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A. Executive Summary

The Centers for Medicare & Medicaid Services (CMS) renewed the Indiana Family and Social Services Administration’s (FSSA) Healthy Indiana Plan (HIP) Section 1115(a) demonstration waiver for three years from February 1, 2018 through December 31, 2020. First passed by the Indiana General Assembly in 2007, and implemented in 2008, HIP represents the nation’s first consumer-driven health plan for Medicaid beneficiaries, and in 2015, became an alternative to traditional Medicaid expansion under the Patient Protection and Affordable Care Act.

HIP provides health care coverage for qualified low-income, non-disabled adults ages 19 – 64 up to 138% of the federal poverty level (FPL). From February 2015 – December 2020, HIP served 954,572 unique members. The number of unique members covered annually increased from 389,919 in 2015 to 569,985 in 2018. HIP covered an average of 390,640 unique members every month in 2018. The number of unique members increased again in 2020 to 629,240. HIP covered an average of 397,600 in January and February 2020, and 515,773 in March through December 2020.

HIP seeks to engage members and empower them to become active consumers of health care services. Building on the original HIP design (referred to as the Original HIP in this report), FSSA implemented HIP 2.0 in 2015. HIP 2.0 continued the use of a special health savings account called a Personal Wellness and Responsibility (POWER) Account where HIP Plus members pay a monthly contribution. HIP 2.0 also included a voluntary Gateway to Work program to connect members to job training and job search resources, and HIP Link, which provided enrolled individuals with a defined contribution to help pay for the costs of employer-sponsored insurance.

The State used the 2018 – 2020 HIP demonstration, referred to as “HIP” throughout this report, to continue or expand many of the HIP 2.0 policies. Most notably, the State simplified the payment tiers for member POWER Account Contributions, included community engagement reporting requirements in the Gateway to Work program for part of 2019, and added a POWER Account Contribution surcharge (a 50% increase in POWER Account Contributions) for members using tobacco for longer than one year. (see Section B: Summary of HIP Demonstration for more information).

In July 2019, the State submitted a waiver amendment to CMS to implement Workforce Bridge, which serves a similar goal as HIP Link in supporting the transition of members to non-HIP coverage. Workforce Bridge will provide financial support to members transitioning from HIP to another coverage option (e.g., employer-sponsored coverage or the federal marketplace) through a special health savings-like account that covers health care costs incurred during their coverage transition up to $1,000. Although Workforce Bridge has been approved as part of the End Stage Renal Disease (ESRD) Section 1115

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1 Members with enrollment status values of Regular Basic (RB), Regular Plus (RP), State Basic (SB), State Plus (SP), HIP Maternity (MA), and HIP Plus Copay (PC). Lewin did not include months when an individual had conditional eligibility or Presumptive Eligibility status, or members that were eligible for Emergency Services Only (Emergency Room Services flag of “Y”).

2 Increased enrollment in 2020 is likely due to the COVID-19 Public Health Emergency (PHE).

3 HIP Link did not continue into the waiver renewal period due to limited participation.

4 Throughout the report, Lewin refers to FSSA and Indiana interchangeably as “the State.”

5 The State suspended all cost-sharing, including monthly POWER Account Contributions, for the duration of the COVID-19 PHE.

6 Effective October 31, 2019, the State no longer required members to report their hours. Effective April 30, 2020, the State indefinitely stopped all Gateway to Work activities (Indiana’s community engagement program) in response to the stay in the federal lawsuit involving Indiana Medicaid and the COVID-19 PHE. Additionally, on June 24, 2021, CMS withdrew its conditional approval of the community engagement requirement.

7 The State suspended all cost-sharing, including the tobacco surcharge, for the duration of the COVID-19 PHE.
amendment, Workforce Bridge has not been implemented due to the coronavirus disease (COVID-19) public health emergency (PHE).

Many of the HIP policies evaluated for the Summative Evaluation have been affected by the COVID-19 PHE (see Exhibit A.1). Beginning in March 2020, the State suspended all cost-sharing, including monthly POWER Account Contributions and the tobacco surcharge, for the duration of the COVID-19 PHE. Effective April 30, 2020, the State indefinitely stopped all Gateway to Work activities (Indiana’s community engagement program) in response to the stay in the federal lawsuit involving Indiana Medicaid and the COVID-19 PHE. Section B: Summary of HIP Demonstration provides additional detail on current HIP policies and policy modifications due to the COVID-19 PHE.

The State contracted with The Lewin Group ("Lewin") to conduct the federally-mandated independent evaluation of HIP for the waiver renewal period (February 2018 – December 2020). The State also contracted with Milliman, Inc. to conduct analyses specific to Goal 6 of the federally-mandated evaluation. This evaluation includes two reports:

- **Interim Evaluation Report** – This report reflects the first 17 months of the HIP waiver renewal (February 2018 – June 2019) and the first six months of the phase-in of the new community engagement reporting requirements (voluntary reporting from January 2019 – June 2019). As appropriate, Lewin included data from 2015 – 2018 for comparative purposes. As required by CMS as part of the waiver renewal’s Specific Terms and Conditions (STCs) and Section 1115 rules, this report accompanied the State’s waiver renewal application submitted to CMS by December 31, 2019.

- **Summative Evaluation Report** – This report provides a comprehensive evaluation of the full three-year demonstration period from February 2018 – December 2020. As required by CMS as part of the waiver’s STCs and Section 1115 rules, this report will be submitted by June 30, 2022. As appropriate, Lewin included data from 2015 – 2018 for comparative purposes. Several research questions were not fully addressed due to the impact of the COVID-19 PHE on HIP policies and evaluation data collection activities (e.g., member and leaver surveys were not conducted as planned due to the COVID-19 PHE). Examples of data sources included were key informant interviews, monthly enrollment and disenrollment files, annual POWER Account Reconciliation files, and encounter data.

This Summative Evaluation Report provides observations to date on the HIP policies under the waiver renewal. These observations will inform the State’s continued implementation of these policies and builds on the analyses conducted for the Interim Evaluation Report.

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8 The Lewin Group’s team included AIRvan Consulting, Engaging Solutions, Indiana University, and McCarty Research. AIRvan Consulting is certified as an Indiana Women’s Business Enterprise, Engaging Solutions is certified as an Indiana Minority Business Enterprise, and McCarty Research is certified as an Indiana Veteran’s Business Enterprise.

9 To reduce the duplication of efforts, and thus cost, this analysis was completed by Indiana’s actuary, Milliman, Inc. and included in the Summative Evaluation Report. The results are incorporated into the overall evaluation analysis where relevant and as appropriate.

**Summary of the Goals of the Demonstration**

1. Building on the successes and lessons learned from Original HIP and HIP 2.0, the State used the 2018 HIP waiver renewal to test new approaches and flexibilities in Indiana’s Medicaid program to provide incentives for members to take personal responsibility for their health (see **Section B: Summary of HIP Demonstration**). Over the current demonstration period (February 2018 – December 2020), the State sought to achieve several demonstration goals relating to health care access, tobacco cessation, and other policies. These goals inform the State’s evaluation of the HIP program. The goals are: Improve health care access, appropriate utilization, and health outcomes among HIP members.

2. Increase community engagement leading to sustainable employment and improved health outcomes among HIP members.\(^{11}\)

3. Discourage tobacco use among HIP members through a premium surcharge and the utilization of tobacco cessation benefits.\(^{12}\)

4. Promote member understanding and increase compliance with payment requirements by changing the monthly POWER Account payment requirement to a tiered structure.\(^{13}\)

5. Ensure HIP program policies align with commercial policies, encourage member understanding, promote positive member experience, and minimize gaps in coverage.

6. Assess the costs to implement and operate HIP and other non-cost outcomes of the demonstration.

**Exhibit A.2** lists the goal number, corresponding hypotheses and research questions (RQ). This exhibit also outlines which research questions are addressed in this report (see **Section C: Evaluation Questions and Hypotheses**). As previously mentioned, several HIP policies were impacted by the COVID-19 PHE and as a result, some research questions were not fully addressed.

---

\(^{11}\) Effective October 31, 2019, the State no longer required members to report their Gateway to Work (Indiana’s community engagement program) hours. Effective April 30, 2020, the State indefinitely stopped all Gateway to Work activities in response to the stay in the federal lawsuit involving Indiana Medicaid and the COVID-19 PHE. Additionally, on June 24, 2021, CMS withdrew its conditional approval of the community engagement requirement. Therefore, this goal will not be evaluated in this report.

\(^{12}\) The State suspended all cost-sharing, including the tobacco surcharge, for the duration of the COVID-19 PHE.

\(^{13}\) The State suspended all cost-sharing, including monthly POWER Account Contributions, for the duration of the COVID-19 PHE.
### Exhibit A.2: Overview of Summative Report Content by Goal, Hypothesis, and Research Question

<table>
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<th>Hypothesis</th>
<th>Research Questions</th>
<th>Included in Summative Report</th>
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<td><strong>Goal 1 – Improve health care access, appropriate utilization, and health outcomes among HIP members.</strong></td>
<td><strong>Hypothesis 1</strong> – Enrollment in HIP will promote member use of preventive care, primary care, chronic disease management care, and urgent care, and needed prescription drugs.</td>
<td><strong>Primary RQ 1.1</strong> – How have the following changed over time for HIP members: preventive, primary, urgent, and specialty care; prescription drug use; and chronic care management?</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td><strong>Hypothesis 2</strong> – Unnecessary emergency department (ED) services will not rise over time for HIP members.</td>
<td><strong>Primary RQ 2.1</strong> – How have avoidable ED visits among HIP members changed over time?</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td><strong>Hypothesis 3</strong> – HIP members will report positive health outcomes.</td>
<td><strong>Primary RQ 3.1</strong> – How has reported health status for HIP members changed over time?</td>
<td>Yes</td>
</tr>
<tr>
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<td><strong>Hypothesis 4</strong> – HIP members will report satisfaction with health care access.</td>
<td><strong>Primary RQ 4.1</strong> – What percentage of HIP members report getting health care as soon as needed? <strong>Primary RQ 4.2</strong> – To what extent do HIP members receive coverage through Fast Track and Presumptive Eligibility policies?</td>
<td>Yes</td>
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<td><strong>Hypothesis 5</strong> – The Indiana Medicaid enrollment rate will be comparable to other Medicaid expansion states.</td>
<td><strong>Primary RQ 5.1</strong> – How does the Indiana Medicaid coverage rate compare to other Medicaid expansion states?</td>
<td>Yes</td>
</tr>
</tbody>
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**Goal 2 – Increase community engagement leading to sustainable employment and improved health outcomes among HIP members.**

*Effective October 31, 2019, the State no longer required members to report their Gateway to Work (Indiana’s community engagement program) hours. Effective April 30, 2020, the State indefinitely stopped all Gateway to Work activities in response to the stay in the federal lawsuit involving Indiana Medicaid and the COVID-19 PHE. Additionally, on June 24, 2021, CMS withdrew its conditional approval of the community engagement requirement. Therefore, Goal 2 will not be evaluated.*

---

14 The following evaluation goals are impacted by the cancellation of Longitudinal Member Survey and Leaver Survey data collection as of May 2022: Goal 1 (Hypothesis 3, RQ 3.1; Hypothesis 4, RQ 4.1), Goal 3 (Hypothesis 1, RQs 1.1 – 1.1b; Hypothesis 2, RQ 2.1), Goal 4 (Hypothesis 1, RQ 1.1), and Goal 5 (Hypothesis 1, RQs 1.1 – 1.3; Hypothesis 2, RQ 2.1; Hypothesis 4, RQ 4.2).
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<th>Hypothesis</th>
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</tr>
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</table>
| **Goal 3 – Discourage tobacco use among HIP members through a premium surcharge and the utilization of tobacco cessation benefits.** | **Hypothesis 1**  – The tobacco premium surcharge will increase use of tobacco cessation services among HIP members. | **Primary RQ 1.1** – What impact has the tobacco premium surcharge had on the use of tobacco cessation benefits for HIP members?*  
**Subsidiary RQ 1.1a** – Do HIP members understand the premium surcharge policy?*  
**Subsidiary RQ 1.1b** – Do HIP members know about the cessation services offered through HIP?*  
**Subsidiary RQ 1.1c** – Are HIP members satisfied with tobacco cessation services?* | Yes (only evaluating data through February 2020 due to the COVID-19 PHE) |
| | **Hypothesis 2**  – The tobacco premium surcharge and availability of tobacco cessation benefits will decrease tobacco use. | **Primary RQ 2.1** – Has tobacco use decreased among the target population?* | Yes (only evaluating data through February 2020 due to the COVID-19 PHE) |
| **Goal 4 – Promote member understanding and increase compliance with payment requirements by changing the monthly POWER Account payment requirement to a tiered structure.** | **Hypothesis 1**  – HIP’s new income tier structure for POWER Account Contributions will be clear to HIP members. | **Primary RQ 1.1** – Do HIP members with POWER Account payment requirements understand their payment obligations?*  
**Subsidiary RQ 1.1a** – Do HIP members that are subject to POWER Account payment requirements have different disenrollment compared to other HIP members?*  
**Primary RQ 1.2** – Do HIP members with POWER Account payment requirements who initiate payments continue to make regular payments throughout their 12-month enrollment period?* | Yes (only evaluating data through February 2020 due to the COVID-19 PHE) |
| | **Hypothesis 2**  – Enrollment and enrollment continuity will vary for the POWER Account payment tiers. | **Primary RQ 2.1** – Is there a relationship between POWER Account payment tiers and total and new enrollment in Medicaid?*  
**Primary RQ 2.2** – Is there a relationship between POWER Account payment tiers and continued enrollment in Medicaid?*  
**Primary RQ 2.3** – Do HIP members who receive rollover have greater coverage continuing than members who do not receive rollover?* | Yes (only evaluating data through February 2020 due to COVID-19 PHE) |
<table>
<thead>
<tr>
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</tr>
</thead>
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<td>Goal 5 – Ensure HIP program policies align with commercial policies, are understood by members, and promote positive member experience and minimize coverage gaps.</td>
<td>Hypothesis 1 – Beneficiaries who are required to participate in HIP policies will understand program policies.</td>
<td>Primary RQ 1.1 – Are HIP members knowledgeable about policies on payment of POWER Account Contributions preventive care, and rollover?</td>
<td>Yes</td>
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<td>Primary RQ 1.2 – Do HIP members subject to non-eligibility periods understand program requirements and how to comply with them? Note: Goal 4, H.1, RQ 1.1 also addresses this question.</td>
<td>No (no data due to COVID-19 PHE)</td>
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<td></td>
<td>Primary RQ 1.3 – Do HIP members subject to non-eligibility periods understand the consequence for noncompliance with program requirements?</td>
<td>No (no data due to COVID-19 PHE)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Primary RQ 1.4 – What are common barriers to compliance with program requirements that have non-eligibility period consequences for noncompliance?</td>
<td>No (no data due to COVID-19 PHE)</td>
</tr>
<tr>
<td></td>
<td>Hypothesis 2 – Beneficiaries will be satisfied with the HIP program.</td>
<td>Primary RQ 2.1 – What is the level of satisfaction with HIP among HIP members?</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Hypothesis 3 – Individuals subject to the non-eligibility/“lockout” periods (payment and redetermination) are no different from commercial market populations.</td>
<td>Primary RQ 3.1 – Do HIP members have similar demographic characteristics as the commercial market population?</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Primary RQ 3.2 – Do HIP that are not retroactively eligible have similar demographic characteristics as the commercial market population?</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Hypothesis 4 – Eliminating or reducing retroactive eligibility will not reduce member enrollment or access to health care; decrease health status; or have adverse financial impact.</td>
<td>Primary RQ 4.1 – Do eligible people subject to retroactive eligibility waivers enroll in Medicaid at the same rates as other eligible people who have access to retroactive eligibility? (CMS Guidance Hypothesis 1, RQ 1.1)</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Primary RQ 4.2 – Do beneficiaries subject to the retroactive eligibility waiver understand that they will not be covered during enrollment gaps? (CMS Guidance Hypothesis 1, Subsidiary RQ 1.2a)</td>
<td>No (no data due to COVID-19 PHE)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Subsidiary RQ 4.2a – What are common barriers to timely renewal for those subject to the retroactive eligibility waiver? (CMS Guidance Hypothesis 1, Subsidiary RQ 1.2b)</td>
<td></td>
</tr>
</tbody>
</table>

The hypothesis was included to address CMS’ recommendation (received on March 24, 2020) to include analyses of the impact of the waiver of retroactive eligibility on member access and health.
<table>
<thead>
<tr>
<th>Goal 5 continued</th>
<th>Hypothesis 4 continued</th>
<th>Research Questions</th>
<th>Included in Summative Report</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Goal 5 continued</strong></td>
<td>Hypothesis 4 continued</td>
<td><strong>Primary RQ 4.3</strong> – Do beneficiaries subject to the retroactive eligibility waiver have better health outcomes than other beneficiaries who have access to retroactive eligibility? (CMS Guidance Hypothesis 3, RQ 3.1)</td>
<td>Yes</td>
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<tr>
<td></td>
<td></td>
<td><strong>Primary RQ 4.4</strong> – Does the retroactive eligibility waiver lead to changes in the incidence of beneficiary medical debt? (CMS Guidance Hypothesis 4, RQ 4.1)</td>
<td>Yes</td>
</tr>
<tr>
<td>Goal 6 – Assess the costs to implement and operate HIP and other non-cost outcomes of the demonstration.</td>
<td>Implementation Questions</td>
<td><strong>Primary RQ 1</strong> – What are the administrative costs incurred by the State to implement and operate the HIP demonstration?</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Primary RQ 2</strong> – What are the short-and long-term effects of eligibility and coverage policies on Medicaid health care expenditures?</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Primary RQ 3</strong> – What are the impacts of eligibility and coverage policies on provider uncompensated care costs?</td>
<td>Yes</td>
</tr>
</tbody>
</table>

* = only evaluating data through February 2020 due to COVID-19 PHE; ^ = no data due to COVID-19 PHE, RQ not being evaluated in this report.
Summary of Summative Evaluation Methodology

The methodology follows the federally required evaluation plan covering analyses for both the Interim and the Summative Evaluation Reports. CMS approved the HIP Evaluation Plan in October 2020. The evaluation methodology relies on a mixed-methods approach employing qualitative and quantitative analyses to provide preliminary observations for the hypotheses and research questions corresponding to each goal of the demonstration (see Section D: Methodology).

The analyses reflect qualitative sources (e.g., key informant interviews with State officials, managed care entity [MCE] executives, providers, and members), and quantitative sources (e.g., enrollment data, encounter data, and other State administrative data). Lewin and its partners conducted key informant interviews between July and September 2019 for the Interim Evaluation Report and between November and December 2020 for the Summative Evaluation Report. Data sources for the Summative Evaluation Report also included February 2015 – December 2020 monthly enrollment and disenrollment files, 2015 – 2020 annual POWER Account Reconciliation files, and February 2015 – December 2020 encounter data.

This Summative Evaluation Report provides a more comprehensive examination than the Interim Evaluation Report, including related inferential analyses of HIP according to the approved HIP Evaluation Plan. Evaluating impacts of individual HIP policies presents a challenge due to their interdependent nature, the time-period used for analysis, and trends encompassing a variety of waiver and non-waiver developments. These include the maturation of the HIP program since 2015, recent improvement in the state economy, case-mix changes over time, implementation of a new Medicaid Management Information System, removal of a graduated ED copayment, updates to HIP verification processes and eligibility systems, and the impact of the COVID-19 pandemic.

Impact of the COVID-19 Public Health Emergency

Several HIP policies were modified or put on hold in March 2020 in response to the COVID-19 pandemic (we refer to the period where the pandemic impacted HIP policies as the “COVID-19 PHE”). These included policies related to member eligibility, cost-sharing, tobacco surcharge, and prescription filling processes, among others. The details of these policy changes and their implications for the evaluation are included in Section B: Summary of Demonstration and noted throughout this report as appropriate. The State announced that any reinstatement of policies would occur after the COVID-19 PHE is lifted. Any reinstatement processes will ensure members, MCEs, providers, and other stakeholders are aware.

Given the policy changes enacted in response to the COVID-19 PHE, certain data and analyses may be omitted or adjusted depending on the impact of the policy (e.g., time period 2015 – 2020 for enrollment data, 2018 – 2019 for participation and utilization data). For example, during key informant interviews for this Summative Evaluation Report, the evaluators asked key informants to provide observations on the administration of POWER Accounts before the COVID-19 PHE. Any analysis adjustments conducted in response to the COVID-19 PHE policy changes are noted throughout this report.

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16 At the time of the finalization of this report, June 30, 2022, the COVID-19 PHE was still in effect with no identified expiration date.
Summative Evaluation Report Observations

Indiana’s HIP program functions within Medicaid regulations and operational constraints to provide health care coverage that resembles commercial coverage. The resulting policies produce a multifaceted set of outcomes and require a high degree of collaboration between the State and the contracted MCEs, and between State agencies. This collaboration includes a range of data sharing (e.g., related to tracking member enrollment in HIP benefit plans and member POWER Account Contribution payments) and intensive, targeted member communications that must distill multifaceted HIP policies into key takeaways. Note that the time period for data analyzed for each research question or sociodemographic characteristic may vary based on available data and the impacts of the COVID-19 PHE (e.g., 2015 – 2020 for enrollment statistics, 2018 – 2019 for participation and utilization of services).

HIP enrollment has grown from 389,984 unique members in 2015 (February to December) to 629,240 unique members in 2020. While the number of unique HIP members has increased from 2015 – 2020, the annual rate of increase in unique members decreased over the same period (33% increase from 2015 – 2016, 7% increase from 2016 – 2017, 2% increase from 2017 – 2018, 4% decrease from 2018 – 2019, and, with the COVID-19 PHE Maintenance of Effort (MOE) in effect, 15% increase from 2019 – 2020).

HIP members were more likely to be female and less likely to be non-Hispanic White compared to the general population of Indiana. The average income of HIP members increased across time (from 2015 – 2020) with the proportion of members with income over 100% of the FPL increasing from 11% to 17% in 2017, then dropping to 13% by 2020. Black HIP members disproportionately disenrolled regardless of the disenrollment reason compared to other races during this same period.

Section B: Summary of HIP Demonstration and Attachment I: HIP Sociodemographic Statistics contains more detailed sociodemographic analyses.

Our analysis identified that service participation and utilization varied across the study time-period (2018 – 2019) and across service. Findings also indicated that most HIP members reported positive health status, satisfaction with HIP, and that there was no adverse change in access to and enrollment in the Medicaid program after the 2018 HIP waiver renewal and policy interventions. Additionally, Medicaid enrollment rates in Indiana continued to increase after the 2018 HIP waiver renewal.

Findings also indicated that member satisfaction varies between sociodemographic groups, with Black members and younger members generally more dissatisfied. Additionally, the socioeconomic and demographic characteristics of HIP members who are at risk of the non-eligibility or lockout periods (payment and redetermination) are somewhat different from commercial market populations.

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17 Members with enrollment status values of Regular Basic (RB), Regular Plus (RP), State Basic (SB), State Plus (SP), HIP Maternity (MA), and HIP Plus Copay (PC). Lewin did not include months when an individual had conditional eligibility or Presumptive Eligibility status, or members that were eligible for Emergency Services Only (Emergency Room Services flag of “Y”).


20 During the COVID-19 PHE, member disenrollment was paused. Moreover, no members were downgraded to a plan with less coverage starting March 1, 2020, regardless of change in income. During the PHE, the only reasons for closure were death, change in residency (i.e., no longer resident of Indiana), and written voluntary withdrawal from assistance. Member coverage could be suspended if they were incarcerated or admitted to a psychiatric facility.
Overall, the complexity of HIP creates challenges for the State and MCEs to support member and provider understanding of key policies, in particular, POWER Accounts and tobacco surcharge requirements. Although the State and MCEs have dedicated resources to communicating key policies and related changes, information gathered during key informant interviews with State officials, MCE executives, members, and providers suggest opportunities for improvement in member and provider understanding of HIP policies.

Summative Evaluation Report Observations by Goal

This section summarizes preliminary observations and recommendations by demonstration goal. Section G: Conclusions provides a more detailed description of these observations. Section F: Results by Demonstration Goal provides the results by hypothesis and research question. The analytic evaluation period was through December 2019. Data from 2020 was included for descriptive purposes but should be reviewed with caution due to the impact of the COVID-19 PHE on policies. As noted throughout the report, several HIP policies were impacted by the COVID-19 PHE and as a result, some research questions were not fully addressed.

Goal 1 – Improve health care access, appropriate utilization, and health outcomes among HIP members.

State officials, MCEs, providers, and members recognize HIP as critical for supporting health care access to individuals at or under 138% of the FPL.

Service Participation and Utilization. Service participation (i.e., the proportion of continuously enrolled members receiving a specific service at least once in the year) and utilization (i.e., the count of services or visits per 1,000 member years) varied across the study time period (2018 – 2019), and by demographic. Key participation and service utilization findings from 2015 – 2019 include:

- Preventive Services: The preventive services participation and utilization rates for all HIP members increased in 2018 and declined in 2019. HIP Plus Only members were more likely to have at least one preventive visit as well as a greater number of visits relative to HIP Basic Only members. Males were less than half as likely to receive preventive care and were associated with using fewer preventive care services.

- Primary Care: Participation and utilization rates for primary care visits increased in 2019. However, the increase in 2019 is likely due to enhancements in the claims or encounter data that began recording the “Rendering Provider Specialty” at the claim line level.

- Specialty Care: Participation and utilization rates for specialty care services decreased from 2015 – 2019. However, specialty care use for 2018 and 2019 were higher relative to 2017. HIP Plus Only members and HIP Switchers were more likely to receive specialty care compared with HIP Basic Only members. Relative to Caucasian members, Asian or Pacific Islander members were less likely to receive specialty services.

- Urgent Care: Both the participation and utilization rates increased for HIP members from 2015 – 2019. Even adjusting for case mix over time, members in the demonstration period (2018 – 2019) had a higher likelihood of using urgent care relative to prior years. Asian or Pacific Islander, Black, and Other races were all less likely to receive urgent care services relative to Caucasian members.
• ED Visits: The participation rate fluctuated between 2015 – 2019. Utilization rates for ED services decreased across time. Relative to 2017, HIP members were more likely to receive ED services in 2016 than in 2018 and 2019 (demonstration period). Findings also indicate that the overall avoidable ED rate decreased from 2015 – 2019, suggesting that HIP members were using the ED less frequently for non-urgent conditions. Increased coverage based on benefit plan may be contributing to reductions in the overuse or misuse of EDs and thereby accounting for the lower utilization and participation of the ED.

Health Outcomes and Satisfaction with Health Care Access. Findings to date suggest that members have Good, Very Good, or Excellent health outcomes and were generally satisfied with their health care access. However, information collection strategies used did not directly ask questions specific to HIP or sample HIP members. Enhancing MCE data to capture health care activities or using additional survey strategies which directly sample HIP members may enable more affirmative conclusions to be drawn regarding HIP member health outcomes or satisfaction with health care access.

Coverage through Fast Track and Presumptive Eligibility. While not everyone who initiates enrollment using Fast Track or Presumptive Eligibility is ultimately enrolled, individuals using these options have accessed needed care across the years. For individuals that used Fast Track or Presumptive Eligibility and enrolled in HIP, many received HIP coverage for more than 12 months reinforcing that these policies support access to needed care and may be preferable to retroactive coverage. However, findings do not disentangle if individuals with the greatest needs for services enroll. Future studies examining individual characteristics associated with enrollment as well as whether or not those that needed services retained coverage may support the State in making needed improvements to converting applicants to enrolled members.

Medicaid Enrollment Rates. Results indicate that the Medicaid enrollment rates in Indiana increased from 2017 – 2019. In contrast, the Medicaid enrollment rates in the comparison states declined slightly or remained relatively stable during the same time period. Additionally, the proportion of Medicaid eligible population enrolled in Medicaid increased by almost 1.6 percentage points more in Indiana during the period of 2018 and after relative to the change in Medicaid enrollment rates in the comparison states. Medicaid enrollment rates in Indiana suggest that there is no adverse change in the access to and enrollment in the Medicaid program in the state after the 2018 HIP waiver renewal and policy interventions.

Medicaid enrollment analyses did not assess the drivers of high versus low rates of the proportion of the Medicaid eligible population enrolled in Medicaid. Future studies that examine the drivers of Medicaid enrollment will be an important next step for improving access to needed care.

Goal 1 Recommendations

• Continue to collaborate with health care providers to provide equitable access to health care services.
• Continue to develop policies and action plans to increase utilization of preventive care services.
• Continue to develop plans and policies to decrease avoidable ED use.
• Enhance MCE data capture activities or use additional survey strategies which directly sample HIP members on topics, such as health care outcomes or satisfaction with access to care.
• Conduct studies examining individual characteristics associated with enrollment as well as whether or not those that needed services maintained coverage.

• Build on findings of observational changes in Medicaid enrollment by examining the drivers of Medicaid enrollment.

**Goal 2 – Increase community engagement leading to sustainable employment and improved health outcomes among HIP members.**

Effective October 31, 2019, the State no longer required members to report their Gateway to Work (Indiana’s community engagement program) hours. Effective April 30, 2020, the State indefinitely stopped all Gateway to Work activities in response to the stay in the federal lawsuit involving Indiana Medicaid and the COVID-19 PHE. Additionally, on June 24, 2021, CMS withdrew its conditional approval of the community engagement requirement. Therefore, Goal 2 will not be evaluated.

**Goal 3 – Discourage tobacco use among HIP members through a premium surcharge and the utilization of tobacco cessation benefits.**

All members have access to HIP covered tobacco cessation services which have remained unchanged since the 2018 waiver renewal. However, as part of the 2018 renewal, HIP added a tobacco use surcharge policy. HIP Plus members having continuous enrollment with an MCE and continuing to report tobacco use in the second year of enrollment have a surcharge applied to their POWER Account Contributions at the beginning of the new benefit period. Members having continuous enrollment and reported tobacco use at intake are assumed to be tobacco users unless they report a tobacco use status change.

**Member Understanding of the Tobacco Premium Surcharge Policy and Available Cessation Services.**

Although 2020 member interviews did not include references to the surcharge policy, results from the 2019 member interviews suggest that HIP members are generally aware of the tobacco surcharge as well as the availability of cessation services (e.g., counseling or medications). In contrast, MCE representatives expressed some uncertainty related to member awareness of the surcharge and noted that member understanding of the tobacco surcharge continued to be a challenge requiring supplemental communications to reinforce messages and further facilitate knowledge sharing. Given the inconsistent findings, caution should be used when interpreting results. Additional studies which directly examine member awareness and policy comprehension may result in more conclusive findings and provide insights for potential improvement strategies.

Provider interviews indicated that few providers were familiar with the tobacco surcharge and the consequences for a HIP member who was unable to quit tobacco use. Additionally, findings from CAHPS Surveys suggest considerable variation among the proportion of members who self-report regular tobacco use and who are advised by their providers to quit. CAHPS Survey findings also indicate a gap between the proportion of members advised to quit smoking or using tobacco and those who are offered information on cessation methods. Together, these findings suggest a need for provider training that covers the premium surcharge policy, available cessation services, and strategies that encourage member’s use of cessation services (e.g., motivational interviewing).

**Tobacco Premium Surcharge and Use of Tobacco Cessation Benefits.** Between 2017 (year prior to surcharge policy) and 2019 (first year surcharge policy applied), the proportion of HIP members using cessation services increased. Total number of cessation services used and average services per member using the cessation services increased over time – from before the implementation of the surcharge policy (2015 – 2017) to implementation of policy (2018) and application of the surcharge (members charged...
during 2019), suggesting that the surcharge encouraged the increase in cessation service utilization. Of those with known tobacco use information, Caucasian Females between ages 30 – 66 living in metro areas had the highest proportion of cessation service use. To reduce disparities and encourage utilization of tobacco cessation efforts, targeted outreach to HIP members should be conducted.

**Tobacco Premium Surcharge – Availability of Tobacco Cessation Benefits and Decrease in Tobacco Use.** The percentage of members quitting tobacco use among those who were surcharged in 2019 and 2020 was lower (12.0% and 10.8% respectively) than the overall HIP population. In 2020, 11.3% of HIP Plus members reported quitting. Although, members who had a surcharge applied in 2019 were not as likely to quit as the overall HIP population who use cessation services (12.0% versus 27.6%), cessation rates declined when the surcharge was paused in 2020. This may suggest that the surcharge in conjunction with policy communications as well as cessation service availability may contribute to tobacco use quit rates.

**Goal 3 Recommendations**

- Continue providing clear and succinct messaging of the surcharge policy and available cessation services to members and providers to further facilitate awareness and knowledge.
- Conduct studies which directly examine member awareness and policy comprehension.
- Implement provider training that 1) increases familiarity with the surcharge policy and consequences to HIP members who are unable to quit tobacco use; 2) promotes regular tobacco screening; 3) highlights cessation services; and 4) provides strategies to encourage member’s use of cessation services (e.g., motivational interviewing).
- Conduct outreach to HIP members with known tobacco information who reported tobacco use. Outreach should focus on Caucasian males between ages 30 – 50 who live in nonmetro areas.
- Conduct regular reviews of HIP-covered or new, emerging tobacco cessation services (e.g., Transcranial magnetic stimulation, nicotine vaccine) to determine if additional services should be covered.

**Goal 4 – Promote member understanding and increase compliance with payment requirements by changing the monthly POWER Account payment requirement to a tiered structure.**

The State’s transition from a percent of income POWER Account Contribution structure to a simplified tiered structure in 2018 intended to reduce administrative burden, support initial and sustained enrollment in HIP, and reduce disenrollment due to members’ misunderstanding their POWER Account Contribution payment amounts.

**Member Understanding of the Income Tier Structure for POWER Account Contributions.** Feedback received from MCE and State officials indicates that member understanding has improved since the first key informant interviews in 2019 as a result of layered communications, ongoing education, and the transition to the tiered POWER Account structure. However, fewer members understood the consequences of nonpayment indicating that improvements for ongoing communications and outreach should continue to be a program focus.

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21 Although members are only eligible for the HIP program until age 64, the analysis includes some members who are 65 or 66.
Differential Disenrollment and Power Account Payments. HIP members that are subject to POWER Account payment requirements have higher annual disenrollment compared to other HIP Plus members. Key observations include:

- As expected, the majority of member disenrollment due to nonpayment was associated with members subject to the POWER Account Contribution payment policies. Monthly disenrollment due to nonpayment was highly variable – irrespective of benefit plan, income level, or medically frail status.

- The number of Goal 4 HIP Plus members with changed POWER Account tiered payment structure was higher (similar between 2018 – 2019) during the waiver period as compared to prior years. Additionally, the number of continuously enrolled members increased steadily.

- Goal 4 HIP Plus member disenrollment with nonpayment as a reason (irrespective of member FPL) was low and decreased from 2017 – 2019.

- The number of members disenrolled due to not making their initial POWER Account Contribution decreased during the same period. Most of these members received HIP Basic coverage after not making the initial POWER Account Contribution payment.

- Although the number of members disenrolled due to nonpayment remained similar between 2018 – 2019 – it was lower compared to the period prior to the tiered payment structure, potentially suggesting that the tiered structure improves member understanding of POWER Account Contribution payments and the ability to make payments on time.

Enrollment Across POWER Account Tiers. The number of HIP Plus members during the waiver period with changed POWER Account tiered payment structure was higher (and similar between 2018 and 2019) compared to prior years. Additionally, the number of continuously enrolled members increased steadily. Although the proportion of members having higher FPLs increased across time, the number of new HIP Plus members having income greater than 100% FPL was lower in 2017 – 2019 compared to 2016.

Individuals with income between 51% – 75% of FPL had the highest enrollment across all years while Medicaid individuals with income less than 23% or more than 100% FPL had the lowest enrollment rate. Although the enrollment rates increased (especially among individuals with income less than 23% of FPL, 51% – 75% of FPL, and 101% – 138% of FPL) and was higher after implementation of the new POWER Account payment tier structure in 2018, there is variability in the enrollment rate as well as a change in the rate over time based on income. This finding is further reinforced by the results of the ITS model which identified a relationship between enrollment growth and POWER Account income tiers suggesting the need for additional study to identify barriers and strategies that address coverage gaps (e.g., income tiers of 23% – 50% and 76% – 100% FPL).

POWER Account Payment Tiers and Continued Medicaid Enrollment. The overall number of disenrollments and the disenrollment rate increased from 2015 to 2018. In 2019, the number and proportion of disenrollments decreased slightly. Additionally, the disenrollment rate for members having nonpayment as a reason has decreased across time.

Goal 4 HIP PLUS Member Definition (see Goal 4 Definition of HIP Member Population Used for Goal 4 Analyses): Members meeting the Goal 4 inclusion and exclusion criteria and who have at least one month of the HIP Plus benefit plan in the calendar year regardless of other enrollment status. This category is not the same as the “HIP Plus” category in Section F, Goal 1 and Attachment I: HIP Sociodemographic Statistics due to the differences in included and excluded members.
The number and proportion of HIP Plus members (who could be impacted by POWER Account Contribution payment policies) moving from HIP Plus to HIP Basic in a year has been variable across the years (largest in 2019). Goal 4 HIP Plus members who were Black had a higher likelihood of disenrollment due to nonpayment as well as a higher likelihood of moving to HIP Basic compared to non-Hispanic White HIP Plus members. However, even after controlling for sociodemographic characteristics, there was a higher likelihood of disenrollment for all other reasons (other than nonpayment) in 2018 and 2019, compared to 2017. Given both disparities and disenrollment reasons other than nonpayment, research investigating underlying causes for disenrollment may provide insights for targeted strategies that more fully engage all subpopulations.

During most years, at least 50% of Goal 4 HIP Plus members (HIP Plus Only and HIP Switchers) had 10 – 12 months of coverage within the year. Approximately 80% of members who changed plans (HIP Basic or HIP Plus) had more than seven months of coverage in a year.

**Rollover and Coverage Continuity.** Goal 4 HIP Plus members receiving rollover appear to have longer coverage compared to those not receiving rollover. The disenrollment rate among Goal 4 HIP members that received rollover and who did not receive rollover varied across years. This finding requires further exploration to better understand the drivers associated with higher disenrollment rates among those members who received rollover.

Since 2017, the disenrollment rate declined and the length of coverage within a year increased among Goal 4 HIP Plus members receiving rollover status. Compared to members not receiving rollover status, the length of coverage was higher, but the disenrollment rates were also higher among members receiving rollover status. These results suggest that the receipt of rollover supports greater continuity of coverage for HIP Plus members.

**Goal 4 Recommendations**

- Continue to improve ongoing communications and outreach to ensure members understand the consequences of nonpayment.
- Conduct additional outreach efforts to identify barriers and address coverage gaps across those income tiers that did not have significant change in enrollment rates after 2018 HIP waiver renewal and policy interventions (e.g., income tiers of 23% – 50% and 76% – 100% FPL).
- Investigate underlying causes of the increased disenrollment rate due to nonpayment and movement from HIP Plus to HIP Basic for Black HIP members.
- Consider a targeted and culturally appropriate communication strategy to more fully engage all subpopulations and providers.
- Conduct further exploration to assess the drivers associated with higher disenrollment rates among those members who received rollover.

**Goal 5 – Ensure HIP program policies align with commercial policies, are understood by members, and promote positive member experience and minimize gaps in coverage.**

The State designed its HIP policies to mirror a commercial market health insurance plan, including the use of copayments and monthly payment amounts (varying by benefit plan), offering members choices between benefit plans and MCEs, and including incentives to obtain preventive services and
disincentives to continue tobacco use. The State, MCEs, provider associations, and advocacy organizations work together in distinct capacities to support member understanding of HIP policies.

**Member Understanding of HIP Policies.** Findings from the key informant interviews with State officials, MCE executives, and members indicate member understanding of POWER Account Contributions and rollover varied in both 2019 and 2020 interviews. All interviews suggested that opportunities exist to further support member understanding of policies related to POWER Account Contributions, rollover, and preventive care. Findings should be interpreted with caution given the lengthy time frame between the recall time period and the interviews and the likelihood of information bias.

**Member Satisfaction with HIP.** Results of member key informant interviews indicated that most members interviewed were satisfied with the HIP program, citing increased access to care (e.g., large network of providers, preventive and chronic care), and care management supports. Reasons for dissatisfaction reported by members and providers included: challenges related to the required documentation members submit for eligibility determination as well as confusion about the plan types and associated requirements. Consistent with findings from 2019, 2020 interviews with MCE executives and FSSA officials indicated that the overall complexity and nuance associated with the HIP program and policies is the most significant area of dissatisfaction among members. Results from the CAHPS Survey data was consistent with key informant interviews suggesting that most members were satisfied with the HIP program, with the highest levels of satisfaction in 2020. Findings also indicated that member satisfaction varied between sociodemographic groups, with Black members and younger members generally more dissatisfied.

**Individuals Subject to Non-Eligibility Periods and Retroactive Eligibility – Member and Commercial Beneficiary Characteristics.** The socioeconomic and demographic characteristics of HIP members who are at risk of the non-eligibility or lockout periods (payment and redetermination) are different from commercial market populations in terms of income, education, race, and gender. Given the differences in socio-economic and demographic characteristics between Medicaid and the commercially insured population at risk of the non-eligibility or lockout periods, more in-depth examination is needed to better understand why members lose HIP coverage (and may become ineligible/locked out from getting coverage) and any relevant patterns may provide the state with insights for possible improvements.

**Retroactive Eligibility, Enrollment in Medicaid, and Health Outcomes.** The proportion of the Indiana Medicaid eligible population enrolled in Medicaid increased by almost 1.6% during the period of 2018 and after relative to the change in Medicaid enrollment rates in the comparison states. This additional 1.6% increase in Indiana Medicaid enrollment rates after the 2018 waiver renewal indicates that the renewal did not adversely impact the Medicaid enrollment trend in the state of Indiana.

Analysis of health status trend in Indiana relative to the selected comparison states with retroactive coverage suggests that the health status of Medicaid population in Indiana is relatively similar during this time period.

**Goal 5 Recommendations**

- Continue to work with MCEs to carefully test and further streamline communications to support member understanding of POWER Account policies, along with other HIP policies such as rollover, Fast Track, and Presumptive Eligibility, including continuing a layered communication approach (e.g., social media, text message, email, mail) and multiple communication releases reframing the same message to reinforce the policies.
• Examine member perceptions of their health care and how it varies among sociodemographic groups to identify improvement strategies.

• Conduct additional analysis to better understand why members lose HIP coverage (and may become ineligible/locked out from getting coverage) and any patterns that indicate a certain group is more at risk than others.

Goal 6 – Assess the costs to implement and operate HIP and other non-cost outcomes of the demonstration.

Milliman, Inc. analyzed administrative data, enrollment data, encounter data, fee-for-service data and uncompensated care costs to assess the costs associated with the HIP program.23

Analysis of the administrative data revealed an overall increase in the administrative cost of the program prior to the pandemic, driven by increases to the non-benefit portion of the capitation rate that is paid to the participating MCEs for administering the program. Part of the increase paid to the MCEs was related to set-up costs for the Gateway to Work community engagement program, which has been discontinued. Although per member per month administrative costs paid to the MCEs declined in 2020 to reflect discontinuation of community engagement, the number of HIP members increased sharply after the PHE was declared, leading to a slight increase in aggregate administrative expenditures paid to the MCEs.

Analysis of the encounter and enrollment data did not provide clear conclusions on sustainability of the HIP program. Based on historical expenditures for the program, both the HIP benefit cost and administrative cost increased pre-pandemic, on a per member per month basis, then declined during 2020.

Analysis of Indiana’s year-over-year cost changes for the Expansion and Non-Expansion population shows that the increases are consistent for both populations and are higher than in two comparable states with similar Medicaid expansion populations (Kentucky and Ohio). However, it is difficult to compare these costs without a deeper understanding of the differences in the programs such as reimbursement strategies and member profiles.

The analysis of the uncompensated care costs as a percentage of total hospital costs revealed that the uncompensated care cost percentage decreased after Medicaid expansion for the three states that implemented Medicaid expansion (Indiana, Kentucky, and Ohio), but remained flat for the state that elected not to implement Medicaid expansion (South Carolina).

Goal 6 Recommendations (Milliman)

• Consider simplification of the HIP program to reduce the number of administrative tasks required from the MCEs and the overall cost of the program.

• Monitor key drivers of benefit cost increases in future emerging experience and discuss root causes with MCEs.

• Collaborate with providers and MCEs serving the HIP program to ensure that benefit cost growth in the program continues to be sustainable.

23 To reduce the duplication of efforts, and thus cost, this analysis was completed by Indiana’s actuary, Milliman, Inc. and appended to the Summative Evaluation Report. The results are incorporated into the overall evaluation analysis where relevant and as appropriate.
B. Summary of HIP Demonstration

The Centers for Medicare & Medicaid Services (CMS) renewed the Indiana Family and Social Services Administration’s (FSSA) Healthy Indiana Plan (HIP) Section 1115(a) demonstration for three years beginning on February 1, 2018. Through the Section 1115(a) demonstrations and waiver authorities in the Social Security Act, states can test and evaluate innovative solutions to improve quality, accessibility, and health outcomes in a budget-neutral manner. Indiana’s approved 1115 waiver STCs requires an independent evaluation to assess the program’s ability to meet its intended goals.


- Adding a tobacco use surcharge by increasing a users’ POWER Account Contribution 50% beginning in their second year of continuous enrollment.\footnote{The State suspended all cost-sharing, including the tobacco surcharge, for the duration of the COVID-19 PHE effective April 1, 2020.}
- Expanding the Gateway to Work program by adding a community engagement reporting requirement for non-disabled working-age members beginning in 2019.\footnote{Effective October 31, 2019, the State no longer required members to report their Gateway to Work hours. Effective April 30, 2020, the State indefinitely stopped all Gateway to Work activities in response to the stay in the federal lawsuit involving Indiana Medicaid and the COVID-19 PHE. Additionally, on June 24, 2021, CMS withdrew its conditional approval of the community engagement requirement.}
- Changing the determination of member Personal Wellness and Responsibility (POWER) Account Contribution amounts from 2% of income to a tiered structure based on income level.\footnote{The State suspended all cost-sharing, including monthly POWER Account Contributions, for the duration of the COVID-19 PHE.}
- Adding a new HIP Plus chiropractic benefit.
- Modifying eligibility criteria to ensure that either pregnant members or pregnant individuals applying for HIP (at or below 133% of the federal poverty level [FPL]) were provided HIP Maternity coverage benefit.

\begin{tabular}{|c|}
\hline
\textbf{Exhibit B.1: HIP Milestones} \\
\textbf{2007:} HIP passed in the Indiana General Assembly. \\
\textbf{2008:} With CMS approval, HIP began enrolling working-age, uninsured adults in coverage for a pilot program with an enrollment cap (Referred to as Original HIP). \\
\textbf{2011:} State legislature passed Senate Enrolled Act 461 that called on HIP to be the program used for the eventual expansion of Medicaid through the Patient Protection and Affordable Care Act. \\
\textbf{2014:} State requested permission from CMS to expand its existing demonstration waiver via HIP 2.0. \\
\textbf{2015:} CMS approved HIP 2.0, which included Indiana’s Medicaid expansion, through a three-year waiver renewal expiring January 2018. \\
\textbf{2017:} State requested permission from CMS to expand its existing demonstration waiver via HIP. \\
\textbf{2018:} CMS approved the current HIP through a three-year waiver renewal expiring December 2020. \\
\textbf{2020:} CMS approved a ten-year waiver renewal expiring December 2030 (not in scope for this report). \\
\hline
\end{tabular}
• Enhancing the managed care entity (MCE) member incentive program by increasing available healthy incentives to a maximum of $200 per initiative.
• Establishing a calendar year benefit period and annual plan selection opportunity.
• Waiving the “institution for mental disease” payment exclusion for short-term substance use disorder (SUD) treatment services for all Medicaid adults ages 21 – 64 (Note: this provision will be the subject of a separate evaluation).
• Discontinuing the graduated copayments for non-emergency use of the emergency department (ED) and the HIP Link premium assistance program for those with employer-sponsored insurance.

**Demonstration Goals**

Indiana’s goals aligned with those of CMS for the demonstration waiver. Demonstration goals include the following.

1. Improve health care access, appropriate utilization, and health outcomes among HIP members.
2. Increase community engagement leading to sustainable employment and improved health outcomes among HIP members.\(^{28}\)
3. Discourage tobacco use among HIP members through a premium surcharge and the utilization of tobacco cessation benefits.\(^ {29}\)
4. Promote member understanding and increase compliance with payment requirements by changing the monthly POWER Account payment requirement to a tiered structure.\(^ {30}\)
5. Ensure HIP program policies align with commercial policies, encourage member understanding, and promote positive member experience and minimize gaps in coverage.
6. Assess the costs to implement and operate HIP and other non-cost outcomes of the demonstration.

Demonstration goals address objectives of Section 1115(a) demonstrations, including improving access to high-quality services that produce positive health outcomes for individuals; strengthening beneficiary engagement in their personal health care plan, including incentive structures that promote responsible decision-making; and enhancing alignment between Medicaid policies and commercial health insurance products to facilitate smoother beneficiary transition.\(^ {31}\)

**Impact of COVID-19 Public Health Emergency**

Several HIP policies were modified or put on hold in March 2020 in response to the COVID-19 public health emergency (PHE). These included policies related to member eligibility and disenrollment, cost-sharing (e.g., copayments, POWER Account Contributions and the tobacco surcharge), and prescription

\(^{28}\) Effective October 31, 2019, the State no longer required members to report their Gateway to Work (Indiana’s community engagement program) hours. Effective April 30, 2020, the State indefinitely stopped all Gateway to Work activities in response to the stay in the federal lawsuit involving Indiana Medicaid and the COVID-19 PHE. Additionally, on June 24, 2021, CMS withdrew its conditional approval of the community engagement requirement.

\(^{29}\) The State suspended all cost-sharing, including the tobacco surcharge, for the duration of the COVID-19 PHE.

\(^{30}\) The State suspended all cost-sharing, including monthly POWER Account Contributions, for the duration of the COVID-19 PHE.

filling processes, among others. The details of these policy changes and their implications for the evaluation are noted throughout this report as appropriate. Given these policy changes, certain analyses were omitted or adjusted depending on the impact of the policy. See Exhibit A.2 in the previous section for an outline of which goals and research questions are addressed in this report and which were omitted or adjusted due to the COVID-19 PHE.

Although this Summative Evaluation Report includes data for the entire HIP 2.0 and HIP demonstration waiver period (January 2015 – December 2020), the narrative delineates analytic trends for 2015 – 2019 versus 2020. Subsequently, the narrative intentionally differentiates the impacts of HIP in contrast to impacts that may be a result of COVID-19 PHE-related policy changes and activities. The sub-heading COVID-19 PHE (2020) is used throughout the report to highlight findings and interpretations relevant to 2020.

**Description of the Demonstration and Implementation Plan**

First passed by the Indiana General Assembly in 2007, HIP provides Medicaid health insurance coverage for qualified low-income, non-disabled adults ages 19 – 64. HIP offers its members a high-deductible health plan paired with a POWER Account, which operates similarly to a health savings account. The State uses a managed care delivery system for HIP. As of December 2020, four MCEs were contracted under HIP to provide health coverage. Additional MCE responsibilities include:

- Tracking and invoicing for POWER Account Contributions;\(^\text{32}\)
- Applying the tobacco surcharge;\(^\text{33}\)
- Providing member incentives; and
- Reporting key metrics to the State.\(^\text{34}\)

The State designates staff to work with the MCEs on HIP contract compliance and programming. In coordination with the State, MCEs also have a critical role in communicating many of the HIP policies outlined in this section.

**HIP Benefit Plans**

In 2015 and as a result of Medicaid expansion, HIP’s target population changed to all non-disabled, non-pregnant, low-income adults ages 19 – 64 with household income at or below 138% of FPL. HIP offers distinct benefit packages to its eligible members: HIP Plus, HIP Basic, HIP State Plan Plus, HIP State Plan Basic, HIP Maternity, and HIP Plus Copay.

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\(^{32}\) The State suspended all cost-sharing, including monthly POWER Account Contributions, for the duration of the COVID-19 PHE.

\(^{33}\) The State suspended all cost-sharing, including the tobacco surcharge, for the duration of the COVID-19 PHE.

\(^{34}\) Sample metrics include rate of preventive examinations for HIP members, ED admissions per 1,000 member months, or number of outpatient visits per member months.
Indiana’s current Section 1115(a) demonstration provides authority for the State to continue to offer HIP with different benefit plans:35

- **HIP Plus**: HIP members with income at or below 138% of the FPL who make required monthly POWER Account Contributions maintain access to HIP Plus, an enhanced benefit plan that includes additional health care benefits such as coverage for dental, vision, and chiropractic services.36 HIP Plus members pay a monthly POWER Account Contribution payment based on income tiers and only pay copayments for non-emergent ED visits.
  - **HIP State Plan Plus**: Members have the same cost-sharing requirements as HIP Plus and do not pay copayments for services other than for non-emergent ED visits. Similar to HIP Plus, State Plan Plus members, make POWER Account Contributions. Enrollment in this plan provides certain members37 with access to the Medicaid State Plan benefits in place of the approved Alternative Benefit Plan.
  - **HIP Plus Copay**: HIP members above 100% of the FPL identified as medically frail38 by the State or an MCE and have not been able to meet their HIP Plus POWER Account Contribution obligations. These members have copayments assigned to them, consistent with the HIP Basic Plan and have access to the HIP Plus benefits.

- **HIP Basic**: HIP members with income at or below 100% of the FPL who do not make monthly POWER Account Contributions for HIP Plus coverage enroll in HIP Basic. This benefit plan provides more limited coverage than HIP Plus (i.e., not covering vision or dental services) and includes copayments for doctor visits, hospital stays, and prescriptions.39 These copayments are consistent with traditional Medicaid copayments and can range from $4 to $8 per doctor visit or prescription filled and can be as high as $75 per hospital stay. HIP Basic members can enroll in HIP Plus during their annual redetermination if they choose to begin paying their POWER Account Contribution and may enroll if they receive rollover.
  - **HIP State Plan Basic**: Members have the same cost-sharing requirements and copayments for services as HIP Basic. Enrollment in this plan provides certain members40 with access to the Medicaid State Plan benefits in place of the approved Alternative Benefit Plan.

35 The State temporarily paused plan switches which would result in a benefit downgrade due to the COVID-19 PHE.
37 Medically frail, Transitional Medical Assistance (TMA) participants, Section 1931 low-income (<19% of the FPL) parents and caretakers, and low-income (<19% of the FPL) ages 19 – 20.
38 Medically frail refers to a federally required designation of members who have disabling mental disorders, including serious mental illness; chronic substance use disorders; serious or complex medical conditions; physical, intellectual or developmental disabilities that significantly impair the ability to perform one or more activities of daily living; or a disability determination based on Social Security Administration criteria. These members have a medically frail flag of Y in the monthly enrollment data.
39 On June 10, 2015, the State submitted an approved copy of the ABP for HIP Basic as a State Plan Amendment to the Centers for Medicare and Medicaid Services. These benefits for the ABP were aligned using Essential Health Benefits. Indiana Family and Social Services Administration. (2014). Alternative Benefit Plan: Healthy Indiana Plan (HIP) 2.0 Basic. Retrieved from https://www.in.gov/fssa/hip/files/DraftBasicABP.pdf
40 Medically frail, Transitional Medical Assistance (TMA) participants, Section 1931 low-income (<19% of the FPL) parents and caretakers, and low-income (<19% of the FPL) ages 19 – 20.
Healthy Indiana Plan Summative Evaluation Report

- **HIP Maternity**: HIP members who become pregnant while enrolled in a HIP plan transition to HIP Maternity. HIP Maternity (MA) covers HIP members throughout their pregnancy and 60 days postpartum. HIP Maternity enrollees do not have cost-sharing requirements and have access to the Medicaid State Plan benefits.

Prior to the COVID-19 PHE, members could switch between benefit plans as policies allowed. As a result of COVID-19 PHE, a pause on switches was enacted which resulted in a benefit downgrade between State Plan to regular (HIP Basic, HIP Plus) benefits; and HIP Plus to HIP Basic. However, the opposite switches did not result in a downgrade (HIP Basic to HIP Plus or HIP regular to State Plan) and thus were allowed. Additional COVID-19 PHE policy changes included: waiving monthly contributions for HIP Plus members; permitting members having HIP Basic (enrolled prior to the COVID-19 PHE) to change to HIP Plus. 41

Automatically enrolling new HIP members in HIP Plus; pausing cost-sharing and the requirement for an $8 copay for a no-emergent ED visit.

Adults that meet all the eligibility requirements for HIP, but who are not a U.S. citizen and not a lawful permanent resident in the U.S. for at least five years or are not qualified aliens, are entitled to “Emergency Services Only” under HIP. The Lewin Group ("Lewin") did not include this enrollment category in this evaluation due to the limited nature of covered services.

**HIP Enrollment Over Time**

The HIP program grew from 389,942 unique members in 2015, the first year of the program, to 546,451 unique members in 2019, with the largest enrollment increase occurring from 2015 – 2016—during the initial year of Medicaid expansion. 42 During the five-year period from 2015 – 2019, there were 954,572 unique members in the HIP program.

In 2019, approximately 58% of members (317,589) were enrolled only in HIP Plus during the year, 21% (113,479) were enrolled only in HIP Basic, and the remaining 21% (115,383) were either enrolled in HIP Maternity or had otherwise switched HIP enrollment statuses during the year (e.g., from HIP Plus to HIP Basic or vice versa). Starting from 2018, the State brought all pregnant members likely to qualify for HIP benefits following the end of their postpartum period into the HIP program. 43 Generally, HIP Maternity involves a switch to the maternity enrollment status from HIP Plus or HIP Basic, or vice versa. 44 Approximately 46% of members who switched enrollment statuses in 2019 fall into the HIP Maternity category.

**COVID-19 PHE (2020):** In 2020, the HIP program enrollment increased an additional 15% to 629,240 unique members. HIP covered an average of 397,600 members per month in January and February 2020 and an average of 515,773 members per month in March through December 2020. Medicaid enrollment grew considerably during the COVID-19 PHE due to compliance with the Maintenance of Effort (MOE) requirement (i.e., the Families First Coronavirus Response Act which provides a 6.2 percentage point increase in the federal share of certain Medicaid spending with requirements to meet certain

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41 Based on information available during preparation of the Evaluation Plan.
42 Enrollment status values of Regular Basic (RB), Regular Plus (RP), State Basic (SB), State Plus (SP), HIP Maternity (MA), and HIP Plus Copay (PC). Lewin did not include months when an individual had conditional eligibility, or members that were eligible for Emergency Services Only (Emergency Room Services flag of "Y").
43 There also is a special pregnancy category for pregnant members with income over the regular HIP limit of 138% FPL.
44 New pregnant or postpartum enrollees applying for Medicaid and are under 138% FPL are also eligible for the HIP program and are automatically enrolled in HIP Maternity.
maintenance of eligibility requirements that include ensuring continuous coverage for current enrollees), individual changes in income, and decreases in HIP disenrollment. In 2020, approximately 69% of members (435,972) were enrolled only in HIP Plus during the year, 19% (117,170) were enrolled only in HIP Basic, and the remaining 12% (76,098) were either enrolled in HIP Maternity or had otherwise switched their HIP benefit plan during the year (“HIP Switcher”). Increases in HIP Plus enrollment were expected as members did not have to make POWER Account Contributions as a condition of eligibility during the COVID-19 PHE. Thus, those with eligibility (including conditional eligibility) in a Plus category were not switched to a Basic category or denied for nonpayment of POWER Account Contribution. Moreover, any newly enrolled members were automatically enrolled in HIP Plus due to the COVID-19 PHE. The State chose to enroll all newly eligible HIP members into HIP Plus because cost sharing was suspended due to the PHE. Without the ability to make POWER Account Contribution payments, there was not a way to distinguish whether a member should go to Plus or Basic; therefore, the State opted to place members in the plan with the most benefits.

The total number of members identified as HIP Switcher is lower compared to prior years. This is primarily due to policies implemented during the COVID-19 PHE when members did not have to make POWER Account Contribution payments or get disenrolled or moved to HIP Basic for nonpayment of POWER Account Contributions. Approximately 77% of members (58,898) that identified as HIP Switchers fell into the HIP Maternity category. In 2020, individuals who were already in this cohort (regardless of their current pregnancy status) remained, as disenrollment policies were turned off due to the COVID-19 PHE.

Exhibits B.2, B.3, and B.4 summarize HIP enrollment. Sociodemographic information about the HIP population can be found at the end of Section B: Summary of HIP Demonstration and in Attachment I: HIP Sociodemographic Statistics.

Exhibit B.2: Count of Unique HIP Members by Year (February 2015 – December 2020)


During the COVID-19 PHE, member disenrollment was paused. Moreover, no members were downgraded to a plan with less coverage starting after March 1, 2020, regardless of change in income. During the PHE, the only reasons for closure were death, change in residency (i.e., no longer resident of Indiana), and written voluntary withdrawal from assistance. Member coverage could be suspended if they were incarcerated or admitted to a psychiatric facility.
Exhibit B.3: Count of HIP Members by Benefit Plan and Year (February 2015 – December 2020)


Exhibit B.4: Count and Percent of Unique HIP Members by Year and Benefit Plan (February 2015 – December 2020)

<table>
<thead>
<tr>
<th>Benefit Plan</th>
<th>2015 Count (%)</th>
<th>2016 Count (%)</th>
<th>2017 Count (%)</th>
<th>2018 Count (%)</th>
<th>2019 Count (%)</th>
<th>2020 Count (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIP Basic Only</td>
<td>112,152 (29%)</td>
<td>151,469 (29%)</td>
<td>163,450 (29%)</td>
<td>141,798 (25%)</td>
<td>113,479 (21%)</td>
<td>117,170 (19%)</td>
</tr>
<tr>
<td>HIP Plus Only</td>
<td>219,802 (56%)</td>
<td>296,878 (57%)</td>
<td>301,606 (54%)</td>
<td>313,248 (55%)</td>
<td>317,589 (58%)</td>
<td>435,972 (69%)</td>
</tr>
<tr>
<td>HIP Switchers</td>
<td>57,988 (15%)</td>
<td>71,789 (14%)</td>
<td>91,373 (16%)</td>
<td>114,948 (20%)</td>
<td>115,383 (21%)</td>
<td>76,098 (12%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>389,942</strong></td>
<td><strong>520,136</strong></td>
<td><strong>556,429</strong></td>
<td><strong>569,994</strong></td>
<td><strong>546,451</strong></td>
<td><strong>629,240</strong></td>
</tr>
</tbody>
</table>


**Eligibility Determination Process**

Individuals apply for HIP services through the Division of Family Resources, which determines eligibility for Indiana Health Coverage Programs. Members can also complete a Presumptive Eligibility application with qualified providers to receive temporary health coverage.

To start coverage, HIP members must make an initial Fast Track or POWER Account Contribution payment or wait 60 days. New HIP members in the 60-day period who have not made a $10 Fast Track prepayment are determined conditionally eligible by the Division of Family Resources. Conditionally eligible members do not receive full eligibility and cannot enroll as members until one of the following occurs:

- Enrollee makes a payment of their first POWER Account Contribution for HIP Plus
- Enrollee at or below 100% of the FPL does not make a first payment before the 60-day payment period expires and, therefore, enrolls in HIP Basic. Individuals with income greater than 100% FPL must make a payment within 60 days to obtain coverage.
Members have the opportunity to select an MCE on their application. However, if an individual determined to be conditionally eligible for HIP by the Division of Family Resources and does not select an MCE, the State auto-assigns the member to an MCE. Member eligibility is effective the first day of the month in which they make their payment or the 60-day period ends; coverage end dates fall on the last day of a month unless a member dies.

**COVID-19 PHE (2020):** During the COVID-19 PHE and in compliance with the MOE requirement, the State adjusted eligibility policies to ensure uninterrupted access to coverage. Self-attestation of income was accepted for income verification at the time of application. Additionally, in alignment with federal MOE requirements, the State announced that no members would have their health coverage terminated throughout the COVID-19 PHE unless it was voluntarily withdrawn or there was a relocation outside of Indiana. The information on Presumptive Eligibility and Fast Track outlined below represents the policy structure in use before the COVID-19 PHE changes went into effect. Throughout the COVID-19 PHE, completion of a full application for the Indiana Health Coverage Programs (including HIP) to continue benefits beyond the end of the month following the start of Presumptive Eligibility. The State also announced that member coverage started when eligibility was determined and initial payment to begin coverage was not required. Fast Track payments were also paused.

**Presumptive Eligibility**

With HIP 2.0, the State introduced enhancements to the Presumptive Eligibility process. The Presumptive Eligibility process allows qualified providers to determine eligibility for certain groups to receive temporary health coverage under the Indiana Health Coverage Programs, which includes HIP. As of April 1, 2015, the State expanded qualified Presumptive Eligibility providers to include Federally Qualified Health Centers (FQHCs), Rural Health Centers (RHCs), Community Mental Health Centers (CMHCS), and local County Health Departments. Qualified providers work with individuals to complete a Presumptive Eligibility application. Using an online system and member self-reported responses, qualified providers receive real-time Presumptive Eligibility determinations for individuals seeking health care services. An individual can receive Presumptive Eligibility coverage only once during a 12-month rolling period, and only once per pregnancy.

Individuals determined presumptively eligible can receive temporary coverage and receive services immediately until the end of the following month. Members must complete the full application by the last day of the next month to maintain Presumptive Eligibility coverage. Before January 1, 2019, members determined presumptively eligible received coverage under the managed care delivery system. State applicants determined presumptively eligible for the adult category (PE Adult) before 2019 enrolled with an MCE and received coverage similar to HIP Basic with copayment obligations. As of January 1, 2019, applicants determined presumptively eligible receive coverage under a fee-for-service delivery system.

Starting in 2018, Presumptive Eligibility members determined to be conditionally eligible for HIP move directly to HIP Basic with an opportunity to pay for HIP Plus. The State refers to this population as “Potential Plus.” This extension allows members to avoid a gap in coverage as long as they meet the

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48 Ibid.
required application and payment deadlines. Applicants have 60 days to pay any required POWER Account Contribution to be eligible for HIP Plus.\(^{49}\)

**COVID-19 PHE (2020):** Presumptive Eligibility continued during the COVID-19 PHE.

**Fast Track**

The Fast Track option expedites HIP enrollment by allowing applicants to make a prepayment of $10 toward their POWER Account Contribution. Using Fast Track, applicants can pay a POWER Account Contribution at the time of application or any time before the State’s eligibility determination. Once the State determines an applicant eligible for Medicaid, the individual’s Medicaid eligibility dates back to the first day of the month in which the member made the Fast Track payment. Individuals approved for HIP with income less than 100% of the FPL who do not make a POWER Account Contribution within the 60 days enroll in HIP Basic. Individuals with income over 100% of the FPL who do not make a POWER Account payment or Fast Track pre-payment in the required 60-day period do not receive coverage and must reapply.\(^ {50}\)

**COVID-19 PHE (2020):** Fast Track payments were paused during the COVID-19 PHE since all member cost-sharing requirements were suspended.

**POWER Accounts**

To help members prepare for participation in the commercial marketplace, the State offers all HIP members a POWER Account, similar to a health savings account. POWER Accounts provide incentives for members to stay healthy, be value- and cost-conscious, and use services in a cost-efficient manner. HIP Plus, HIP Basic, or HIP State Plan members use their POWER Accounts to pay for covered services up to their $2,500 deductible. MCEs establish and administer each member’s POWER Account and pay the claims for all covered services when a member exhausts their POWER Account.

**POWER Account Contributions**

While all members have a POWER Account, HIP Plus members have a POWER Account Contribution. The State funds POWER Accounts up to a ceiling of $2,500 per year, contributing an amount annually for each member that is equal to the difference between the required member contribution and the $2,500 ceiling. For HIP Plus members, this monthly amount represents a combination of member, employer, or not-for-profit contributions, and State contributions when rollover is earned. Members may also apply earned MCE incentives as offered by their plan. For HIP Basic members, the State fully funds the POWER Accounts and covers the member’s $2,500 annual deductible.

MCEs bill for and collect HIP Plus POWER Account Contributions and send monthly statements to members. HIP Basic members also receive monthly account statements to assist them in managing the POWER Account and copayments and to increase awareness of the cost of the health care services received.

**Determination of POWER Account Contribution Amounts**

Effective with CMS’s waiver approval in 2018, the State changed member POWER Account Contribution amounts from 2% of income to a tiered structure based on income level (see Exhibit B.5). The previous

\(^{49}\) Ibid.

monthly POWER Account Contribution amounts ranged from a maximum amount of $4.28 for members with incomes less than 22% of the FPL to a maximum amount of $27.17 for those at 100% of the FPL or higher. Fluctuations in a member’s income required a recalculation of the member’s 2% of income and changed the monthly amount due. This change could happen as frequently as every month for members with monthly income fluctuations. This ongoing variability of the POWER Account Contribution amounts created confusion among members regarding the amount owed and increased the overall administrative burden for the State and MCEs related to these tiers.

The new tiered monthly contribution amounts range from $1.00 for members with income less than 22% of the FPL and $20.00 for those at 100% of the FPL or higher. The State anticipates that the simplified tiered structure results in greater member understanding, increased member compliance with payments, and will minimize gaps in coverage.

The State calculates the household’s POWER Account Contribution based on a tiered contribution structure for individuals. For two HIP-eligible married adults, the State divides the monthly contribution, and each member pays half of the calculated amount on a monthly basis. Married members with household income less than 22% both pay a $1 POWER Account Contribution. Other income tiers split the amount; for example, two married adults with household income of 51% to 75% FPL each pay $5.00. Beginning in January 2019, members may pay a 50% tobacco use surcharge in addition to the POWER Account tier amounts.


<table>
<thead>
<tr>
<th>FPL</th>
<th>HIP 2.0 POWER Account Contribution (Previous)a</th>
<th>HIP POWER Account Contribution (2018 – February 2020)b</th>
<th>HIP POWER Account Contribution (March 2020 – Current)c</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;23%</td>
<td>Less than $214</td>
<td>$4.28</td>
<td>$1.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Less than $222</td>
<td>$1.50</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Less than $234</td>
</tr>
<tr>
<td>23-50%</td>
<td>$214.01 to $487</td>
<td>$9.74</td>
<td>$5.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$222.01 to $505</td>
<td>$7.50</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>$234.01 to $532</td>
</tr>
<tr>
<td>51-75%</td>
<td>$487.01 to $730</td>
<td>$14.60</td>
<td>$10.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$505.01 to $758</td>
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<td></td>
<td>$532.01 to $798</td>
</tr>
<tr>
<td>76-100%</td>
<td>$730.01 to $973</td>
<td>$19.46</td>
<td>$15.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$758.01 to $1,011</td>
<td>$22.50</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>$798.01 to $1,064</td>
</tr>
<tr>
<td>101-138%</td>
<td>$973.01 to $1,358</td>
<td>$27.17</td>
<td>$20.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$1,011.01 to $1,396</td>
<td>$30.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$1,064.01 to $1,468</td>
</tr>
</tbody>
</table>

Note: For HIP 2.0, the monthly income amounts shown here reflect 2015 FPL and the monthly POWER Account Contribution amounts represent a percentage of income. For current HIP, the POWER Account Contribution amounts reflect the tiered contribution structure.
Loss of Coverage Due to Nonpayment of POWER Account Contributions

HIP Plus members with incomes from 101% to 138% of the FPL that do not make monthly POWER Account Contribution payments are disenrolled from HIP and are not allowed to re-enroll for six months (also referred to as the six-month lockout or non-eligibility period). The State exempts members determined medically frail from nonpayment penalties regardless of income; these members do not lose benefits due to nonpayment of POWER Account Contributions. The enrollment lockout period also does not apply for members residing in a domestic violence shelter or in a state-declared disaster area. Members subject to a lockout period can request a waiver to reenter the program.

COVID-19 PHE (2020): In response to the COVID-19 PHE, the State suspended all cost-sharing policies. The State waived all POWER Account Contributions starting March 1, 2020, until further notice. Effective April 1, 2020, members with copayments no longer had copayments, including pharmacy copayments. Indiana Health Coverage Policy previously outlined that during the COVID-19 PHE, all members who made payments during the 2020 benefit periods were to have those payments applied as credits on their account when payments are required again. CMS guidance, however, has outlined that due to the cost-sharing waiver no member contributions can be accepted, and any member contributions would be immediately refunded during the PHE. In return, MCEs refunded all member contributions within 30 days and unused rollover prior to December 31, 2021. In addition, the State suspended disenrollment and plan switches which would result in a benefit downgrade due to the COVID-19 PHE. Starting January 2021, the State suspended the six-month non-eligibility criterion pending resolution of the stay in the federal lawsuit and in compliance with the newly approved waiver terms and conditions. Members were not “locked” out for nonpayment of POWER Account Contributions.

Tobacco Cessation Initiative

As indicated previously, all HIP members must contribute to their POWER Account to maintain access to the enhanced HIP Plus benefit plan. To discourage tobacco use and to align with commercial market coverage policies, HIP includes a surcharge on top of the POWER Account Contribution for HIP Plus members who self-identify as tobacco users. Tobacco use means the use of tobacco four or more times a week in the last six months, including use of chewing tobacco, cigarettes, electronic cigarettes (including vaping), cigars, pipes, hookah, and snuff. The HIP tobacco initiative began in January 2018, with surcharges taking effect in January 2019.

The State assesses a surcharge on top of the POWER Account Contribution for members who continuously enroll for 12 months with the same MCE and self-identify as tobacco users during this period. If the member continues to self-identify as using tobacco, the State increases their monthly contributions by 50% beginning in the first month of their new benefit period. For example, the POWER Account Contribution for an individual with income less than 22% of the FPL would increase from $1.00 to $1.50 per month with the application of the tobacco surcharge. For married HIP members, only the tobacco user receives the tobacco surcharge. When both married members have the surcharge, they split the surcharge. MCEs reported applying the tobacco surcharge to 1,965 members in 2019, representing <1% of the 569,994 members in 2018. Based on MCE reports, of the total 546,451 HIP

51 This policy was under consideration at CMS but was stopped and all existing lockouts cleared in 2020 due to the COVID-19 PHE.
54 Members may self-identify as tobacco users during their initial application, during MCE selection, or when a member notifies their MCE.
members, there were 1,968 members in 2019 who had the surcharge applied in their first benefit
coverage month. Among these members, 209 used tobacco cessation services during the previous year,
suggesting that even with prior knowledge of the pending surcharge most members did not attempt to
quit using the covered benefits.

MCEs separate the surcharge on the monthly POWER Account statements to highlight the additional
cost due to tobacco use for members. Some MCEs offer members MCE-specific incentives to participate
in tobacco cessation services. While not specific to HIP, two tobacco cessation services include:

- **Indiana Tobacco Quitline:** Free phone-based counseling service administered by the State.
  Users can access services every day of the week in over 170 languages. The Quitline includes
  access to one-on-one coaching, resources for health care providers, and tools for other
  stakeholders to use for smoke-free and other smoking cessation programming.  

- **Baby and Me Tobacco Free:** Smoking cessation program for pregnant and postpartum
  individuals (up until 12 months postpartum). This program includes individualized education
  sessions, biochemical testing at visits, and several diaper vouchers.  

Approximately 29% to 31% of HIP members in the State’s October 2017 – March 2019 smoking indicator
file reported using tobacco. The State’s smoking indicator file includes new HIP members, members
switching MCEs, and members who have self-reported their tobacco use status (reflects a non-
representative subset of approximately 10% to 15% of all HIP members). This percentage range is lower
than low-income/Medicaid estimates for Indiana from other sources, which are in the 35% to 37% range.

The State collects information on HIP member tobacco use during the HIP enrollment process (i.e., initial
enrollment and when changing plans during open enrollment); members can also report changes in
their tobacco use by calling their MCE or the State. While there are questions about tobacco use on the
health needs assessment performed by the MCEs, these responses are not used to determine the
tobacco surcharge due to concerns about members underreporting tobacco use during an assessment
performed for clinical purposes. When a member changes MCEs during the MCE selection period or the
middle of the year, the tobacco indicator passes to the new MCE. However, the surcharge is based on 12
months of full eligibility and tracking of tobacco use, so the new MCE will not know the member’s
previous tobacco use indicator or be expected to apply a surcharge.

**COVID-19 PHE (2020):** Since the State suspended all cost-sharing during the COVID-19 PHE, no surcharge
is collected. The Tobacco surcharge policy will be reinstated, with an implementation process that aligns
with the initial implementation, after the COVID-19 PHE is lifted.

**Preventive Service Incentive and Rollover**

The State provides all HIP members with incentives to receive preventive services and to manage their
POWER Accounts via direct financial investment. Members have an opportunity to rollover any funds
remaining in their POWER Account and apply the rollover as a credit toward their POWER Account
Contribution in the next benefit period. For members that contribute to a POWER Account and use

56 Indiana State Department of Health: Maternal and Child Health Epidemiology Division. (2016). Infant Mortality: Year in
services, claims are paid from the account proportionally from State and member funds. If the member contributes $240 over the year out of the $2,500 limit, then 9.6% of every claim paid by the account is paid with member dollars; the rest is covered with State dollars. If the entire account is not spent, then the member’s remaining dollars can be rolled over to the next year or refunded if the member leaves the program.

The amount rolled over or discounted depends on whether the member received preventive care services and what program the member enrolled in on the last day of the benefit period:

- If HIP Plus members have funds remaining at year-end and received preventive services, the State matches the member rollover amount and provides extra funds to their POWER Account. These funds further reduce the amount owed for the current benefit period, but only after members use rollover funds.

- If HIP Basic members receive preventive services, they can offset the required contribution for HIP Plus by up to 50% the following year. However, members may not double their rollover as in HIP Plus. Members who choose to remain in HIP Basic will incur a 25% penalty on any unused member rollover dollars that are then returned to the State. Only 75% of remaining member rollover dollars will be carried forward to the new coverage year. HIP Basic members who do not receive preventive services will not earn the rollover discount.

Exhibits B.6 and B.7 illustrate the rollover for HIP Plus and HIP Basic.

Exhibit B.6: HIP Rollover for HIP Plus Members

Exhibit B.7: HIP Rollover for HIP Basic Members

The MCEs calculate the rollover 121 calendar days after the end of the benefit period to allow for a claims run-out period. The MCEs then submit this information to the State. For member rollover, members can reuse these funds to reduce the amount owed for their current benefit period. HIP members who leave the program remain eligible to receive a refund for the unused portion of their contributions and rollover following the reconciliation of their POWER Account. State rollover funds never pay tobacco surcharge amounts, and unused funds return to the State at the end of the current benefit period.
COVID-19 PHE (2020): While cost-sharing has been suspended, members who received preventive care during the PHE had the ability to earn rollover in 2020 and throughout the PHE. Members that earn rollover during this time were refunded. All unused rollover amounts were refunded prior to December 31, 2021.

**Employment, Education, and Gateway to Work Policy (Effective January 1, 2019 – April 30, 2020)**

From January 1, 2019 to April 30, 2020, Indiana’s community engagement reporting requirement went into effect, with a six-month voluntary reporting period. This policy evolved from Indiana’s existing HIP 2.0 voluntary Gateway to Work program and was designed to provide an incentive for HIP members to attain employment or engage in other community activities correlated with improved health and wellness (e.g., employment, volunteer work, education, and training). Under this new policy, all able-bodied HIP members, not otherwise meeting an exemption or already working at least 20 hours per week, were required to engage in and report on qualifying activities monthly. Effective October 31, 2019, the State no longer required members to report their Gateway to Work hours. Effective April 30, 2020, the State indefinitely stopped all community engagement activities in response to the stay in the federal lawsuit involving Indiana Medicaid and the COVID-19 PHE.

On June 24, 2021, CMS sent a letter withdrawing its conditional approval of the community engagement requirement. In this letter, CMS included the following explanation regarding the removal of its conditional approval of the policy: “[. . .] CMS has the authority and responsibility to maintain continued oversight of demonstration projects in order to ensure that they promote the objectives of Medicaid. CMS may withdraw waivers or expenditure authorities if it ‘find[s] that [a] demonstration project is not likely to achieve the statutory purposes.’ [. . .] ‘CMS still has serious concerns about testing policies that create a risk of substantial loss of health care coverage and harm to beneficiaries even after the expiration of the bar on disenrolling beneficiaries. The COVID-19 pandemic has had a significant impact on the health of Medicaid beneficiaries. Uncertainty regarding the current crisis and the pandemic’s aftermath, and the potential impact on economic opportunities (including job skills training, work and other activities used to satisfy the community engagement requirement), and access to transportation and affordable child care, have greatly increased the risk that implementation of the community engagement requirement approved in this demonstration will result in substantial coverage loss. In addition, the uncertainty regarding the lingering health consequences of COVID-19 infections further exacerbates the harms of coverage loss for Medicaid beneficiaries.’”

Indiana’s HIP 2.0 voluntary Gateway to Work Program was evaluated in the Interim Evaluation Report and included in the Evaluation Plan (amendment approved by CMS on December 20, 2019). Given that the policy has been halted indefinitely, analyses and subsequent findings were not included in this Summative Evaluation Report. However, to provide continuity between reports, Lewin has included information relevant to the Gateway to Work program reporting status, activities, exempt populations, and phase in hours.

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The Gateway to Work program provides three possible reporting statuses for members, reflecting that some members may already work a substantial amount, and others may encounter circumstances that create significant barriers to participation. **Exhibit B.8** provides a summary of each status.

**Exhibit B.8: Gateway to Work Reporting Status and Number and Percent of HIP Members (June 2019)**

<table>
<thead>
<tr>
<th>Reporting Status</th>
<th>Definition</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exempt</td>
<td>Member has an exemption from reporting requirements and does not have to report qualifying activities during exemption months. The member still has the option of using Gateway to Work resources.</td>
<td>286,107</td>
<td>74.6%</td>
</tr>
<tr>
<td>Reporting Met (i.e., pre-qualified)</td>
<td>Member already works at least 20 hours per week. The member can still use Gateway to Work resources.</td>
<td>28,496</td>
<td>7.4%</td>
</tr>
</tbody>
</table>
| Required to Report (i.e., non-exempt) | Member needs to report qualifying activities for a certain number of hours each month (e.g., FSSA Benefits portal or by calling the MCE).  
**Note:** January to June 2019 reporting is on a voluntary basis only.                                                                 | 68,952 | 18.0%   |

Sources: June 2019 State administrative data; Indiana FSSA. Learn About Gateway to Work. Retrieved from [https://www.in.gov/fssa/hip/2592.htm](https://www.in.gov/fssa/hip/2592.htm)

**Exhibit B.9** provides a summary of qualifying activities and exempt populations. The list of possible exemptions includes a “good cause” exemption, which members report to their MCE for further review by the State and which does not specify any one circumstance or condition. The good cause exemption applies to individuals who do not fit into the other designated exemption categories that may affect their ability to meet reporting hours (e.g., restrictions due to religious affiliations or having a degenerative disease that does not yet meet the medically frail definition).
Exhibit B.9: Gateway to Work Qualifying Activities and Exempt Populations

<table>
<thead>
<tr>
<th>Gateway to Work Qualifying Activities</th>
<th>Exempt Populations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Employment</strong></td>
<td>Age 60 or older</td>
</tr>
<tr>
<td>· Employment (subsidized or unsubsidized)</td>
<td>Temporary Assistance for Needy Families (TANF)/Supplemental Nutrition Assistance Program (SNAP) recipients</td>
</tr>
<tr>
<td>· Health plan employment programs</td>
<td>Medically frail</td>
</tr>
<tr>
<td>· Job search activities</td>
<td>Pregnant people</td>
</tr>
<tr>
<td>· Education related to employment (on-the-job training)</td>
<td>Individuals experiencing homelessness</td>
</tr>
<tr>
<td>· Caregiving</td>
<td>Recently incarcerated (up to six months from release)</td>
</tr>
<tr>
<td>· Homeschooling</td>
<td>Certified illness or incapacity (temporary)</td>
</tr>
<tr>
<td>· Members of the Pokagon Band of Potawatomi participating in the Pathways program</td>
<td>SUD treatment</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td>Student (full or half time)</td>
</tr>
<tr>
<td>· General Education:</td>
<td>Primary caregiver:</td>
</tr>
<tr>
<td>· High School Equivalency</td>
<td>· Dependent child below the compulsory age (seven and under prior to October 1, 2019; changed to ages 13 and younger effective October 1, 2019)</td>
</tr>
<tr>
<td>· Adult education</td>
<td>· Dependents with disabilities</td>
</tr>
<tr>
<td>· Post-secondary education</td>
<td>· Kinship caregiver of abused or neglected children</td>
</tr>
<tr>
<td>· Job skills training (e.g., Next Level Jobs)</td>
<td>· Good cause exemption (e.g., hospitalization, domestic violence, or the death of a family member)</td>
</tr>
<tr>
<td>· Vocation education or training</td>
<td></td>
</tr>
<tr>
<td>· English as a second language education</td>
<td></td>
</tr>
<tr>
<td><strong>Community Service</strong></td>
<td></td>
</tr>
<tr>
<td>· Community service/public service</td>
<td></td>
</tr>
<tr>
<td>· Volunteer work</td>
<td></td>
</tr>
<tr>
<td>· Gateway to Work community work experience</td>
<td></td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td></td>
</tr>
<tr>
<td>· Qualifying activities based on State or MCE review</td>
<td></td>
</tr>
<tr>
<td>· MCE Qualifying Activities (MCE specific programs)</td>
<td></td>
</tr>
<tr>
<td>· Attending Alcoholic Anonymous or Narcotics Anonymous meetings</td>
<td></td>
</tr>
<tr>
<td>· Completing pre-suspension courses</td>
<td></td>
</tr>
</tbody>
</table>

The State began to phase-in the reporting requirements in 2019 with a member grace period of six months of voluntary reporting only to allow for operational readiness and promote member awareness. Members required to report qualifying activities had to start reporting a minimum of five hours per week beginning on July 1, 2019, with plans to increase over time to 20 hours per week by July 1, 2020. Exhibit B.10 outlines this phase-in period.

Exhibit B.10: Gateway to Work Phase in Hours Plan

<table>
<thead>
<tr>
<th>HIP Eligibility Period</th>
<th>Required Participation Hour Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 2019 – June 2019</td>
<td>0 hours per week</td>
</tr>
<tr>
<td>July 2019 – September 2019</td>
<td>5 hours per week</td>
</tr>
<tr>
<td>October 2019 – December 2019</td>
<td>10 hours per week</td>
</tr>
<tr>
<td>January 2020 – June 2020</td>
<td>15 hours per week</td>
</tr>
<tr>
<td>July 2020 – Ongoing</td>
<td>20 hours per week</td>
</tr>
</tbody>
</table>

The State had planned to assess member compliance with the Gateway to Work reporting requirement in December of each year; at least eight months of compliance during a calendar year would have
resulted in continued enrollment. Effective October 31, 2019, the State temporarily removed the enrollment suspension for members who did not meet their reporting requirements pending results of the federal lawsuit (the lawsuit challenging the Gateway to Work program was filed in federal court in September 2019 against Health and Human Services\(^{61}\)). Effective April 30, 2020, the State indefinitely stopped all community engagement activities. However, MCEs will continue to refer members to job training and placement programs, including but not limited to, Next Level Jobs and WorkOne. Then, on June 24, 2021, CMS sent a letter withdrawing its conditional approval of the community engagement requirement.\(^{62}\)

**Other State Policies**

**Workforce Bridge Account**

As members gain employment, their eligibility in HIP may change; members who earn income over the HIP income limit may lose their HIP coverage and potentially transition to commercial coverage. The State developed the HIP Workforce Bridge program to support individuals making the transition, submitting the HIP Workforce Bridge Amendment to CMS in July 2019 for approval.\(^{63}\)

The HIP Workforce Bridge account seeks to alleviate the potential gap in coverage between the time a member leaves HIP and transitions to their commercial plan. Under HIP Workforce Bridge, members transitioning from HIP to employer-sponsored coverage or the federal marketplace have access to a special health account that covers direct health care costs incurred during their coverage transition up to $1,000. Individuals can use this account to pay for premiums, deductibles, copayments, and coinsurance incurred while in commercial insurance. The HIP Workforce Bridge Account eligibility period covers 12 months from an individual’s disenrollment from HIP, or until the member uses the full account balance (whichever comes first). The HIP Workforce Bridge account, funded from aggregate remaining balances of the POWER Account, entitles members to the full $1,000 Bridge account amount regardless of their POWER Account balance upon disenrollment from HIP. The State anticipates the HIP Workforce Bridge account will:

- Reduce the amount of out-of-pocket costs for members transitioning to commercial plans and support members who face a coverage gap.
- Increase the number of successful enrollments in marketplace and employer-sponsored insurance from HIP coverage.
- Reduce the number of individuals who leave HIP due to increased earnings and end up uninsured following disenrollment.
- Reduce churn back to HIP among eligible individuals.

**COVID-19 PHE (2020):** Though Gateway to Work was phased out and Workforce Bridge has not yet been implemented, the State plans to implement Workforce Bridge once the COVID-19 PHE has been lifted.

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The current Workforce Bridge approval was included in an amendment to the End Stage Renal Disease (ESRD) Section 1115 demonstration to permit the state to reinvest budget neutrality savings from the ESRD program to support the Workforce Bridge Account. Since the initial CMS approval, the State requested to move the Workforce Bridge to HIP.

**Workforce Training Initiative**

Created under Governor Holcomb’s Next Level Indiana agenda, Next Level Jobs focuses on connecting Indiana residents with jobs and other employment enrichment opportunities. This program provides free trainings to individuals and reimbursements for Indiana employers when they train employees in high-demand fields. For individuals searching for jobs that have completed trainings, Next Level Jobs also connects them to the Indiana Career Ready IN Demand Jobs tool to search for high-demand jobs.

State officials interviewed for this evaluation indicated that the Gateway to Work program, Next Level Jobs, and the pending HIP Workforce Bridge program work in concert to strengthen workforce participation throughout Indiana. HIP members can leverage participation in Next Level Jobs training to satisfy HIP community engagement reporting requirements, and HIP Workforce Bridge would help individuals make the transition from HIP to commercial coverage when appropriate.

**HIP Member Sociodemographics**

Exhibit B.11 presents an analysis of HIP enrollment data by select sociodemographic characteristics from 2015 – 2020, grouped by pre-COVID-19 PHE and COVID-19 PHE. The distribution of geographic area, race, ethnicity, age, and sex of the HIP population has generally remained unchanged from 2015 – 2020.

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td><strong>Income</strong></td>
<td>83% of HIP members were at or below 100% of the FPL as compared to 18% at 101% of the FPL or higher (16% at 101 – 138% FPL and 2% at &gt;138% FPL). 53% of HIP members had no income.</td>
<td>84% of HIP members were at or below 100% of the FPL as compared to 17% at 101% of the FPL or higher (13% at 101 – 138% FPL and 4% at &gt;138% FPL). 56% of HIP members had no income.</td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td>63% of HIP members were female.</td>
<td>62% of HIP members were female.</td>
</tr>
<tr>
<td><strong>Health Status</strong></td>
<td>30% of HIP members were medically frail.</td>
<td>32% of HIP members were medically frail.</td>
</tr>
<tr>
<td><strong>Race and Ethnicity</strong></td>
<td>66% of HIP members identified as non-Hispanic White, as compared to 18% Black, and 3% Asian or Pacific Islander.</td>
<td>66% of HIP members identified as non-Hispanic White, as compared to 18% Black, and 3% Asian or Pacific Islander.</td>
</tr>
</tbody>
</table>

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65 Effective October 31, 2019, the State no longer required members to report their Gateway to Work (Indiana’s community engagement program) hours. Effective April 30, 2020, the State indefinitely stopped all Gateway to Work activities in response to the stay in the federal lawsuit involving Indiana Medicaid and the COVID-19 PHE. Additionally, on June 24, 2021, CMS withdrew its conditional approval of the community engagement requirement.
## Sociodemographic Characteristic

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>79% of HIP members lived in metro areas (greater than 250,000 population) and 21% lived in nonmetro areas. Of this 21%, 7% of HIP members lived in nonmetro communities with a population of 20,000 or more, 13% lived in nonmetro areas with a population of 2,500 to 19,999, and 1% lived in nonmetro areas with a population of less than 2,500.</td>
<td>79% of HIP members lived in metro areas (greater than 250,000 population) and 21% lived in nonmetro areas. Of this 21% in nonmetro areas, 7% of HIP members lived in nonmetro communities with a population of 20,000 or more, 13% lived in nonmetro areas with a population of 2,500 to 19,999, and 1% lived in nonmetro areas with a population of less than 2,500.</td>
<td></td>
</tr>
</tbody>
</table>

### Age Group (see Attachment I: Exhibit I.53)

| 79% of HIP members were between ages 18 – 49. | 79% of HIP members were between ages 18 – 49. |  |

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2 Medically frail refers to a federally required designation of members who have disabling mental disorders, including serious mental illness; chronic substance use disorders; serious or complex medical conditions; physical, intellectual or developmental disabilities that significantly impair the ability to perform one or more activities of daily living; or a disability determination based on Social Security Administration criteria. These members have a medically frail flag of Y in the monthly enrollment data.


This section includes select sociodemographic descriptions along with comparisons of sociodemographic characteristics between members with only HIP Plus coverage (HIP Plus Only), members with only HIP Basic coverage (HIP Basic Only) and members that switched between coverage types during the calendar year (HIP Switcher). **Attachment I: HIP Sociodemographic Statistics** repeats some of the demographic indicator exhibits below and provides additional detail by benefit plan, along with methodological explanations.

The number (and proportion) of members receiving HIP Plus benefits increased significantly in 2020. This increase was primarily due to changes in HIP policies during the COVID-19 PHE whereby enrolled members were not disenrolled (except due to member request, death, or moving out of state); members did not have to make POWER Account payments to maintain HIP Plus coverage; and all new members were enrolled to receive HIP Plus benefits. The number of HIP Switcher members increased between 2017 and 2018 in part because of the addition of the MA category in 2018. Prior to 2018, pregnant members would have moved out of HIP to Hoosier Healthwise (another Indiana Medicaid program) at the time of their regularly scheduled renewal.

### Income

The proportion of HIP members at higher levels of income increased from 2015 – 2017. This change in the proportion of HIP members at higher income levels corresponds to a reduction in the statewide Indiana unemployment rate over the same period (5.4% in January 2015 compared to 3.3% in January 2018).66

The percentage of members with zero income increased from 51% in 2018 to 53% in 2019, indicating a smaller proportion of members in higher levels of income.

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COVID-19 PHE (2020): In 2020, the percentage of members with zero income increased from 51% in 2018 to 56% in 2020. Exhibit B.12 summarizes the HIP population by income range.

Exhibit B.12: HIP Population by Income Range (February 2015 – December 2020)


Sex

Most HIP members are female (overall and by benefit plan). A larger proportion of HIP Plus Only members are female (61% in 2019) as compared to HIP Basic Only members (53% in 2019). From 2015 – 2019, the percentage of HIP Basic Only male members increased from 32% to 47% while the percentage of HIP Plus Only male members stayed approximately the same between 2016 and 2019 (38% in 2016 and 40% in 2017 & 2018, and 39% in 2019). HIP Switcher members were much more likely to be female (80% in 2019) with a large proportion of this population consisting of pregnant members (21%). Exhibit B.13 summarizes the HIP sex composition by HIP benefit plan.

COVID-19 PHE (2020): The distribution of sex did not change in 2020, with the majority of HIP members being female (overall and by benefit plan). The proportion of HIP Switcher female members increased 11 percentage points in 2020 (81% in 2019 to 92% in 2020). This increase was likely due to the decrease in the number of members switching from HIP Plus to Basic and thereby the majority of the members identified as Switchers were pregnant members only.
**Health Status**

The proportion of medically frail HIP members has increased over time from 14% in 2015 to 30% in 2019. This is likely a result of health plans improving and optimizing their processes for identifying medical frailty. HIP Plus Only members were more likely to be medically frail than HIP Basic Only members from 2015 – 2019, with 2019 having the largest percentage difference of 12 percentage points (HIP Basic at 21% versus HIP Plus at 33%).

- Between 10% and 21% of members with only HIP Basic coverage were medically frail per year from 2015 – 2019.
- Between 15% and 33% of members with only HIP Plus coverage were medically frail per year from 2015 – 2019.

**COVID-19 PHE (2020):** In 2020, the percentage of medically frail per year was equal (33%) between HIP Basic and HIP Plus Coverage. During the PHE, as part of the disenrollment pause, no members lost frailty status.
Exhibit B.14 summarizes the HIP population by medically frail status.

Exhibit B.14: Composition of HIP Population by Benefit Plan, Health Status, and Year (February 2015 – December 2020)

**Race**

The composition of the overall HIP population in terms of race\(^{67}\) remained consistent across time. In 2019, non-Hispanic White members comprised approximately 66% of the overall HIP population, Black members approximately 18%, and Asian or Pacific Islander members approximately 3%. The composition of race by HIP benefit plan was also consistent across time.

HIP Basic Only members were more likely to be Black than HIP Plus Only members (by approximately 12 percentage points in 2019). HIP Plus members included a smaller proportion of Black HIP members (14%) as compared to the HIP Basic Only members (26%) in 2019. Asian and Pacific Islander members comprised similar proportions of the HIP Basic Only, HIP Plus Only, and HIP Switchers subpopulations at 1% to 3% of members each (see Exhibit I.31 in Attachment I: HIP Sociodemographic Statistics).

**COVID-19 PHE (2020):** The distribution of race did not change in 2020, with most HIP members being non-Hispanic White members (overall and by benefit plan).

From 2015 – 2019, HIP members were more likely to be Black as compared to the overall Indiana population and the potentially eligible HIP population\(^{68}\). This comparison used HIP monthly enrollment data and the most recently available American Community Survey (ACS) data.\(^{69}\)

In comparison to the overall Indiana population:

- There was a smaller percentage of Caucasian HIP members (in 2019, 66% of the HIP population was Caucasian as compared to 83% of Indiana residents).
- There was a larger percentage of Black HIP members (in 2019, 18% of HIP members as compared to 10% of Indiana residents).
- The percentages of Asian and Hispanic members in the HIP population are similar (2% to 3% from 2015 – 2019).

In comparison to Medicaid members who are potentially eligible for HIP\(^{70},^{71}\):

- There was a smaller percentage of Caucasian HIP members (in 2019, 66% of HIP population were Caucasian compared to 73% of potentially eligible HIP members).
- The percentages of Black members in the HIP population were similar (in 2019, 18% of HIP members compared to approximately 16% of potentially eligible HIP members).

**Exhibits B.15 to B.19** summarize the HIP population by race and provide comparisons to the general Indiana population and potentially eligible HIP members.

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\(^{67}\) Due to shifts in how race and ethnicity data is compiled and reported in Indiana, comparisons between the 2018 Interim Evaluation Report and the 2020 Summative Evaluation Report should not be made.

\(^{68}\) Defined as those with income below 138% FPL, between ages 19 – 64, without Medicare coverage and without Supplemental Security Income (i.e., those who are eligible for Medicaid).


\(^{70}\) Defined as those with income below 138% FPL, between ages 19 – 64, without Medicare coverage and without Supplemental Security Income (i.e., those who are eligible for Medicaid).

\(^{71}\) These comparisons may be skewed given the large number of members who did not report racial information in the monthly HIP enrollment data as well as the fact that ACS data does not identify actual HIP members.
Attachment I: HIP Sociodemographic Statistics provides a complete summary of enrollment by sociodemographic characteristics for all HIP members, as well as by the HIP Plus Only, HIP Basic Only, and HIP Switcher subpopulations.

Exhibit B.15: HIP Population by Race (February 2015 – December 2020)

Exhibit B.16: Count and Percent of HIP Members by Race for All Members (February 2015 – December 2020)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
</tr>
<tr>
<td>Caucasian</td>
<td>263,828 (68%)</td>
<td>351,830 (68%)</td>
<td>374,888 (67%)</td>
<td>380,589 (67%)</td>
<td>359,848 (66%)</td>
<td>412,998 (66%)</td>
</tr>
<tr>
<td>Black</td>
<td>72,836 (19%)</td>
<td>96,444 (19%)</td>
<td>102,106 (18%)</td>
<td>104,194 (18%)</td>
<td>99,513 (18%)</td>
<td>114,053 (18%)</td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>7,984 (2%)</td>
<td>11,109 (2%)</td>
<td>12,601 (2%)</td>
<td>13,595 (2%)</td>
<td>13,815 (3%)</td>
<td>16,246 (3%)</td>
</tr>
<tr>
<td>Other or Not Available</td>
<td>45,294 (12%)</td>
<td>60,752 (12%)</td>
<td>66,833 (12%)</td>
<td>71,616 (13%)</td>
<td>73,275 (13%)</td>
<td>85,943 (14%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>389,942</strong></td>
<td><strong>520,135</strong></td>
<td><strong>556,428</strong></td>
<td><strong>569,994</strong></td>
<td><strong>546,451</strong></td>
<td><strong>629,240</strong></td>
</tr>
</tbody>
</table>

Defined as those with income below 138% FPL, between ages 19 – 64, without Medicare coverage and without Supplemental Security Income (i.e., those who are eligible for Medicaid).

Exhibit B.18: Count and Percent of Indiana Population by Race (February 2015 – December 2019)

<table>
<thead>
<tr>
<th>Race</th>
<th>Count (%)</th>
<th>Count (%)</th>
<th>Count (%)</th>
<th>Count (%)</th>
<th>Count (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2015</td>
<td>2016</td>
<td>2017</td>
<td>2018</td>
<td>2019</td>
</tr>
<tr>
<td></td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
</tr>
<tr>
<td>Caucasian</td>
<td>5,561,958 (84%)</td>
<td>5,539,000 (84%)</td>
<td>5,584,314 (84%)</td>
<td>5,539,137 (83%)</td>
<td>5,574,860 (83%)</td>
</tr>
<tr>
<td>Black</td>
<td>613,843 (9%)</td>
<td>615,558 (9%)</td>
<td>622,495 (9%)</td>
<td>640,118 (10%)</td>
<td>643,105 (10%)</td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>156,899 (2%)</td>
<td>166,060 (3%)</td>
<td>162,187 (2%)</td>
<td>173,511 (3%)</td>
<td>188,499 (3%)</td>
</tr>
<tr>
<td>Other or Not Available</td>
<td>286,980 (4%)</td>
<td>312,435 (5%)</td>
<td>297,822 (4%)</td>
<td>339,112 (5%)</td>
<td>325,755 (5%)</td>
</tr>
<tr>
<td>Total</td>
<td>6,619,680</td>
<td>6,633,053</td>
<td>6,666,818</td>
<td>6,691,878</td>
<td>6,732,219</td>
</tr>
</tbody>
</table>

Note: Data from the IPUMS is only compiled through 2019.


<table>
<thead>
<tr>
<th>Race</th>
<th>Count (%)</th>
<th>Count (%)</th>
<th>Count (%)</th>
<th>Count (%)</th>
<th>Count (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2015</td>
<td>2016</td>
<td>2017</td>
<td>2018</td>
<td>2019</td>
</tr>
<tr>
<td></td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
</tr>
<tr>
<td>Caucasian</td>
<td>655,389 (74%)</td>
<td>619,959 (74%)</td>
<td>606,727 (74%)</td>
<td>559,173 (71%)</td>
<td>565,461 (72%)</td>
</tr>
<tr>
<td>Black</td>
<td>139,150 (16%)</td>
<td>123,643 (15%)</td>
<td>125,938 (15%)</td>
<td>131,637 (17%)</td>
<td>129,013 (17%)</td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>32,585 (4%)</td>
<td>39,363 (5%)</td>
<td>34,783 (4%)</td>
<td>37,710 (5%)</td>
<td>33,372 (4%)</td>
</tr>
<tr>
<td>Other or Not Available</td>
<td>58,185 (7%)</td>
<td>56,380 (7%)</td>
<td>49,076 (6%)</td>
<td>61,281 (8%)</td>
<td>53,071 (7%)</td>
</tr>
<tr>
<td>Total</td>
<td>885,309</td>
<td>839,345</td>
<td>816,524</td>
<td>789,801</td>
<td>780,917</td>
</tr>
</tbody>
</table>

Note: Data from the IPUMS is only compiled through 2019.

**Ethnicity**

The composition of the overall HIP population in terms of populations by Hispanic origin remained consistent across time. In 2019, Hispanic members comprised approximately 6% of the overall HIP population. The composition of Hispanic members by HIP benefit plan was also consistent across time.

**COVID-19 PHE (2020):** The distribution of Hispanic populations did not change in 2020 (6% of HIP members were Hispanic).

**Exhibits B.20 to B.22** summarize the HIP Hispanic population and provide comparisons by benefit plan.
Exhibit B.20: HIP Population by Hispanic Origin (February 2015 – December 2020)


Exhibit B.21: Composition of HIP Population by Benefit Plan and Hispanic Origin (February 2015 – December 2020)

### Exhibit B.22: Count and Percent of HIP Members by Hispanic Origin for All HIP Members (February 2015 – December 2020)

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>2015 Count (%)</th>
<th>2016 Count (%)</th>
<th>2017 Count (%)</th>
<th>2018 Count (%)</th>
<th>2019 Count (%)</th>
<th>2020 Count (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanic</td>
<td>20,534 (5%)</td>
<td>28,160 (5%)</td>
<td>31,069 (6%)</td>
<td>33,744 (6%)</td>
<td>33,645 (6%)</td>
<td>39,365 (6%)</td>
</tr>
<tr>
<td>Not Hispanic</td>
<td>308,901 (79%)</td>
<td>427,003 (82%)</td>
<td>485,067 (87%)</td>
<td>500,317 (88%)</td>
<td>482,068 (88%)</td>
<td>533,479 (85%)</td>
</tr>
<tr>
<td>Not reported</td>
<td>60,507 (16%)</td>
<td>64,973 (12%)</td>
<td>40,293 (7%)</td>
<td>35,933 (6%)</td>
<td>30,738 (6%)</td>
<td>56,396 (9%)</td>
</tr>
<tr>
<td>Total</td>
<td>389,942</td>
<td>520,136</td>
<td>556,429</td>
<td>569,994</td>
<td>546,451</td>
<td>629,240</td>
</tr>
</tbody>
</table>

C. Evaluation Questions and Hypotheses

The following goals and hypotheses guide the evaluation of HIP and are based on the approved STCs and CMS evaluation guidance documents. Due to policy and program changes resulting from the COVID-19 PHE, several goals and research questions were not measured and evaluated. These are marked throughout the report as appropriate. Exhibit C.1 details the hypotheses and research questions by program goal. For reference purposes, Exhibit C.1 also includes the corresponding exhibits from Section F: Results by Demonstration Goal. Section F’s exhibits are numbered sequentially by goal. For example, Exhibit F.1.1 refers to Section F, Goal 1, Exhibit 1, Exhibit F.2.2 refers to Section F, Goal 2, Exhibit 2, and Exhibit F.3.3 refers to Section F, Goal 3, Exhibit 3.
Exhibit C.1: HIP Evaluation Goals and Hypotheses

<table>
<thead>
<tr>
<th>Goal</th>
<th>Hypothesis</th>
<th>Research Questions</th>
<th>Exhibits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Section F Overview</strong></td>
<td>Section F Overview</td>
<td>Section F Overview</td>
<td>F.1.1</td>
</tr>
<tr>
<td><strong>Goal 1 – Improve health care access, appropriate utilization, and health outcomes among HIP members.</strong></td>
<td><strong>Hypothesis 1</strong> – Enrollment in HIP will promote member use of preventive care, primary care, chronic disease management care, and urgent care, and needed prescription drugs.</td>
<td><strong>Primary Research Question (RQ) 1.1</strong> – How have the following changed over time for HIP members: preventive, primary, urgent, and specialty care; prescription drug use; and chronic care management?</td>
<td>F.1.2 – F.1.3</td>
</tr>
<tr>
<td></td>
<td><strong>Hypothesis 2</strong> – Unnecessary ED services will not rise over time for HIP members.</td>
<td><strong>Primary RQ 2.1</strong> – How have avoidable ED visits among HIP members changed over time?</td>
<td>F.1.34 – F.1.40</td>
</tr>
<tr>
<td></td>
<td><strong>Hypothesis 3</strong> – HIP members will report positive health outcomes.</td>
<td><strong>Primary RQ 3.1</strong> – How has reported health status for HIP members changed over time?</td>
<td>F.1.41 – F.1.43</td>
</tr>
<tr>
<td></td>
<td><strong>Hypothesis 4</strong> – HIP members will report satisfaction with health care access.</td>
<td><strong>Primary RQ 4.1</strong> – What percentage of HIP members report getting health care as soon as needed? <strong>Primary RQ 4.2</strong> – To what extent do HIP members receive coverage through Fast Track and Presumptive Eligibility policies?</td>
<td>F.1.44 – F.1.51</td>
</tr>
<tr>
<td></td>
<td><strong>Hypothesis 5</strong> – The Indiana Medicaid enrollment rate will be comparable to other Medicaid expansion states.</td>
<td><strong>Primary RQ 5.1</strong> – How does the Indiana Medicaid coverage rate compare to other Medicaid expansion states?</td>
<td>F.1.52</td>
</tr>
<tr>
<td><strong>Goal 2 – Increase community engagement leading to sustainable employment and improved health outcomes among HIP members.</strong></td>
<td>Effective October 31, 2019, the State no longer required members to report their Gateway to Work (Indiana’s community engagement program) hours. Effective April 30, 2020, the State indefinitely stopped all Gateway to Work activities in response to the stay in the federal lawsuit involving Indiana Medicaid and the COVID-19 PHE. Additionally, on June 24, 2021, CMS withdrew its conditional approval of the community engagement requirement. Therefore, Goal 2 will not be evaluated.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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72 The following evaluation goals are impacted by the cancellation of Longitudinal Member Survey and Leaver Survey data collection as of May 2022: Goal 1 (Hypothesis 3, RQ 3.1; Hypothesis 4, RQ 4.1), Goal 3 (Hypothesis 1, RQs 1.1 – 1.1b; Hypothesis 2, RQ 2.1), Goal 4 (Hypothesis 1, RQ 1.1), and Goal 5 (Hypothesis 1, RQs 1.1 – 1.3; Hypothesis 2, RQ 2.1; Hypothesis 4, RQ 4.2).
### Goal 3 – Discourage tobacco use among HIP members through a premium surcharge and the utilization of tobacco cessation benefits.

**Hypothesis 1** – The tobacco premium surcharge will increase use of tobacco cessation services among HIP members.

<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Exhibits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary RQ 1.1 – What impact has the tobacco premium surcharge had on the use of tobacco cessation benefits for HIP members?*</td>
<td>F.3.1 – F.3.11</td>
</tr>
<tr>
<td>Subsidiary RQ 1.1a – Do HIP members understand the premium surcharge policy?*</td>
<td></td>
</tr>
<tr>
<td>Subsidiary RQ 1.1b – Do HIP members know about the cessation services offered through HIP?*</td>
<td></td>
</tr>
<tr>
<td>Subsidiary RQ 1.1c – Are HIP members satisfied with tobacco cessation services?*</td>
<td></td>
</tr>
</tbody>
</table>

**Hypothesis 2** – The tobacco premium surcharge and availability of tobacco cessation benefits will decrease tobacco use.

<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Exhibits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary RQ 2.1 – Has tobacco use decreased among the target population?*</td>
<td>F.3.12 – F.3.14</td>
</tr>
</tbody>
</table>

### Goal 4 Overview

**Hypothesis 1** – HIP’s new income tier structure for POWER Account Contributions will be clear to HIP members.

<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Exhibits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary RQ 1.1 – Do HIP members with POWER Account payment requirements understand their payment obligations?*</td>
<td>F.4.3</td>
</tr>
<tr>
<td>Subsidiary RQ 1.1a – Do HIP members that are subject to POWER Account payment requirements have different disenrollment compared to other HIP members?*</td>
<td></td>
</tr>
</tbody>
</table>

**Hypothesis 2** – Enrollment and enrollment continuity will vary for the POWER Account payment tiers.

<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Exhibits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary RQ 2.1 – Is there a relationship between POWER Account payment tiers and total and new enrollment in Medicaid?*</td>
<td>F.4.6 – F.4.9</td>
</tr>
<tr>
<td>Primary RQ 2.2 – Is there a relationship between POWER Account payment tiers and continued enrollment in Medicaid?*</td>
<td>F.4.10 – F.4.13b</td>
</tr>
<tr>
<td>Primary RQ 2.3 – Do HIP members who receive rollover have greater coverage continuing than members who do not receive rollover?*</td>
<td>F.4.14 – F.4.16</td>
</tr>
</tbody>
</table>

---

73 Previous versions of this goal included a reference to “efficient use of services” consistent with the STCs. This wording is no longer included as efficient use of services is addressed under Goal 1.
<table>
<thead>
<tr>
<th>Goal</th>
<th>Hypothesis</th>
<th>Research Questions</th>
<th>Exhibits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Goal 5</strong> – Ensure HIP program policies align with commercial policies, are understood by members, and promote positive member experience and minimize coverage gaps.</td>
<td><strong>Hypothesis 1</strong> – Beneficiaries who are required to participate in HIP policies will understand program policies.</td>
<td><strong>Primary RQ 1.1</strong> – Are HIP members knowledgeable about policies on payment of POWER Account Contributions preventive care, and rollover? <strong>Primary RQ 1.2</strong> – Do HIP members subject to non-eligibility periods understand program requirements and how to comply with them? <strong>Note: Goal 4, H.1, RQ 1.1 also addresses this question.</strong>^ <strong>Primary RQ 1.3</strong> – Do HIP members subject to non-eligibility periods understand the consequence for noncompliance with program requirements?^ <strong>Primary RQ 1.4</strong> – What are common barriers to compliance with program requirements that have non-eligibility period consequences for noncompliance?^</td>
<td>n.a. – No exhibits are associated with this RQ.</td>
</tr>
<tr>
<td><strong>Hypothesis 2</strong> – Beneficiaries will be satisfied with the HIP program.</td>
<td><strong>Primary RQ 2.1</strong> – What is the level of satisfaction with HIP among HIP members?</td>
<td>F.5.1, F.5.2a, F.5.2b, F.5.3</td>
<td></td>
</tr>
<tr>
<td><strong>Hypothesis 3</strong> – Individuals subject to the non-eligibility/&quot;lockout&quot; periods (payment and redetermination) are no different from commercial market populations.</td>
<td><strong>Primary RQ 3.1</strong> – Do HIP members have similar demographic characteristics as the commercial market population?</td>
<td>F.5.4 – F.5.6</td>
<td></td>
</tr>
<tr>
<td><strong>Primary RQ 3.2</strong> – Do HIP that are not retroactively eligible have similar demographic characteristics as the commercial market population?</td>
<td>F.5.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goal</td>
<td>Hypothesis</td>
<td>Research Questions</td>
<td>Exhibits</td>
</tr>
<tr>
<td>------</td>
<td>------------</td>
<td>--------------------</td>
<td>----------</td>
</tr>
</tbody>
</table>
| **Goal 5 continued** | **Hypothesis 4** – Eliminating or reducing retroactive eligibility will not reduce member enrollment or access to health care; decrease health status; or have adverse financial impact | **Primary RQ 4.1** – Do eligible people subject to retroactive eligibility waivers enroll in Medicaid at the same rates as other eligible people who have access to retroactive eligibility? (CMS Guidance Hypothesis 1, RQ 1.1)  
**Primary RQ 4.2** – Do beneficiaries subject to the retroactive eligibility waiver understand that they will not be covered during enrollment gaps? (CMS Guidance Hypothesis 1, Subsidiary RQ 1.2a)\(^\)  
**Subsidiary RQ 4.2a** – What are common barriers to timely renewal for those subject to the retroactive eligibility waiver? (CMS Guidance Hypothesis 1, Subsidiary RQ 1.2b)\(^\) | n.a. |
| **Goal 6** – Assess the costs to implement and operate HIP and other non-cost outcomes of the demonstration. | **Implementation Questions** | **Primary RQ 1** – What are the administrative costs incurred by the State to implement and operate the HIP demonstration? | F.6.1 |
| | | **Primary RQ 2** – What are the short-and long-term effects of eligibility and coverage policies on Medicaid health care expenditures? | F.6.2 – F.6.8 |
| | | **Primary RQ 3** – What are the impacts of eligibility and coverage policies on provider uncompensated care costs? | F.6.9 – F.6.11 |

\(^*\) = only evaluating data through February 2020 due to COVID-19 PHE; \(^\) = no data due to COVID-19 PHE, RQ not being evaluated in this report.

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\(^74\) The hypothesis was included to address CMS’ recommendation (received on March 24, 2020) to include analyses of the impact of the waiver of retroactive eligibility on member access and health.
D. Methodology

The State’s HIP Evaluation Plan, approved by CMS in December 2019, describes the analytical approach for both the Interim and the Summative Evaluation Reports. The evaluation uses a mixed-methods approach employing both qualitative and quantitative analyses to provide preliminary observations for the hypotheses and research questions corresponding to each goal of the demonstration. Any necessary statistical tests to measure program impact for inferential analyses were also executed and align to the HIP Evaluation Plan. While the waiver period for the Summative Evaluation Report was 2018 – 2020, data from 2015 – 2017 was also included to facilitate trend analyses.

Under the mixed-methods approach, qualitative analyses support an understanding of stakeholders’ perspectives about implementation and outcomes and identify contextual factors that help to explain outcomes. Quantitative analyses examine changes in outcomes and estimate the impact of policy changes, as demonstration design and data permit. As such, qualitative data and analysis informs the collection, analysis, and interpretation of quantitative data, and quantitative data and analysis informs the collection, analysis, and interpretation of qualitative data. For example, interviews with HIP members provide important contextual information to help explain the results of analyses of encounter data; these analyses may inform the development of survey and interview protocols for the Summative Evaluation Report. Triangulated quantitative and qualitative analyses contribute to understanding context, impact, and variation in program implementation and outcomes.

Summary of Qualitative Populations, General Analytic Approach, and Data Sources by Goal

For Qualitative analyses, Lewin used data from key informant interviews conducted between July and September 2019 for the Interim Evaluation Report and between November and December 2020 for the Summative Evaluation Report, with FSSA officials, MCEs, providers and associations, advocacy organizations, and members. Lewin reviewed information gathered from these interviews to address relevant research questions and identify common themes.

Analysis was conducted on an on-going basis, with team members reviewing data following each interview and using immediate findings to inform subsequent interviews. For example, if one MCE identified a novel challenge or issue, the facilitator would include additional probes for subsequent interviews to better understand the topic. Lewin used informal thematic analysis to identify themes from interviews and summarize findings by topic area. Thematic analysis is a method for systematically identifying, organizing, and offering insight into patterns of meaning (themes) across different interviewees.

Exhibit D.1 provides a summary of the qualitative data collection methodology, including information about how interviewees were identified, who facilitated the interviews, and interview topics. Key informant interviews were conducted via telephone and lasted 15 – 60 minutes. See Attachment X to XIII for key informant interview guides.

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### Exhibit D.1: Summary of Qualitative Interview Type, Methodology, and Relevant Goals by Interview Year

<table>
<thead>
<tr>
<th>Interview Type</th>
<th>Description</th>
<th>Relevant Goals for 2019 Interviews</th>
<th>Relevant Goals for 2020 Interviews</th>
</tr>
</thead>
</table>
| FSSA State Officials       | - The Indiana FSSA evaluation contract officer identified State interviewees representing several roles within FSSA for 2019 and 2020.  
- Some interview questions were specific to each official’s role. Common questions across officials covered the following topics: overall HIP experience, POWER Accounts, communication strategies, and perceptions of member understanding of HIP policies and satisfaction with HIP. | Goal 1, Goal 2, Goal 3, Goal 4, Goal 5 | Goal 3, Goal 4, Goal 5            |
| Total 2019: 6              |                                                                                                                                                                                                             |                                   |                                   |
| Total 2020: 6              |                                                                                                                                                                                                             |                                   |                                   |
| MCEs                       | - The Indiana FSSA evaluation contract officer identified MCE interviewees for 2019 and 2020. Interviews included key individuals from each of the four MCEs. Each MCE participated in two separate calls, one for a general interview and another for a tobacco cessation interview.  
- Lewin conducted general interviews with executives and key team members from each of the four MCEs in 2019 and 2020.  
- For the general interview, Lewin asked executives and team members a standardized set of questions related to overall HIP experience, POWER Accounts, communication strategies, and perceptions of member understanding of HIP policies and satisfaction with HIP.  
- Lewin’s partner, Indiana University, conducted tobacco cessation-specific interviews in 2019 with key executives from each MCE. These interviews informed the evaluation of Goal 3 (tobacco cessation services and tobacco surcharge). | MCE General Interviews: Goal 1, Goal 2, Goal 3, Goal 4, Goal 5 | MCE General Interviews: Goal 3, Goal 4, Goal 5 |
| Total 2019: 8              | (4 General, 4 Tobacco)                                                                                                                                                                                       |                                   |                                   |
| Total 2020: 4              |                                                                                                                                                                                                             |                                   |                                   |
| Provider Associations      | - Lewin conducted individual interviews with four Indiana provider associations in 2019 and 2020.  
- Lewin asked team members a standardized set of questions related to overall HIP experience, access to health care, communication strategies, and perceptions of member understanding of HIP policies and satisfaction with HIP. | Goal 2, Goal 3, Goal 4, Goal 5 | Goal 4, Goal 5                    |
| Total 2019: 4              |                                                                                                                                                                                                             |                                   |                                   |
| Total 2020: 4              |                                                                                                                                                                                                             |                                   |                                   |
| Providers                  | - Lewin’s partner, McCarty Research, conducted 36 telephone interviews with HIP providers in 2019, including three physicians, five nurse practitioners, 15 navigators, and 13 administrators. Given the small number of key informant interviews, the 36 providers who participated are not a representative sample.  
- McCarty asked providers a standardized set of questions based on three distinct questionnaires: one designed for practitioners, one for those involved in determining eligibility for HIP, and one for administrators. Questions focused on topics including member satisfaction, POWER Accounts, eligibility and enrollment, and tobacco cessation.  
- McCarty Research compiled the and conducted qualitative analyses.  
- The number of responses varied for each question as providers could refuse to answer or based on survey skip logic were not asked all questions. | Goal 2, Goal 3, Goal 4, Goal 5 | n.a.                              |
| Total 2019: 36             |                                                                                                                                                                                                             |                                   |                                   |
| Total 2020: 36             |                                                                                                                                                                                                             |                                   |                                   |
## Interview Type

<table>
<thead>
<tr>
<th>Advocacy Organizations</th>
<th>Description</th>
<th>Relevant Goals for 2019 Interviews</th>
<th>Relevant Goals for 2020 Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total 2019: 2</strong></td>
<td>Lewin conducted individual interviews with two advocacy organizations in 2019. Lewin asked team members a standardized set of questions related to overall HIP experience, access to health care, communication strategies, and perceptions of member understanding of HIP policies and satisfaction with HIP.</td>
<td>Goal 2</td>
<td>Goal 4</td>
</tr>
<tr>
<td><strong>Total 2020: 2</strong></td>
<td></td>
<td>Goal 3</td>
<td>Goal 5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Members</th>
<th>Description</th>
<th>Relevant Goals for 2019 Interviews</th>
<th>Relevant Goals for 2020 Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total 2019: 33</strong></td>
<td>Lewin identified a random sample of HIP members from the most recently available enrollment data. Lewin’s partner, Engaging Solutions, called 409 members on this list to reach a target number of 30 interviews. Members had the option to participate or decline to participate. Lewin’s partner, Engaging Solutions, conducted 33 unique member interviews. Given the small number of key informant interviews, the 33 members who participated are not a representative sample. Engaging Solutions asked members a standardized set of questions to assess members understanding of their HIP plan, the POWER Account, and member satisfaction via telephone. Engaging Solutions compiled the data and conducted qualitative analyses. The number of responses varied for each question as members could refuse to answer or based on survey skip logic were not asked all questions.</td>
<td>Goal 2</td>
<td>Goal 3</td>
</tr>
<tr>
<td><strong>Total 2020: 30</strong></td>
<td></td>
<td>Goal 4</td>
<td>Goal 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Goal 5</td>
<td>Goal 5</td>
</tr>
</tbody>
</table>

## Summary of Quantitative Populations, General Analytic Approach, and Data Sources by Goal

For Quantitative analyses, Lewin used data from sources identified in Exhibits D.2 and D.3 to evaluate the policy goals identified in Section C: Evaluation Questions and Hypotheses. Exhibit D.2 provides a summary of the quantitative populations, general analytic approach, and data sources by goal. Target populations varied by goal and by specific research question. Individuals eligible for only ED services under HIP were excluded from this evaluation given the short-term nature of this enrollment and limited-service coverage. Exhibit D.3 and Attachment II provide a summary of the quantitative data sources.

When developing analyses by benefit plan, Lewin included State Plan Basic and State Plan Plus members through February 2020 (policies were on hold during the COVID-19 PHE beginning in March 2020). While the State provides these members with a specific set of State Plan services due to their qualifying health condition or eligibility category, the HIP Plus and HIP Basic member cost-sharing requirements still apply. As such, they do not experience the same choices between the HIP Plus and HIP Basic benefit plans but do experience similar tradeoffs in cost-sharing in terms of paying copayments under HIP Basic versus the monthly POWER Account Contribution amount under HIP Plus.

---

76 Medically frail, Transitional Medical Assistance (TMA) participants, Section 1931 low-income (<19% of the FPL) parents and caretakers, and low-income (< 19% of the FPL) ages 19 – 20.
### Exhibit D.2: Summary of Quantitative Populations, General Analytic Approach, and Data Sources by Goal

<table>
<thead>
<tr>
<th>Goal</th>
<th>Populations Used for Analysis</th>
<th>General Analytic Approach</th>
<th>Data Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Goal 1 – Service Utilization</strong></td>
<td>HIP Basic (State Plan and Regular), HIP Plus (State Plan and Regular), HIP Maternity (MA), and HIP Plus Copay (PC) members</td>
<td>• Analysis of preventive care services, primary care visits, specialty care services, ED visits, urgent care center visits</td>
<td>MCE encounter data, February 2015 – December 2020&lt;br&gt;Enrollment data, February 2015 – December 2020</td>
</tr>
<tr>
<td><strong>Goal 1 – Consumer Assessment of Healthcare Providers &amp; Systems (CAHPS)</strong></td>
<td>CAHPS® Medicaid Adult 5.0H Member Survey respondents (across four MCEs) &lt;br&gt;&lt;b&gt;Note: Referred to as the CAHPS Survey in this report&lt;/b&gt;</td>
<td>• Analyses of member health status (overall health and overall mental/emotional health) by MCE and year&lt;br&gt;• Analyses of member satisfaction with health care access by MCE and year</td>
<td>CAHPS Survey summary reports, 2015 – 2020&lt;br&gt;See Attachment IV for more detailed information on this data source</td>
</tr>
<tr>
<td><strong>Goal 1 – Fast Track</strong></td>
<td>HIP Plus (State Plan and Regular) members, including those that subsequently move to Basic</td>
<td>• Use of Fast Track by new enrollees and related covered months of services</td>
<td>Enrollment data, 2017 – 2020&lt;br&gt;Fast Track administrative data, 2017 – 2020</td>
</tr>
<tr>
<td><strong>Goal 1 – Presumptive Eligibility</strong></td>
<td>Basic (State Plan and Regular) Plus (State Plan and Regular)</td>
<td>• Use of Presumptive Eligibility processes by new enrollees and related covered months of services</td>
<td>Enrollment data, February 2015 – December 2020&lt;br&gt;Presumptive Eligibility administrative data, February 2015 – December 2020</td>
</tr>
<tr>
<td><strong>Goal 3 – Tobacco Surcharge</strong></td>
<td>All HIP members</td>
<td>• Tobacco cessation service use&lt;br&gt;• Member tobacco use</td>
<td>MCE encounter data, February 2015 – December 2020&lt;br&gt;Enrollment data, February 2015 – December 2020&lt;br&gt;Tobacco use data collected by the State from new HIP applications (new enrollees or enrollees switching MCEs) and self-reported member tobacco use during enrollment from calendar year 2015 – 2020&lt;br&gt;CAHPS Survey reports from 2016 – 2021</td>
</tr>
<tr>
<td><strong>Goal 3 – Tobacco Surcharge</strong></td>
<td>CAHPS® Medicaid Adult 5.0H Member Survey respondents (across four MCEs) who self-reported regular tobacco use</td>
<td>• Analyses of self-reported tobacco users who are advised by provider to quit by MCE and year&lt;br&gt;• Analyses of self-reported tobacco users who are provided information on tobacco cessation methods (both medications and other strategies) by MCE and year</td>
<td>CAHPS Survey summary reports, 2015 – 2020&lt;br&gt;(see Exhibit D.2 and Attachment IV for more detailed information on this data source)</td>
</tr>
</tbody>
</table>
### Goal 4 – POWER Account Contribution Payment Tiers

**Populations Used for Analysis**
- HIP Basic (State Plan and Regular) and HIP Plus (State Plan and Regular)
  
**Note:** The population used within this goal varies by research question; we include the definition of each research question’s population by research question.

**General Analytic Approach**
- Enrollment and disenrollment rate analyses, in particular related to nonpayment or POWER Account Contributions
- Analyses of members moving from HIP Plus to HIP Basic and from HIP Basic to HIP Plus

**Data Sources**
- Enrollment and disenrollment data, February 2015 – December 2020

### Goal 5 – Member Satisfaction & Understanding

**Populations Used for Analysis**
- CAHPS® Medicaid Adult 5.0H Member Survey respondents (across four MCEs)
  
**Note:** Referred to as the CAHPS Survey in this report

**General Analytic Approach**
- Analyses of satisfaction scores by MCE and year
- Analyses of satisfaction scores by select sociodemographic characteristics

**Data Sources**
- CAHPS Survey summary reports, 2015 – 2020

### Goal 5 – Medicaid Enrollment, Member Experience, & Coverage Gaps

**Populations Used for Analysis**
- Medicaid eligible population based on American Community Survey (ACS) data
- Medicaid eligible population from the Behavioral Risk Factor Surveillance System (BRFSS) data

**General Analytic Approach**
- Descriptive analysis of socio-economic and demographic characteristics of Medicaid and commercial population
- Difference-in-differences (DiD) regression model to examine the change in Medicaid enrollment in Indiana over the years relative to comparison states
- DiD regression model to examine the changes in health status among Medicaid eligible population in Indiana over the years relative to comparison states

**Data Sources**
- BRFSS data (2013 – 2020)

### Goal 6 – Administrative Costs

**Populations Used for Analysis**
- Analysis focused on administrative costs for the HIP population in total

**General Analytic Approach**
- Summary of administrative costs by year
- Stratification of the administrative costs by direct costs to the state versus administrative costs paid to the HIP health plans through capitation payments
- Descriptive analysis

**Data Sources**
- State enrollment data, January 2018 – December 2020
- Capitation rate development used to determine administrative costs paid to the health plans, January 2018 – December 2020
- State administrative data, January 2018 – December 2020
<table>
<thead>
<tr>
<th>Goal</th>
<th>Populations Used for Analysis</th>
<th>General Analytic Approach</th>
<th>Data Sources</th>
</tr>
</thead>
</table>
| Goal 6 – Impact on Medicaid Health Expenditures | • HIP Non-Expansion: Low-Income Parent and Caretaker members (mandatory)  
• HIP Expansion: Non-elderly, non-disabled adult members enrolled due to Medicaid expansion | • Summary of per member per month (PMPM) costs in Indiana, Ohio, and Kentucky by year, separately for the Medicaid Expansion and Non-Expansion populations.  
• Analysis of changes in per member per month costs by year and compared across states.  
• DiD regression application to the data to analyze the impact of Medicaid expansion in Indiana compared to other states. | State enrollment data for Indiana, Ohio, and Kentucky, January 2016 – December 2020  
MCE encounter data for Indiana, Ohio, and Kentucky, January 2016 – December 2020  
Fee-for-service data for Indiana, Ohio, and Kentucky, January 2016 – December 2020 |
| Goal 6 – Uncompensated Care | Analysis focused on uncompensated care costs across the entire population of each state. | • Analysis of uncompensated care costs as a percent of total costs for Indiana, Ohio, Kentucky (states that implemented Medicaid expansion), and South Carolina (state that did not expand Medicaid) by year.  
• DiD regression to analyze impacts of Medicaid expansion to other above states. | Healthcare Cost Report Information System (HCRIS): Medicare cost report public use data collected by CMS (Worksheet S10 and Worksheet C) for Indiana, Ohio, Kentucky, and South Carolina, January 2013 – December 2014 and January 2018 – December 2020 |
Exhibit D.3: Description of Quantitative Data Sources

<table>
<thead>
<tr>
<th>Data Type</th>
<th>Period</th>
<th>Data Description</th>
</tr>
</thead>
</table>
| MCE encounter data                                                       | 2015 – 2020             | • Submitted by the four Indiana HIP MCEs (i.e., Anthem, Managed Health Services (MHS), MDwise, and CareSource) to the Medicaid agency to detail specific services provided to a member by a provider.  
• Represents HIP-covered services with dates of service from February 2015 through December 2020 and paid through April 30, 2021.  
• Includes patient demographic information, diagnoses, procedure codes, revenue codes, and billing and rendering provider types. |
| Annual enrollment data included Personal Wellness and Responsibility (POWER) Account reconciliation files | 2015 – 2020             | • Provides a member’s POWER Account experience by benefit period, including contributions, expenditures, and rollover status.                                                                                                                                                                                                                                                                                                                                                         |
| Monthly enrollment data                                                  | 2015 – 2020             | • Provides member enrollment status by month and demographic characteristics (e.g., sex, race, income level).  
• Includes indicators/flags for the following: medically frail, pregnant, Transitional Medical Assistance (TMA) and Emergency Services Only.                                                                                                                                                                                                                                                                                                                                                                                                 |
| Monthly disenrollment data                                               | 2015 – 2020             | • Provides member disenrollment by month, including enrollment status at time of disenrollment and reason(s) associated with disenrollment.                                                                                                                                                                                                                                                                                                                                          |
| Fast Track data file                                                     | 2017 – 2020             | • Identifies members who made a Fast Track payment.                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Presumptive Eligibility file                                            | 2015 – 2020             | • Identifies members who used the Presumptive Eligibility enrollment process.                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Tobacco use data file                                                   | October 2017 – December 2020 | • Provides self-reported tobacco use by HIP members.  
• Reflects new enrollees or enrollees switching MCEs and self-reported member tobacco use during enrollment.                                                                                                                                                                                                                                                                                                                                                           |
| Tobacco surcharge data file                                             | 2019, 2020              | • Identifies members that have received a tobacco surcharge levied by MCEs in 2019 and 2020 for member tobacco use in 2018 and 2019.                                                                                                                                                                                                                                                                                                                                                   |
| Rural-Urban Continuum Code (RUCC) file                                  | 2013 (last update)      | • Provides geographic location indicator to characterize members’ area of residence according to RUCC.  
• Developed by the United States Department of Agriculture.                                                                                                                                                                                                                                                                                                                                                                                                                     |
| CAHPS Survey Summary Reports                                            | 2015 – 2020             | • Data from CAHPS® Medicaid Adult 5.0H Member Surveys (referred to in this report as CAHPS Survey) was compiled to assess various research questions associated with Goals 1, 3, and 5. Data was drawn from 2015 to 2020 for four MCEs. For this evaluation, CAHPS Survey data is reported by the coverage year, rather than the survey year.  
• The surveys were administered by each MCE both by mail and telephone. Surveys contained a total of 60 questions. However, some survey questions were only asked to a subset of respondents. Each MCE is expected to meet a minimum response total of 411 responses across all their programs to ensure the representative scores are accurate and statistically valid. |
<table>
<thead>
<tr>
<th>Data Type</th>
<th>Period</th>
<th>Data Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRFSS Data</td>
<td>2013 – 2020</td>
<td>• BRFSS is a system of health-related telephone surveys that collect state data about U.S. residents regarding their health-related risk behaviors, chronic health conditions, and use of preventive services. BRFSS completes more than 400,000 adult interviews each year, making it the largest continuously conducted health survey system in the world.</td>
</tr>
<tr>
<td>ACS Data</td>
<td>2015 – 2019</td>
<td>• ACS data, sponsored jointly by the U.S. Census Bureau and the U.S. Department of Commerce, is a nationally representative sample survey data that includes information on demographic, social, economic, and health insurance coverage characteristics of the U.S. population each year.</td>
</tr>
<tr>
<td>Administrative Costs</td>
<td>2018 – 2020</td>
<td>• Administrative costs for Goal 6 were calculated using state enrollment data, capitation rate development data, and state administrative data.</td>
</tr>
<tr>
<td>Medicaid Health Expenditures</td>
<td>2016 – 2020</td>
<td>• Medicaid health expenditures for Goal 6 were calculated using state enrollment data, MCE encounter data for Indiana, Ohio, and Kentucky, and fee-for-service data for Indiana, Ohio, and Kentucky</td>
</tr>
<tr>
<td>Uncompensated Care Costs</td>
<td>2013 – 2014, 2018 – 2020</td>
<td>• Uncompensated care costs for Goal 6 were calculated using Healthcare Cost Report Information System (HCRIS): Medicare cost report public use data collected by CMS (Worksheet S10 and Worksheet C) for Indiana, Ohio, Kentucky, and South Carolina</td>
</tr>
<tr>
<td>Longitudinal Member and Leaver Surveys</td>
<td>n.a.</td>
<td>• Due to the impact of the COVID-19 pandemic on members, the State, with CMS approval, elected to minimize burden and delay conducting the Longitudinal Member and Leaver Surveys until the next evaluation period. The surveys would have asked HIP Basic and HIP Plus members as well as individuals who had been fully enrolled in HIP but who left the program about access to care, health status, satisfaction with HIP, and knowledge of HIP policies. In addition to these topics, the Leaver Survey would have asked about current insurance coverage and reasons for leaving HIP. Since the surveys were not completed, several research questions could not be fully addressed.</td>
</tr>
</tbody>
</table>

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E. Methodological Limitations

Exhibit E.1 describes the known limitations of the evaluation for the Summative Evaluation Report and approaches used to minimize those limitations and/or acknowledgment of where limitations might preclude causal inferences about the effects of demonstration policies.

The HIP Evaluation Plan used to develop this report (approved by CMS in 2020) describes the limitations of the overall evaluation including data and methodological challenges of the analyses for the Summative Evaluation Report.

Exhibit E.1: Summary of Summative Evaluation Report Methodological Limitations and Approach(es) Used to Minimize Limitations

<table>
<thead>
<tr>
<th>Area</th>
<th>Issue</th>
<th>Description</th>
<th>Approach(es) Used to Address Limitation</th>
</tr>
</thead>
</table>
| Overall                       | Distinguishing the impacts of overlapping initiatives       | Multiple policy changes have been implemented under the renewal. As such, distinguishing the impacts of the individual initiatives becomes challenging. In addition to the HIP waiver policies, non-waiver operational items have overlapping impacts, for example:  
  • Implementation of a new Medicaid Management Information System in 2017  
  • Updates to verification policies over time  
  • New processes for reporting and tracking community engagement activities | Provided context for interpretation of results.                                                                                                               |
|                               | Impact of COVID-19 PHE                                     | The ongoing COVID-19 PHE, which started from March 2020, is anticipated to cause substantial changes to:  
  • Service utilization  
  • Medicaid enrollment  
  • Provider networks | Use and inclusion of calendar year 2020 data to analyze impact of HIP 2018 policies will require careful analyses and be dependent on multiple factors including the time frame for reinstatement of HIP policies and the COVID-19 PHE’s economic impact. |
|                               | Impact of changes in case mix over time                    | Changes in HIP case mix over time may have an impact on a variety of areas of this evaluation, including service utilization, prevalence of medical frailty, and member preference for the HIP Plus versus HIP Basic benefit plan. Case mix analyses were not included in the HIP Evaluation Plan. | Provided context for interpretation of results.                                                                 |
|                               | Quality and lack of specificity of provider contact information for key informant interviews resulted in low response | Provider contact information for completing key informant interviews was often generic. For example, office email addresses or office telephone numbers were provided rather than direct contact emails or telephone numbers for a specific provider. | Performed outreach and follow-up via telephone calls. Adjusted outreach strategy to work directly through provider associations. |
### Area

<table>
<thead>
<tr>
<th>Area</th>
<th>Issue</th>
<th>Description</th>
<th>Approach(es) Used to Address Limitation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of MCE encounter</td>
<td>MCE encounter data is self-reported and the procedure codes and units recorded in the encounter data analyzed for the evaluation of the 2015 to 2017 demonstration period appeared incomplete and/or inaccurate.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Performed data checks on key variables (e.g., expected versus populated values).</td>
</tr>
<tr>
<td>Identification of unique HIP members</td>
<td>The identification of unique members on the recipient identification were based on the number for each member provided in the State administrative files and the MCE encounter data. Recipient identification numbers can change over time and the State performs ongoing adjustments to data so that each member has only one active recipient identification number. The State indicated at the end of the Interim Evaluation Report analysis period that there is the possibility that encounter data for some members in Quarter 4, 2018 may reflect more than one recipient identification number per member. As such, unique member counts for 2018 may be slightly overstated.</td>
<td>The State has indicated that they will provide a mapping of duplicate recipient identification numbers for purposes of the Summative Evaluation Report.</td>
<td></td>
</tr>
<tr>
<td>Identification of member FPL</td>
<td>Member income can change throughout the year and as often as monthly. Lewin defined member FPL based on the first enrollment month in the calendar year under analysis (based on analyses of the income in enrollment data and feedback from the State). In some instances, Lewin observed FPL amounts that appeared inconsistent with HIP policies (for example, a small number of HIP Plus members with income at or less than 100% had disenrollments with nonpayment as a reason). Based on discussions with the State, there are several possible reasons for these inconsistencies, for example: The member changed income after the first HIP Plus enrollment month in the calendar year under analysis Interplay between the required member notification for coverage changes (e.g., HIP Plus to HIP Basic) and when the State/MCE received and updates data, in conjunction with member changes in FPL across months Inconsistencies in the FPL data between eligibility and the Medicaid Management Information System that resulted in null FPL values on disenrollment which appear as zero in the provided enrollment data and in some cases in the application of updated FPL numbers to prior months. The State has indicated that this data issue is resolved but on a minority of historical records included in this analyses these data artifacts remain.</td>
<td>• Did not place restrictions on FPL when identifying HIP Plus members for analysis in Goal 4. • Provided context for interpretation of results.</td>
<td></td>
</tr>
<tr>
<td>Area</td>
<td>Issue</td>
<td>Description</td>
<td>Approach(es) Used to Address Limitation</td>
</tr>
<tr>
<td>---------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Overall continued</td>
<td>Shorter post-period to examine the effect on Medicaid enrollment after 2018 HIP waiver renewal</td>
<td>ACS 2020 data is impacted by survey challenges due to the COVID-19 PHE. Hence, the analysis was restricted to ACS data through 2019. This allows only one year of post-period after the 2018 HIP waiver renewal. Due to this limitation of the ACS data, the estimated DiD regression model only captures any short-term effect of the 2018 HIP waiver renewal that may occur within the first two years after the waiver renewal. The ACS data does not capture true Medicaid eligible populations to examine access to Medicaid and assess coverage gaps.</td>
<td>In absence of ACS 2020 data, Lewin considered 2018 and 2019 as the post HIP waiver renewal period in the DiD model to examine the change in Medicaid enrollment after the waiver renewal. The Medicaid eligible population based on the poverty status in the ACS data serves as a close proxy for the truly Medicaid eligible population.</td>
</tr>
<tr>
<td>Identification of HIP members in BRFSS data</td>
<td>BRFSS data does not capture actual Medicaid coverage status separately for the surveyed individuals. Hence, it does not allow the examination of the change in health status among the HIP members.</td>
<td>Levered information about income status to identify potential Medicaid eligible population as a proxy for HIP members.</td>
<td></td>
</tr>
<tr>
<td>Identification of new enrollees</td>
<td>The identification of new enrollees is likely overstated as data were not available from the State to identify which individuals were coming into HIP from a separate Medicaid program for the Interim Evaluation Report.</td>
<td>Described limitation in the relevant goals. The State will provide additional data indicating members transitioning into HIP from a separate Medicaid program for purposes of the Summative Evaluation Report.</td>
<td></td>
</tr>
<tr>
<td>Self-reported qualitative data</td>
<td>Key informant interviews represent qualitative feedback from multiple stakeholders including State officials, MCE executives, providers and provider association representatives, and members. This self-reported information requires participants to recall information at a point in time (July 2019) and may not capture all experiences.</td>
<td>• Identified MCE and FSSA participants that represented multiple roles and organizations. • Identified members randomly. • Identified providers and navigators through multiple outreach strategies (e.g., State navigator list, MCE contact lists, and conversations with provider associations) in an effort to represent multiple viewpoints. • Tailored interview questions based on role and type of interview.</td>
<td></td>
</tr>
<tr>
<td>Area</td>
<td>Issue</td>
<td>Description</td>
<td>Approach(es) Used to Address Limitation</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Overall continued</td>
<td>Limited information from members about POWER Account Contribution payments</td>
<td>Few HIP members interviewed needed to make payments and many expressed reluctance to speak about payments in detail, which resulted in limited data collection for this topic.</td>
<td>Described this limited response when summarizing member feedback.</td>
</tr>
<tr>
<td>Key Informant Interviews</td>
<td>Direct comparisons are not possible for 2019 and 2020 interviews</td>
<td>Different members were interviewed in 2019 and 2020. Therefore, Lewin is not able to compare responses directly.</td>
<td>Similar FSSA and MCE staff were interviewed in 2019 and 2020.</td>
</tr>
<tr>
<td></td>
<td>Although Lewin used a random sample of HIP members based on enrollment data to select members, Lewin interviewed members until a set threshold was met due to resource limitations.</td>
<td>Conclusions cannot be drawn to the general populations due to small sample sizes, selection bias, and recall bias.</td>
<td>Provided sample size for responses when possible.</td>
</tr>
<tr>
<td>Goal 1: Improve health care access, appropriate utilization, and health outcomes among HIP members</td>
<td>Variations in health care utilization based on time of enrollment</td>
<td>Members may experience higher utilization of service when first enrolled in Medicaid based on previously unmet health care needs. This higher utilization may make identification of trends in the use of preventive, primary, urgent, and specialty care challenging.</td>
<td>Only used members continuously enrolled for at least one year to calculate the participation rate for each service type.</td>
</tr>
<tr>
<td></td>
<td>Not able to access the full CAHPS Survey data</td>
<td>Summary reports of the survey data were used to calculate metrics and conduct analyses. Summary reports do not include the full data set and are tailored for the MCE, yielding inconsistent reports across MCEs. Subsequently, missing data minimizes comparisons across MCEs.</td>
<td>Missing data points are flagged in exhibits with ‘NR’ (not reported) and are not considered when making conclusions and recommendations.</td>
</tr>
<tr>
<td>Goal 3: Discourage tobacco use among HIP members, through a premium surcharge and the utilization of tobacco cessation benefits</td>
<td>Surcharge only assessed on members who self-report tobacco use via defined channels</td>
<td>The tobacco surcharge determination relies on reporting of tobacco use by members during the MCE selection period, when changing MCEs, or if members otherwise voluntarily contact the MCE to report their tobacco use status. This underestimates the number of members who continue to use tobacco.</td>
<td>Provided context in the evaluation narrative.</td>
</tr>
<tr>
<td></td>
<td>Members may under-report tobacco use</td>
<td>Members may have an incentive to refrain from reporting tobacco use if they want to avoid the related premium surcharge increase.</td>
<td>Provided context in the evaluation narrative.</td>
</tr>
<tr>
<td>Area</td>
<td>Issue</td>
<td>Description</td>
<td>Approach(es) Used to Address Limitation</td>
</tr>
<tr>
<td>-----------------------------</td>
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<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Goal 3 continued</td>
<td>Medicaid encounter data may not fully reflect the use of tobacco cessation services</td>
<td>Encounter data will not have codes for all tobacco cessation services since some programs will not be reimbursable by the provider.</td>
<td>Provided context in the evaluation narrative.</td>
</tr>
<tr>
<td></td>
<td>Not able to access the full CAHPS Survey data</td>
<td>Summary reports of the survey data were used to calculate metrics and conduct analyses. Summary reports do not include the full data set and are tailored for the MCE, yielding inconsistent reports across MCEs. Subsequently, missing data minimizes comparisons across MCEs.</td>
<td>Missing data points are flagged in exhibits with ‘NR’ (not reported) and are not considered when making conclusions and recommendations.</td>
</tr>
<tr>
<td></td>
<td>Insufficient sample size for selected CAHPS Survey questions</td>
<td>The questions on tobacco cessation were only asked of those respondents who self-reported regular tobacco use. Therefore, the sample size for this set of questions is smaller than the sample size for the survey. In several instances, certain data points are not reported due to an insufficient denominator of less than 100.</td>
<td>Missing data points are flagged in exhibits with ‘NR’ (not reported) and are not considered when making conclusions and recommendations.</td>
</tr>
<tr>
<td>Goal 4 – Promote member understanding and increase compliance with payment requirements by changing the monthly POWER Account payment requirement to a tiered structure.</td>
<td>Limited time following the enactment of the payment tier policy</td>
<td>Available data spans calendar years 2015 – 2020, allowing three years prior to the enactment of the payment tier POWER Account Contribution structure and two years following its enactment (not including 2020). This limits the ability to interpret the effect of the policy, as additional time periods are necessary to assess time trends in enrollment. In particular, additional time periods are necessary to assess changes in the length of continuous enrollment periods given that many HIP members maintain continuous enrollment for multiple years.</td>
<td>We interpreted the initial trends following the enactment of the payment tier POWER Account Contribution structure using the years available.</td>
</tr>
<tr>
<td></td>
<td>Change in rollover policy</td>
<td>Starting in 2018, the State made all member benefit periods equal to the calendar year. Prior to 2017, members enrolling multiple times within a year had multiple POWER Accounts and the State applied rollover based on the individual member benefit period (based on the dates the member enrolled).</td>
<td>For consistency, we identified rollover according to successive calendar years and regard findings as nominal.</td>
</tr>
<tr>
<td></td>
<td>Exclusion of special enrollment status</td>
<td>We removed members with TMA, pregnancy, or medically frail enrollment status for the specific month that the member had one of these statuses. Thus, counts of HIP member months do not reflect all HIP members.</td>
<td>It is necessary to remove these members so that the Goal 4 analyses can focus solely on members that have POWER Account Contribution payment obligations.</td>
</tr>
</tbody>
</table>

---
78 Previous versions of this goal included a reference to “efficient use of services” consistent with the STCs. This wording is no longer included as efficient use of services is addressed under Goal 1.
<table>
<thead>
<tr>
<th>Area</th>
<th>Issue</th>
<th>Description</th>
<th>Approach(es) Used to Address Limitation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 4 continued</td>
<td>Member coverage span</td>
<td>Members may have coverage for more or less than one calendar year. Counts of enrollment within a calendar year will not reflect the length of coverage a member may receive.</td>
<td>We performed specific analyses to examine length of coverage.</td>
</tr>
<tr>
<td></td>
<td>Variability in FPL amounts</td>
<td>Discussed as an overall methodological limitation above</td>
<td>Refer to description above</td>
</tr>
<tr>
<td>Goal 5: Ensure that HIP policies promote a positive member experience for all HIP members and minimize coverage gaps</td>
<td>Unable to access the full CAHPS Survey data</td>
<td>Summary reports of the survey data were used to calculate metrics and conduct analyses. Summary reports do not include the full data set and are tailored for the MCE, yielding inconsistent reports across MCEs. Subsequently, missing data minimizes comparisons across MCEs.</td>
<td>Missing data points are flagged in exhibits with ‘NR’ (not reported) and are not considered when making conclusions and recommendations.</td>
</tr>
<tr>
<td>Goal 6: Assess the costs to implement and operate HIP and other non-cost outcomes of the demonstration</td>
<td>RQ1 – No data from other states for comparison</td>
<td>The analysis could be improved by comparing to administrative costs for similar programs in other states</td>
<td>Data from Indiana could be compared to publicly available benchmarks</td>
</tr>
<tr>
<td></td>
<td>RQ2 – 2016 data unavailable for Kentucky</td>
<td>Planned to include data for all states from 2016 – 2020, but 2016 data was unavailable for Kentucky</td>
<td>Used available data for Kentucky and continued to use 2016 through 2020 for the other states being analyzed</td>
</tr>
<tr>
<td></td>
<td>RQ2 – Differences in programs between states</td>
<td>Although claims costs were summarized and analyzed for Indiana, Kentucky, and Ohio, too many differences between the programs in each state existed to draw meaningful conclusions across states</td>
<td>Data was presented and narrative was provided for some of the confounding factors that exist across states and years</td>
</tr>
<tr>
<td></td>
<td>RQ3 – Medicare cost reports</td>
<td>Even though all hospitals that receive payments from Medicare are required to submit cost reports, not all hospitals submit accurate and complete information to CMS.</td>
<td>This is the best source for the data on hospital uncompensated care and is utilized as is.</td>
</tr>
</tbody>
</table>
F. Results by Demonstration Goal

This section provides detailed observations by research question, organized by the six evaluation goals and related hypotheses. A combination of qualitative and quantitative analyses informed these observations and address trends related to health care access, utilization, outcomes, tobacco use, and POWER Accounts. This Summative Evaluation Report provides a comprehensive examination, including cross-state comparisons and statistical tests with adjustments for demographic characteristics as determined necessary and appropriate. Section G: Conclusions provides a summary of observations by goal.

Findings are presented by each goal, hypothesis, and research question. As appropriate, analytic population, measure definition, and analytic methods have been discussed for each hypothesis or research question. For ease of reference, Lewin has summarized key observations by hypothesis or research question using a blue bolded text box. The COVID-19 pandemic, which started in March 2020, caused substantial changes to service utilization and provider availability. Additionally, due to the COVID-19 PHE, the State suspended HIP policies regarding POWER Account payment, tobacco surcharge, and disenrollment. For quantitative analysis, descriptive summary includes data from 2020. However, as the COVID-19 PHE impacted 2020 (March – December), the evaluation analyses focused on the demonstration period prior to 2020. Exhibit F.1.1 presents a summary of the HIP policies that were suspended due to the COVID-19 PHE, and potential direct or indirect impact to HIP goal.

Data sources used for analyses by goal are listed below.

- Goal 1 Access, Utilization, Health Outcomes: Enrollment, encounters, American Community Survey (ACS), Behavioral Risk Factor Surveillance System (BRFSS), Consumer Assessment of Healthcare Providers & Systems (CAHPS)
- Goal 3 Tobacco Cessation: Enrollment, encounters, Tobacco Use and Surcharge, CAHPS
- Goal 4 POWER Account: Enrollment, ACS
- Goal 5 Positive Member Experience: ACS, BRFSS, CAHPS
- Goal 6 Cost and Non Cost: Enrollment, encounters, administrative, fee-for-service data, Healthcare Cost Report Information System (HCRIS)

Exhibit F.1.1: Impact of HIP Policy Changes Due to the COVID-19 PHE on Demonstration Goals

<table>
<thead>
<tr>
<th>PHE Policy Change</th>
<th>Goal 1 Access, Utilization, Health Outcomes</th>
<th>Goal 3 Tobacco Cessation</th>
<th>Goal 4 POWER Account</th>
<th>Goal 5 Positive Member Experience</th>
<th>Goal 6 Cost and Non Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrolled members were not disenrolled (except due to member request, death, or moving out of state)</td>
<td>Indirect</td>
<td>Indirect</td>
<td>Direct</td>
<td>Indirect</td>
<td>Direct</td>
</tr>
<tr>
<td>All new members were enrolled to receive HIP Plus benefits</td>
<td>Indirect</td>
<td>Indirect</td>
<td>Direct</td>
<td>Indirect</td>
<td>Direct</td>
</tr>
<tr>
<td>Members did not have to make POWER Account payments to maintain HIP Plus coverage</td>
<td>Indirect</td>
<td>Direct</td>
<td>Direct</td>
<td>Indirect</td>
<td>Direct</td>
</tr>
<tr>
<td>Tobacco surcharge was suspended</td>
<td>None</td>
<td>Direct</td>
<td>Indirect</td>
<td>Indirect</td>
<td>Direct</td>
</tr>
</tbody>
</table>
Goal 1 – Improve health care access, appropriate utilization, and health outcomes among HIP members

This goal evaluates the HIP program’s progress in improving health care access, utilization of health care services, and health outcomes. Four hypotheses associated with this goal examine whether HIP enrollment supports member use of key services (including appropriate use of emergency department [ED] services), positive health outcomes, and member satisfaction with access to services. A final hypothesis examines whether the Indiana HIP enrollment rate is comparable to other Medicaid expansion states, and whether HIP coverage results in positive health outcomes and member satisfaction with access to care. Analysis for each hypothesis relies on varied data sources and a population cohort (depending on the research question). Lewin describes relevant analytic methodology, data sources, and findings for each of these hypotheses below.

Hypothesis 1 – Enrollment in HIP will promote member use of preventive care, primary care, needed prescription drugs, chronic disease care management, and urgent care.

This hypothesis examines whether HIP enrollment supports member use of preventive services, primary care, specialty care, needed prescription drugs, ED, and urgent care. Access to and appropriate use of these services supports positive health outcomes and members’ ability to engage in key community activities such as employment, education, and caregiving, among others. Analyses related to member use of chronic disease care management was performed only during the Interim Evaluation.

Methodology

To examine changes in use of health care services, the evaluation team used a multi-step approach:

1. Developed annual measures of service use for descriptive trend analyses
2. Used regression methods to analyze differences in service use over time

Monthly enrollment data from February 2015 – December 2020 in conjunction with encounter data was used to conduct the analyses. The study period of interest for this evaluation is 2018 – 2019 (2018 – 2020 waiver demonstration period). Summary findings from 2020 are included yet should be reviewed with caution as utilization trends were likely impacted by the pandemic (e.g., social distancing parameters, re-prioritization of health care resources) as well as the suspension of many FSSA policies effective April 2020. Data from 2015 – 2017 is also included and provides HIP member service use prior to the study period (2018 – 2020) to understand changes over time.

Service utilization occurring between 2015 and 2020 was impacted by several waiver and non-waiver developments – implemented in a linear fashion or co-occurring. These include the maturation of the HIP program, dynamics of the state economy, case-mix changes over time, implementation of a new

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79 Results in this report will vary from the 2016 and 2019 Interim Evaluation Report due to differences in time period evaluated and timing of the receipt of encounter data from the MCEs. Additionally, Lewin has updated the specification and definition of the measures to align more closely with national metric standards when standards are available (i.e., CDC definition of preventive care).

80 Although chronic disease care management is included in the hypothesis, it was not evaluated (per discussions with the State). Analyses related to member use of chronic disease management was included in the Interim Evaluation Report.

81 See Section F, Goal 1 of the Interim Evaluation Report for detailed findings on chronic disease care management.

82 Per discussions with the State, analyses to examine chronic care management were not conducted for the Summative Evaluation as service category analyses were deemed sufficient for responding to the research question.
Medicaid Management Information System, removal of a graduated ED copayment, updates to HIP verification processes, the impact of the COVID-19 PHE, and new processes for reporting and tracking community engagement activities. Although a combination of descriptive and regression-based approach allows for controlling of certain impacts (e.g., year indicator for linear changes in program, beneficiary characteristics for case-mix), interpretation of findings presented should not be linked to a single HIP policy or program feature.

Analytic Population

The analytic population includes all HIP members in monthly HIP enrollment data identified using enrollment category codes (aid category) as follows: Regular Basic (RB), Regular Plus (RP), State Basic (SB), State Plus (SP), HIP Maternity (MA), and HIP Plus Copay (PC). Lewin did not include months when an individual had conditional eligibility or Presumptive Eligibility status, or members that were eligible for Emergency Services Only (Emergency Room Services flag of “Y”). Additionally, for purposes of this research question, HIP member was defined as being continuously enrolled if the member had valid HIP coverage83 for more than 10 months in the year (11 or 12 months).84

Analyses are presented for all HIP members as well as for three sub-cohorts based on member benefit plan coverage during the calendar year under analysis:

- **HIP Basic Only**: Members enrolled exclusively in HIP Basic (enrollment codes RB or SB).
- **HIP Plus Only**: Members enrolled exclusively in HIP Plus (enrollment codes RP or SP).
- **HIP Switchers**85: Members that moved between HIP Basic and HIP Plus (either direction, State Plan, or regular benefits), or pregnant (MA or pregnancy flag of Y) or HIP Plus Copay.86

Exhibit F.1.2 summarizes the population totals for this analysis by benefit plan. The table includes both a count of total members enrolled in the benefit plan and the number of members continuously enrolled in the benefit plan during the year. Exhibit F.1.3 provides the total number of visits by service category for all HIP members.

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83 Valid HIP coverage is defined as member having either of the six enrollment statuses (Regular Basic (RB), Regular Plus (RP), State Basic (SB), State Plus (SP), HIP Maternity (MA), and HIP Plus Copay (PC)) and not eligible for Emergency Services Only (Emergency Room Services flag of “Y”).

84 Since HIP program was implemented from February 2015 and only 11 months of enrollment data were available, members were identified as being continuously enrolled if the member had 10 or more months of valid HIP coverage.

85 Due to the COVID-19 PHE, the State temporarily paused plan switches which would result in a benefit downgrade

86 Pregnant members switch from either HIP Plus or HIP Basic to the MA category, and then from MA to HIP Basic or HIP Plus following the conclusion of the pregnancy. HIP Plus Copay members have switched from HIP Plus to the HIP Plus Copay category and are afforded the opportunity at least annually to return to HIP Plus.
Exhibit F.1.2: All HIP Members in Service Utilization Analysis by Benefit Plan (February 2015 – December 2020)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Members</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIP Basic Only</td>
<td>112,147</td>
<td>151,469</td>
<td>163,449</td>
<td>141,791</td>
<td>113,474</td>
<td>117,170</td>
</tr>
<tr>
<td>HIP Plus Only</td>
<td>219,785</td>
<td>296,873</td>
<td>301,603</td>
<td>313,246</td>
<td>317,587</td>
<td>435,971</td>
</tr>
<tr>
<td>HIP Switchers</td>
<td>57,987</td>
<td>71,787</td>
<td>91,373</td>
<td>114,948</td>
<td>115,383</td>
<td>76,098</td>
</tr>
<tr>
<td>All Members</td>
<td>389,919</td>
<td>520,129</td>
<td>556,425</td>
<td>569,985</td>
<td>546,444</td>
<td>629,239</td>
</tr>
<tr>
<td><strong>Continuously Enrolled Members</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIP Basic Only</td>
<td>39,229</td>
<td>54,674</td>
<td>60,749</td>
<td>39,221</td>
<td>37,090</td>
<td>84,455</td>
</tr>
<tr>
<td>HIP Plus Only</td>
<td>72,177</td>
<td>149,310</td>
<td>161,397</td>
<td>154,174</td>
<td>158,042</td>
<td>243,042</td>
</tr>
<tr>
<td>HIP Switchers</td>
<td>34,007</td>
<td>41,198</td>
<td>53,896</td>
<td>56,673</td>
<td>62,740</td>
<td>48,125</td>
</tr>
<tr>
<td>All Members</td>
<td>145,413</td>
<td>245,182</td>
<td>276,042</td>
<td>249,068</td>
<td>257,872</td>
<td>375,622</td>
</tr>
</tbody>
</table>

*Continuously enrolled members are members who were enrolled for 11 or 12 months in a year (for 2016 – 2020). Since HIP program was implemented from February 2015 and only 11 months of enrollment data were available, continuous enrollment counts members enrolled for 10 or 11 months.*


Exhibit F.1.3: Total Visits by Service Category for All HIP Members (February 2015 – December 2020)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Preventive Care</td>
<td>321,398</td>
<td>488,459</td>
<td>519,319</td>
<td>541,642</td>
<td>500,970</td>
<td>563,969</td>
</tr>
<tr>
<td>Primary Care</td>
<td>473,473</td>
<td>691,487</td>
<td>709,788</td>
<td>803,162</td>
<td>1,374,082</td>
<td>1,717,358</td>
</tr>
<tr>
<td>Specialty Care</td>
<td>606,404</td>
<td>959,735</td>
<td>774,148</td>
<td>894,938</td>
<td>930,695</td>
<td>1,092,147</td>
</tr>
<tr>
<td>Urgent Care</td>
<td>24,838</td>
<td>52,404</td>
<td>58,389</td>
<td>57,421</td>
<td>68,826</td>
<td>76,479</td>
</tr>
<tr>
<td>ED Care</td>
<td>281,879</td>
<td>431,368</td>
<td>450,884</td>
<td>426,273</td>
<td>414,963</td>
<td>455,183</td>
</tr>
</tbody>
</table>


**Outcome Measures**

HIP enrollment and encounter data for preventive care, primary care, urgent care, specialty care, and ED care was used to calculate two key metrics—the participation rate and the utilization rate—by benefit plan from 2015 – 2020. These two metrics (unadjusted for any beneficiary characteristics) convey two important aspects of utilization—the proportion of continuously enrolled members accessing a specific service (participation rate), and how often a particular population accesses the same service (utilization rate) each year irrespective of member demographic characteristics.

**Participation Rate**

The participation rate is the proportion of continuously enrolled members receiving a specific service at least once in the year. This metric reflects that a member participated in a type of care; it does not reflect how frequently the member utilized the service. This rate calculation was restricted to members enrolled for at least 11 months during a year (allowing a gap in coverage of up to 30 days). Consequently, the utilization experience of individuals enrolled for a brief time throughout the year does not influence the rate. Year-to-year changes and comparisons in participation rate were examined using percentage point difference in participation rates between two years being compared.
Utilization Rate

The utilization rate is the count of services or visits per 1,000 member years (referred to as per 1,000 members), which reflects the frequency at which members access the service regardless of their length of enrollment. The use of “member years” in the utilization rate reflects the number of services used per 1,000 members during a year and reflects the number of months of enrollment by members. The formula for the utilization rate is:

\[
\frac{\text{(# of services or visits)}}{\text{(member months)}} \times 1,000 \times 12 \text{ months}
\]

While the formula uses member months, a member year is a more tangible concept for the reader to understand and is a commonly used concept in health care utilization metrics. Year-to-year changes in utilization rates were examined based on percent change calculated as difference in utilization rate between two years being compared divided by utilization rate in the first year.

Analytic Method

We used descriptive statistics (annual and monthly participation and utilization rates) to study change in use of services over time. In addition to comparing trends over time, we used regressions to examine: (1) changes in service use between 2017 (year prior to demonstration period for this evaluation) and during demonstration period; (2) possible association between service use and member sociodemographic characteristics. For each of the outcome measures, we developed the following regressions (see Attachment VII: Methodology section for more details):

- Participation Rate: Service specific logistic regressions were used to examine the likelihood of member receiving the service at least once during a given year. Analyses was restricted to members continuously enrolled in a year. Estimated odds ratio (OR) was used to examine the likelihood of participation.
- Utilization Rate: Service specific Negative Binomial regressions were used to examine change in service utilization per member per year. Estimated incidence rate ratio (IRR), measuring the change in outcome for one unit of change in the control variable, was used to examine likelihood of utilization.

The regression models controlled for benefit year as well as beneficiary sociodemographic characteristics including type of benefit member received, age, sex, race, ethnicity, marital status, income, geography of residence (metro or nonmetro), pregnant anytime in the coverage year, identified as medically frail, size of household and selected chronic conditions (diabetes, chronic obstructive pulmonary disease [COPD], hypertension, chronic kidney disease, cancer, arthritis). Lewin used 2017 as a reference year to examine change across demonstration years (2018, 2019) relative to the pre-demonstration period for this evaluation.

Descriptive statistics for trend was calculated for all years of available HIP data (2015 – 2020). In addition to studying the trends, Lewin performed statistical analyses to analyze the differences in service participation and utilization pre-and post-2020 (Chi-square test for difference in participation rate, ANOVA for utilization rates). Sensitivity analysis revealed significant differences (see Exhibit VII.6 in Attachment VII. Goal 1 Detailed Results for test findings) when comparing 2020 with the two prior program years (2018 and 2019) for all services. As majority HIP policies were only effective for first two months of the year, utilization of services was impacted by confounding effects of the COVID-19
pandemic as well as changes in HIP program policies, all regressions and any program evaluation analysis were limited through 2019.

**Brief Summary:** Use of health care services among HIP members have increased over time, for members receiving HIP Plus benefits during the demonstration period. Findings from 2020 are included yet should be reviewed with caution as utilization trends were likely impacted by the pandemic (e.g., social distancing parameters, re-prioritization of health care resources) as well as the suspension of many FSSA policies effective April 2020. Key participation and service utilization findings from 2015 – 2019 include:

**Preventive Services:** The preventive services participation rate for all HIP members increased from 55.7% in 2015 to 59.0% through 2018. In 2019, the participation rate decreased to 56.6%. The utilization rate for these services also increased from 2015 – 2018, from 1,342 services per 1,000 member years to 1,386 services per 1,000 member years. Consistent with the participation rate, the utilization rate decreased in 2019 (1,291 preventive visits per 1,000 member years). HIP Basic Only members had lower participation and utilization rates in preventive care when compared to HIP Plus and HIP Switchers.

**Primary Care:** Participation for all HIP members averaged 53.8% from 2015 – 2018, increasing to 75.6% in 2019. Utilization rates averaged 1,915 visits per 1,000 member years from 2015 – 2018, increasing to 3,541 in 2019. The increase in 2019 and 2020 is likely due to enhancements in the claims or encounter data that began recording the “Rendering Provider Specialty” at the claim line level. HIP Basic Only members overall had lower utilization and participation than HIP Plus Only and HIP Switchers. The utilization rate for HIP Basic Only was consistently 50% to 60% lower than HIP Plus Only and HIP Switchers.

**Specialty Care:** Participation and utilization rates for specialty care services decreased from 2015 – 2019 for all plans. Participation decreased from 55.3% to 53.6% and utilization decreased from 2,532 to 2,399 visits per 1,000 member years. However, specialty care use for 2018 and 2019 were higher relative to 2017.

**Urgent Care:** Both the participation and utilization rates for urgent care increased for HIP members from 2015 – 2019. The participation rate increased each year from 5.5% for all HIP members in 2015 to 10.1% in 2019, while the utilization rate increased 70.2%, from 104 visits per 1,000 member years in 2015 to 177 visits per 1,000 member years in 2019. Urgent care utilization and participation rates were lowest among HIP Basic Only members, although increasing at a higher rate than HIP Plus Only and HIP Switchers throughout the evaluation period.

**ED Visits:** The participation rate fluctuated between 2015 and 2019 resulting in a decrease of 0.2 percentage points from 41.0% in 2015 to 40.8% in 2019. Utilization rates for ED services decreased 9.2% from 2015 – 2019, from 1,177 to 1,069 visits per 1,000 member years. HIP Plus Only members maintain an ED utilization rate that is 19% lower on average than the rate for HIP Basic Only members. The participation rate is also lower for HIP Plus Only members averaging an 8.5 percentage point different than HIP Basic.
Primary Research Question 1.1 – How have the following changed over time for HIP members: preventive, primary, specialty, emergency department, and urgent care?

This research question assesses member use over time of preventive, primary care, specialty care, urgent care, and ED care. Tracking trends in service utilization over time may help the State determine if sufficient resources are in place across the continuum of care.

The participation rate for HIP members indicates that approximately 90% of all HIP members received a HIP-covered service each year from 2015 – 2019.

- The percentage of continuously enrolled HIP Basic Only members receiving one or more HIP-covered services decreased from approximately 81% in 2015 to approximately 73% in 2018. HIP Basic Only members participation rate increased in 2019 to approximately 74%.

- Between 2015 and 2019, approximately 91% to 94% of HIP Plus Only members and HIP Switcher members received one or more medical services, as measured by the participation rate, compared to HIP Basic Only members who experienced the decrease noted above from approximately 81% to approximately 73%.

**COVID-19 PHE (2020):** The COVID-19 PHE and associated policy modifications impacted the composition of members enrolling in benefit plans. Consequently, utilization and participation rates were affected. For example, HIP Basic Only and HIP Switchers member participation rates increased in 2020 (75.1%; 95.4%) while HIP Plus members decreased (91.3%).

**Exhibits F.1.4 to F.1.5** display the participation rates for all members, and members in HIP Basic Only, HIP Plus Only, and HIP Switchers who received any medical service, including prescriptions, between February 2015 and December 2020.

**Exhibit F.1.4: HIP Member Participation Rates for Any Medical Service by Benefit Plan (February 2015 – December 2020)**

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HIP Basic Only</td>
<td>81.3%</td>
<td>76.0</td>
<td>75.9%</td>
<td>72.9%</td>
<td>74.0%</td>
<td>75.1%</td>
</tr>
<tr>
<td>HIP Plus Only</td>
<td>92.6%</td>
<td>93.5%</td>
<td>93.0%</td>
<td>93.1%</td>
<td>94.1%</td>
<td>91.3%</td>
</tr>
<tr>
<td>HIP Switchers</td>
<td>91.4%</td>
<td>92.5%</td>
<td>91.0%</td>
<td>93.0%</td>
<td>93.4%</td>
<td>95.4%</td>
</tr>
<tr>
<td><strong>All Members</strong></td>
<td><strong>89.6%</strong></td>
<td><strong>89.3%</strong></td>
<td><strong>88.8%</strong></td>
<td><strong>89.9%</strong></td>
<td><strong>91.0%</strong></td>
<td><strong>88.2%</strong></td>
</tr>
</tbody>
</table>

Exhibit F.1.5: HIP Member Participation Rates for Any Medical Service by Benefit Plan (February 2015 – December 2020)


Exhibits F.1.6 and F.1.7 provide an overview of changes in participation and utilization rates for preventive services, primary care visits, urgent care visits, specialty care services, and ED visits across a six-year period (2015 – 2020). Additionally, differences in participation and utilization rates by benefit plan are provided for two selected years (2015 and 2019) in Exhibits F.1.8 and F.1.9. The remainder of the narrative for this hypothesis provides detailed information by service category (including service category definitions). Lewin reports results by benefit plan where possible using the categories described at the beginning of Section F: Results by Demonstration Goal.
Exhibit F.1.6: Participation Rates for All HIP Members by Service Category (February 2015 – December 2020)

Note: Participation rates reflect continuously enrolled members only.

Exhibit F.1.7: Utilization Rates for All HIP Members by Service Category (February 2015 – December 2020)

Note: Utilization rates include services used by members with any length of enrollment.
### Exhibit F.1.8: Summary of Participation Rate by Service Category and Benefit Plan, 2015 and 2019

<table>
<thead>
<tr>
<th>Service Type</th>
<th>All Members</th>
<th>HIP Plus Only</th>
<th>HIP Basic Only</th>
<th>HIP Switchers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Preventive Care Services</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>55.7%</td>
<td>60.7%</td>
<td>40.4%</td>
<td>59.8%</td>
</tr>
<tr>
<td>2019</td>
<td>56.6%</td>
<td>59.4%</td>
<td>34.9%</td>
<td>62.5%</td>
</tr>
<tr>
<td><strong>Percentage Point Change</strong></td>
<td>0.9</td>
<td>-1.3</td>
<td>-5.5</td>
<td>2.7</td>
</tr>
<tr>
<td><strong>Preventive Care (Dental/Vision)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>26.7%</td>
<td>34.3%</td>
<td>11.9%</td>
<td>24.1%</td>
</tr>
<tr>
<td>2019</td>
<td>21.7%</td>
<td>26.5%</td>
<td>6.3%</td>
<td>19.0%</td>
</tr>
<tr>
<td><strong>Percentage Point Change</strong></td>
<td>-5.0</td>
<td>-7.8</td>
<td>-5.6</td>
<td>-5.1</td>
</tr>
<tr>
<td><strong>Primary Care Visits</strong>[^87]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>53.3%</td>
<td>57.4%</td>
<td>41.1%</td>
<td>56.2%</td>
</tr>
<tr>
<td>2019</td>
<td>75.6%</td>
<td>81.8%</td>
<td>49.1%</td>
<td>75.8%</td>
</tr>
<tr>
<td><strong>Percentage Point Change</strong></td>
<td>22.3</td>
<td>24.4</td>
<td>8.0</td>
<td>19.6</td>
</tr>
<tr>
<td><strong>Specialty Care Services</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>53.6%</td>
<td>57.6%</td>
<td>34.2%</td>
<td>54.9%</td>
</tr>
<tr>
<td>2019</td>
<td>53.6%</td>
<td>57.6%</td>
<td>34.2%</td>
<td>54.9%</td>
</tr>
<tr>
<td><strong>Percentage Point Change</strong></td>
<td>-1.7</td>
<td>-1.5</td>
<td>-9.6</td>
<td>-3.4</td>
</tr>
<tr>
<td><strong>Urgent Care Center Visits</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>5.5%</td>
<td>6.2%</td>
<td>3.7%</td>
<td>5.4%</td>
</tr>
<tr>
<td>2019</td>
<td>10.1%</td>
<td>10.7%</td>
<td>6.6%</td>
<td>10.4%</td>
</tr>
<tr>
<td><strong>Percentage Point Change</strong></td>
<td>4.6</td>
<td>4.5</td>
<td>2.9</td>
<td>5.0</td>
</tr>
<tr>
<td><strong>ED Visits</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>41.0%</td>
<td>35.3%</td>
<td>47.7%</td>
<td>47.5%</td>
</tr>
<tr>
<td>2019</td>
<td>40.8%</td>
<td>36.4%</td>
<td>42.5%</td>
<td>50.7%</td>
</tr>
<tr>
<td><strong>Percentage Point Change</strong></td>
<td>-0.2</td>
<td>1.1</td>
<td>-5.2</td>
<td>3.0</td>
</tr>
</tbody>
</table>


[^87]: As part of this system enhancement, the “Rendering Provider” was added to the claim line level in the encounter data yielding additional specialty data to be collected. MCE claims for 2019 were re-adjudicated and as a result, the number of visits counted as primary care visits increased.
Exhibit F.1.9: Summary of Utilization Rate by Service Category and Benefit Plan, 2015 and 2019

Utilization Rates reported as “per 1,000” refer to per 1,000 member years, as described in the Utilization Rate explanation.

<table>
<thead>
<tr>
<th>Service Category</th>
<th>All Members</th>
<th>HIP Plus Only</th>
<th>HIP Basic Only</th>
<th>HIP Switchers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Preventive Care Services</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>1,342 per 1,000</td>
<td>1,519 per 1,000</td>
<td>755 per 1,000</td>
<td>1,657 per 1,000</td>
</tr>
<tr>
<td>2019</td>
<td>1,291 per 1,000</td>
<td>1,306 per 1,000</td>
<td>643 per 1,000</td>
<td>2,057 per 1,000</td>
</tr>
<tr>
<td>Percent Change</td>
<td>-3.8%</td>
<td>-14.0%</td>
<td>-14.8%</td>
<td>4.4%</td>
</tr>
<tr>
<td><strong>Dental/Vision Services</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>347 per 1,000</td>
<td>478 per 1,000</td>
<td>111 per 1,000</td>
<td>301 per 1,000</td>
</tr>
<tr>
<td>2019</td>
<td>262 per 1,000</td>
<td>335 per 1,000</td>
<td>65 per 1,000</td>
<td>224 per 1,000</td>
</tr>
<tr>
<td>Percent Change</td>
<td>-24.5%</td>
<td>-29.9%</td>
<td>-41.4%</td>
<td>-25.6%</td>
</tr>
<tr>
<td><strong>Primary Care Visits</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>1,977 per 1,000</td>
<td>2,327 per 1000</td>
<td>1,116 per 1000</td>
<td>2,171 per 1000</td>
</tr>
<tr>
<td>2019</td>
<td>3,541 per 1,000</td>
<td>4,098 per 1000</td>
<td>1,795 per 1000</td>
<td>3,427 per 1000</td>
</tr>
<tr>
<td>Percent Change</td>
<td>79.1%</td>
<td>76.1%</td>
<td>60.8%</td>
<td>57.9%</td>
</tr>
<tr>
<td><strong>Specialty Care Services</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>2,532 per 1,000</td>
<td>3,039 per 1,000</td>
<td>1,406 per 1,000</td>
<td>2,642 per 1,000</td>
</tr>
<tr>
<td>2019</td>
<td>2,399 per 1,000</td>
<td>2,890 per 1,000</td>
<td>1,207 per 1,000</td>
<td>2,038 per 1,000</td>
</tr>
<tr>
<td>Percent Change</td>
<td>-5.3%</td>
<td>-4.9%</td>
<td>-14.2%</td>
<td>-22.9%</td>
</tr>
<tr>
<td><strong>Urgent Care Center Visits</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>104 per 1,000</td>
<td>125 per 1,000</td>
<td>58 per 1,000</td>
<td>107 per 1,000</td>
</tr>
<tr>
<td>2019</td>
<td>177 per 1,000</td>
<td>195 per 1,000</td>
<td>107 per 1,000</td>
<td>186 per 1,000</td>
</tr>
<tr>
<td>Percent Change</td>
<td>70.2%</td>
<td>56.0%</td>
<td>84.5%</td>
<td>73.8%</td>
</tr>
<tr>
<td><strong>ED Visits</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>1,177 per 1,000</td>
<td>1,026 per 1,000</td>
<td>1,309 per 1,000</td>
<td>1,436 per 1,000</td>
</tr>
<tr>
<td>2019</td>
<td>1,069 per 1,000</td>
<td>917 per 1,000</td>
<td>1,140 per 1,000</td>
<td>1,401 per 1,000</td>
</tr>
<tr>
<td>Percent Change</td>
<td>-9.2%</td>
<td>-10.6%</td>
<td>-12.9%</td>
<td>-2.4%</td>
</tr>
</tbody>
</table>


**Preventive Care Services**

Preventive care services include a variety of preventive care exams, screenings, immunizations, contraception, and chronic disease services. HIP policies encourage the use of these services by excluding copays for preventive care and allowing all members to rollover a portion of their unused POWER Account funds to the next benefit year if they received “qualifying preventive services” as defined by the HIP Managed Care Entity (MCE) Manual[^88] (see Section B: Summary of HIP Demonstration).

**Definition of Preventive Care Services**

Preventive care services between 2015 and 2020 were identified from the encounter data using Current Procedural Terminology (CPT) codes and accompanying diagnosis as defined by the Centers for Disease Control and Prevention (CDC) and Healthcare.gov.[^89] The CDC and Healthcare.gov list does not include dental and vision services as identified in the HIP Basic and HIP Plus benefit plans; Lewin has added


dental and vision services as a supplemental analysis to this preventive services section using the FSSA Fee Schedule.

Analysis Results for Preventive Care Services

HIP member participation in receiving and utilization of preventive care services varied over time and by member benefit plan as well as member characteristics. Exhibits F.1.10 to F.1.17 provide a summary of participation and utilization rates by benefit plan. Additionally, Attachment VII. Goal 1 Detailed Results Exhibits VII.8 and VII.9 provide annual participation and utilization rates by selected member characteristics for preventive care and preventive dental and vision care while Exhibits VII.2 to VII.5 show monthly trend in utilization services.

All HIP Members: The preventive services participation rate for all HIP members increased from 55.7% in 2015 to 59.0% through 2018. In 2019, the participation rate decreased to 56.6%. The utilization rate for these services also increased from 2015 – 2018, from 1,342 services per 1,000 to 1,386 services per 1,000. Consistent with the participation rate, the utilization rate decreased in 2019 (1,291 preventive visits per 1,000). The participation rate for dental or vision services decreased from 26.7% of the HIP members receiving services in 2015 to 21.7% in 2019. Similarly, the utilization rate for dental or vision services decreased 24.5% from 347 services per 1,000 to 262 per 1,000 in 2019. Adjusting for member case mix over time, relative to 2017, HIP members were more likely to receive at least one preventive care service (including dental or vision services) and have more preventive care visits within a year in 2015 and 2016; less likely to receive preventive care and have fewer visits in 2019 (demonstration period). Hence, although findings indicate that participation and utilization rates were higher in 2018, the decline in 2019 hinders interpretations for assessing the impact of HIP on promoting member use of preventive care services.

HIP Basic Only Members: HIP Basic Only members had lower participation and utilization rates in preventive care when compared to HIP Plus Only and HIP Switchers. HIP Basic participation in preventive care services decreased each year of the evaluation period; from 40.4% in 2015 to 34.9% in 2019. Utilization rates also decreased for HIP Basic Only members from 755 visits per 1,000 in 2015 to 643 visits per 1,000 in 2019. Consistent with preventive care utilization and participation rates, dental or vision services for HIP Basic Only members decreased between 2015 and 2019.

HIP Plus Only Members: The preventive services participation rate for HIP Plus Only members increased from 60.7% in 2015 to 62.4% in 2018. The participation rate decreased in 2019 to 59.4%. The utilization rate for preventive services followed a similar pattern, decreasing 14.0% from 1,519 visits per 1,000 in 2015 to 1,306 visits per 1,000 in 2019. Participation rates for dental or vision services dropped from 34.3% in 2015 to 26.5% in 2019 for HIP Plus Only members. The utilization rate also decreased 29.9% from 478 visits per 1,000 to 335 visits per 1,000 in 2019.

- HIP Plus Only members’ participation rate was approximately 1.6 times the rate of HIP Basic Only members across the years (2015 – 2019). For example, in 2019, 34.9% of HIP Basic Only continuously enrolled members received a preventive service, while 59.4% of HIP Plus Only continuously enrolled members received a preventive service.

- The preventive services utilization rate for HIP Plus Only was almost double the rate for HIP Basic Only for 2015 – 2019.
• The HIP Plus Only member utilization rate for dental and vision preventive service is approximately 4.9 times the rate of HIP Basic Only members. Given that the HIP Plus benefit plan provides greater benefits for dental and vision services, higher utilization of these services was expected when compared to HIP Basic Only members.

• Controlling for member characteristics and coverage year, HIP Plus Only members were more likely to have at least one preventive visit (OR: 2.15, 95% confidence interval [CI]: 2.13 – 2.17) as well as a greater number of visits (IRR: 1.79, p-value: <.0001) relative to HIP Basic Only members. This is not surprising as the HIP Plus benefit plan was designed to incentivize individuals receiving preventive care services. In fact, and as expected, HIP Plus Only members were more than five times as likely (OR: 5.07, 95% CI: 4.99 – 5.15) to have at least one preventive dental or vision visit relative to HIP Basic Only members, suggesting that coverage for dental or vision may account for increased service use.

**HIP Switchers**: HIP members alternating between HIP Plus and HIP Basic had higher participation and utilization rates than those who did not switch plan types (HIP Plus Only and HIP Basic Only). For example, in 2019, HIP Switchers had a utilization rate of 1,730 preventive visits per 1,000 and a 62.5% participation rate, compared to HIP Plus Only members who had a utilization rate of 1,306 visits per 1,000 and a participation rate of 59.4%. The higher participation and utilization rates among this cohort of members (compared to other HIP members) may be due to the high proportion of members (ranging between 63% and 77%) who are likely to have higher use of preventive care services – pregnant members (26% to 46% between 2015 and 2019) and members switching from Basic to Plus (ranging between 49% and 22%).

**Variation by Member Clinical and Sociodemographics**: Controlling for coverage year and benefit plan, participation and utilization of preventive care services varied by member characteristics. Males were less than half as likely to receive preventive care (OR: 0.40, 95% CI: 0.40 – 0.41) and were associated with using fewer preventive care services (IRR: 0.54, p-value: <.0001) relative to females. As expected, pregnant members were 5.29 times as to receive preventive care than non-pregnant members (95% CI: 5.18 – 5.42). Members with chronic conditions, such as Diabetes (OR: 8.00, 95% CI 7.80 – 8.21), Hypertension (OR: 5.19, 95% CI: 5.11 – 5.28), and COPD (OR: 2.28, 95% CI: 2.22 – 2.35) also had an increased likelihood of receiving preventive care services. For additional sociodemographics, see Attachment VII.

**COVID-19 PHE (2020)**: Preventive care participation and utilization rates were consistent with 2019 data for HIP Basic Only. Participation and utilization rates declined in 2020 for HIP Plus Only members resulting in a 6.9 percentage point decrease in participation and a 16.3% decrease in utilization.

**Exhibit F.1.10: CDC-Defined Preventive Services Participation and Utilization Rates by Benefit Plan (February 2015 – December 2020)**

<table>
<thead>
<tr>
<th>Benefit Plan</th>
<th>Participation Rate (%)</th>
<th>Utilization Rate (per 1,000 members)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIP Basic Only</td>
<td>40.4%</td>
<td>38.0%</td>
</tr>
<tr>
<td>HIP Plus Only</td>
<td>60.7%</td>
<td>62.7%</td>
</tr>
<tr>
<td>HIP Switchers</td>
<td>59.8%</td>
<td>62.8%</td>
</tr>
<tr>
<td>All Members</td>
<td>55.7%</td>
<td>57.1%</td>
</tr>
</tbody>
</table>

Exhibit F.1.11: Dental or Vision Preventive Services Participation and Utilization Rates by Benefit Plan (February 2015 – December 2020)

<table>
<thead>
<tr>
<th>Benefit Plan</th>
<th>Participation Rate (%)</th>
<th>Utilization Rate (per 1,000 members)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIP Basic Only</td>
<td>11.9%</td>
<td>8.8%</td>
</tr>
<tr>
<td>HIP Plus Only</td>
<td>34.3%</td>
<td>31.6%</td>
</tr>
<tr>
<td>HIP Switchers</td>
<td>24.1%</td>
<td>22.2%</td>
</tr>
<tr>
<td>All Members</td>
<td>26.7%</td>
<td>24.8%</td>
</tr>
</tbody>
</table>


Exhibit F.1.12: HIP Basic Only Preventive Services Utilization and Participation Rates (February 2015 – December 2020)

Exhibit F.1.13: HIP Plus Only Preventive Services Utilization and Participation Rates (February 2015 – December 2020)


Exhibit F.1.14: HIP Switchers Preventive Services Utilization and Participation Rates (February 2015 – December 2020)

Exhibit F.1.15: HIP Basic Only Preventive Dental or Vision Services Utilization and Participation Rates (February 2015 – December 2020)

Note: We see a relatively lower utilization of dental services because only part of the HIP Basic population has access to dental or vision services (State Plan Basic).

Exhibit F.1.16: HIP Plus Only Preventive Dental or Vision Services Utilization and Participation Rates (February 2015 – December 2020)

Exhibit F.1.17: HIP Switchers Preventive Dental or Vision Services Utilization and Participation Rates (February 2015 – December 2020)


Primary Care Visits

Members who enroll in HIP are required to select a primary medical provider (PMP). If the member does not select a PMP, the MCE assigns a PMP to the member. To assess members’ engagement level with their PMP or other primary care provider, the annual primary care participation rates and annual utilization rates from February 2015 – December 2020 were calculated.

Definition of Primary Care Visits

Encounter data from February 2015 – December 2020 was used to identify primary care office and ambulatory care visits. First, evaluation and management (E&M) procedures, International Classification of Diseases (ICD)-9 and ICD-10 codes, and institutional revenue codes were used to identify ambulatory visits. Visits were then limited to primary care provider specialties. The PMP specialties include family practice, pediatricians, obstetrician-gynecologist (OB/GYNs), general practitioners, physician assistants, primary care nurse practitioners, internal medicine providers who do not have primary care sub-specialty, and office or ambulatory visits received at Federally Qualified Health Centers (FQHC) and Rural Health Clinics (RHC).

Analysis Results for Primary Care Visits

The following narrative describes primary care visit participation and utilization rate trends by member benefit plan. Exhibits F.1.18 to F.1.21 provide a summary of these rates by benefit plan. Additionally, Attachment VII. Goal 1 Detailed Results Exhibit VII.10 provides annual participation and utilization rates by selected member characteristics while Exhibits VII.2 to VII.5 show monthly trend in utilization services.
**All HIP Members:** Participation and utilization rates for primary care visits increased in 2019. Participation for all HIP members averaged 53.8% from 2015 – 2018, increasing to 75.6% in 2019. Utilization rates averaged 1,915 visits per 1,000 from 2015 – 2018, increasing to 3,541 visits per 1,000 in 2019. Adjusting for member case mix over time, relative to 2017, HIP members were more likely to receive at least one primary care visit in all years relative to 2017, with 2019 having the greatest increase in likelihood (OR: 2.81, 95% CI: 2.77 – 2.84). Similarly, members were more likely to receive greater numbers of primary care services for all years compared with 2017. In 2019, FSSA implemented a new Medicaid Management Information System. As part of this system enhancement, the “Rendering Provider” was added to the claim line level in the encounter data yielding additional specialty data to be collected. MCE claims for 2019 were re-adjudicated and as a result, the number of visits counted as primary care visits increased. Hence, the increase in primary care visits may be an artifact of the system enhancements rather than due to HIP’s impact on promoting member use of primary care services and thus interpretations of any increase is cautioned.

**HIP Basic Only Members:** The participation rate for primary care visits increased 8.0 percentage points from 41.1% in 2015 to 49.1% in 2019. During the same period, the utilization rates averaged 1,012 visits per 1,000 from 2015 – 2018, increasing to 1,795 visits per 1,000 in 2019. HIP Basic Only members overall had lower utilization and participation than HIP Plus Only and HIP Switchers. The utilization rate for HIP Basic Only was consistently 50 to 60% lower than HIP Plus Only and HIP Switchers.

Controlling for member characteristics and coverage year, HIP Plus members had the greatest likelihood of receiving at least one primary care service within a year (OR: 2.29, 95% CI: 2.27 – 2.32), followed by HIP switchers (OR: 1.77, 95% CI: 1.74 – 1.79) relative to HIP Basic Only members. HIP Plus Only (IRR: 2.04, p-value: <.0001) and HIP Switchers (IRR: 1.96, p-value: <.0001) members were also associated with increased primary care use.

**HIP Plus Only Members:** The participation rate for HIP Plus Only members increased from 57.4% in 2015 to 81.8% in 2019. Consistent with participation rates, utilization also increased. From 2015 – 2019, HIP Plus Only members’ utilization rate increased 76.1% from 2,327 visits per 1,000 to 4,098 visits per 1,000.

**HIP Switchers:** The primary care participation rate for HIP Switchers increased 19.6 percentage points from 56.2% in 2015 to 75.8% in 2019. The utilization rate for HIP Switchers increased 57.9% from 2015 (2,171 visits per 1,000) to 2019 (3,427 visits per 1,000).

**Variation by Member Clinical and Sociodemographics:** Controlling for coverage year and benefit plan, participation and utilization of primary care services varied by member characteristics. For example, males were half as likely to receive at least one primary care service (OR: 0.49, 95% CI: 0.49 – 0.50) and were associated with lower primary care service use (IRR: 0.58, p-value: <.0001). Members with chronic conditions [e.g., Hypertension (OR: 3.02, 95% CI: 2.98 – 3.06), Diabetes (OR: 2.41, 95% CI: 2.36 – 2.45), and COPD (OR: 2.19, 95% CI: 2.13 – 2.25)] had an increased likelihood of receiving primary care. Members with chronic conditions were also associated with greater use of primary care services for all conditions with the exception of chronic kidney disease (IRR: 0.93, p-value: <.0001). For additional sociodemographics, see Attachment VII.COVID-19 PHE (2020): Participation rates for HIP Basic Only increased 2.8 percentage points from 2019 – 2020, while their utilization rate increased 38.7%. Both rates for HIP Switchers increased as well. HIP Plus Only decreased in both participation and utilization rates. The HIP Plus Only participation rate decreased 5.5 percentage points, while utilization decreased 8.8% in 2020.
### Exhibit F.1.18: Primary Care Visits Participation and Utilization Rates by Benefit Plan (February 2015 – December 2020)

<table>
<thead>
<tr>
<th>Benefit Plan</th>
<th>Participation Rate (%)</th>
<th>Utilization Rate (per 1,000 members)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIP Basic Only</td>
<td>41.1%</td>
<td>35.2%</td>
</tr>
<tr>
<td>HIP Plus Only</td>
<td>57.4%</td>
<td>58.3%</td>
</tr>
<tr>
<td>HIP Switchers</td>
<td>56.2%</td>
<td>57.1%</td>
</tr>
<tr>
<td>All Members</td>
<td>53.3%</td>
<td>52.9%</td>
</tr>
</tbody>
</table>


Note: The large increase in the participation and utilization rate in 2019 is due in large part to the re-adjudication process explained above.

### Exhibit F.1.19: HIP Basic Only Primary Care Visits Utilization and Participation Rates (February 2015 – December 2020)

Exhibit F.1.20: HIP Plus Only Primary Care Visits Utilization and Participation Rates (February 2015 – December 2020)


Exhibit F.1.21: HIP Switchers Primary Care Visits Utilization and Participation Rates (February 2015 – December 2020)

**Specialty Care Services**

HIP members typically access specialty care using a referral from a PMP or health plan. The PMP generally serves as a “gatekeeper” to support appropriate access to the necessary specialist(s) a member may require.

**Definition of Specialty Care Services**

Encounter data from February 2015 – December 2020 was used to identify services provided by various physician specialists. Examples of provider specialties include allergists, cardiologists, radiologists, and internal medicine providers who do not identify their subspecialty as a primary care provider. Specialty care services may be provided as part of a hospital inpatient, hospital outpatient, other institutional provider stay, or as part of an ambulatory care visit.

**Analysis Results for Specialty Care Services**

The following narrative describes specialty care services participation and utilization rate trends by member benefit plan. Exhibits F.1.22 to F.1.25 provide a summary of these rates by benefit plan. Additionally, Attachment VII. Goal 1 Detailed Results Exhibit VII.11 provides annual participation and utilization rates by selected member characteristics while Exhibits VII.2 to VII.5 show monthly trend in utilization services.

**All HIP members:** Overall, participation and utilization rates for specialty care services decreased from 2015 – 2019; participation decreased from 55.3% to 53.6% and utilization decreased from 2,532 to 2,399 visits per 1,000. Participation for specialty care services peaked in 2016 at 58.2%, as did utilization at 2,598 visits per 1,000. However, in 2017, participation decreased to 47.1% while utilization dropped to 1,917 visits per 1,000. Although participation and utilization rates increased in 2018 and 2019, the rates did not return to 2015 levels. Adjusting for member case mix over time, relative to 2017, HIP members had slightly higher likelihood of having a specialty care visit and use for all years relative to 2017 (OR: 1.14, 1.1 for 2018 and 2019 respectively).

**HIP Basic Only members:** Both the utilization and participation rates for HIP Basic Only members decreased from 2015 – 2019; participation decreased from 43.8% to 34.2% and utilization decreased from 1,406 to 1,207 visits per 1,000. The largest decline occurred in 2017, when participation decreased by 12.4 percentage points and utilization decreased 33.6% from 2016. Both participation and utilization rates increased in 2018 and 2019 but did not return to 2015 levels.

**HIP Plus Only members:** The participation and utilization rates for HIP Plus Only members increased from 2015 (59.1%; 3,039 visits per 1,000) to 2016 (63.1%; 3,178 visits per 1,000). Consistent with HIP Basic Only members, a large decrease for participation and utilization rates occurred in 2017 when participation decreased by 9.5 percentage points and utilization dropped 23%. Rates then increased in 2018 and 2019. Overall, HIP Plus Only members received specialty care 1.9 times more than HIP Basic Only members between 2015 and 2019. Controlling for member characteristics and coverage year, HIP Plus Only members (OR: 1.83, 95% CI: 1.81 – 1.85) and HIP Switchers (OR: 1.45, 95% CI: 1.43 – 1.47) were more likely to receive specialty care compared with HIP Basic Only members. Having HIP Plus Only

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90 Analyses did not assess any changes across services (i.e., whether decreases in specialty care service participation or utilization occurred as a result of members getting their healthcare needs met by lower levels of care, such as primary care. Any changes across services requires further analysis.
or being a HIP Switcher was also associated with an increase in likelihood of use of specialty care services (HIP Plus Only – IRR: 1.99, p-value: <.0001; HIP Switchers – IRR: 1.79, p-value: <.0001).

**HIP Switchers**: The participation rate decreased from 58.3% in 2015 to 54.9% in 2019. The specialty care utilization rate for HIP Switchers decreased 22.9% from 2015 – 2019. HIP Switchers experienced the largest percentage decrease in utilization during the evaluation period.

**Variation by Member Clinical and Sociodemographics**: Controlling for coverage year and benefit plan, participation and utilization of specialty care services varied by member characteristics. For example, males were approximately half as likely to receive specialty care relative to females (OR: 0.57, 95% CI: 0.57 – 0.58) and were associated with lower specialty care service utilization (IRR: 0.72, p-value: <.0001). Additionally, relative to Caucasian members, Asian or Pacific Islander members were less likely to receive specialty services (OR: 0.66, 95% CI: 0.64 – 0.67). Hispanic members were also less likely to receive specialty services when compared with other ethnicities (OR: 0.64, 95% CI: 0.62 – 0.65) and were associated with lower specialty care service utilization (IRR: 0.67, p-value: <.0001). As expected, members who were frail (OR: 2.10, 95% CI: 2.08 – 2.12), pregnant (OR: 2.69, 95% CI: 2.63 – 2.74), or had a chronic condition were more likely to receive specialty care. Chronic conditions with greatest likelihood of receiving specialty services were cancer (OR: 8.48, 95% CI: 8.02 – 8.97), cardiovascular disease (OR: 6.39, 95% CI: 6.11 – 6.69), arthritis (OR: 3.85, 95% CI: 3.60 – 4.12), and COPD (OR: 3.74, 95% CI: 3.62 – 3.86). For additional sociodemographics, see Attachment VII.Covid-19 PHE (2020): The participation rate for HIP Plus Only decreased in 2020 by 7.0 percentage points. Participation rates for HIP Basic Only remained the same, while HIP Switchers increased by 2.2 percentage points. Utilization rates for HIP Basic Only increased by 26.9% whereas HIP Plus Only and HIP Switchers decreased by 15.8% and 1.0% respectively.

**Exhibit F.1.22: Specialty Care Services Participation and Utilization Rates by Benefit Plan** (February 2015 – December 2020)

<table>
<thead>
<tr>
<th>Benefit Plan</th>
<th>Participation Rate (%)</th>
<th>Utilization Rate (per 1,000 members)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIP Basic Only</td>
<td>43.8%</td>
<td>42.4%</td>
</tr>
<tr>
<td>HIP Plus Only</td>
<td>59.1%</td>
<td>63.1%</td>
</tr>
<tr>
<td>HIP Switchers</td>
<td>58.3%</td>
<td>62.0%</td>
</tr>
<tr>
<td>All Members</td>
<td>55.3%</td>
<td>58.2%</td>
</tr>
</tbody>
</table>

Exhibit F.1.23: HIP Basic Only Specialty Care Services Utilization and Participation Rates (February 2015 – December 2020)


Exhibit F.1.24: HIP Plus Only Specialty Care Services Utilization and Participation Rates (February 2015 – December 2020)

Exhibit F.1.25: HIP Switchers Specialty Care Services Utilization and Participation Rates (February 2015 – December 2020)


**Emergency Department Visits**

The use of the ED for non-urgent services may reflect broader health system issues, such as challenges with accessing services in other settings (e.g., primary care) or care coordination for individuals experiencing chronic conditions.\(^91\),\(^92\) This research question analyzed overall ED utilization; see Research Question 2.1 for an analysis of potentially avoidable ED visits.

**Definition of Emergency Department Visits**

Encounter data from February 2015 – December 2020 was used as the source for ED visits. Select CPT codes or revenue codes were used to identify ED visits.

**Analysis Results for Emergency Department Services**

The following sections describe ED services participation and utilization rate trends by member benefit plan. Exhibits F.1.26 to F.1.29 provide a summary of these rates by benefit plan. Additionally, Attachment VII. Goal 1 Detailed Results Exhibit VII.12 provides annual participation and utilization rates by selected member characteristics while Exhibits VII.2 to VII.5 show monthly trend in utilization services.

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All HIP members: The participation rate fluctuated between 2015 and 2019 resulting in a decrease of 0.2 percentage points from 41.0% in 2015 to 40.8% in 2019. Utilization rates for ED services decreased 9.2% from 2015 – 2019, from 1,177 to 1,069 visits per 1,000. Adjusting for member case mix over time, relative to 2017, HIP members were more likely to receive ED services in 2016 than in 2018 and 2019 (demonstration period). This is consistent with findings indicating a likelihood of greater ED visits in 2015 and 2016 and declines in likelihood for 2018 and 2019 relative to 2017, suggesting that the demonstration may have contributed to reductions in ED services.

HIP Basic Only members: The participation rate for HIP Basic members decreased from 47.7% in 2015 to 42.5% in 2019. The utilization rate decreased 12.9% from 2015 – 2019 (1,309 per 1,000 in 2015 to 1,140 per 1,000 in 2019).

HIP Plus Only members: The participation rate of HIP Plus Only members increased from 2015 (35.3%) to 2016 (39.9%), but by 2019, the participation rate had decreased to 36.4%. ED utilization for HIP Plus Only members decreased 10.6% from 2015 – 2019, decreasing from 1,026 visits per 1,000 in 2015 to 917 visits per 1,000 in 2019.

HIP Plus Only members maintain an ED utilization rate that is 19% lower on average than the rate for HIP Basic Only members. The participation rate is also lower for HIP Plus Only members averaging an 8.5 percentage point different than HIP Basic. This difference in participation rate in HIP Plus Only versus HIP Basic Only decreased from a 12.4 percentage point difference in 2015 to a 6.1 percentage point difference in 2019. Controlling for member characteristics and coverage, HIP Plus Only members were less likely to have an ED visit relative to Basic Only members (OR: 0.74, 95% CI: 0.74 – 0.75) and were associated with lower ED utilization (IRR: 0.90, p-value: <.0001). As stated previously, HIP Plus members are offered additional benefits, beyond HIP Basic, that promote service use for preventable or treatable conditions in settings, such as primary care. This increased coverage as well as potential member characteristics (i.e., more engaged in their healthcare) associated with self-selection into HIP Plus may be contributing to reductions in the overuse or misuse of EDs, thereby accounting for the lower utilization and participation of the ED.

HIP Switchers: Participation rates for HIP Switchers increased by 3.2 percentage points from 47.5% in 2015 to 50.7% in 2019. ED utilization for HIP Switchers also decreased from 2015 – 2019, but at a slower rate than HIP Plus Only and HIP Basic Only, decreasing from 1,436 visits per 1,000 in 2015 to 1,401 visits per 1,000 in 2019. This was only a 2.4% decrease compared to the 12.9% and 10.6% decrease for HIP Basic Only and HIP Plus Only, respectively. Controlling for member characteristics and coverage, HIP Switchers were only slightly more likely to have an ED visit (OR: 1.05, 95% CI: 1.03 – 1.06) relative to HIP Basic members.

Variation by Member Clinical and Sociodemographics: Controlling for coverage year and benefit plan, participation and utilization of ED service varied by member characteristics. For example, members ages 40 and older were less likely to have an ED visit relative to younger cohorts, with those ages 50 and older half as likely to have an ED visit. These age cohorts were also associated with lower ED utilization relative to younger cohorts. Similarly, Asian or Pacific Islander members were less than half as likely to have had an ED visit (OR: 0.46, 95% CI: 0.44 – 0.47) and were associated with lower ED utilization (IRR: 0.43, p-value: <.0001). Males were also less likely to have an ED visit. For additional sociodemographics, see Attachment VII.

Exhibit F.1.26: ED Visits Participation and Utilization Rates by Benefit Plan (February 2015 – December 2020)

<table>
<thead>
<tr>
<th>Benefit Plan</th>
<th>Participation Rate (%)</th>
<th>Utilization Rate (per 1,000 members)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIP Basic Only</td>
<td>47.7%</td>
<td>48.4%</td>
</tr>
<tr>
<td>HIP Plus Only</td>
<td>35.3%</td>
<td>39.9%</td>
</tr>
<tr>
<td>HIP Switchers</td>
<td>47.5%</td>
<td>53.0%</td>
</tr>
<tr>
<td>All Members</td>
<td>41.0%</td>
<td>44.0%</td>
</tr>
</tbody>
</table>


Exhibit F.1.27: HIP Basic Only ED Visit Utilization and Participation Rates (February 2015 – December 2020)

Exhibit F.1.28: HIP Plus Only ED Visit Utilization and Participation Rates (February 2015 – December 2020)


Exhibit F.1.29: HIP Switchers ED Visit Utilization and Participation Rates (February 2015 – December 2020)

**Urgent Care Center Visits**

Urgent care centers may provide an alternative to EDs for non-emergency care.\(^3\) Urgent care centers may decrease lower-acuity ED visits by increasing access to care. The number of urgent care centers has grown over the past decade, and these centers are typically located in easily accessible locations within a community.\(^4\) A study by the CDC’s National Center for Health Statistics found that 29.2% of the U.S. adult population in 2019 had visited an urgent care center in the past 12 months.

**Identification of Urgent Care Center Visits**

Encounter data from February 2015 – December 2020 claims data was used as the data source to identify urgent care center visits. The “Place of Service” code on the professional medical claim in addition to an accompanying ambulatory or outpatient procedure code, diagnosis code, or revenue code from the HEDIS® value set directory for “Ambulatory Visits Value Set” was used to compile the sample data set.\(^5\)

**Analysis Results for Urgent Care Center Visits**

The following narrative describes urgent care center participation and utilization rate trends by member benefit plan. **Exhibits F.1.30 to F.1.33** provide a summary of urgent care center participation and utilization rates by benefit plan. Additionally, **Attachment VII. Goal 1 Detailed Results Exhibit VII.13** provides annual participation and utilization rates by selected member characteristics while **Exhibits VII.2 to VII.5** show monthly trend in utilization services.

**All HIP members**: Both the participation and utilization rates increased for HIP members from 2015 – 2019. The participation rate increased each year from 5.5% for all HIP members in 2015 to 10.1% in 2019, while the utilization rate increased 70.2, from 104 visits per 1,000 in 2015 to 177 visits per 1,000 in 2019. Even adjusting for case mix over time, members in the demonstration period (2018, 2019) had higher likelihood of using urgent care relative to prior years. In contrast to ED utilization (see **Exhibit F.1.26**), the number of urgent care visits increased. For example, in 2015 for every urgent care visit there were 11 ED visits. By 2019, that difference decreased to one urgent care visit for every six ED visits.

**HIP Basic Only members**: Urgent care utilization and participation rates were lowest among HIP Basic Only members, although increasing at a higher rate than HIP Plus Only and Switchers throughout the evaluation period. The participation rate for HIP Basic Only members increased from 3.7% in 2015 to 6.6% by 2019. Urgent care utilization rates for HIP Basic Only increased from 58 visits per 1,000 in 2015 to 107 visits per 1,000 in 2019; an 84.5% increase.

**HIP Plus Only members**: The urgent care participation rate for HIP Plus Only increased from 6.2% in 2015 to 10.7% in 2019. HIP Plus Only members were the highest utilizers of urgent care centers throughout the evaluation period. In 2019, HIP Plus Only members utilized the urgent care center 1.8 times more frequently than HIP Basic members. Urgent care utilization rates for HIP Plus Only members

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increased 56.0% from 125 visits per 1,000 in 2015 to 195 visits per 1,000 in 2019. Controlling for member characteristics and coverage year, HIP Plus Only (OR: 1.80, 95% CI: 1.76 – 1.84) and HIP Switchers (OR: 1.48, 95% CI: 1.44 – 1.52) were more likely to have at least one urgent care visit relative to HIP Basic Only members and were associated with greater utilization (HIP Plus Only - IRR: 2.10, p-value: <.0001; HIP Switcher – IRR: 1.91, p-value: <.0001).

**HIP Switchers**: HIP Switchers increased their utilization and participation in urgent care centers. HIP Switchers’ participation rate nearly doubled increasing from 5.4% in 2015 to 10.4% in 2019. Utilization rates increased from 107 visits per 1,000 to 186 visits per 1,000.

**Variation by Member Clinical and Sociodemographics**: Controlling for coverage year and benefit plan, participation and utilization of urgent care services varied by member characteristics. Consistent with other service categories, males were less likely to have an urgent care visit relative to females (OR: 0.59, 95% CI: 0.58 – 0.60) and were associated with lower utilization (IRR: 0.57, p-value: <.0001). Additionally, Asian or Pacific Islander (OR: 0.62, 95% CI: 0.59 – 0.65), Black (OR: 0.46, 95% CI: 0.45 – 0.47), and Other (OR: 0.89, 95% CI: 0.87 – 0.91) races were all less likely to receive urgent care services relative to Caucasian members. All races were also associated with lower utilization of urgent care relative to Caucasian members (Asian or Pacific Islander - IRR: 0.64, p-value: <.0001; Black - IRR: 0.47, p-value: <.0001; Other - IRR: 0.94, p-value: <.0001). Finally, older members (ages 30 and older) had lower likelihood of using urgent care compared to younger members especially among members ages 50 and older who were 50% less likely to use urgent care services. For additional sociodemographics, see **Attachment VII**.

**COVID-19 PHE (2020)**: Participation rates increased slightly for HIP Basic Only in 2020, while decreasing for HIP Plus Only and HIP Switchers. Trends were consistent for utilization rates.

**Exhibit F.1.30: Urgent Care Center Visits Participation and Utilization Rates by Benefit Plan (February 2015 – December 2020)**

<table>
<thead>
<tr>
<th>Benefit Plan</th>
<th>Participation Rate (%)</th>
<th>Utilization Rate (per 1,000 members)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIP Basic Only</td>
<td>3.7%</td>
<td>4.6%</td>
</tr>
<tr>
<td>HIP Plus Only</td>
<td>6.2%</td>
<td>8.7%</td>
</tr>
<tr>
<td>HIP Switchers</td>
<td>5.4%</td>
<td>7.9%</td>
</tr>
<tr>
<td>All Members</td>
<td>5.5%</td>
<td>7.6%</td>
</tr>
</tbody>
</table>

Exhibit F.1.31: HIP Basic Only Urgent Care Center Visit Utilization and Participation Rates (February 2015 – December 2020)


Exhibit F.1.32: HIP Plus Only Urgent Care Center Visit Utilization and Participation Rates (February 2015 – December 2020)

Exhibit F.1.33: HIP Switchers Urgent Care Center Visit Utilization and Participation Rates (February 2015 – December 2020)


**Adherence to Prescription Drugs**

Poor medication adherence compromises patient outcomes. Multiple factors influence poor or non-adherence including socio-economic variables, the cost of treatment, interactions between the patient and the health system, the patient’s diagnosis, the patient’s cognitive capabilities and social supports, and factors related to the therapy itself. Additionally, therapeutic factors such as the complexity of the therapy, the potential for adverse drug reactions, the duration of the therapy, and the impact of taking multiple medications affect adherence. Increasing the effectiveness of medication adherence is critical for individuals with chronic conditions and is associated with reduced hospitalizations.

**Definition of Prescription Drugs Adherence**

Pharmacy data from February 2015 – December 2020 was used to calculate a pharmaceutical measure called “percent days covered” by benefit plan. This measure uses the following formula: total number of days for the medication supply divided by the number of days in the measurement period. For example, a member who has a 90-day supply in a 180-day period is 50% adherent. For this calculation, Lewin defines long-term adherence as rates of 75% days covered or greater.

This analysis was limited to members with at least six months of enrollment following the first date in the period when a member filled a prescription for a drug, with no more than one gap (of up to 45 days) in enrollment. The analytic population included members who filled a prescription in the following medication classifications: angiotensin converting enzyme (ACE) inhibitors and angiotensin-receptor

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blockers (ARB), attention-deficit/hyperactivity disorder (ADHD) medications, anti-asthmatics, anti-depressants, anti-psychotics, rheumatoid arthritis medications, beta-blockers, bronchodilators, and statins.

**Analysis Results for Prescription Drugs**

The following narrative describes prescription drug adherence using the methodology described above. **Exhibits F.1.34 and F.1.35** provide a summary of prescription drug adherence by benefit plan.

**All members:** Overall prescription drug adherence increased slightly from 2015 – 2019. In 2015, 80.3% of members prescribed medications in the classes listed above adhered to their drug regimen at least 75% of the covered days. The rate decreased in 2016 to 78.5% but increased to 80.9% in 2019.

**HIP Basic Only members:** Prescription adherence rates increased for HIP Basic Only members from 74.5% in 2015 to 77.4% in 2019. This rate is lower than HIP Plus Only members, but the difference between the prescription adherence rate for HIP Plus Only members and HIP Basic members is decreasing over time.

**HIP Plus Only members:** Prescription adherence rates decreased from 2015 – 2016 and then rose slightly each year, from 2017 (80.2%) to 2019 (82.3%). HIP Plus prescription benefits include: 90-day refills on prescription; receiving medication by mail order and receiving medication management services. This additional coverage may contribute to the differences and slightly higher adherence rates of HIP Plus when compared to HIP Basic members.

**HIP Switchers:** Similar to the trend for HIP Plus Only members, HIP Switchers prescription adherence dropped from 77.7% in 2015 to 74.9% in 2016, but then increased over time to 77.8% in 2019.

**COVID-19 PHE (2020):** Prescription adherence increased for all benefit categories in 2020. In 2020, overall prescription adherence was 82.0%, with HIP Plus Only members having the highest adherence at 82.9%.

**Exhibit F.1.34: Prescription Drug Adherence (75% Covered Days) by Benefit Plan (February 2015 – December 2020)**

<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HIP Basic Only</td>
<td>74.5%</td>
<td>74.8%</td>
<td>75.3%</td>
<td>75.7%</td>
<td>77.4%</td>
<td>79.4%</td>
</tr>
<tr>
<td>HIP Plus Only</td>
<td>82.2%</td>
<td>79.8%</td>
<td>80.2%</td>
<td>81.2%</td>
<td>82.3%</td>
<td>82.9%</td>
</tr>
<tr>
<td>HIP Switchers</td>
<td>77.7%</td>
<td>74.9%</td>
<td>75.1%</td>
<td>75.8%</td>
<td>77.8%</td>
<td>78.7%</td>
</tr>
<tr>
<td>All Members</td>
<td>80.3%</td>
<td>78.5%</td>
<td>78.8%</td>
<td>79.6%</td>
<td>80.9%</td>
<td>82.0%</td>
</tr>
</tbody>
</table>

Research Question 1.1 Findings Summary – How have the following changed over time for HIP members: preventive, primary, urgent, and specialty care; prescription drug use; and chronic care management?

Based on enrollment and encounter data, service participation (percentage of continuously enrolled members participating in the services) and utilization varied across the study time period (2018 – 2019) and across service (e.g., preventive, primary, specialty, urgent care, and ED). Results for preventive care services are mixed, while changes in primary care service findings specifically for 2019 are likely due to state data system enhancements. Consequently, interpretations for both these services on promoting member service use is limited. For all HIP members and particularly for HIP Plus, urgent care participation and service utilization increased. In contrast, both ED visits and specialty care participation and service utilization decreased. Findings suggest that HIP members were using the ED less frequently for non-urgent conditions. Increased coverage may be contributing to reductions in the overuse or misuse of EDs and thereby accounting for the lower utilization and participation of the ED.

Hypothesis 2 – Unnecessary emergency department services will not rise over time for HIP members.

This hypothesis focuses on examining whether HIP enrollment discourages unnecessary ED use. As described in Hypothesis 1, the ED is often used to treat individuals with non-emergent conditions.\(^9^7\) According to a systematic review examining ED visits for non-urgent conditions, Uscher-Pines and colleagues (2013) determined that 37% of ED visits were deemed as not urgent (range 8% – 62%).\(^9^8\) New alternatives to divert care from the ED for those experiencing non-urgent conditions are available. For

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example, urgent care centers, retail clinics, and internet-based telemedicine are widely available and offer a viable option for non-emergent, treatable conditions.

Primary Research Question 2.1 – How have avoidable emergency department visits among HIP members changed over time?

To answer this research question, the percent of avoidable ED visits was calculated for HIP Basic Only, HIP Plus Only, and HIP Switchers by benefit plan from February 2015 – December 2020. Although this analysis does not account for whether members were continuously enrolled during each annual period, it does extend ED and urgent care findings presented in Hypothesis 1.

**Brief Summary:** Findings indicate that 42.9% of ED visits in the HIP program in 2019 were seen as “avoidable,” that is, they were either “non-emergent” or “emergent—primary care treatable.” The overall avoidable ED rate decreased from 2015 – 2019, from a high of 49.5% in 2015 to a low of 42.9% in 2019. When stratified by benefit plan, avoidable ED visits for all benefit plans decreased consistently from 2015 – 2019, with HIP Basic Only decreasing 15.1%, HIP Plus Only decreasing 10.1%, and HIP Switchers decreasing avoidable ED visits by 16.8%.

**Approach to Analysis for Avoidable ED**

Encounter data from February 2015 – December 2020 (as submitted by the HIP MCEs) was used to calculate avoidable ED visits. Calculations used the New York University (NYU) Avoidable ED algorithm, developed by John Billings. This algorithm was developed to evaluate a set of ED cases and calculate an expected value and percentage of ED visits into the four main categories as described in Exhibit F.1.36.

**Exhibit F.1.36: Avoidable ED Visit Algorithm Classifications**

<table>
<thead>
<tr>
<th>ED Visit Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-emergent</td>
<td>Immediate medical care was not required within 12 hours</td>
</tr>
<tr>
<td>Emergent/Primary Care Treatable</td>
<td>Treatment was required within 12 hours, but care could have been provided effectively and safely in a primary care setting</td>
</tr>
<tr>
<td>Emergent - ED Care Needed - Preventable/Avoidable</td>
<td>ED care was required based on the complaint or procedures performed/resources used, but the emergent nature of the condition was potentially preventable/avoidable if timely and effective ambulatory care had been received during the episode of illness</td>
</tr>
<tr>
<td>Emergent - ED Care Needed – Non-Preventable/Avoidable</td>
<td>ED care was required, and ambulatory care treatment could not have prevented the condition</td>
</tr>
</tbody>
</table>

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99 We did not include months when an individual had conditional eligibility or Presumptive Eligibility status, or members that were eligible for Emergency Room services only (Emergency Room Services flag of “Y”).

The algorithm further categorizes ED visits into:

- Mental health related
- Alcohol related
- Substance-abuse related
- Injury related
- Unclassified

The model was changed in 2017 to accommodate ICD-10 codes. This version was applied to the current analysis and subsequently incorporates both ICD-9 and ICD-10 diagnosis codes from HIP ED claims. In 2020, the model was further adapted to classify COVID-19 ED visits as “Emergent – ED Care Needed – Non-Preventable/Avoidable” and other minor updates to new ICD-10 codes added since the 2017 patch.

The NYU Avoidable ED Algorithm has gained wide acceptance since its introduction in 2000.\(^{101}\) The current analysis focuses on the “non-emergent” and “emergent-primary care treatable” classifications as avoidable ED visits. These two classifications and the conditions they include are considered avoidable and treatable in a primary care setting. In a 2008 study conducted by Lewin and General Dynamics Information Technology, which examined Medicaid ED utilization rates in 39 states using data in the Centers for Medicare and Medicaid Services (CMS) Chronic Condition Data Warehouse, results indicated that just over one-third of the avoidable visits were for diagnoses related to acute bronchitis, inflammation of the middle ear, inflammation of the throat, voice disturbance, and symptoms referable to the back.\(^{102}\)

**Analysis Results for Avoidable ED**

The following section describes avoidable ED visits rate trends by member benefit plan. Exhibits F.1.37 to F.1.42 provide a summary of these rates by HIP benefit plan.

Findings indicate that 42.9% of ED visits for all HIP members in 2019 could be classified as “avoidable,” that is they were either “non-emergent” or “emergent—primary care treatable.” The overall avoidable ED rate decreased from 2015 (49.5%) to 2019 (42.9%). HIP Switchers experienced the largest decrease in avoidable ED visits from 2015 – 2019 from 50.0% to 41.7%. The avoidable ED visit rate for HIP Basic Only members decreased from 51.0% to 43.5% from 2015 – 2019.

The decrease in the avoidable ED rate from February 2015 – December 2019 is likely attributed to the decrease in the non-emergent subset of ED visits. The overall rate for non-emergent ED visits decreased from 23.8% to 19.0%. Each benefit plan showed decreases of non-emergent visits from 2015 – 2019. For example, in Exhibit F.1.38, the rate of avoidable, non-emergent ED visits for HIP Switchers and HIP Basic Only members decreased 6.1 and 5.5 percentage points respectively during the evaluation period. The decreasing rates of avoidable and non-emergent ED visits over time suggests that HIP members were using the ED less frequently for non-urgent conditions.

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COVID-19 PHE (2020): The overall avoidable ED rate continued to decline to 41.6% in 2020. Findings in 2020 should be interpreted with caution as the COVID-19 pandemic likely impacted overall health care service utilization due to social distancing parameters, available health care resources, and changes in patient behavior for seeking care.

Exhibit F.1.37: Avoidable ED Visits as a Percent of Total ED Visits by Benefit Plan (February 2015 – December 2020)

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>HIP Basic Only</td>
<td>51.0%</td>
<td>47.3%</td>
<td>47.2%</td>
<td>46.2%</td>
<td>43.5%</td>
<td>41.8%</td>
</tr>
<tr>
<td>HIP Plus Only</td>
<td>48.3%</td>
<td>45.3%</td>
<td>45.3%</td>
<td>45.1%</td>
<td>43.4%</td>
<td>42.0%</td>
</tr>
<tr>
<td>HIP Switchers</td>
<td>50.0%</td>
<td>48.0%</td>
<td>46.6%</td>
<td>43.8%</td>
<td>41.7%</td>
<td>39.2%</td>
</tr>
<tr>
<td><strong>All Members</strong></td>
<td>49.5%</td>
<td>46.3%</td>
<td>46.1%</td>
<td>45.0%</td>
<td>42.9%</td>
<td>41.6%</td>
</tr>
</tbody>
</table>

Note: Avoidable ED visits represent the sum of non-emergent ED visits and emergent/primary care treatable ED visits.

Exhibit F.1.38: Non-Emergent ED Visits as a Percent of Total ED Visits by Benefit Plan (February 2015 – December 2020)

<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HIP Basic Only</td>
<td>25.0%</td>
<td>22.0%</td>
<td>21.4%</td>
<td>20.5%</td>
<td>19.5%</td>
<td>19.6%</td>
</tr>
<tr>
<td>HIP Plus Only</td>
<td>22.9%</td>
<td>20.6%</td>
<td>20.1%</td>
<td>19.5%</td>
<td>19.1%</td>
<td>19.7%</td>
</tr>
<tr>
<td>HIP Switchers</td>
<td>24.4%</td>
<td>22.3%</td>
<td>21.0%</td>
<td>19.2%</td>
<td>18.3%</td>
<td>18.3%</td>
</tr>
<tr>
<td><strong>All Members</strong></td>
<td>23.8%</td>
<td>21.3%</td>
<td>20.6%</td>
<td>19.7%</td>
<td>19.0%</td>
<td>19.5%</td>
</tr>
</tbody>
</table>


Exhibit F.1.39: Emergent or Primary Care Treatable ED Visits as a Percent of Total ED Visits by Benefit Plan (February 2015 – December 2020)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HIP Basic Only</td>
<td>26.0%</td>
<td>25.3%</td>
<td>25.8%</td>
<td>25.7%</td>
<td>24.0%</td>
<td>22.2%</td>
</tr>
<tr>
<td>HIP Plus Only</td>
<td>25.4%</td>
<td>24.7%</td>
<td>25.2%</td>
<td>25.6%</td>
<td>24.3%</td>
<td>22.3%</td>
</tr>
<tr>
<td>HIP Switchers</td>
<td>25.6%</td>
<td>25.7%</td>
<td>25.6%</td>
<td>24.6%</td>
<td>23.4%</td>
<td>20.9%</td>
</tr>
<tr>
<td><strong>All Members</strong></td>
<td>25.7%</td>
<td>25.0%</td>
<td>25.5%</td>
<td>25.3%</td>
<td>24.0%</td>
<td>22.1%</td>
</tr>
</tbody>
</table>

Exhibit F.1.40: HIP Basic Only Avoidable ED Visit Rate by Visit Type (February 2015 – December 2020)

Note: Avoidable ED visits represent the sum of non-emergent ED visits and emergent/primary care treatable ED visits.

Exhibit F.1.41: HIP Plus Only Avoidable ED Visit Rate by Visit Type (February 2015 – December 2020)

Note: Avoidable ED visits represent the sum of non-emergent ED visits and emergent/primary care treatable ED visits.
Primary Research Question 2.1 Findings Summary – How have avoidable ED visits among HIP members changed over time?

Findings indicate that the overall avoidable ED rate decreased from 2015 – 2019, suggesting that HIP members were using the ED less frequently for non-urgent conditions. These findings further reinforce Research Question 1.1 findings and suggest that reductions in the overuse or misuse of EDs may be explained by increased coverage.

Hypothesis 3 – HIP members will report positive health outcomes.

Primary Research Question 3.1 – How has reported health status for HIP members changed over time?

This hypothesis and research question examines HIP member self-reported health status.

Consumer Assessment of Healthcare Providers and Systems (CAHPS) Analysis

To assess overall and mental or emotional health status, data for two questions from CAHPS Medicaid Adult 5.0H Member Surveys (2015 – 2020) was compiled and analyzed:

- **Question #1:** “In general, how would you rate your overall health?”
  - Response Options: “Excellent,” “Very good,” “Good,” “Fair,” or “Poor”

- **Question #2:** “In general, how would you rate your overall mental or emotional health?”
  - Response Options: “Excellent,” “Very good,” “Good,” “Fair,” or “Poor”

Exhibit F.1.43 outlines responses to Question #1 (overall health) by MCE and year (2015 – 2020). Exhibit F.1.44 outlines responses to Question #2 (overall mental or emotional health) by MCE and year (2015 – 2020). Exhibit F.1.43 and Exhibit F.1.44 group responses into three categories: Excellent or Very Good, Good, and Fair or Poor. Findings were aggregated and provided in summary reports by the MCEs.
Therefore, further breakdowns of this data were not available. See Section D: Methodology for additional information specific to the report format and data limitations.

**Exhibit F.1.43: Beneficiary Reported Health Status by MCE and Year (February 2015 – December 2020)**

<table>
<thead>
<tr>
<th>MCE</th>
<th>Reported Health Status</th>
<th>Pre-COVID-19 PHE</th>
<th>COVID-19 PHE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sample Size</td>
<td>549</td>
<td>413</td>
</tr>
<tr>
<td></td>
<td>Excellent/Very Good</td>
<td>32.0%</td>
<td>30.7%</td>
</tr>
<tr>
<td></td>
<td>Good</td>
<td>37.8%</td>
<td>36.6%</td>
</tr>
<tr>
<td></td>
<td>Fair/Poor</td>
<td>30.2%</td>
<td>32.7%</td>
</tr>
<tr>
<td>2</td>
<td>Sample Size</td>
<td>NR</td>
<td>NR</td>
</tr>
<tr>
<td></td>
<td>Excellent/Very Good</td>
<td>NR</td>
<td>NR</td>
</tr>
<tr>
<td></td>
<td>Good</td>
<td>NR</td>
<td>NR</td>
</tr>
<tr>
<td></td>
<td>Fair/Poor</td>
<td>NR</td>
<td>NR</td>
</tr>
<tr>
<td>3</td>
<td>Sample Size</td>
<td>580</td>
<td>521</td>
</tr>
<tr>
<td></td>
<td>Excellent/Very Good</td>
<td>31.0%</td>
<td>31.0%</td>
</tr>
<tr>
<td></td>
<td>Good</td>
<td>36.1%</td>
<td>34.0%</td>
</tr>
<tr>
<td></td>
<td>Fair/Poor</td>
<td>32.9%</td>
<td>34.0%</td>
</tr>
<tr>
<td>4</td>
<td>Sample Size</td>
<td>248</td>
<td>330</td>
</tr>
<tr>
<td></td>
<td>Excellent/Very Good</td>
<td>27.6%</td>
<td>28.2%</td>
</tr>
<tr>
<td></td>
<td>Good</td>
<td>35.8%</td>
<td>38.6%</td>
</tr>
<tr>
<td></td>
<td>Fair/Poor</td>
<td>36.6%</td>
<td>33.2%</td>
</tr>
</tbody>
</table>


Note: NR = not reported (no report for corresponding year or metric not reported)

**Exhibit F.1.43** summarizes overall health status across response categories for each year data was provided. Overall, responses were equally distributed across categories. Approximately two-thirds of respondents across all four MCEs reported a health status of Good, Very Good, or Excellent. Approximately one-third of respondents across all four MCEs reported Fair or Poor health. Responses were variable across the years for all MCEs and thus trends related to time cannot be established.

- **MCE 1**: MCE 1’s scores varied across the years. There is no noticeable change during the COVID-19 PHE in 2020. The sample size for MCE 1 was largely variable, decreasing over time and dipping to its lowest point in 2019 with 190.

- **MCE 2**: MCE 2 reported better health across the years at slightly higher proportions than the other MCEs. Compared to scores from 2017 through 2019 (pre-COVID-19 PHE), scores from 2020 were slightly worse (reflecting a lower proportion of Excellent or Very Good and a higher proportion of Fair or Poor than all previous years).

- **MCE 3**: MCE 3’s scores did not reflect any significant trends; the scores remained steady and roughly evenly divided across responses categories. There was no noticeable change during the COVID-19 PHE in 2020.
• **MCE 4:** MCE 4 members’ Excellent or Very Good scores were the lowest on average. Consistent with MCE 3, MCE 4’s scores did not reflect any significant trends. There was no noticeable change during the COVID-19 PHE in 2020.

**Exhibit F.1.44: Beneficiary Reported Mental or Emotional Health Status by MCE and Year (February 2015 – December 2020)**

<table>
<thead>
<tr>
<th>MCE</th>
<th>Reported Mental Health Status</th>
<th>Pre-COVID-19 PHE</th>
<th>COVID-19 PHE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sample Size</td>
<td>549</td>
<td>413</td>
</tr>
<tr>
<td></td>
<td>Excellent/Very Good</td>
<td>44.6%</td>
<td>41.1%</td>
</tr>
<tr>
<td></td>
<td>Good</td>
<td>27.1%</td>
<td>30.0%</td>
</tr>
<tr>
<td></td>
<td>Fair/Poor</td>
<td>28.4%</td>
<td>29.0%</td>
</tr>
<tr>
<td>2</td>
<td>Sample Size</td>
<td>NR</td>
<td>NR</td>
</tr>
<tr>
<td></td>
<td>Excellent/Very Good</td>
<td>NR</td>
<td>NR</td>
</tr>
<tr>
<td></td>
<td>Good</td>
<td>NR</td>
<td>NR</td>
</tr>
<tr>
<td></td>
<td>Fair/Poor</td>
<td>NR</td>
<td>NR</td>
</tr>
<tr>
<td>3</td>
<td>Sample Size</td>
<td>580</td>
<td>521</td>
</tr>
<tr>
<td></td>
<td>Excellent/Very Good</td>
<td>42.5%</td>
<td>42.0%</td>
</tr>
<tr>
<td></td>
<td>Good</td>
<td>30.2%</td>
<td>28.0%</td>
</tr>
<tr>
<td></td>
<td>Fair/Poor</td>
<td>27.4%</td>
<td>30.0%</td>
</tr>
<tr>
<td>4</td>
<td>Sample Size</td>
<td>248</td>
<td>330</td>
</tr>
<tr>
<td></td>
<td>Excellent/Very Good</td>
<td>43.7%</td>
<td>41.9%</td>
</tr>
<tr>
<td></td>
<td>Good</td>
<td>29.4%</td>
<td>27.3%</td>
</tr>
<tr>
<td></td>
<td>Fair/Poor</td>
<td>26.9%</td>
<td>30.7%</td>
</tr>
</tbody>
</table>

Note: NR = not reported (no report for corresponding year or metric not reported)

**Exhibit F.1.44** summarizes mental or emotional health status across response categories for each year data was provided. More than two-thirds of respondents across all four MCEs indicated a mental health status of Good, Very Good, or Excellent across the years. Just under one-third of respondents across all four MCEs reported Fair or Poor mental health. With two exceptions (both in 2020), Excellent/Very Good scores were consistently higher than either Good or Fair/Poor scores individually in any given year for every MCE. Consistent with the findings for overall health, responses for mental health were variable across the years for all MCEs and thus trends related to time cannot be established.

- **MCE 1:** MCE 1’s scores varied across the years. There was no noticeable change during the COVID-19 PHE in 2020. The sample size for MCE 1 was largely variable, decreasing over time and dipping to its lowest point in 2019 with 190.

- **MCE 2:** MCE 2 reported better mental health across the years at slightly higher proportions than the other three MCEs. From 2019 (pre-COVID-19 PHE) to 2020 (COVID-19 PHE), scores were slightly worse (the proportion of Excellent or Very Good decreased and the proportion of Fair or Poor increased).
• **MCE 3:** Consistent with MCE 2, from 2019 (pre-COVID-19 PHE) to 2020 (COVID-19 PHE) in MCE 3, scores were slightly worse (the proportion of Excellent or Very Good decreased and the proportion of Fair or Poor increased). Prior to the COVID-19 PHE, scores were consistent and did not reflect any notable trends.

• **MCE 4:** MCE 4’s scores varied across the years. Except for a small increase in 2019, Excellent or Very Good scores steadily decreased over time. From 2019 (pre-COVID-19 PHE) to 2020 (COVID-19 PHE), Excellent or Very Good scores decreased, and Good scores increased, both by almost 10 percentage points. The Fair or Poor scores did not reflect the same notable change.

**BRFSS Analysis**

**Datasets and Methodology for the Analysis of Health Status**

To understand whether self-reported health status for HIP members changed over time, data from the BRFSS for the period of 2013 – 2020 was compiled and analyzed. Since HIP began in 2015, the extended time period allows analysis of the change in health status before and after the HIP policy. Given that BRFSS data does not directly identify covered Medicaid populations, Lewin identified the likely Medicaid eligible population (per CMS recommendation) using the following criteria:

- Include respondents between ages 18 – 64
- Exclude respondents that report household income of more than $15,000 (BRFSS does not capture federal poverty level [FPL] status)\(^{103}\)
- Exclude respondents with self-reported employment status of “unable to work”
- Exclude pregnant people

This approach resulted in a total sample size of 2,477 likely Medicaid eligible Indiana residents during 2013 – 2020. Both the sample size and weighted total population of likely Medicaid eligible Indiana residents are presented in Exhibits V.1 and V.2 (see Attachment V). Caution should be applied when interpreting the findings for the BRFSS data set given the small sample size.

**Analysis of Health Status among Medicaid Eligible Population using BRFSS Data**

To examine the changes in health status, Lewin examined the percent of the population with four different self-reported health status categories reported in the BRFSS data for Indiana. Overall health status was assessed by asking respondents: “Would you say in general your health is.” Response options were categorical: Excellent, Very Good, Good, and Fair/Poor. Exhibit F.1.45 displays the percentage of Medicaid eligible population for each of the response options. Trends prior to the HIP waiver renewal (2018) were relatively stable. Rates of individuals who reported “Very Good” increased from 19.5% in 2018 to 24.0% in 2019. This trend continued to increase in 2020 (29.6%). The proportion of individuals who reported “Excellent” also increased in 2020 (see Exhibit V.3 in Attachment V).

\(^{103}\) Note this income level likely leaves out some households with two or more members on HIP.
Exhibit F.1.45: Percent of Medicaid Eligible Population in Indiana by Health Status (BRFSS Data 2013 – 2020)

Interrupted time series (ITS) analysis was used to derive the estimated change in health status over time among the Medicaid eligible population after controlling for the socio-economic and demographic characteristics of the population. This Multinomial Logistic Regression model accounts for multiple outcome categories. Marginal effects measure the impact that a change in one variable has on the outcome while all other variables were constant. Estimated marginal effects were calculated to assess the likelihood of different health status outcomes as a result of the change in the control variable. Findings indicate that the estimated marginal effects corresponding to prior and post waiver renewal period (i.e., 2015 – 2017 and 2018 – 2020) show that the percentage of Medicaid eligible population in Indiana with "Very Good" health increased by about 2.4 percentage points during 2018 – 2020 period relative to the percentage in 2013 – 2014 period. However, this improvement in health status is not statistically significant.

Limitation of Analysis based on BRFSS Data

Although Lewin used established criteria (recommended by CMS) to identify the Medicaid eligible sample\textsuperscript{104} as a proxy for HIP members, the sample may not adequately represent the HIP population. For example, HIP members may have more serious health conditions overall and subsequently report poorer health status than the general Medicaid population. Additionally, the small sample size reduces the robustness of the findings.

Primary Research Question 3.1 Findings Summary – How has reported health status for HIP members changed over time?

Findings suggest that members have good or better health outcomes. Despite these findings caution should be used when interpreting results given the various methodological limitations identified for both the CAHPS and BRFSS data. Enhancing MCE data capture activities or using additional survey

\textsuperscript{104} The Medicaid enrolled population may be a better proxy for the HIP population; however, Lewin is unable to adequately identify the Medicaid enrolled population from the BRFSS data.
strategies which directly sample HIP members may enable more affirmative conclusions to be drawn that are specific to HIP member health outcomes. Hypothesis 4 – HIP members will report satisfaction with health care access.

This hypothesis examines satisfaction by assessing care accessibility and policies (e.g., Fast Track, Presumptive Eligibility) that facilitate enrollment.

Primary Research Question 4.1 – What percentage of HIP members report getting health care as soon as needed?

**CAHPS Analysis**

To assess member satisfaction with health care access, data for two summary items from CAHPS Medicaid Adult 5.0H Member Surveys (2015 – 2020) was compiled and analyzed. The first summary item assessed “Getting Needed Care” and the second summary item assessed “Getting Care Quickly.” Both items were comprised of two individual questions:

**Getting Needed Care**
- In the last 6 months, how often was it easy to get the care, tests, or treatment you needed?
- In the last 6 months, how often did you get an appointment to see a specialist as soon as you needed?

**Getting Care Quickly**
- In the last 6 months, when you needed care right away, how often did you get care as soon as you needed?
- In the last 6 months, how often did you get an appointment for a check-up or routine care at a doctor’s office or clinic as soon as you needed?

**Exhibit F.1.46** displays the proportion of members answering “Usually” or “Always” to both questions for a singular summary item. Given that each individual question includes a time specifier (i.e., last six months), findings presented do not capture a member’s satisfaction with their health care status for the entire year reported.
Exhibit F.1.46: Beneficiaries Usually or Always Reporting Getting Needed Care and Getting Care Quickly by MCE and Year (2015 – 2020)

<table>
<thead>
<tr>
<th>Summary Items</th>
<th>MCE 1</th>
<th>MCE 2</th>
<th>MCE 3</th>
<th>MCE 4</th>
<th>Overall Weighted Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Getting Needed Care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>82.1%</td>
<td>84.9%</td>
<td>86.7%</td>
<td>86.2%</td>
<td>86.5% 90.6%</td>
</tr>
<tr>
<td>2</td>
<td>NR</td>
<td>NR</td>
<td>81.2%</td>
<td>83.8%</td>
<td>81.8% 86.4%</td>
</tr>
<tr>
<td>3</td>
<td>83.0%</td>
<td>83.9%</td>
<td>85.0%</td>
<td>83.8%</td>
<td>87.3% 84.4%</td>
</tr>
<tr>
<td>4</td>
<td>82.3%</td>
<td>81.4%</td>
<td>83.0%</td>
<td>81.1%</td>
<td>88.2% 85.8%</td>
</tr>
<tr>
<td>Overall Weighted Average</td>
<td>82.4%</td>
<td>83.8%</td>
<td>85.0%</td>
<td>84.4%</td>
<td>86.6% 87.8%</td>
</tr>
<tr>
<td>Getting Care Quickly</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>79.5%</td>
<td>83.8%</td>
<td>83.3%</td>
<td>86.7%</td>
<td>85.1% 88.3%</td>
</tr>
<tr>
<td>2</td>
<td>NR</td>
<td>NR</td>
<td>81.2%</td>
<td>83.6%</td>
<td>79.7% 84.3%</td>
</tr>
<tr>
<td>3</td>
<td>80.4%</td>
<td>82.4%</td>
<td>84.7%</td>
<td>84.1%</td>
<td>83.8% 84.9%</td>
</tr>
<tr>
<td>4</td>
<td>82.4%</td>
<td>79.6%</td>
<td>82.2%</td>
<td>82.4%</td>
<td>80.3% 82.5%</td>
</tr>
<tr>
<td>Overall Weighted Average</td>
<td>80.5%</td>
<td>82.4%</td>
<td>83.3%</td>
<td>84.9%</td>
<td>83.4% 86.0%</td>
</tr>
</tbody>
</table>

Overall, there is not much variation across MCEs. Moreover, the data does not appear to follow any trend over time (i.e., no notable increase or decrease as time progresses). The overall weighted average was the highest during the COVID-19 pandemic (2020); however, the difference is small and likely not significant. Data for both summary items fall within the mid-80% range. Therefore, there does not appear to be a noteworthy difference between member ability to get needed care and to get care quickly. The overall weighted averages across the data indicate that members were generally satisfied with their health care access as defined by their ability to get needed care (approximately 85% average from 2015 – 2020) and their ability to get care quickly (approximately 83% average from 2015 – 2020).

In addition to the CAHPS analysis, the evaluation team intended on conducting a member survey to address this research question. However, due to COVID-19 PHE, whereby many HIP policies under evaluation were suspended starting from March of 2020, Lewin did not conduct the member survey that was planned to be fielded in 2021. This survey would have been fielded to HIP members who had received coverage through December of 2020. Since analysis for this research question is dependent on information collected from HIP members, the evaluation team was unable to fully address this research question for the summative evaluation.

**Primary Research Question 4.1 Findings Summary – What percentage of HIP members report getting health care as soon as needed?**

Findings suggest that members are satisfied with their health care access. However, as stated in the finding summary for Research Question 3.1, findings should be interpreted with caution given the methodological limitations of the CAHPS Survey. Findings reinforce the need for improved data collection strategies and surveys.
Primary Research Question 4.2 – To what extent do HIP members receive coverage through Fast Track and Presumptive Eligibility policies?

This research question assesses the proportion of HIP members that receive coverage through Fast Track and Presumptive Eligibility processes as well as the number of months the HIP member was enrolled for those with Fast Track status. Extent is defined as both the proportion of members and number of months of coverage received.

The Presumptive Eligibility policy allows individuals with income meeting qualifications for HIP and not currently receiving Medicaid services to receive immediate access to health care. At point of care, health care providers may apply, on behalf of the individual, for short-term coverage under HIP through Presumptive Eligibility. During the temporary Presumptive Eligibility coverage, these individuals must file the full Medicaid application to become HIP or Medicaid eligible. Only a certain percentage of individuals that receive Presumptive Eligibility file the full application and, of those, only a certain percentage are found eligible for HIP.

As described in Section B: Summary of HIP Demonstration, the State expanded Presumptive Eligibility under HIP and also offered members the option of an initial $10 Fast Track POWER Account payment that allows a member to “lock in” a HIP Plus coverage start date (the first of the month that the member made the payment) while the application is processing and the member is completing the required verification. Without a Fast Track payment, the member would have conditional enrollment following eligibility determination and would only have HIP coverage starting on the first of the month that the member paid after being found eligible.

Both Fast Track and Presumptive Eligibility policies are important, as HIP does not include a retroactive coverage provision. Fast Track allows for an expedited enrollment process while Presumptive Eligibility allows members to receive HIP coverage prior to the completion of the eligibility determination. New members may use the Fast Track option to enroll in HIP Plus. New members may use the Presumptive Eligibility option to enroll in HIP Basic or HIP Plus.

COVID-19 PHE (2020): Following the start of the COVID-19 PHE (April 2020), the ability to pay Fast Track on an application was paused. Eligible HIP members without current coverage were automatically enrolled in HIP Plus, effective the first day of the month in which the application was submitted, without the need to make a payment. MCEs were instructed to refund all Fast Track payments received in March 2020 and later.
Brief Summary: Lewin’s analyses found the following:

- Approximately one-third of individuals that submitted Fast Track payments in 2017, 2018, and 2019 completed enrollment.
  - The proportion of HIP Plus members enrolling via Fast Track decreased from 8.7% of new HIP Plus members in 2017 to 6.2% of new HIP Plus members in 2018 before rising again to 8.1% in 2019.
  - In 2017, 62.6% of Fast Track recipients were enrolled for more than a year compared to 73.3% in 2019.
- The proportion of individuals meeting Presumptive Eligibility process and completed HIP enrollment decreased from 35.2% in 2016 to 27.7% in 2019.
  - The proportion of new HIP members with Presumptive Eligibility decreased from 17.2% to 15.4% from 2016 – 2019. However, this was not a steady trend, declining in 2017 and 2018 to 14.1% and 13.4%, respectively.
- A larger proportion of members that used the Presumptive Eligibility process stayed enrolled in Basic rather than moving to Plus.

Approach to Quantitative Analysis

Lewin used monthly HIP enrollment data from February 2015 – December 2020 to identify members enrolled via Fast Track or Presumptive Eligibility. Although the Fast Track policy was in effect during 2015 and 2016, Fast Track data were only available for analysis from 2017 – 2020. Fast Track data was only accessible after a system conversion was implemented yielding a more robust State Medicaid Management Information System. Exhibit F.1.47 summarizes the specifications for identifying the proportion of individuals who enrolled using Fast Track or Presumptive Eligibility. Members who initiated the enrollment process under Fast Track but did not enroll (i.e., did not complete the eligibility process or did not qualify for HIP) were not included in the data set.

Exhibit F.1.47: Summary of the Components of the Fast Track and Presumptive Eligibility Calculations

<table>
<thead>
<tr>
<th>Calculation</th>
<th>Fast Track</th>
<th>Presumptive Eligibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numerator</td>
<td>Members with Fast Track status</td>
<td>Members with Presumptive Eligibility status</td>
</tr>
</tbody>
</table>
| Denominator     | New HIP Plus (RP, SP) members that do not have an “Emergency Room Services” flag. New members are defined as members that do not have the following in the 12 months prior to their HIP coverage:  
  - Presumptive Eligibility status  
  - Any monthly enrollment status other than conditional enrollment (RP, SP, RB, SB, MA, or PC)
  This denominator is likely overstated as data were not available from the State to identify which individuals were coming into HIP from a separate Medicaid program. | New members that do not have an “Emergency Room Services” flag and have one of the following enrollment statuses: HIP Plus (RP, SP), HIP Basic (RB, RP), and HIP Maternity (MA). New members are defined as members that do not have any other monthly enrollment status besides conditional enrollment (RP, SP, RB, SB, MA, or PC) in the 12 months prior to their HIP coverage.
  This denominator is likely overstated as data were not available from the State to identify which individuals were coming into HIP from a separate Medicaid program. |
We used the following steps to compute the proportion of members enrolled under Fast Track or Presumptive Eligibility by number of enrolled months:

- Identified members who began the enrollment process under Fast Track or Presumptive Eligibility but did not complete full enrollment
- Counted the number of enrolled months for each member that completed enrollment
- Divided for each enrollment month the number of unique members enrolling under Fast Track or Presumptive Eligibility by the total number of new members enrolled

**Results of Quantitative Analysis – Fast Track**

Even though Fast Track expedites member enrollment, enabling individuals to obtain coverage sooner and stay covered longer, many members who initiate enrollment using Fast Track do not complete enrollment or qualify for HIP. In fact, approximately two-thirds of individuals that submitted Fast Track payments did not complete enrollment in 2017, 2018, and 2019. This finding suggests that although the Fast Track mechanism promotes access to needed care, additional study may be needed to understand characteristics associated with enrollment and identify strategies for promoting enrollment completion.\(^{106}\) (see **Exhibit F.1.48**).

**Exhibit F.1.48: Final Enrollment Status of Members Making Fast Track Payments (January 2017 – December 2020)**

<table>
<thead>
<tr>
<th>Enrollment Span</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Members with Fast Track Status</td>
<td>Percent</td>
<td>Members with Fast Track Status</td>
<td>Percent</td>
</tr>
<tr>
<td>Individuals that did not complete enrollment in HIP</td>
<td>13,704</td>
<td>69.7%</td>
<td>10,600</td>
<td>71.1%</td>
</tr>
<tr>
<td>Individuals that completed enrollment in HIP</td>
<td>5,960</td>
<td>30.3%</td>
<td>4,313</td>
<td>28.9%</td>
</tr>
<tr>
<td>Total Individuals Submitted Fast Track Payments</td>
<td>19,664</td>
<td>100.0%</td>
<td>14,913</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Note: Fast Track is only for members enrolling in HIP Plus. Although the Fast Track policy was in effect during 2015 and 2016, Fast Track data were only available for analysis from 2017 – 2020.

The proportion of HIP Plus members enrolling via Fast Track decreased from 8.7% of new HIP Plus members in 2017 to 6.2% of new HIP Plus members in 2018 before rising again to 8.1% in 2019.

**COVID-19 PHE (2020):** Fast Track enrollment was only available in January and February 2020. Of the members that initiated Fast Track enrollment, 34.6% of individuals completed enrollment in 2020. The proportion of new HIP Plus members that had enrolled via Fast Track in 2020 was 4.7% of all new HIP Plus members. Given the process was suspended for the duration of the COVID-19 PHE, the State

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\(^{106}\) Members can pay fast track prior to completing the eligibility process and receive refunds if they ultimately do not complete enrollment.
Initially mimicked Fast Track payments as a work around to enroll all conditional members and expedite enrollment without requiring a member payment. No member payments were actually required from mid-March 2020 through December 2020. Exhibit F.1.49 provides additional detail.

Exhibit F.1.49: Proportion of Members Using Fast Track by Benefit Plan (January 2017 – December 2020)

<table>
<thead>
<tr>
<th>Benefit Plan</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total New Members</td>
<td>Total Fast Track</td>
<td>Percent Fast Track</td>
<td>Total New Members</td>
</tr>
<tr>
<td>HIP Basic Only</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>HIP Plus Only</td>
<td>66,643</td>
<td>5,767</td>
<td>8.7%</td>
<td>67,839</td>
</tr>
<tr>
<td>HIP Switchers</td>
<td>4,064</td>
<td>193</td>
<td>4.7%</td>
<td>4,171</td>
</tr>
<tr>
<td>All Members</td>
<td>70,707</td>
<td>5,960</td>
<td>8.4%</td>
<td>72,010</td>
</tr>
</tbody>
</table>

Note: Fast Track is only for members enrolling in HIP Plus. Although the Fast Track policy was in effect during 2015 and 2016, Fast Track data were only available for analysis from 2017 – 2020.
Note: Total Fast Track payments in 2020 occurred between January and May, with the majority occurring in March and April.

As stated previously, members can use Fast Track to initiate coverage sooner and subsequently stay covered for longer periods of time. In 2017, 62.6% of Fast Track recipients were enrolled for more than one year compared to 73.3% in 2019.

COVID-19 PHE (2020): In 2020, 6.1% of Fast Track recipients were enrolled for one year compared to 2.9% in 2019. Maintenance of Effort (MOE) protections established during the COVID-19 PHE restricted Medicaid disenrollment. Hence, the increase between 2019 and 2020 is likely due to the impact of the MOE and should be interpreted with caution. Exhibit F.1.48 provides additional detail regarding the proportion of HIP members using Fast Track by months enrolled.
### Exhibit F.1.50: Percentage of HIP Members Using Fast Track by Enrollment Month (January 2017 – December 2020)

<table>
<thead>
<tr>
<th>Enrollment Span</th>
<th>2017</th>
<th></th>
<th>2018</th>
<th></th>
<th>2019</th>
<th></th>
<th>2020</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Members with Fast Track Status</td>
<td>Percent</td>
<td>Members with Fast Track Status</td>
<td>Percent</td>
<td>Members with Fast Track Status</td>
<td>Percent</td>
<td>Members with Fast Track Status</td>
<td>Percent</td>
</tr>
<tr>
<td>1 month</td>
<td>13</td>
<td>0.2%</td>
<td>4</td>
<td>0.1%</td>
<td>17</td>
<td>0.3%</td>
<td>11</td>
<td>0.2%</td>
</tr>
<tr>
<td>2 months</td>
<td>42</td>
<td>0.7%</td>
<td>43</td>
<td>1.0%</td>
<td>50</td>
<td>0.9%</td>
<td>14</td>
<td>0.2%</td>
</tr>
<tr>
<td>3 months</td>
<td>118</td>
<td>2.0%</td>
<td>89</td>
<td>2.1%</td>
<td>103</td>
<td>1.8%</td>
<td>26</td>
<td>0.4%</td>
</tr>
<tr>
<td>4 months</td>
<td>132</td>
<td>2.2%</td>
<td>141</td>
<td>3.3%</td>
<td>168</td>
<td>2.9%</td>
<td>33</td>
<td>0.5%</td>
</tr>
<tr>
<td>5 months</td>
<td>236</td>
<td>4.0%</td>
<td>183</td>
<td>4.2%</td>
<td>215</td>
<td>3.7%</td>
<td>54</td>
<td>0.8%</td>
</tr>
<tr>
<td>6 months</td>
<td>182</td>
<td>3.1%</td>
<td>186</td>
<td>4.3%</td>
<td>207</td>
<td>3.6%</td>
<td>30</td>
<td>0.4%</td>
</tr>
<tr>
<td>7 months</td>
<td>146</td>
<td>2.4%</td>
<td>160</td>
<td>3.7%</td>
<td>164</td>
<td>2.9%</td>
<td>38</td>
<td>0.5%</td>
</tr>
<tr>
<td>8 months</td>
<td>159</td>
<td>2.7%</td>
<td>131</td>
<td>3.0%</td>
<td>136</td>
<td>2.4%</td>
<td>341</td>
<td>4.8%</td>
</tr>
<tr>
<td>9 months</td>
<td>172</td>
<td>2.9%</td>
<td>114</td>
<td>2.6%</td>
<td>121</td>
<td>2.1%</td>
<td>3,304</td>
<td>46.2%</td>
</tr>
<tr>
<td>10 months</td>
<td>194</td>
<td>3.3%</td>
<td>127</td>
<td>2.9%</td>
<td>92</td>
<td>1.6%</td>
<td>2,235</td>
<td>31.3%</td>
</tr>
<tr>
<td>11 months</td>
<td>192</td>
<td>3.2%</td>
<td>129</td>
<td>3.0%</td>
<td>93</td>
<td>1.6%</td>
<td>624</td>
<td>8.7%</td>
</tr>
<tr>
<td>12 months</td>
<td>643</td>
<td>10.8%</td>
<td>327</td>
<td>7.6%</td>
<td>169</td>
<td>2.9%</td>
<td>435</td>
<td>6.1%</td>
</tr>
<tr>
<td>13+ months</td>
<td>3,731</td>
<td>62.6%</td>
<td>2,679</td>
<td>62.1%</td>
<td>4,205</td>
<td>73.3%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total Enrolled</strong></td>
<td><strong>5,960</strong></td>
<td>100%</td>
<td><strong>4,313</strong></td>
<td>100%</td>
<td><strong>5,740</strong></td>
<td>100%</td>
<td><strong>7,145</strong></td>
<td>100%</td>
</tr>
</tbody>
</table>


Note: Fast Track is only for members enrolling in HIP Plus. Although the Fast Track policy was in effect during 2015 and 2016, Fast Track data were only available for analysis from 2017 – 2020.

#### Results of Quantitative Analysis – Presumptive Eligibility

Since 2015, the proportion of individuals who used the Presumptive Eligibility process and completed HIP enrollment fluctuated, with the highest proportion in 2016 (35.2%) and the lowest proportion in 2018 (27.6%). See **Exhibit F.1.51**. Consistent with the Fast Track process, members who use the Presumptive Eligibility process may not complete full Medicaid enrollment for several reasons (e.g., never completing a full application or the eligibility process; found to be ineligible).

#### COVID-19 PHE (2020): In 2020, the proportion of individuals using the Presumptive Eligibility process that completed HIP enrollment increased to 46.1%. This increase in Presumptive Eligibility and general enrollment may be partially due to modified enrollment policies that removed the process for income documentation collection (subsequently reducing member burden) to complete enrollment for all HIP members during the COVID-19 PHE.
Exhibit F.1.51: Final Enrollment Status of Individuals Using Presumptive Eligibility (PE) Process (February 2015 – December 2020)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Individuals that did not complete enrollment in HIP</td>
<td>60,296</td>
<td>56,540</td>
<td>45,992</td>
<td>52,861</td>
<td>57,584</td>
<td>30,652</td>
</tr>
<tr>
<td>Members with PE Status</td>
<td>Percent</td>
<td>Percent</td>
<td>Percent</td>
<td>Percent</td>
<td>Percent</td>
<td>Percent</td>
</tr>
<tr>
<td></td>
<td>72.8%</td>
<td>64.8%</td>
<td>68.5%</td>
<td>72.4%</td>
<td>72.3%</td>
<td>53.9%</td>
</tr>
<tr>
<td>Individuals that completed enrollment in HIP</td>
<td>22,566</td>
<td>30,721</td>
<td>21,125</td>
<td>20,122</td>
<td>22,073</td>
<td>26,223</td>
</tr>
<tr>
<td>Members with PE Status</td>
<td>Percent</td>
<td>Percent</td>
<td>Percent</td>
<td>Percent</td>
<td>Percent</td>
<td>Percent</td>
</tr>
<tr>
<td></td>
<td>27.2%</td>
<td>35.2%</td>
<td>31.5%</td>
<td>27.6%</td>
<td>27.7%</td>
<td>46.1%</td>
</tr>
<tr>
<td>Total Individuals Using the Presumptive Eligibility process</td>
<td>82,862</td>
<td>87,261</td>
<td>67,117</td>
<td>72,983</td>
<td>79,657</td>
<td>56,875</td>
</tr>
<tr>
<td>Members with PE Status</td>
<td>Percent</td>
<td>Percent</td>
<td>Percent</td>
<td>Percent</td>
<td>Percent</td>
<td>Percent</td>
</tr>
<tr>
<td></td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>


The proportion of new HIP members with Presumptive Eligibility decreased from 17.2% to 15.4% from 2016 – 2019. However, this was not a steady trend, dropping in 2017 and 2018 to 14.1% and 13.4%, respectively. As of 2018, once members that enroll via Presumptive Eligibility are found eligible, they are enrolled in Basic. These members are more likely to remain basic members following the initial enrollment in HIP Basic because they enroll in Basic without waiting 60 days or paying. The proportion of new HIP Basic members enrolled under Presumptive Eligibility decreased from 19.0% to 15.4% from 2016 – 2017, but then steadily rose to 23.2% in 2019. Exhibit F.1.52 provides additional detail.

COVID-19 PHE (2020): Presumptive Eligibility members automatically enroll into HIP Basic and can move to Plus if they make a payment within 60 days of enrollment. Due to the suspension of the payment process from the PHE, only the members enrolling in January or February could move to HIP Plus since there was no opportunity to make a payment. As expected, the proportion of new HIP Basic members to new HIP Plus members under Presumptive Eligibility had the largest gap in 2020 with 40.3% of HIP Basic and 8.7% of HIP Plus.

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107 We did not include 2015 in this analysis as 2014 data are not available to perform a “look back” to identify new members.
Exhibit F.1.52: Proportion of Total New HIP Members Using Presumptive Eligibility (PE) by Benefit Plan (January 2016 – December 2020)

<table>
<thead>
<tr>
<th>Benefit Plan</th>
<th>2016 Total New Members</th>
<th>Total Under PE</th>
<th>Percent PE</th>
<th>2017 Total New Members</th>
<th>Total Under PE</th>
<th>Percent PE</th>
<th>2018 Total New Members</th>
<th>Total Under PE</th>
<th>Percent PE</th>
<th>2019 Total New Members</th>
<th>Total Under PE</th>
<th>Percent PE</th>
<th>2020 Total New Members</th>
<th>Total Under PE</th>
<th>Percent PE</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIP Basic Only</td>
<td>59,576</td>
<td>11,342</td>
<td>19.0%</td>
<td>56,489</td>
<td>8,674</td>
<td>15.4%</td>
<td>43,978</td>
<td>9,069</td>
<td>20.6%</td>
<td>40,145</td>
<td>9,316</td>
<td>23.2%</td>
<td>27,257</td>
<td>10,983</td>
<td>40.3%</td>
</tr>
<tr>
<td>HIP Plus Only</td>
<td>106,944</td>
<td>17,547</td>
<td>16.4%</td>
<td>77,036</td>
<td>10,393</td>
<td>13.5%</td>
<td>76,110</td>
<td>8,271</td>
<td>10.9%</td>
<td>77,297</td>
<td>9,539</td>
<td>12.3%</td>
<td>159,673</td>
<td>13,918</td>
<td>8.7%</td>
</tr>
<tr>
<td>HIP Switchers</td>
<td>11,716</td>
<td>1,832</td>
<td>15.6%</td>
<td>16,003</td>
<td>2,058</td>
<td>12.9%</td>
<td>29,689</td>
<td>2,782</td>
<td>9.4%</td>
<td>26,138</td>
<td>3,218</td>
<td>12.3%</td>
<td>22,081</td>
<td>1,322</td>
<td>6.0%</td>
</tr>
<tr>
<td>All Members</td>
<td>178,236</td>
<td>30,721</td>
<td>17.2%</td>
<td>149,528</td>
<td>21,125</td>
<td>14.1%</td>
<td>149,777</td>
<td>20,122</td>
<td>13.4%</td>
<td>143,580</td>
<td>22,073</td>
<td>15.4%</td>
<td><strong>209,011</strong></td>
<td>26,223</td>
<td>12.5%</td>
</tr>
</tbody>
</table>


Note: Lewin defined new members as members that do not have any other monthly enrollment status besides conditional enrollment in the month prior to their HIP coverage. The number of new members is likely overstated as data were not available from the State to identify which individuals were coming into HIP from a separate Medicaid program. Lewin did not include 2015 in this analysis as 2014 data are not available to perform a “look back” to identify new members.
The proportion of members that enrolled in 2018 that continued enrollment for more than 12 months was 57.1% compared to 69.7% of members enrolled in 2019. This percentage jumped in 2020 with 52.5% of Presumptive Eligibility recipients enrolled for six or more months. Exhibit F.1.53 provides additional detail regarding the proportion of HIP members using Presumptive Eligibility by months enrolled.

**COVID-19 PHE (2020):** In 2020, 8.1% of Presumptive Eligibility recipients were enrolled for 11 months compared to 1.7% in 2019. MOE protections established during the COVID-19 PHE restricted Medicaid disenrollment. Hence, the increase between 2019 and 2020 is likely due to the impact of the MOE and should be interpreted with caution.

Exhibit F.1.53: Total Months of Coverage for HIP Members under Presumptive Eligibility (PE) (February 2015 – December 2020)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 month</td>
<td>226</td>
<td>1.0%</td>
<td>502</td>
<td>1.6%</td>
<td>221</td>
<td>1.0%</td>
<td>229</td>
<td>1.1%</td>
<td>299</td>
<td>1.4%</td>
<td>1,898</td>
<td>7.2%</td>
</tr>
<tr>
<td>2 months</td>
<td>394</td>
<td>1.7%</td>
<td>717</td>
<td>2.3%</td>
<td>439</td>
<td>2.1%</td>
<td>752</td>
<td>3.7%</td>
<td>531</td>
<td>2.4%</td>
<td>2,159</td>
<td>8.2%</td>
</tr>
<tr>
<td>3 months</td>
<td>472</td>
<td>2.1%</td>
<td>966</td>
<td>3.1%</td>
<td>1,127</td>
<td>5.3%</td>
<td>1,343</td>
<td>6.7%</td>
<td>1,090</td>
<td>4.9%</td>
<td>2,348</td>
<td>9.0%</td>
</tr>
<tr>
<td>4 months</td>
<td>434</td>
<td>1.9%</td>
<td>973</td>
<td>3.2%</td>
<td>1,147</td>
<td>5.4%</td>
<td>1,227</td>
<td>6.1%</td>
<td>1,118</td>
<td>5.1%</td>
<td>2,167</td>
<td>8.3%</td>
</tr>
<tr>
<td>5 months</td>
<td>374</td>
<td>1.7%</td>
<td>708</td>
<td>2.3%</td>
<td>633</td>
<td>3.0%</td>
<td>819</td>
<td>4.1%</td>
<td>727</td>
<td>3.3%</td>
<td>2,118</td>
<td>8.1%</td>
</tr>
<tr>
<td>6 months</td>
<td>361</td>
<td>1.6%</td>
<td>571</td>
<td>1.9%</td>
<td>517</td>
<td>2.4%</td>
<td>690</td>
<td>3.4%</td>
<td>518</td>
<td>2.3%</td>
<td>2,520</td>
<td>9.6%</td>
</tr>
<tr>
<td>7 months</td>
<td>340</td>
<td>1.5%</td>
<td>532</td>
<td>1.7%</td>
<td>522</td>
<td>2.5%</td>
<td>558</td>
<td>2.8%</td>
<td>440</td>
<td>2.0%</td>
<td>2,098</td>
<td>8.0%</td>
</tr>
<tr>
<td>8 months</td>
<td>359</td>
<td>1.6%</td>
<td>533</td>
<td>1.7%</td>
<td>540</td>
<td>2.6%</td>
<td>534</td>
<td>2.7%</td>
<td>353</td>
<td>1.6%</td>
<td>2,305</td>
<td>8.8%</td>
</tr>
<tr>
<td>9 months</td>
<td>362</td>
<td>1.6%</td>
<td>446</td>
<td>1.5%</td>
<td>530</td>
<td>2.5%</td>
<td>476</td>
<td>2.4%</td>
<td>334</td>
<td>1.5%</td>
<td>2,227</td>
<td>8.5%</td>
</tr>
<tr>
<td>10 months</td>
<td>371</td>
<td>1.6%</td>
<td>519</td>
<td>1.7%</td>
<td>544</td>
<td>2.6%</td>
<td>407</td>
<td>2.0%</td>
<td>343</td>
<td>1.6%</td>
<td>2,758</td>
<td>10.5%</td>
</tr>
<tr>
<td>11 months</td>
<td>622</td>
<td>2.8%</td>
<td>856</td>
<td>2.8%</td>
<td>524</td>
<td>2.5%</td>
<td>424</td>
<td>2.1%</td>
<td>370</td>
<td>1.7%</td>
<td>2,113</td>
<td>8.1%</td>
</tr>
<tr>
<td>12 months</td>
<td>2,252</td>
<td>10.0%</td>
<td>4,444</td>
<td>14.5%</td>
<td>2,607</td>
<td>12.3%</td>
<td>1,166</td>
<td>5.8%</td>
<td>556</td>
<td>2.5%</td>
<td>1,512</td>
<td>5.8%</td>
</tr>
<tr>
<td>13+ months</td>
<td>15,999</td>
<td>70.9%</td>
<td>18,954</td>
<td>61.7%</td>
<td>11,774</td>
<td>55.7%</td>
<td>11,497</td>
<td>57.1%</td>
<td>15,394</td>
<td>69.7%</td>
<td>-</td>
<td>0.0%</td>
</tr>
<tr>
<td><strong>Total Enrolled</strong></td>
<td>22,566</td>
<td>100.0%</td>
<td>30,721</td>
<td>100.0%</td>
<td>21,125</td>
<td>100.0%</td>
<td>20,122</td>
<td>100.0%</td>
<td>22,073</td>
<td>100.0%</td>
<td>26,223</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Primary Research Question 4.2 Findings Summary – To what extent do HIP members receive coverage through Fast Track and Presumptive Eligibility policies?

Although both Fast Track and Presumptive Eligibility allows individuals to obtain coverage sooner and stay covered longer, many individuals who initiate enrollment using either process do not complete enrollment or qualify for HIP. While not everyone who initiates enrollment is ultimately enrolled, individuals use either the Fast Track prepayment option or Presumptive Eligibility to access needed care. For individuals that used Fast Track or Presumptive Eligibility and enrolled in HIP, many received HIP coverage for more than 12 months reinforcing that these policies support access to needed care and may be preferable to retroactive coverage. Findings do not disentangle if individuals with the greatest needs for services enrolled. Future studies examining individual characteristics associated with enrollment as well as whether or not those that needed services retained coverage may support the State in making needed improvements in converting applicants to enrolled members.

Hypothesis 5 – The Indiana Medicaid enrollment rate will be comparable to other Medicaid expansion states.

Indiana used the 2018 – 2020 HIP waiver renewal to continue testing new approaches and flexibilities in the state’s Medicaid program to provide incentives for members to take personal responsibility for their health. Over the demonstration period for this evaluation (January 2018 through December 2020), the State objective was to continue improving health care access and health outcomes among HIP members. The objective of this hypothesis and associated research question is to examine impact of the 2018 – 2020 Demonstration on Medicaid coverage (and thereby access to needed or continued health care among Indiana residents eligible for the benefits provided).

Primary Research Question 5.1 – How does the Indiana Medicaid coverage rate compare to other Medicaid expansion states?

Methodology

Analytic Method

The 2018 HIP waiver renewal continues most components of HIP 2.0 (initiated in 2015) with some new provisions such as (see Section A for detailed background discussion on the demonstration): expanded MCE incentives program; new HIP Plus chiropractic benefits; reestablish an open enrollment period; facilitate enrollment in HIP Maternity for pregnant members; tiered structure for POWER Account Contributions instead of a flat 2% of income; tobacco-user premium surcharge for HIP Plus members. Although these changes were additions or refinements to existing HIP program policies, changes may directly or indirectly impact program enrollment (or continued enrollment) among the eligible population. To understand impact of program policy, if feasible, a preferred method is to compare pre/post implementation of policy to change in comparable population without policy changes over same time period. Subsequently, Lewin evaluated the changes in Indiana’s Medicaid enrollment rates during the 2015 – 2019 period in comparison to the Medicaid enrollment rates in other Medicaid expansion states.

Regression-Based Difference-in-Differences Model

To estimate the change in the Medicaid enrollment rate in Indiana (beyond the secular trend) after 2018 HIP waiver renewal and policy interventions, Lewin has used regression-based Difference-in-Differences (DiD) model. This type of regression model allowed for comparison of the Medicaid enrollment change in Indiana before and after the policy interventions relative to change in comparison states that did not have any policy change during the same time period (after controlling for other population
characteristics). As a result, it minimizes the impact of any secular trend that may affect the Medicaid enrollment across different states, eliminates any bias due to the differences in population characteristics, and identifies any additional change in the Medicaid enrollment rates, specifically in Indiana after the 2018 HIP waiver renewal.

Since the primary focus of this research question is to examine the change after the 2018 – 2020 HIP waiver renewal, Lewin restricted the analysis to only the 2016 – 2019 period. Elimination of 2015 data from the DiD model allowed us to avoid any potential impact of Medicaid expansion in Indiana in 2015. The outcome variable in the DiD model is a binary indicator variable that takes a value of 1 if the person is reported to have Medicaid coverage and 0 otherwise. In this regression model, Lewin also controls for other potential drivers of Medicaid enrollment including age, sex, race, ethnicity, education, income, and state (e.g., indicator of whether an individual’s state of residence is Indiana) and year fixed effects. The main explanatory variable in this DiD regression model is an interaction (i.e., multiplicative form) term of two binary variables: whether the state of residence is Indiana and whether the observation belongs to year 2018 or after (i.e., post-HIP waiver renewal period). Lewin estimated a linear regression version (linear probability model) of the DiD model where the estimated coefficient of this interaction term informs us about whether the 2018 HIP waiver renewal has any statistically significant impact on the Medicaid enrollment rate in Indiana.

**Analytic Population and Data Source**

Lewin used the ACS data to examine the changes in Medicaid enrollment rates among the Medicaid eligible population in Indiana. The ACS data, sponsored jointly by the U.S. Census Bureau and the U.S. Department of Commerce, is a nationally representative sample survey data that includes rich information on demographic, social, economic, and health insurance coverage characteristics of the U.S. population each year.\(^{108}\) To analyze enrollment rates in Indiana HIP Medicaid program (as well as comparison states) Lewin used the ACS data from 2015 – 2019.\(^{109}\) After restricting the sample to population ages 19 – 64, the raw sample size for Indiana varies by year: from 38,686 to 39,217 during the data period. The sample size by state and year are presented in Exhibit VI.1 in Attachment VI.

Lewin defined the Medicaid eligible population using information on health insurance coverage details and income status in terms of FPL. More specifically, for the purpose of the analysis, Lewin classified the Medicaid eligible population as the individuals ages 19 – 64 with income below 139% of FPL, with no Medicare coverage and no supplemental security income (SSI). While the FPL is used as a proxy for Medicaid income eligibility requirement to identify the low-income population, the exclusion of individuals with SSI allows us to identify the non-disabled population. The raw sample size of the Medicaid eligible population by state and year (presented in Exhibit VI.2 in Attachment VI) shows 35,773 sample individuals ages 19 – 64 in Indiana were Medicaid eligible in 2015 – 2019 (almost 18% of the total sample size in that age group).

Lewin identified four comparison states for this DiD analyses: Colorado (CO), Minnesota (MN), Pennsylvania (PA), and Washington (WA). These comparison states had expansion of traditional


\(^{109}\) Because of the impact of the COVID-19 pandemic on 2020 ACS data collection and data quality, the Census Bureau did not release their standard data products, including the standard Public Use Microdata Sample (PUMS) data. Instead, they released the 2020 ACS one-year data products with experimental weights designed to account for the impact of the COVID-19 pandemic on the data quality. Hence, Lewin excluded the ACS 2020 data from the analysis to avoid any potential bias that may occur due to the COVID-19 pandemic’s impact on data quality.
Medicaid program, do not have program policies like HIP (e.g., work requirements), there were no policy interventions in those states during the same period that can alter Medicaid enrollment. As per CMS’s guidance, these comparison states were selected after carefully comparing the Medicaid policy features, population characteristics, and the sample size (see Attachment III for details).

**Analysis Results**

**Enrollment Trend over Time – Indiana and Comparison States**

The state of Indiana adopted Medicaid expansion in 2015. This Medicaid expansion expected to see increased Medicaid enrollment in the subsequent years. The estimated volume of Medicaid enrollment, size of Medicaid eligible population and the changes in Medicaid enrollment rate among the Medicaid eligible population in Indiana by year are presented in Exhibit VI.3 (see Attachment VI). Almost 14% of the Indiana population ages 19 – 64 enrolled in Medicaid in 2019. About 35% of the Medicaid eligible population had Medicaid coverage in that year. To better understand the comparative changes in access to health care services through Medicaid in Indiana, Lewin examined the trends in Medicaid enrollment rates in Indiana and the four comparison states (see Exhibit VI.4).

Percent of eligible Indiana population enrolled in Medicaid (enrollment rates) increased by 5.1 percentage points from 26.9% in 2015 to 32.0% in 2016 (see Exhibit F.1.54). This can be primarily attributed to the Medicaid expansion in 2015. The Medicaid enrollment rate in Indiana gradually increased afterwards. In contrast, the Medicaid enrollment rate increased by a relatively smaller magnitude between 2015 and 2016 for comparison states; remained relatively stable between 2017 and 2018 and then it declined slightly in 2019. Overall, the Medicaid enrollment rates in the comparison states were at least 10 percentage points higher than Indiana in 2016 and 2017. The differences in rates during 2016 – 2017 may reflect the differences in policies between Indiana and the comparison states. However, given the 2018 policy interventions in Indiana (and no such intervention for the comparison states), Lewin compared the changes in Medicaid enrollment in Indiana over time (from 2016 – 2017 to 2018 – 2019) relative to the changes in the enrollment rates in the comparison states. The Medicaid enrollment rates in Indiana increased from 33.3% in 2017 to 35.5% in 2019. In contrast, the Medicaid enrollment rates in the comparison states declined slightly or remained relatively stable: from 44.0% to 43.7% during the same time period.
Impact of Demonstration on Enrollment - DiD Model Findings

Prior to estimating the DiD model, we examined the population composition for Indiana and comparison states. The Medicaid eligible population across Indiana and the comparison states is similar in terms of average age, proportion of males, and average income. Indiana has a lower proportion of Hispanic and college graduates as well as a higher proportion with less than a high school education (see Exhibit VI.5 in Attachment VI).

Based on estimated linear DiD regression model (see Exhibit VI.6 in Attachment VI), coefficient corresponding to the binary indicator of Indiana is: $-0.10$. This estimated effect reflects the underlying difference of 10 percentage points in the Medicaid enrollment rates between Indiana and the comparison states in 2016. The estimated coefficient of the interaction term (interaction between state indicator Indiana and the period indicator of year 2018 and after) is 0.016. This implies that the proportion of Medicaid eligible population enrolled in Medicaid increased by almost 1.6 percentage points more in Indiana during the period of 2018 and after relative to the change in Medicaid enrollment rates in the comparison states. This additional 1.6 percentage points increase (relative to the change in the comparison states) in Medicaid enrollment rates in Indiana suggests that there is no adverse change in the access to and enrollment in the Medicaid program in the state after the 2018 HIP waiver renewal and policy interventions. This effect is statistically significant at 5% level of significance. However, given that over 33% of the Medicaid eligible Indiana population was enrolled in Medicaid in 2017, this effect is relatively small. Thus, Lewin has detected a marginal improvement in

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110 Given the binary nature of the outcome variable in the DiD model, Lewin has also estimated an alternative non-linear Logistic model to derive the implied impact of the 2018 HIP waiver renewal. The Logistic model result shows a very similar 1.5 percentage point increase in Medicaid enrollment rates. Thus, the estimated impact of HIP waiver renewal is robust to functional form of the DiD model.
access to health care through Medicaid enrollment growth after the 2018 HIP waiver renewal and policy interventions.

**Limitations of Analysis Using the ACS Data**

The estimated DiD regression model only captures any short-term effect of the 2018 HIP waiver renewal that may occur within the first two years after the waiver renewal. The definition of Medicaid eligible population accounts for income status in the ACS data is based on FPL which is a static measure for the year and based on individual’s income in the past 12 months. However, actual Medicaid income eligibility is based on current income and hence it is not based on static income status. Hence, the Medicaid eligible population based on the ACS data serves as a proxy for the truly Medicaid eligible population.

**Primary Research Question 5.1 Findings Summary – How does the Indiana Medicaid coverage rate compare to other Medicaid expansion states?**

Results indicate that the Medicaid enrollment rates in Indiana increased from 33.3% in 2017 to 35.5% in 2019. In contrast, the Medicaid enrollment rates in the comparison states declined slightly or remained relatively stable: from 44.0% to 43.7% during the same time period. Additionally, the increase in the proportion of Medicaid eligible population enrolled in Medicaid (from before 2018 to 2018 – 2019) was higher by almost 1.6 percentage points for Indiana relative to the change in the comparison states. This additional 1.6 percentage points increase in Medicaid enrollment rates in Indiana suggests that there is no adverse change in the access to and enrollment in the Medicaid program in Indiana after the 2018 HIP waiver renewal and policy interventions. It should be noted that Medicaid enrollment analyses did not assess the drivers of high versus low rates. Future studies that examine the drivers of Medicaid enrollment will be an important next step for improving access to needed care.

**Goal 2 – Increase community engagement leading to sustainable employment and improved health outcomes among HIP members**

Indiana’s community engagement requirement, known as Gateway to Work, was designed to provide an incentive for HIP members to attain employment or engage in other community activities correlated with improved health and wellness (e.g., employment, volunteer work, education, and training). All able-bodied HIP members, not otherwise meeting an exemption or already working at least 20 hours per week, were required to engage in and report on qualifying activities for a minimum of eight months each calendar year starting in 2019.

Effective October 31, 2019, the State no longer required members to report their Gateway to Work hours. Effective April 30, 2020, the State indefinitely stopped all Gateway to Work activities in response to the stay in the federal lawsuit involving Indiana Medicaid and the COVID-19 PHE. Additionally, on June 24, 2021, CMS withdrew its conditional approval of the community engagement requirement. Since the State suspended community engagement activities after the submission of the Interim Evaluation Report, community engagement is not evaluated for the Summative Evaluation Report.

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Goal 3 – Discourage tobacco use among HIP members through a premium surcharge and the utilization of tobacco cessation benefits

All members have access to HIP covered tobacco cessation services which have remained unchanged since the 2018 waiver renewal. However, as part of the 2018 renewal, HIP added a tobacco use surcharge policy. HIP Plus members having continuous enrollment with a managed care entity (MCE) and continuing to report tobacco use in the second year of enrollment have a surcharge applied to their POWER Account Contributions at the beginning of the new benefit period. Members having continuous enrollment and reported tobacco use at intake are assumed to be tobacco users unless they report a tobacco use status change. Section B: Summary of HIP Demonstration provides details about the policy and examples of the tobacco surcharge by income level. Removal of the surcharge requires the member to contact their MCE and report a change in tobacco use status. This surcharge policy aims to discourage use of tobacco and thereby reduce tobacco use among HIP members.

Background
The State collects information on HIP member tobacco use during the HIP enrollment process (initial enrollment and during the plan selection period). At this time, the member is presented with the following tobacco surcharge information and asked about their tobacco use:

- If you are eligible for HIP and you are a tobacco-user, you may have an increased POWER Account Contribution in your second year of coverage.

- Have you used tobacco four (4) or more times per week in the last six (6) months? (The definition of tobacco includes: chewing tobacco, cigarettes, cigars, pipes, hookah, and snuff. It does not include the use of nicotine delivery devices.)
  - Yes (if you do not stop using tobacco within the next twelve (12) months you will be assessed a 50% surcharge to your POWER Account Contribution. Contact your health plan for help in quitting tobacco)
  - No (FSSA reserves the right to audit claims in order to identify member tobacco use)
  - Prefer not to answer (FSSA reserves the right to audit claims in order to identify member tobacco use)

If the member reports tobacco use, the MCE conducts targeted outreach to provide cessation education specific to available benefits and related programs. If the member quits smoking, the member is expected to contact their MCE to report the change in their tobacco use status. When a member switches MCEs or disenrolls from HIP, the tobacco surcharge resets.

The additional 50% tobacco surcharge was first implemented starting from 2019 for members with HIP coverage and reporting tobacco use in 2018. The surcharge policy was suspended starting from March 2020 due to the ongoing COVID-19 PHE and the process will restart after the PHE is lifted and all HIP policies are reinstated.

Analytic Population
The analytic population was restricted to members with monthly enrollment statuses of Regular Basic (RB), Regular Plus (RP), State Basic (SB), State Plus (SP), Maternity (MA), and HIP State Plan Plus with Copays (PC). Lewin did not include months when an individual had conditional eligibility or presumptive
eligibility status, or members that were eligible for Emergency Department services only (Emergency Room Services flag of “Y”).

The analytic population was limited to members who self-reported as “yes” or “no” or “prefer not to answer” for using tobacco depending on the research question or measure used. MCEs reported applying the tobacco surcharge to 1,965 members in 2019, representing <1% of the 569,994 members in 2018.

Goal 3 includes data from January 2015 – December 2020. Data from 2015 – 2017 provides baseline data to understand tobacco use and cessation services changes across time. HIP policies related to POWER Account Contribution and surcharge were suspended starting from March 2020. Consequently, the narrative delineates analytic trends for 2015 – 2019 versus 2020 to clearly differentiate findings relevant to the evaluation of the tobacco surcharge policies versus observations that may be confounded by the COVID-19 PHE policy modifications.

**Hypothesis 1 – The tobacco premium surcharge will increase use of tobacco cessation services among HIP members.**

The tobacco premium surcharge was implemented to account for tobacco users’ excess health care costs and encourage use of cessation services. Hypothesis 1 tests the impact of this policy on use of tobacco cessation services by examining utilization trends pre- and post-policy implementation. In addition to utilization patterns, the analyses examine HIP member understanding of the policy and availability of and satisfaction with tobacco cessation benefits.

*Primary Research Question 1.1 – What impact has the tobacco premium surcharge had on the use of tobacco cessation benefits for HIP members?*

This research question assesses whether use of tobacco cessation benefits changed due to implementation of a surcharge policy. To study the impact, Lewin examined the proportion of HIP members using cessation services (overall and among those reporting tobacco use) over time.
**Brief Summary:** A summary view of tobacco cessation service utilization includes the following observations:

- Between 2017 (year prior to surcharge policy) and 2019 (first year surcharge policy applied), the proportion of HIP members using cessation services increased from 6.0% to 6.3% among those who reported “yes” on the tobacco use question. The proportion of HIP members with known tobacco use information and used cessation services in the same year increased from 5.6% to 12.7% between 2015 and 2019.

- The groups with the highest proportion of tobacco cessation services utilization included members ages 50 and older, female, Caucasian, non-Hispanic, and residing in metro areas.

- Nicotine replacement therapy was the most used tobacco cessation service among HIP members. The use of nicotine replacement therapy increased across years with more than 40% of members using this treatment yearly. Of those members using nicotine replacement therapy, approximately 90% used the nicotine patch.

- HIP Plus members had a higher utilization of cessation services on average (3,654) compared to HIP Basic members (2,769) in 2019.

- Approximately 10% of members who received a tobacco surcharge also received tobacco cessation use in the prior year. For example, 209 HIP Plus members who received a surcharge in 2019 also had tobacco cessation service use in 2018.

**Approach to Quantitative Analysis**

Utilization of tobacco cessation services was calculated from encounter data based on all paid tobacco cessation services provided during an inpatient or outpatient visit as well as cessation medications prescriptions that were filled at pharmacies. The eligible cessation services were identified based on date of service (to ensure members had HIP coverage at the time), National Drug Code (NDC), and procedure code. For purposes of these analyses, tobacco cessation services were categorized into three groups: physician counseling\(^{112}\), nicotine replacement products, and medication.

The three primary pharmacotherapy drug classes for tobacco cessation are:\(^{113}\)

- Nicotine replacement products (e.g., inhaler, spray, gum, patch, lozenge)
- Bupropion (e.g., Wellbutrin\(^{TM}\) SR, Zyban\(^{TM}\))
- Varenicline (e.g., Chantix\(^{TM}\))

NDCs were identified using the Food and Drug Administration National Drug Code directory. To ensure accurate NDCs, both proprietary and nonproprietary names were used. Bupropion was limited to the types prescribed for tobacco cessation (hydrochloride SR 150mg and bupropion hydrochloride extended

\(^{112}\) Derived from recommendations by the American Lung Association and based on the following CPT4 procedure codes: 99406, 99407, D1302, G0436, G0437, S9453. Retrieved from https://www.lung.org/assets/documents/tobacco/billing-guide-for-tobacco-1.pdf

release 150mg\textsuperscript{114}). Tobacco cessation medication prescriptions that are filled on a 90-day supply were normalized and converted to a 30-day supply medication count. This approach aligned prescription medications (filled on a 30-day supply schedule), increasing the accuracy of claim counts. Identification of tobacco cessation services using this approach has several limitations and can result in under-reporting of service use:

- **Reliance on tobacco-specific procedure codes:** While the analysis relies on codes specific to tobacco or smoking, providers can also bill for tobacco cessation counseling under general preventive counseling procedure codes (99381 – 99397). It is not possible to distinguish tobacco-specific counseling from other health behavior counseling billed using the general preventive counseling procedure codes, which may include diet, exercise, or substance use.

- **Use of Indiana Tobacco Quit Line:** Many providers refer members to the Indiana Quit Line, which is a free resource for tobacco cessation that includes counseling and some nicotine replacement therapy (usually time-limited). The encounter data does not capture these referrals.

- **Use of over-the-counter medications:** Encounter data does not reflect members who received over-the-counter cessation medications such as nicotine replacement therapies.

- **Provider billing practices:** It is possible that providers are delivering tobacco cessation services but not billing for these services. Providers billed for most cessation counseling services using procedure code 99406, representing 82% of all cessation counseling procedure codes, followed by procedure code 99407 at 13%. Procedure codes D1302 and S9453, which represent non-physician provider codes, were present on four occasions. Procedure codes G0436 and G0437 were discontinued in 2016 and were also infrequent.

For this research question, Lewin calculated the following metrics:

- Proportion of HIP members using tobacco cessation services (overall and among those reporting tobacco use)
- Count of services (counseling and medication)
- Per member per year average utilization among those using cessation services
- Proportion of unique members utilizing each service
- Proportion of shared cessation services by type, including combination therapies (e.g., counseling and medication)

For this research question, the term “known tobacco use information” is defined as the number or percent of members who self-reported “yes” or “no” or “prefer not to answer” during the initial enrollment process and / or planned selection period.

Regression modelling was used to examine: (1) likelihood of smoking cessation service use between 2017 (the year prior to demonstration period for this evaluation) and 2019 (with the demonstration

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period spanning years 2018 through 2019); (2) utilization of smoking cessation services between 2017 and 2019, controlling for sociodemographic characteristics.

- Likelihood of smoking cessation service use: Logistic regression models were used to assess the likelihood of a member receiving a smoking cessation service at least once during a given year. Estimated marginal effects and odds ratios (OR) were calculated to assess the likelihood of utilization of smoking cessation services over time.

- Utilization of smoking cessation services: Negative binomial regression models were used to examine the predictors of a change in the number of smoking cessation services per member per year. Negative binomial regressions were selected due to overdispersion of the outcome variable (i.e., the number of smoking cessation services). Estimated incidence rate ratio (IRR) were used to examine the rate of utilization.

### Results of Quantitative Analysis

#### Cessation Service User Trend

From 2015 – 2019, the number (13,868 to 34,373) and proportion (3.6% to 6.3%) of HIP members using tobacco cessation services increased (see Exhibit F.3.1).

### Exhibit F.3.1: All HIP Members Using Tobacco Cessation Services by Year (February 2015 – December 2020)

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Total HIP Members</td>
<td>389,942</td>
<td>520,136</td>
<td>556,429</td>
<td>629,240</td>
</tr>
<tr>
<td>Members using Cessation Services</td>
<td>13,868</td>
<td>26,477</td>
<td>33,189</td>
<td>34,737</td>
</tr>
<tr>
<td>% of Members using Cessation Services</td>
<td>3.6%</td>
<td>5.1%</td>
<td>6.0%</td>
<td>6.1%</td>
</tr>
</tbody>
</table>

a Due to COVID-19 PHE, the tobacco surcharge was suspended in March 2020. Surcharge policy analysis is only restricted to data till 2019.

Source: MCE encounter data, February 2015 – December 2020 and Monthly enrollment data

The proportion of HIP members with known tobacco use information and used cessation services in the same year increased from 5.6% to 12.7% between 2015 and 2019. The annual average of members with known tobacco use information was 71,879 members (13.9%). The annual average of members with known tobacco use information that used cessation services was 7,460 (10.4%) (see Exhibit F.3.2).
Exhibit F.3.2: Members with Known Tobacco Use Information that Use Cessation Services by Year (February 2015 – December 2020)

<table>
<thead>
<tr>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total HIP Members</td>
<td>389,942</td>
<td>520,136</td>
<td>556,429</td>
<td>569,994</td>
<td>546,451</td>
</tr>
<tr>
<td>Members with Known Tobacco Use Informationb</td>
<td>45,914</td>
<td>63,649</td>
<td>70,023</td>
<td>86,254</td>
<td>93,554</td>
</tr>
<tr>
<td>% of Members with Known Tobacco Use Informationc</td>
<td>11.8%</td>
<td>12.2%</td>
<td>12.6%</td>
<td>15.1%</td>
<td>17.1%</td>
</tr>
<tr>
<td>Members with Known Tobacco Use Information and Using Cessation Servicesd</td>
<td>2,559</td>
<td>5,582</td>
<td>7,368</td>
<td>9,891</td>
<td>11,900</td>
</tr>
<tr>
<td>% of Members with Known Tobacco Use Information and Using Cessation ServicesEA</td>
<td>5.6%</td>
<td>8.8%</td>
<td>10.5%</td>
<td>11.5%</td>
<td>12.7%</td>
</tr>
</tbody>
</table>

a Due to COVID-19 PHE, the tobacco surcharge was suspended in March 2020. Surcharge policy analysis is only restricted to data till 2019.
b Number of HIP members who self-reported tobacco use information (response options: yes, no, or prefer not to answer) during enrollment (defined as known tobacco use information).
c The percentage of unique HIP members who answered the tobacco usage question on their Medicaid enrollment application.
d Number of HIP members who self-reported tobacco use information (response options: yes, no, or prefer not to answer) during enrollment (defined as known tobacco use information) and used tobacco cessation services.
e The percentage of unique HIP members who answered the tobacco usage question on their Medicaid enrollment application and used tobacco cessation services.

Source: Monthly enrollment data, February 2015 - December 2020. Tobacco use data, 2015 - 2020. Data for member self-reported use of tobacco was collected by the State from new applications (new HIP members or members switching MCEs) during enrollment. The subset of members with available tobacco information (used or did not use tobacco) is not based on a random sample of members. MCE encounter data, February 2015 – December 2020.

Note. Due to COVID-19 PHE, HIP suspended policies related to tobacco surcharge. MCEs continued collecting information on tobacco use.

Of those with known tobacco use information, Caucasian Females between ages 30 — 66 living in metro areas had the highest proportion of cessation service use. Below we highlight the 2019 composition of HIP members with known tobacco use information (see Attachment Exhibits I.3, I.18, I.30, I.39, VIII.1, and VIII.2).

- 64.3% of members using cessation services were Female. This is consistent with the overall HIP member composition in 2019 (63.4% Female). When compared to members who reported tobacco use and received cessation services, the percentage of Females was 61.6%.

115 Although members are only eligible for the HIP program until age 64, the analysis includes some members who are 65 or 66.
who reported tobacco use and received cessation services (73.9% of members were Caucasian, 8.9% were Black, and 17.1% self-identified as “Other” or “Unknown”).

- 1.9% of members using cessation services were Hispanic. This is inconsistent with the overall HIP population (6.0% Hispanic), however consistent with members who reported tobacco use and received cessation services (1.8%).
- 65.2% of members using cessation services received only HIP Plus coverage. This is inconsistent with the overall HIP Plus Only population (58.0%), however consistent with members who reported tobacco use and received cessation services and had HIP Plus Only coverage (64.3%).

Controlling for member characteristics and coverage year, all HIP Members were more likely to utilize tobacco cessation services in 2018 (OR=1.01, 95% confidence interval [CI] = [0.99, 1.02]) and 2019 (OR=1.01, 95% CI = [1.00, 1.03]) compared to 2017 – although this effect was not statistically significant at a significance level of 0.05. For those members who had known tobacco information, the likelihood of utilizing tobacco cessation services decreased in 2018 (OR=0.93, 95% CI = [0.91, 0.95]) and 2019 (OR=0.96, 95% CI = [0.94, 0.99]) compared to 2017.

**COVID-19 PHE (2020):** Although the total number of HIP members increased from 546,451 in 2019 to 629,240 in 2020, the number of members with known tobacco use information that used cessation services stayed the same (34,373 to 34,396). The composition of members with known tobacco use information using cessation services was similar between 2019 and 2020 for the majority of demographics with the exception of sex (proportion of female members declined from 64.4% in 2019 to 61% in 2020).

**POWER Account Surcharge**

Members that self-report tobacco use have one benefit period (12 months) to use covered cessation services to become tobacco free. If after the benefit period, the member reports using tobacco during that benefit period, without stopping, the tobacco surcharge is applied. Based on MCE reports, there were 1,968 members in 2019 who had the surcharge applied in their first benefit coverage month. Among these members, 209 used tobacco cessation services during the previous year, suggesting that even with prior knowledge of the pending surcharge most members did not attempt to quit using the covered benefits (see Exhibit F.3.3).
Exhibit F.3.3: Members Having a Surcharge and who had Tobacco Services in the Prior Year (February 2015 – December 2020)

<table>
<thead>
<tr>
<th>Metric</th>
<th>Pre-tobacco Surcharge</th>
<th>Tobacco Surcharge Policy</th>
<th>Surcharge suspended Mar. 2020&lt;sup&gt;a&lt;/sup&gt;</th>
<th>2015 – 2019 Annual Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total HIP Members</td>
<td>389,942</td>
<td>520,136</td>
<td>556,429</td>
<td>569,994</td>
</tr>
<tr>
<td>Number of Members Having a Surcharge</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Number of Members Having a Surcharge who had Tobacco Cessation Services in Prior Year</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

<sup>a</sup> Due to COVID-19 PHE, the tobacco surcharge was suspended in March 2020. Surcharge policy analysis is only restricted to data till 2019.

<sup>b</sup> Surcharge was applied beginning of second year of continuous enrollment. For 2019 and 2020, the surcharge was applied in the first quarter of the calendar year. This cohort represents members who had the 50% surcharge applied and had at least some tobacco cessation services in prior year.


COVID-19 PHE (2020): Based on MCE reports, there were 1,801 members in 2020 who had the surcharge applied in their first benefit coverage month. Among these members, 146 used tobacco cessation services during the previous year. Although the surcharge should have only been applied to those HIP Plus members who reported tobacco use in 2018 and continued to use tobacco in 2019, data indicated that a few HIP Basic members received the surcharge in both 2019 and 2020.<sup>116</sup> Indiana refunded any HIP member who received the surcharge in March 2020 and later.

Cessation Service Utilization Trend

All HIP members: Total number of cessation services used and average services per member using the cessation services (see Exhibit F.3.4) increased over time – from before the implementation of the surcharge policy (2015 – 2017) to implementation of the surcharge policy (2018) and application of the surcharge (members charged from 2019). Before the surcharge policy (2015 – 2018), the average tobacco cessation services utilized per member was between 2.3 – 3.1 and the proportion of members using services increased from 3.6% to 6.1%. With the implementation of the surcharge policy in 2018 and the surcharge applied in 2019, the average services utilized per member increased to 3.5 services in 2019.

<sup>116</sup> Twenty-nine members receiving Basic coverage had the surcharge applied. The majority of these members (n = 27) were either a Switcher or Plus member prior to 2019.
Exhibit F.3.4: Number of Tobacco Cessation Services Used by All HIP Members (February 2015 – December 2020)

![Graph showing the number of tobacco cessation services used by HIP members from 2015 to 2020. The graph includes data points for each year with a percentage of members using cessation services.

A. Count of services is equivalent to the appearance of a service in a claim, or a claim for a medication fill, and represents instances of counseling visits, initial medication fills, or medication refills. This is the total number of each service utilized during the calendar year, including multiple services utilized per member.

B. Average number of services were calculated as total count of services in a year divided by number of members who utilized tobacco cessation services during the calendar year. This provides an indication of the frequency of use over time.


Cessation Service Utilization Trend by Demographic

All HIP members: Although utilization of cessation services increased over time (see Exhibit F.3.5), the average number of cessation services used varied across member characteristics. In 2019, the composition of HIP member cessation utilization included the following.

- The average of cessation services used per 1,000 increased with each age cohort, with individuals under 30 having the lowest average (2,808) to individuals ages 60 and older having the highest average (3,906).
- Female members had a higher utilization of cessation services on average (3,661) compared to Males (3,321).
- HIP members who self-identified as Caucasian had a higher utilization of cessation services on average (3,539) relative to Black members (3,078).
- Hispanic members had a lower utilization of cessation services on average (2,956) compared to non-Hispanic members (3,557).
- HIP Plus members had a higher utilization of cessation services on average (3,654) compared to HIP Basic members (2,769).

HIP members who continued to use tobacco and received a surcharge appeared to have higher average cessation service utilization for the majority of demographic groups with the exception of those members under the age of 30 and Black. This may suggest that knowledge of the pending surcharge was a driver for quit attempts, yet not sufficient to result in a successful quit. For example, of the 1,965 who received the surcharge in 2019, 50 members reported quitting tobacco (2.5%).
### Exhibit F.3.5: Average Tobacco Cessation Services Used per 1,000 Members for All HIP Members by Demographic Characteristics (February 2015 – December 2020)

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Average Tobacco Cessation Services Used per 1,000 Members*</th>
<th>Average Tobacco Cessation Services Used per 1,000 Members (Members Having Surcharge in Following Year)*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2018</td>
<td>2019</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age 19-29</td>
<td>2,374</td>
<td>2,808</td>
</tr>
<tr>
<td>Age 30-39</td>
<td>2,909</td>
<td>3,326</td>
</tr>
<tr>
<td>Age 40-49</td>
<td>3,272</td>
<td>3,748</td>
</tr>
<tr>
<td>Age 50-59</td>
<td>3,343</td>
<td>3,892</td>
</tr>
<tr>
<td>Age 60-64*</td>
<td>3,256</td>
<td>3,906</td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>2,907</td>
<td>3,321</td>
</tr>
<tr>
<td>Female</td>
<td>3,143</td>
<td>3,661</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>2,939</td>
<td>3,534</td>
</tr>
<tr>
<td>Black</td>
<td>2,774</td>
<td>3,078</td>
</tr>
<tr>
<td>Caucasian</td>
<td>3,062</td>
<td>3,539</td>
</tr>
<tr>
<td>Other/Unknown</td>
<td>3,202</td>
<td>3,766</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>2,483</td>
<td>2,956</td>
</tr>
<tr>
<td>Non-Hispanic</td>
<td>3,089</td>
<td>3,557</td>
</tr>
<tr>
<td><strong>Geographic Area</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metro</td>
<td>3,029</td>
<td>3,586</td>
</tr>
<tr>
<td>Nonmetro</td>
<td>3,143</td>
<td>3,398</td>
</tr>
<tr>
<td><strong>HIP Category</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic</td>
<td>2,304</td>
<td>2,769</td>
</tr>
<tr>
<td>Plus</td>
<td>3,179</td>
<td>3,654</td>
</tr>
</tbody>
</table>

*Due to the COVID-19 PHE, HIP suspended policies related to tobacco surcharge and extended coverage to members who were age 64. Although members are only eligible for the HIP program through age 64, the analysis includes some members who have turned 65 or 66. During COVID-19 PHE, MCEs continued collecting information on tobacco use.

* The average tobacco cessation services used per 1,000 members is calculated as total tobacco cessation services divided by all unique HIP members then multiplied by 1,000. Given this calculation, the numbers across demographic categories will not add up to the total number of HIP members who used cessation services.

b This refers to the year prior to the surcharge implementation where the members have one year to use tobacco cessation services for members who reported tobacco use during enrollment.


Controlling for member characteristics and coverage year, estimated marginal effects corresponding to the post waiver renewal period (i.e., 2018 – 2019) indicate a higher count of smoking cessation services in 2019 (IRR=1.14 (β Estimate=0.13)) compared to 2017 for all HIP members. After restricting to members with known tobacco information a similar effect was found in 2019, compared to 2017 (IRR=1.12 (β Estimate=0.12)).

**COVID-19 PHE (2020):** In 2020, the average number of services utilized decreased irrespective of any sociodemographic characteristics.
Type of Cessation Services Used

Nicotine replacement therapy has the highest proportion of utilization followed by medication and counseling. In 2015, 1.2% of HIP members used nicotine replacement therapy compared to 1.5% of HIP members who used medication and 1.2% used counseling. The percent of HIP members using nicotine replacement therapy increased to 3.0% in 2019 compared to 2.6% receiving medication and 1.6% receiving counseling (see Exhibit F.3.6). Note that the same member could use any or all of these different cessation services.

- Nicotine Replacement Therapy: The patch was frequently used by tobacco users to quit smoking. On average, HIP members were three times as likely to use the patch versus other nicotine replacement therapies (e.g., nicotine gum, inhaler, and lozenges, which combined were used by less than 1% of HIP members). Patch usage increased across the years. In 2017, prior to the surcharge policy, 2.3% of HIP members used the patch, increasing to 2.8% in 2019 (see Exhibit F.3.7).

- Medication: Since 2015 Varenicline was used by more HIP members than Bupropion. In 2015, less than 1% of HIP members used Varenicline, gradually increasing to 1.7% in 2019. In contrast, HIP members using Bupropion increased from 0.7% in 2015 to 1.2% in 2017 and then declined to less than 0.9% in 2019 (see Exhibit F.3.8).

- Counseling: HIP members used counseling services to quit tobacco less frequently than nicotine replacement therapy or medication (on average 1.6% from 2015 – 2019). Consistent with the other cessation treatments, the use of cessation counselling increased from 2015 – 2018. In 2018, although the number of members using the cessation counseling was higher relative to 2017, there was a small decrease in the proportion of members using counseling services (see Exhibit F.3.9).


Exhibit F.3.6: Percent of All HIP Members Using Tobacco Cessation by Service Type and Count of HIP Members per 1,000 (February 2015 – December 2020)

*Due to COVID-19 PHE, the State suspended tobacco surcharge starting March 2020.
Exhibit F.3.7: Percent of All HIP Members Using Nicotine Replacement Therapy (February 2015 – December 2020)

*Due to COVID-19 PHE, the State suspended tobacco surcharge starting March 2020.

Exhibit F.3.8: Percent of Tobacco Cessation Medications Used by All HIP Members (February 2015 – December 2020)

*Due to COVID-19 PHE, the State suspended tobacco surcharge starting March 2020.
Prior to the surcharge (2017), 1.0% (or 5,087) of HIP members used a combination of tobacco cessation treatments. In 2019 (i.e., the second year of the policy; first year of surcharge), 0.8% of the HIP members used a combination of cessation treatments. Counseling and medication or nicotine replacement therapy was most often used as a combination treatment.

**Exhibit F.3.9: Percent of All HIP Members Using Combination of Counseling, Medication, and Nicotine Replacement Therapy (February 2015 – December 2020)**

*Due to COVID-19 PHE, the State suspended tobacco surcharge starting March 2020.


**Primary Research Question 1.1 Findings Summary – What impact has the tobacco premium surcharge had on the use of tobacco cessation benefits of HIP members?**

Between 2017 (year prior to surcharge policy) and 2019 (first year surcharge policy applied), the proportion of HIP members using cessation services increased from 6.0% to 6.3% among those who reported “yes” on the tobacco use question. The proportion of HIP members with known tobacco use information and used cessation services in the same year increased from 5.6% to 12.7% between 2015 and 2019. Of those with known tobacco use information, Caucasian females ages 30 – 66 living in metro areas had the highest proportion of cessation service use. To reduce disparities and encourage utilization of tobacco cessation efforts, targeted outreach to HIP members should be conducted.

Nicotine replacement therapy had the highest proportion of utilization followed by medication and counseling. Total number of cessation services used and average services per member using the cessation services increased over time – from before the implementation of the surcharge policy (2015 – 2017) to implementation of policy (2018) and application of the surcharge (members charged during 2019), suggesting that the surcharge encouraged the increase in cessation service utilization.

117 Although members are only eligible for the HIP program until age 64, the analysis includes some members who are 65 or 66.
Subsidiary Research Question 1.1a – Do HIP members understand the premium surcharge policy?

Under the tobacco premium surcharge policy, tobacco users will have to pay more for HIP coverage than non-tobacco users. This research question assesses whether HIP members understand the additional charges for continued tobacco use and when those charges will be accrued. Given the pause for implementing the tobacco premium surcharge during the COVID-19 PHE (beginning March 2020), members were not asked about their understanding of the policy in 2020. Thus, results specific to this research question are limited based on member and provider responses and were only compiled for the 2019 interviews. While MCE representatives and FSSA staff were not explicitly asked about perceived member understanding of the tobacco surcharge policy, MCE representatives and FSSA staff interviewed in 2020 suggested the policy continues to cause confusion for some providers and members.

Brief Summary: Stakeholder interviews with MCE representatives and FSSA staff conducted in both 2019 and 2020 included discussion about types of member communications (e.g., notices to members who reported tobacco use; provider bulletins; MCE contract requirements to perform outreach around the surcharge) in response to questions about strategies to support member understanding of policies. In 2019, MCE representatives indicated that members (specifically those identified as tobacco users or being assessed the surcharge) are provided with multiple communications covering both tobacco related policies and services. MCE representatives interviewed in 2019 reported receiving few complaints or disputes related to the tobacco surcharge. While findings from member and provider interviews indicated that HIP members are generally aware of HIP policies, including the tobacco surcharge and available cessation services, stakeholder responses also suggested the policy causes confusion for some providers and members.

Results of Qualitative Analysis

Member and Provider Interviews

Although 2020 member interviews did not include references to the surcharge policy, results from the 2019 member interviews suggest that HIP members are generally aware of the tobacco surcharge. For example, 23 of 27 members reported awareness of various HIP policies or benefits including the surcharge and tobacco cessation service options. However, the interview question was broad and focused on a time frame rather than a distinct topic area (e.g., the tobacco surcharge, tobacco cessation services) limiting the specificity of the information provided. Members who self-reported tobacco usage were asked about their surcharge knowledge. However, given the few individuals in this sub-sample, conclusions are unable to be drawn.

Provider interviews were conducted in 2019 with 36 providers (e.g., nurses, physicians). A sub-sample of providers (n=15) were asked directly about their knowledge of the tobacco surcharge. Of the fifteen respondents, only four providers were familiar with the tobacco surcharge and acknowledged that HIP members who used tobacco would have to pay if they were unable to quit smoking. Two of the four providers stated that they engaged HIP members in conversations about the surcharge and speculated that the surcharge may cause confusion and not lead to behavior change.

Stakeholder Interviews

Most MCE representatives interviewed during 2019 expressed uncertainty related to member awareness of the surcharge. However, representatives did indicate that members were provided with multiple communications that disseminated information about the policy changes. Communication
vehicles included websites, MCE member handbooks, newsletters, flyers, and social media accounts. Communications were delivered via member events and standard case management services. MCEs also provided additional outreach specifically to those members identified as tobacco users and eligible for the surcharge. Each of the MCEs sent letters to members prior to the surcharge being activated to inform them of changes and promote available cessation services and initiatives. Further, 2019 MCE interviews found that representatives reported receiving few complaints or disputes among members related to the tobacco surcharge. Although the surcharge policy was paused during the COVID-19 PHE, MCE representatives interviewed in 2020 noted that member understanding of the tobacco surcharge continued to be a challenge requiring supplemental communications to reinforce messages and further facilitate knowledge sharing.

**Primary Research Question 1.1a Findings Summary – Do HIP members understand the premium surcharge policy?**

Although 2020 member interviews did not include references to the surcharge policy, results from the 2019 member interviews suggest that HIP members are generally aware of the tobacco. In contrast, MCE representatives expressed some uncertainty related to member awareness of the surcharge and noted that member understanding of the tobacco surcharge continued to be a challenge requiring supplemental communications to reinforce messages and further facilitate knowledge sharing. Given the inconsistent findings, caution should be used when interpreting results. Additional studies which directly examine member awareness and policy comprehension may result in more conclusive findings and provide insights for potential improvement strategies.

**Subsidiary Research Question 1.1b – Do HIP members know about the cessation services offered through HIP?**

Under HIP, tobacco users are provided access to tobacco cessation services. This research question assesses whether HIP members understand the available cessation services that will help them quit tobacco use and avoid the tobacco surcharge. Lewin used informant interviews and Consumer Assessment of Healthcare Providers & Systems (CAHPS) Survey responses for qualitative and quantitative analysis.

**Brief Summary:** Findings from the 2019 member interviews suggest that individuals are aware that tobacco cessation services (e.g., counseling or medications) exist. Despite this knowledge, few reported use of cessation services. Findings from both member and provider interviews in 2019 indicated that some members desired access to additional tobacco services not currently covered by HIP. Stakeholder interviews conducted in 2020 reinforced the need to use communications as a strategy for further supporting member knowledge and utilization of cessation services.

Findings from CAHPS Surveys suggest considerable variation among the proportion of members who self-report regular tobacco use who are advised by their providers to quit. CAHPS Survey findings also indicate a gap between the proportion of members advised to quit smoking or using tobacco and those who are offered information on cessation methods.
Results of Qualitative Analysis

Member and Provider Interviews

Findings from the 2019 member interviews suggest that individuals are aware of tobacco cessation services, such as counseling or medication. Despite this knowledge, few reported use of cessation services. Findings from both member and provider interviews in 2019 indicated that some members desired access to additional tobacco services not currently covered by HIP, such as group therapy and options for the types of nicotine patches covered.

For member interviews conducted in 2020, five of 28 members stated they currently use tobacco or tobacco-related products. Of those, four of five stated that they were aware of the tobacco services available to help them reduce or eliminate tobacco use, with one member identifying as unaware of the cessation services available to them through HIP. Of the four members reporting awareness of services, only one used the service. While the data suggests the need for more information to be disseminated regarding tobacco cessation, these results are not statistically significant and are for observational purposes only.

Key informant interviews with providers in 2019 indicated that many members might be aware of tobacco cessation services offered to them, but face external barriers to utilization. Some providers stated that getting someone to start tobacco cessation services is difficult; the member’s level of motivation is critical to initiation and adherence to programming. Additionally, providers discussed difficulties in maintaining participation in tobacco cessation programs, with reasons related to both motivation and cost. One provider said that HIP’s tobacco cessation program coverage should expand beyond 12 weeks, and another discussed the lack of reimbursement for group work as a reason for member disengagement. A provider also stated that members sometimes have trouble paying out-of-pocket for cessation services not covered under HIP (such as over-the-counter nicotine patches).

Stakeholder Interviews

During 2019 interviews, MCE representatives stated uncertainty of member knowledge specific to tobacco cessation services. However, MCE representatives reported that they provided information related to tobacco cessation services and specific MCE initiatives. Additionally, MCE representatives reported that staff promoted the Indiana Tobacco Quitline, and the Baby and Me Tobacco Free initiative for pregnant people. MCE representatives also described ongoing collaborations with FSSA and the Indiana State Department of Health to expand tobacco cessation programs beyond HIP members to Indiana Health Care Program members or Indiana Medicaid members. Collaborations provide opportunities for data sharing, allowing the MCEs to track member engagement in FSSA and Indiana State Department of Health programs. For example, at least two of the MCEs reported using data from the Indiana Tobacco Quitline which provided preliminary findings for increased member engagement in tobacco cessation services. MCE representatives shared that the State supports them in their efforts to improve the quality and availability of Indiana Tobacco Quitline data to better measure member participation. All four MCEs interviewed in 2019 reported having revised incentive schema to encourage participation in tobacco cessation services, and that FSSA has supported MCEs’ revised incentive structures. Exhibit F.3.10 outlines various programs and/or incentives that the four MCEs are using to encourage participation in tobacco cessation services.

During stakeholder interviews conducted in 2020, State officials noted that tobacco cessation and surcharge policies remained an area of focus for their ongoing communication strategy to address areas of confusion to HIP members. State officials shared that FSSA’s communication strategy placed a greater
emphasis on MCE cessation program referrals, to ensure that HIP members using tobacco are aware of all coverage options.

**Exhibit F.3.10: MCE Incentives for HIP Member Utilization of Tobacco Cessation Services as of 2019**

<table>
<thead>
<tr>
<th>MCE</th>
<th>Incentives and Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Anthem</strong></td>
<td>• Tobacco users may earn up to $40 for quitting smoking using the <em>Indiana Tobacco Quitline</em>; members receive $20 upon enrollment and another $20 upon completion of the program.</td>
</tr>
</tbody>
</table>
|            | • Pregnant tobacco users may enroll in the *Baby and Me Tobacco Free* program, which allows pregnant, tobacco using members to become eligible for rewards such as $25 diaper vouchers upon completion of the following steps:  
  o Enroll in the program  
  o Take prenatal smoking-cessation classes  
  o Agree to take a monthly breath test  
  o Stay smoke free after their baby is born |
| **MDwise** | • Tobacco users may participate in SMOKE-free, the plan’s incentive program. Participation is not limited to members who use tobacco via smoking and can assist members with tobacco cessation.                                                                                       |
|            | • SMOKE-free covers the following treatments, with some limits: Nicotine replacement therapy (e.g., gum, patch, lozenge, nasal spray, inhaler) prescription medication, and counseling.                                                                                                                       |
|            | • Tobacco users may earn points to get gift cards by completing a cessation program; eligible programs include the Indiana Tobacco Quitline, Baby and Me Tobacco Free, and/or a program through the member’s hospital or clinic.                                                                 |
|            |  o Members may also choose the POWER Account Contribution option as their reward, so the funds from accrued points will go toward HIP Plus plan payments.                                                                                                                                              |
| **CareSource** | • CareSource covers quit services and benefits including prescription medicine, web-based education and tools, calls with a personal coach, counseling, and reward opportunities.                                                                                      |
|            | • Tobacco users may earn various gift card incentives for being tobacco free through the MyHealth program.                                                                                                                                                                                   |

Results from Quantitative Analysis – CAHPS

To address several primary and subsidiary RQs for Goal 3, data from CAHPS Medicaid Adult 5.0H Member Surveys (2015 – 2020) was compiled and analyzed for members who reported regular tobacco use (i.e., smoke cigarettes or use tobacco “every day” or “some days”) and responded to at least one of the three survey items below associated with tobacco cessation.

- **Advice to Quit Smoking**: In the last 6 months, how often were you advised to quit smoking or using tobacco by a doctor or other health provider in your plan?
- **Tobacco Cessation Medications**: In the last 6 months, how often was medication recommended or discussed by a doctor or health provider to assist you with quitting smoking or using tobacco? Examples of medication are: nicotine gum, patch, nasal spray, inhaler, or prescription medication.
- **Tobacco Cessation Strategies (other than medications)**: In the last 6 months, how often did your doctor or health provider discuss or provide methods and strategies other than medication to assist you with quitting smoking or using tobacco? Examples of methods and strategies are: telephone helpline, individual or group counseling, or cessation program.

Given that the analytic population was restricted to number of respondents who report regular tobacco use, the data set was smaller than the total number of survey respondents across MCEs. For example, in 2015, MCE 1 had 549 total survey respondents, yet 216 reported regular tobacco use. Of these, 211 members responded to the “advice to quit smoking” question; 210 members responded to the “tobacco cessation medications” question; and 208 members responded to the “tobacco cessation strategies” question.

Given the number of respondents, generalizability to the larger population may be limited. Moreover, the time span assessed in the questions (i.e., last six months) may not fully capture a member’s tobacco use and cessation experience.

Exhibits F.3.11 to F.3.12 display the proportion of survey respondents who answered “Sometimes”, “Usually”, or “Always” to each of the survey items related to tobacco cessation by MCE and year. The

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124 My Health Pays is the MHS rewards program in the form of a payment card. Members may use their My Health Pays card to help pay for utilities, transportation, telecommunications, childcare services, education, rent, POWER Account Contributions, and/or everyday items at Walmart.
125 For more information on CAHPS methodology, see Attachment IV.
tobacco surcharge was implemented in 2018 and effective for HIP members in 2019. Therefore, 2015 – 2018 served as a baseline for this data before the surcharge and 2019 reflected data from when the surcharge was in place. Due to the COVID-19 PHE, the tobacco surcharge was suspended in March 2020. Note that survey data is based on member recall and, therefore, is subject to recall bias or incorrect recall.

Exhibit F.3.11: Percent of Responding Beneficiaries Reporting Being Provided Advice to Quit Smoking by MCE and Year (2015 – 2020) (Responses: Sometimes, Usually, and Always)

<table>
<thead>
<tr>
<th>MCE</th>
<th>Pre-Tobacco Surcharge</th>
<th>Tobacco Surcharge</th>
<th>Surcharge Suspended Mar 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>74.9%</td>
<td>67.7%</td>
<td>84.2%</td>
</tr>
<tr>
<td>2</td>
<td>NR</td>
<td>NR</td>
<td>69.6%</td>
</tr>
<tr>
<td>3</td>
<td>78.8%</td>
<td>75.5%</td>
<td>74.4%</td>
</tr>
<tr>
<td>4</td>
<td>79.7%</td>
<td>78.1%</td>
<td>75.1%</td>
</tr>
<tr>
<td>Overall Weighted Average</td>
<td>77.4%</td>
<td>72.7%</td>
<td>78.2%</td>
</tr>
</tbody>
</table>


Notes: Proportion of members selecting Sometimes, Usually, or Always in response to the advice to quit smoking question. NR = not reported (no report for corresponding year, metric not reported, or insufficient denominator [less than 100])

Of those who smoke or use tobacco regularly, overall, about three-quarters report that they were advised by their providers to quit (see Exhibit F.3.11).

- **MCE 1**: MCE 1 ranged from 67.7% to 84.2% before the surcharge, but the metric was not reported in 2019 due to an insufficient denominator, limiting the ability to evaluate the effect of the surcharge for MCE 1.
- **MCE 2**: More than two thirds (69.2% on average from 2017 – 2019) of survey respondents in MCE 2 were advised by their providers to quit. The percentage of respondents reporting advice by their providers to quit increased in 2020 (72.6%).
- **MCE 3**: About three quarters of survey respondents in MCE 3 were advised to quit smoking. This proportion is consistent across time, ranging from 72.1% to 78.8%.
- **MCE 4**: About three quarters of survey respondents in MCE 4 were advised to quit smoking. The proportion of members receiving cessation advice in MCE 4 steadily declined from 2015 (79.7%) to 2018 (70.6%). In 2019 (the year the surcharge was effective), 78.7% reported receiving advice to quit smoking. This increase was sustained in 2020 with a slight uptick (82.0%).
### Exhibit F.3.12: Percent of Responding Beneficiaries Reporting Being Provided Information on Tobacco Cessation Medications by MCE and Year (2015 – 2020) (Responses: Sometimes, Usually, and Always)

<table>
<thead>
<tr>
<th>MCE</th>
<th>Pre-Tobacco Surcharge</th>
<th>Tobacco Surcharge</th>
<th>Surcharge Suspended Mar 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>43.8%</td>
<td>47.4%</td>
<td>53.9%</td>
</tr>
<tr>
<td>2</td>
<td>NR</td>
<td>NR</td>
<td>50.8%</td>
</tr>
<tr>
<td>3</td>
<td>47.3%</td>
<td>48.7%</td>
<td>53.9%</td>
</tr>
<tr>
<td>4</td>
<td>54.2%</td>
<td>52.7%</td>
<td>53.4%</td>
</tr>
<tr>
<td>Overall Weighted Average</td>
<td>47.5%</td>
<td>49.0%</td>
<td>53.5%</td>
</tr>
</tbody>
</table>


Notes: Proportion of members selecting Sometimes, Usually, or Always in response to the tobacco cessation medications question. NR = not reported (no report for corresponding year, metric not reported, or insufficient denominator [less than 100]).

The proportion of members indicating “Sometimes”, “Usually”, or “Always” for the tobacco cessation medications question varies across time and across MCEs (see **Exhibit F.3.12**). Except for MCE 2, all MCEs report higher rates in 2020 versus 2015. The highest overall weighted average was in 2019, aligning with the tobacco surcharge.

- **MCE 1**: In MCE 1, the proportion of members indicating that their providers offered information on tobacco cessation medications was variable across pre-tobacco surcharge years with the lowest proportion of respondents endorsing this item in 2015 (43.8%). This metric was not reported in 2019 due to an insufficient denominator. In 2020, the proportion increased (52.7%) yet was relatively consistent to rates reported prior to the tobacco surcharge.

- **MCE 2**: MCE 2 has a small range over the years reported (47.7% to 50.8%). The proportion of members indicating that their providers offered information on tobacco cessation medications was consistent prior to the surcharge and decreased when the surcharge was applied. This lower proportion was sustained in 2020 when the surcharge was suspended.

- **MCE 3**: The proportion of members indicating that their providers offered information on tobacco cessation medications steadily increased from 2015 – 2018 (47.3% to 56.7%) in MCE 3. This increase continued to rise in 2019 (57.9%) when the surcharge was applied but declined in 2020 (55.1%) when the surcharge was removed.

- **MCE 4**: In MCE 4, the proportion of members indicating that their providers offered information on tobacco cessation medications was variable across the pre-tobacco surcharge years, with the lowest proportion in 2018 (50.5%). In 2019 (the year of the surcharge), there was an increase of almost 7 percentage points. Rates rose again in 2020, with 61.5% of respondents indicating that providers sometimes, usually, or always shared information on tobacco cessation medications.

Across MCEs, approximately half of members who use tobacco indicated that providers sometimes, usually, or always shared information on tobacco cessation medications throughout the period assessed.
Exhibit F.3.13: Percent of Responding Beneficiaries Reporting Being Provided Information on Tobacco Cessation Strategies (other than medications) by MCE and Year (2015 – 2020) (Responses: Sometimes, Usually, and Always)

<table>
<thead>
<tr>
<th>MCE</th>
<th>Pre-Tobacco Surcharge</th>
<th>Tobacco Surcharge</th>
<th>Surcharge Suspended Mar 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>38.9%</td>
<td>47.7%</td>
<td>42.2%</td>
</tr>
<tr>
<td>2</td>
<td>NR</td>
<td>NR</td>
<td>41.8%</td>
</tr>
<tr>
<td>3</td>
<td>45.3%</td>
<td>45.5%</td>
<td>46.6%</td>
</tr>
<tr>
<td>4</td>
<td>52.0%</td>
<td>48.1%</td>
<td>45.0%</td>
</tr>
<tr>
<td>Overall Weighted Average</td>
<td>44.3%</td>
<td>47.1%</td>
<td>43.9%</td>
</tr>
</tbody>
</table>


Notes: Proportion of members selecting Sometimes, Usually, or Always in response to the tobacco cessation strategies (other than medications) question. NR = not reported (no report for corresponding year, metric not reported, or insufficient denominator [less than 100]).

Survey findings specific to the provision of information on cessation medications is consistent with findings on the provision of information on cessation strategies (other than medications) (see Exhibit F.3.13). On average, the proportion of responding beneficiaries who report receiving information on tobacco cessation strategies (other than medications) was slightly less than half (the majority fall in the 40 to 52% range). The highest overall weighted average was in 2019, aligning with the tobacco surcharge.

- **MCE 1**: The proportion of members indicating that their providers offered information on tobacco cessation strategies was variable across the pre-tobacco surcharge years for MCE 1, with the lowest proportion in 2015 (38.9%). This metric was not reported in 2019 due to an insufficient denominator. In 2020, the proportion slightly decreased (48.2%) yet is relatively consistent to rates reported prior to the tobacco surcharge. This metric peaked in 2018 at 50.7%.

- **MCE 2**: In MCE 2, the proportion of members indicating that their providers offered information on tobacco cessation strategies steadily rose from 2017 (41.8%) to 2020 (49.7%). The largest increase occurred in 2019 (almost 5 percentage points) when the surcharge was applied. This is inconsistent with the tobacco cessation medication findings, which indicated a downward trend in 2019.

- **MCE 3**: The proportion of members indicating that their providers offered information on tobacco cessation strategies steadily increased from 2015 – 2018 (45.3% to 50.4%). This increase continued in 2019 (53.6%) when the surcharge was applied but declined in 2020 (48.7%) when the surcharge was removed.

- **MCE 4**: The proportion of members indicating that their providers offered information on tobacco cessation strategies steadily declined from 2015 – 2018 (52.0% to 43.3%). In 2019 (the year of the surcharge), the proportion increased 9 percentage points (to 52.3%). Rates rose again in 2020, with 53.6% reporting being provided information on tobacco cessation strategies.
Overall, compared to the proportion of members advised to quit smoking or using tobacco (almost three-quarters on average) (see Exhibit F.3.11), fewer members (approximately half) were provided with information on tobacco cessation medications or other strategies (see Exhibit F.3.12 and Exhibit F.3.13). Moreover, the tobacco surcharge was associated with changes in these metrics in some MCEs, but not across all MCEs.

**Primary Research Question 1.1b Findings Summary – Do HIP members know about the cessation services offered through HIP?**

Although 2020 member interviews did not include references to the surcharge policy, results from the 2019 member interviews suggest that HIP members are generally aware of availability of cessation services (e.g., counseling or medications).

Provider interviews indicated that few providers were familiar with the tobacco surcharge and the consequences for a HIP member who was unable to quit tobacco use. Additionally, findings from CAHPS Surveys suggest considerable variation among the proportion of members who self-report regular tobacco use and who are advised by their providers to quit. CAHPS Survey findings also indicate a gap between the proportion of members advised to quit smoking or using tobacco and those who are offered information on cessation methods. Together, these findings suggest a need for provider training that covers the premium surcharge policy, available cessation services and strategies that encourage patient’s use of cessation services (e.g., motivational interviewing).

**Subsidiary Research Question 1.1c – Are HIP members satisfied with tobacco cessation services?**

This research question assesses whether HIP members are satisfied with the available cessation services that will help them quit tobacco use and avoid the tobacco surcharge. Note that due to the limited number of interviews with members using tobacco cessation services, Lewin could not fully address this research question.

**Brief Summary:** Due to the COVID-19 PHE-related policy changes, during interviews conducted in 2020, members were asked to recall their satisfaction with cessation services before the enactment of the PHE. Subsequently, results are limited and may be affected by recall bias. Additionally, for both 2019 and 2020, the number of members reporting use of tobacco cessation services was two members and one member respectively. Of the two members reporting using services in 2019, one was somewhat satisfied and one was somewhat dissatisfied and the one member using services in 2020 was very satisfied. Since the number using services in the member interviews were small and satisfaction varied, the findings should be interpreted with caution. Key informant interviews from 2019 and 2020 indicated that continued communications on the availability of services is valuable for member engagement and satisfaction.

**Results of Qualitative Analysis**

**Member, Provider, and Stakeholder Interviews**

Data from the 2019 member interviews specific to satisfaction with tobacco cessation services was limited to two members and not consistent. Similarly, data from the 2020 member interviews specific to satisfaction with tobacco cessation services was limited to one member. Given the small sample, information provided is not sufficient to draw conclusions.
Interviews with MCE representatives in 2020 suggested that expansion of tobacco cessation services may improve satisfaction among members and providers. State officials interviewed in 2020 also noted that they anticipated higher levels of satisfaction with these services due to removal of copayments of all services during the COVID-19 PHE.

**Primary Research Question 1.1c Findings Summary – Are HIP members satisfied with tobacco cessation services.**

MCE representatives and state officials suggested that members and providers may be satisfied with tobacco cessation services.

**Hypothesis 2 – The tobacco premium surcharge and availability of tobacco cessation benefits will decrease tobacco use.**

HIP provides easy access to tobacco cessation products and counseling services to help members successfully quit smoking and avoid the application of the tobacco premium surcharge. This hypothesis tests whether the surcharge policy and the availability of cessation services impact member tobacco use.

**Primary Research Question 2.1 – Has tobacco use decreased among the target population?**

This research question assesses whether use of tobacco decreased among all HIP members excluding conditional members due to implementation of a surcharge policy. To study the impact, Lewin examined the proportion of HIP members reporting using tobacco over time.

**Brief Summary:** Between 2015 – 2019, the proportion of all HIP members reporting tobacco information (reporting yes or no to using tobacco) on their HIP enrollment application during the MCE selection period increased from 33.8% to 51.9% (in 2019). Among members reporting, between 32% and 35% reported using tobacco. Comparatively, Medicaid estimates for Indiana from other sources indicate percent of Medicaid beneficiaries using tobacco range from 35% to 37%.126,127 Caucasian members and members living in nonmetro area reported the highest rates of tobacco use. Tobacco use has decreased among the target population. In 2018, 16.3% of tobacco users reported quitting tobacco use, and it peaked in 2018 at 34.5%.

**Approach to Quantitative Analysis**

Tobacco use prevalence was calculated using state administrative data tobacco use files for February 2015 – December 2020. Limitations for using this data set include:

- **Data reflects a subset of HIP members:** This data is drawn from new applications (new HIP members or members switching MCEs) for each year and relies on member’s self-report of tobacco use (reporting yes or no to using tobacco) at enrollment. The subset represents approximately 33.8% to 51.9% of the overall HIP population and is not a random sample. Given that new applicants may use tobacco at differing rates compared with existing HIP members due to status changing overtime but not being reported, inaccurate estimations may occur. Moreover, tobacco use status may change over time. Additionally, results may not be generalizable to the population due to selection bias.


• **Self-reported use:** Members may underreport tobacco use to avoid stigma and/or the additional 50% surcharge applied to their monthly POWER Account Contribution. Underreporting may lead to inaccurate estimates of prevalence.

For this analysis, Lewin calculated three metrics: (1) number and percent of members reporting information related to tobacco use (reporting yes or no or prefer not to answer to using tobacco) during enrollment (i.e., Members with Known Tobacco Information), (2) Of members who reported information related to tobacco use during enrollment, percent of members reported “yes” on the tobacco use question (i.e., Percent of Members Using Tobacco with Known Tobacco Information), and (3) Of members who reported information related to tobacco use during enrollment, percent of members who reported quitting tobacco in the same year (i.e., Percent of Members Quitting Tobacco with Known Tobacco Information).

**Results of Quantitative Analysis**

**Tobacco Use**

In 2015, there were 131,859 HIP members with known tobacco information (33.8% of all HIP members). Information collected on member use of tobacco increased over time and by 2019, 52.6% HIP members had reported tobacco use information. Of members with known tobacco use information, 34.8% reported using tobacco in 2015; declining to 32.5% in 2019 (see Exhibit F.3.14).

**Exhibit F.3.14: Tobacco Use Among All HIP Enrolled Members (February 2015 – December 2020)**

* Number of HIP members who self-reported tobacco use information (response options: yes, no, or prefer not to answer) during enrollment (defined as known tobacco use information).

**%** % of HIP members with known tobacco use information who reported using tobacco.

Source: Data for member self-reported use of tobacco was collected by the State from new applications (new HIP members or members switching MCEs) during enrollment. The subset of members with available tobacco information (used or did not use tobacco) is not based on a random sample of members. *Due to COVID-19 PHE, HIP suspended policies related to tobacco surcharge. MCEs continued collecting information on tobacco use.*
Demographics of HIP Members with Known Tobacco Information who Reported Tobacco Use

Member characteristics varied for members with known tobacco information who reported using tobacco (see Exhibit F.3.15):

- Members between ages 30 – 50 used tobacco at higher rates than members in other age groups. Tobacco use for this age group was stable from 2015 – 2019. Members ages 60 – 64 tobacco use steadily increased from 2015 – 2019 while members ages 19 – 29 decreased during the same time period.
- Male members reported tobacco use at higher rates (10 – 12 percentage points higher) than Female members from 2015 – 2019. This finding is consistent with rates of reported tobacco use in 2020. Tobacco use declined for both Female and Male members from 2015 – 2019 (approximately 32% – 29%; approximately 42% – 40% respectively). Declines continued in 2020.
- Caucasian members reported using tobacco at higher rates across the years yet had a sharper decline between 2015 and 2019 as compared to Black, Asian or Pacific Islander, or Other or Unknown.
- Non-Hispanic members and those living in nonmetro areas reported higher rates of tobacco use.

COVID-19 PHE (2020): Tobacco surcharge policies were suspended during the COVID-19 PHE. However, information on a member’s tobacco use status continued to be collected throughout the year. Although the number of members answered “yes,” “no,” or “prefer not to answer” on the enrollment application increased by 13%, it represented a slightly lower proportion of HIP members (relative to 2019). Tobacco use prevalence rates were consistent across all demographic characteristics with the pre-COVID-19 PHE time frame.

Exhibit F.3.15: Percent of Members Reporting Tobacco Use Among HIP Members with Known Tobacco Information by Member Characteristics by Category (February 2015 – December 2020)

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<tbody>
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<td>Age</td>
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<tr>
<td>Age 19-29</td>
<td>30.4%</td>
<td>29.7%</td>
<td>28.2%</td>
<td>25.7%</td>
<td>24.2%</td>
<td>23.0%</td>
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<tr>
<td>Age 30-39</td>
<td>38.2%</td>
<td>38.7%</td>
<td>38.2%</td>
<td>36.9%</td>
<td>35.8%</td>
<td>35.0%</td>
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<tr>
<td>Age 40-49</td>
<td>39.3%</td>
<td>39.6%</td>
<td>39.6%</td>
<td>38.8%</td>
<td>39.3%</td>
<td>38.9%</td>
</tr>
<tr>
<td>Age 50-59</td>
<td>37.6%</td>
<td>39.2%</td>
<td>38.8%</td>
<td>38.9%</td>
<td>39.4%</td>
<td>38.7%</td>
</tr>
<tr>
<td>Age 60-64*</td>
<td>28.0%</td>
<td>28.9%</td>
<td>29.4%</td>
<td>30.9%</td>
<td>32.2%</td>
<td>31.9%</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>32.4%</td>
<td>31.9%</td>
<td>31.0%</td>
<td>30.9%</td>
<td>28.5%</td>
<td>28.2%</td>
</tr>
<tr>
<td>Male</td>
<td>41.6%</td>
<td>42.1%</td>
<td>41.4%</td>
<td>40.5%</td>
<td>40.2%</td>
<td>38.8%</td>
</tr>
<tr>
<td>Other or Unknown</td>
<td>100.0%</td>
<td>0.0%</td>
<td>100.0%</td>
<td>100.0%</td>
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<tr>
<td>Race</td>
<td></td>
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<tr>
<td>Asian or Pacific Islander</td>
<td>8.7%</td>
<td>10.0%</td>
<td>10.3%</td>
<td>9.5%</td>
<td>9.3%</td>
<td>8.8%</td>
</tr>
<tr>
<td>Black</td>
<td>22.7%</td>
<td>23.3%</td>
<td>22.9%</td>
<td>22.0%</td>
<td>21.8%</td>
<td>21.8%</td>
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<tr>
<td>Caucasian</td>
<td>40.6%</td>
<td>40.6%</td>
<td>39.8%</td>
<td>38.1%</td>
<td>37.6%</td>
<td>37.0%</td>
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<tr>
<td>Other or unknown</td>
<td>30.8%</td>
<td>30.7%</td>
<td>30.1%</td>
<td>28.8%</td>
<td>28.8%</td>
<td>27.8%</td>
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</tbody>
</table>

128 Although members are only eligible for the HIP program until age 64, the analysis includes some members who are 65 or 66.
Healthy Indiana Plan Summative Evaluation Report

### Characteristics

<table>
<thead>
<tr>
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<td><strong>Ethnicity</strong></td>
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<tr>
<td>Hispanic</td>
<td>16.7%</td>
<td>16.2%</td>
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<tr>
<td>Not Hispanic</td>
<td>35.8%</td>
<td>36.0%</td>
<td>35.4%</td>
<td>34.1%</td>
<td>33.7%</td>
<td>33.4%</td>
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<tr>
<td>Other or unknown</td>
<td>36.7%</td>
<td>36.8%</td>
<td>35.9%</td>
<td>34.5%</td>
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<td><strong>Geographic Area</strong></td>
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<tr>
<td>Metro</td>
<td>32.7%</td>
<td>33.0%</td>
<td>32.3%</td>
<td>30.9%</td>
<td>30.5%</td>
<td>30.0%</td>
</tr>
<tr>
<td>Nonmetro</td>
<td>42.9%</td>
<td>42.8%</td>
<td>42.1%</td>
<td>40.8%</td>
<td>40.3%</td>
<td>40.0%</td>
</tr>
<tr>
<td>Rural</td>
<td>46.8%</td>
<td>47.1%</td>
<td>45.0%</td>
<td>0.4%</td>
<td>0.5%</td>
<td>0.4%</td>
</tr>
<tr>
<td><strong>Benefit Category</strong></td>
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</tr>
<tr>
<td>HIP Basic</td>
<td>38.3%</td>
<td>39.0%</td>
<td>38.0%</td>
<td>39.0%</td>
<td>39.7%</td>
<td>39.2%</td>
</tr>
<tr>
<td>HIP Plus</td>
<td>32.8%</td>
<td>33.0%</td>
<td>32.4%</td>
<td>31.3%</td>
<td>31.6%</td>
<td>31.8%</td>
</tr>
<tr>
<td>Switcher</td>
<td>33.3%</td>
<td>32.7%</td>
<td>32.4%</td>
<td>30.1%</td>
<td>28.9%</td>
<td>24.6%</td>
</tr>
</tbody>
</table>

* Due to the COVID-19 PHE, HIP suspended policies related to tobacco surcharge and extended coverage to members who were age 64. Although members are only eligible for the HIP program through age 64, the analysis includes some members who have turned 65 or 66. During COVID-19 PHE, MCEs continued collecting information on tobacco use.

Source: Data for member self-reported use of tobacco was collected by the State from new applications (new HIP members or members switching MCEs) during enrollment. The subset of members with available tobacco information (used or did not use tobacco) is not based on a random sample of members.

### Tobacco Cessation Rates

Prior to the surcharge policy, the percentage of members who reported quitting tobacco use (among members reporting using tobacco) was less than 2%. In 2018 (first year of surcharge policy), 16.3% of tobacco users reported quitting tobacco use regardless of using tobacco cessation services. Among the 9,891 tobacco users who also used tobacco cessation services in 2018, approximately 14% of tobacco users, reported quitting tobacco use. In 2019, when the surcharge was implemented, 27.6% of tobacco users who used cessation services reported quitting tobacco use (i.e., first surcharge year was applied in 2019; second year of continuous enrollment after the surcharge was applied).

In 2019, 32,271 tobacco users out of 92,554 members with known tobacco use information (34.5%) reported quitting tobacco compared to 16.3% in 2018. The higher percentage of members who reported quitting tobacco in 2019 suggests that the tobacco cessation surcharge process encourages members to report quitting even though the application of the surcharge does not appear to impact quitting. HIP Plus/Switcher members who use tobacco and tobacco cessation services quit tobacco at higher rates (average of 15.2%) than Basic members (average of 12.6%) (see Exhibit F.3.17). The percentage of members quitting tobacco use among those who received a surcharge in 2019 and 2020 was lower (12.0% and 10.8% respectively) than the overall HIP population. Of the 12.0% of members who received the surcharge and reported quitting tobacco use in 2019, 7 were HIP Basic members, while 408 were HIP Plus members. In 2020, 11.3% of HIP Plus members reported quitting tobacco use compared to 8.3% of HIP Basic members (see Exhibit F.3.16). Although, members who had a surcharge applied were not as likely to quit as the overall HIP population who use cessation services (12.0% versus 27.6%) in 2019, cessation rates declined when the surcharge was paused in 2020.

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129 Although the surcharge should have only been applied to those HIP Plus members who reported tobacco use in 2018 and continued to use tobacco in 2019, data indicated that a few HIP Basic members received the surcharge in both 2019 and 2020. Indiana refunded any HIP member who received the surcharge in 2020.
COVID-19 PHE (2020): In January 2020, the average cessation services used per 1000 members was 1,813. Although cessation services were available in 2020 and are not linked to the surcharge policy, social distancing parameters and resource prioritization likely limited provider-patient interactions yielding reduced availability. For example, during the initial months of the pandemic, the average cessation services used per 1,000 members decreased to 1,678 in April 2020 and 1,669 in May 2020. Cessation service utilization began to increase in June 2020, with the average cessation services used per 1,000 members rising to 1,743. This may suggest that the surcharge in conjunction with policy communications as well as cessation service availability may contribute to tobacco use quit rates.

Exhibit F.3.16: Percentage of Members Reporting Quitting Tobacco Use Among: Members with Known Tobacco Information, Tobacco Users Who Use Tobacco Cessation Services, and Tobacco Users Who Received a Surcharge (January 2017 – December 2020)

* Due to COVID-19 PHE, the tobacco surcharge was suspended in March 2020. Surcharge policy analysis is only restricted to data till 2019.

**Reporting of quit tobacco use started toward end of 2017.

Source: Data was collected by the State from new applications (new HIP members or members switching MCEs) beginning in 2015 and self-reported member tobacco use during enrollment. Data represents approximately 12% to 16% of the overall HIP population and is not a random sample.
Exhibit F.3.17: Percentage of Members Reporting Quitting Tobacco Use Among: Members with Tobacco Information, Tobacco Users Who Use Tobacco Cessation Services by Benefit Plan (January 2017 – December 2020)

* Due to COVID-19 PHE, the tobacco surcharge was suspended in March 2020. Surcharge policy analysis is only restricted to data till 2019.

**Reporting of quit tobacco use started toward end of 2017.

Source: Data was collected by the State from new applications (new HIP members or members switching MCEs) beginning in 2015 and self-reported member tobacco use during enrollment. Data represents approximately 12% to 16% of the overall HIP population and is not a random sample.

Primary Research Question 2.1 Findings Summary – Has tobacco use decreased among the target population?

Prior to the surcharge policy, the percentage of members who reported quitting tobacco use (among members reporting using tobacco) was less than 2%. In 2018 (first year of surcharge policy), 16.3% of tobacco users reported quitting tobacco use regardless of using tobacco cessation services. Among the 9,891 tobacco users who also used tobacco cessation services in 2018, approximately 14% of tobacco users, reported quitting tobacco use. In 2019, when the surcharge was implemented, 27.6% of tobacco users who used cessation services reported quitting tobacco use (i.e., first surcharge year was applied in 2019; second year of continuous enrollment after the surcharge was applied).

In 2019, 32,271 tobacco users out of 92,554 members with known tobacco use information (34.5%) reported quitting tobacco compared to 16.3% in 2018. The higher percentage of members who reported quitting tobacco in 2019 suggests that the tobacco cessation surcharge process encourages members to report quitting even though the application of the surcharge does not appear to impact quitting. HIP Plus/Switcher members who use tobacco and tobacco cessation services quit tobacco at higher rates (average of 15.2%) than Basic members (average of 12.6%).
Although, members who had a surcharge applied were not as likely to quit as the overall HIP population who use cessation services (12.0% versus 27.6%) in 2019, cessation rates declined when the surcharge was paused in 2020. This may suggest that the surcharge in conjunction with policy communications as well as cessation service availability may contribute to tobacco use quit rates.

Goal 4 – Promote member understanding and increase compliance with payment requirements by changing the monthly POWER Account payment requirement to a tiered structure

HIP offers members a health savings-like account called a POWER Account with member contributions varying by benefit plan and income level. As of 2018, the State changed the determination of HIP Plus member contributions from a percent of income to a tiered structure in an effort to reduce administrative burden and support member understanding of payment requirements. This goal tests whether the tiered structure improves member understanding of and compliance with POWER Account payments.

Summary of POWER Account and Enrollment in HIP Plus

As described in Section B: Summary of HIP Demonstration, the State funds POWER Accounts up to a ceiling of $2,500 per year. The State contributes an amount annually for each member that is equal to the difference between the required member contribution and the $2,500 ceiling. For HIP Plus members this monthly amount represents a combination of member, employer or not-for-profit, and/or State contributions. Members may also apply earned managed care entity (MCE) incentives if those programs are offered as part of their plan. HIP Basic members pay copayments and the State fully funds the POWER Accounts and covers the member’s $2,500 annual deductible.

HIP Basic members can move to the HIP Plus benefit plan at three different times provided they begin making POWER Account Contributions:130

- Benefit renewal period
- After receiving rollover
- After an increase in income over 100% of the federal poverty level (FPL)

Individuals have 60 days to make a POWER Account Contribution after the State makes a determination of eligibility for HIP Plus. The State identifies individuals as conditionally eligible who are transferring from a non-HIP benefit category until the initial payment is made; the State does not provide benefits during this time.

The State disenrolls HIP Plus members with incomes from 101% – 138% of the FPL who do not make monthly POWER Account Contribution payments (after a 60-day payment grace period).131 These

130 The State immediately enrolls members transitioning to HIP from other Medicaid programs (including pregnant members in HIP exiting the postpartum period) in HIP Basic; these members have a 60-day opportunity to make an initial POWER Account Contribution payment.

131 The State disenrolls eligible individuals with an income of more than 100% FPL for not making the initial (first) POWER Account Contribution payment. These members are not locked out for six months. Eligible individuals with income at or less than 100% FPL can continue with HIP Basic coverage if they did not make the initial POWER Account Contribution payment within the 60-day grace period.
members may not re-enroll for six months (also referred to as the “six-month lockout period”). Members determined medically frail or living in a domestic violence shelter or in a state-declared disaster area are exempt from disenrollment due to nonpayment regardless of income. Members subject to a lockout period and identified by the State or MCE as medically frail can request a waiver to reenter the program.

All HIP members pay $8 for a non-emergency emergency department (ED) visit; HIP Basic members make additional copayments for doctor visits, hospital stays, non-emergency ED visits, and prescriptions. HIP Plus members who are not HIP State Plan Plus receive an enhanced benefit plan that includes additional health care benefits such as coverage for dental, vision, and chiropractic services. HIP State Plan provides certain members with access to the Medicaid State Plan benefits in place of HIP Plus approved Alternative Benefit Plan.

Members enrolled in HIP Basic prior to the COVID-19 PHE could change to HIP Plus during redetermination and at certain other times like a change in income. All new members were enrolled in HIP Plus irrespective of income status during the COVID-19 PHE, and members were not allowed to downgrade to Basic during the PHE. Additionally, the State suspended all cost-sharing during the COVID-19 PHE and thereby also suspended disenrollment due to nonpayment of POWER Account Contribution. As no contribution was collected and other HIP policies were suspended, there were limited dollars for rollover during the COVID-19 PHE. These policy changes moderately impacted the evaluator’s ability to analyze the research questions for this goal.

Change to a Tiered Structure for Member Contributions

Prior to 2018, HIP Plus members made POWER Account Contributions that varied by level of income. Specifically, HIP Plus members contributed no more than 2% of their household income and the State contributed the difference. As member incomes could vary by month, POWER Account Contribution levels would also vary. This monthly fluctuation posed difficulties for members in understanding their payment obligations (creating the potential for loss of coverage) and created additional administrative burden for the State and MCEs.

The State’s transition to a tiered POWER Account Contribution structure in 2018 aimed to reduce administrative burden and support member understanding of payment requirements. Under this new structure, HIP Plus members make a fixed monthly payment based on income. Depending on income, member POWER Account Contributions range from $1 to $20. POWER Account Contributions for members who continue to use tobacco may increase by 50%.

Section B: Summary of HIP

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132 Members with income less than 100% FPL and not making POWER Account Contribution payments receive State Basic Plan benefits. Members with income more than 100% FPL receive HIP Plus Copay (PC) benefits. HIP Plus Copay members still have POWER Account Contribution obligations and also must pay copayments consistent with HIP Basic.

133 Pregnant members have no cost sharing and there is a 5% of income quarterly cost sharing limit for all members.


135 Medically frail, TMA participants, Section 1931 low-income (< 19% of the FPL) parents and caretakers, and low-income (< 19% of the FPL) ages 19 – 20.

136 Since cost sharing was suspended during the PHE, HIP Basic members had to engage with their MCEs to move to HIP Plus in 2020 and would not receive an invoice that they could pay to move up to HIP Plus.
Demonstration provides additional information about the POWER Account, POWER Account Contributions and the tobacco surcharge.

Goal 4 Hypotheses and Analysis

Goal 4 includes two hypotheses that assess the move to the POWER Account tiered payment structure. The qualitative and quantitative analyses related to these hypotheses and the five related research questions rely on the following data sources:

- Key informant interviews with members, providers, State officials, and MCE executives
- HIP enrollment and disenrollment data from February 2015 – December 2020
- American Community Survey (ACS) data from January 2015 – December 2019

As stated previously, the State suspended several HIP policies related to the POWER Account Contribution due to the COVID-19 PHE. Consequently, evaluation analyses focused on the demonstration period prior to 2020 (2018 – 2019). Data from 2015 – 2017 provides HIP member enrollment and disenrollment trend prior to change to tiered structure for POWER Account Contribution payments (2018 – 2020 Demonstration waiver). Findings for 2020 are included as observations and should not be used to draw conclusions for Goal 4 research questions.

Definition of HIP Member Population Used for Goal 4 Analyses

The analyses for this goal include fully enrolled HIP Plus and HIP Basic members. These members had coverage that was potentially affected by the change in the POWER Account payment tiers, specifically:

- HIP Basic members could move to HIP Plus if they made the required POWER Account Contribution payment amounts.
- Members with income at or below 100% of the FPL who did not make the required POWER Account Contribution payments could have moved from HIP Plus to HIP Basic.
- Members with income over 100% of the FPL could have been disenrolled for nonpayment of the HIP Plus POWER Account Contribution (with exceptions as described previously).

Members were identified based on the following enrollment codes in the monthly enrollment data: HIP Basic (Regular Basic [RB], State Basic [SB]) and HIP Plus (Regular Plus [RP], State Plus [SP]). Members can have multiple enrollment codes in a month in the monthly enrollment data (at most three). In instances when a member had both HIP Plus and HIP Basic (Regular or State) enrollment codes in one month, the member was classified as having HIP Plus Plan benefits.

In some cases, member enrollment status or member characteristics reflected situations where members would not have POWER Account Contribution payment obligations, nonpayment penalties, or be considered fully enrolled in HIP. As such, member months when members had the following enrollment statuses or member characteristics in the monthly enrollment data were excluded from the Goal 4 population:

- HIP Maternity (MA)
- Pregnancy flag of “Y”
Members can have multiple disenrollments in a year and multiple reasons associated with a disenrollment. Disenrollment data was used to identify the month when disenrollment occurred and the associated reason(s).

Exhibit F.4.1 describes the HIP member categories used for Goal 4 analyses. Total member counts for these categories will not match those used in Section F, Goal 1 and Attachment I: HIP Sociodemographic Statistics as analyses in those sections include pregnant members (having MA enrollment status or a pregnancy flag of “Y”) and do not exclude members receiving TMA.

Exhibit F.4.1: Goal 4 Definition of HIP Member Categories

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 4 HIP Plus Members</td>
<td>Members meeting the Goal 4 inclusion and exclusion criteria above who have at least one month of the HIP Plus benefit plan in the calendar year regardless of other enrollment status. This category is not the same as the “HIP Plus” category in Section F, Goal 1 and Attachment I: HIP Sociodemographic Statistics due to the differences in included and excluded members.</td>
</tr>
<tr>
<td>Goal 4 HIP Plus Only</td>
<td>Members meeting the Goal 4 inclusion and exclusion criteria above who have only the HIP Plus benefit plan in the calendar year. This category is not the same as the “HIP Plus Only” category in Section F, Goal 1 due to the differences in included and excluded members.</td>
</tr>
<tr>
<td>Goal 4 HIP Basic Members</td>
<td>Members meeting the Goal 4 inclusion and exclusion criteria above who have at least one month of the HIP Basic benefit plan in the calendar year regardless of other enrollment status. This category is not the same as the “HIP Basic” category in Section F, Goal 1 and Attachment I: HIP Sociodemographic Statistics due to the differences in included and excluded members.</td>
</tr>
<tr>
<td>Goal 4 HIP Basic Only</td>
<td>Members meeting the Goal 4 inclusion and exclusion criteria above who have only the HIP Basic benefit plan in the calendar year. This category is not the same as the “HIP Basic Only” category in Section F, Goal 1 and Attachment I: HIP Sociodemographic Statistics due to the differences in included and excluded members.</td>
</tr>
<tr>
<td>Goal 4 HIP Switchers</td>
<td>Members meeting the Goal 4 inclusion and exclusion criteria above who have at least one movement between the HIP Plus and HIP Basic benefit plans (between HIP Basic to HIP Plus or HIP Plus to HIP Basic) in the calendar year. For example, this category includes HIP Plus members receiving coverage under the HIP Basic benefit plan for at least one month or HIP Basic members having HIP Plus coverage for at least one month in the calendar year. This category is not the same as the “HIP Switcher” category in Section F, Goal 1 and Attachment I: HIP Sociodemographic Statistics due to the differences in included and excluded members.</td>
</tr>
</tbody>
</table>

Medically frail members having an enrollment status code of HIP Plus Copay (PC) were excluded. The enrollment data also includes a flag for medically frail. The State and the MCEs can both designate members as medically frail based on eligibility determinations or claims. Additionally, providers or members can report medically frail status. Goal 4 analyses included members having “Y” (medically frail) for this flag as long as the member met other Goal 4 population inclusion criteria.

Low-income parents and caretakers whose income increases over 138% FPL can receive TMA for up to 12 months. HIP Plus members receiving TMA can continue receiving Plus benefits as long as the members make POWER Account Contribution payments.

The disenrollment month in the disenrollment data indicates the month in which member disenrolled from a HIP plan and did not receive any HIP benefits for the month. A small number of members (less than 2% of the member population) had disenrollment and enrollment in same month. Most of these members had HIP Basic in the month(s) prior to disenrollment, then HIP Plus in the month with enrollment and disenrollment followed by HIP Plus or no HIP coverage.
Identification of FPL

For purposes of Goal 4 analyses, we defined member FPL based on the first enrollment month in the calendar year under analysis. These assumptions for FPL were based on analyses of the income in enrollment data and feedback from the State. Member income level as defined by FPL can change across months of enrollment. Additionally, in some instances, the FPL in the enrollment data for certain member months was not consistent with HIP policy. For example, we observed the following:

- A small number of Goal 4 HIP Plus members with income at or less than 100% FPL had disenrollment with nonpayment as a reason
- A small number of Goal 4 HIP Plus members having income over 100% FPL moved to HIP Basic within the calendar year

Based on discussions with the State, there are several possible reasons for these inconsistencies. For example:

- The member changed income in the calendar year under analysis
- Interplay between the required member notification for coverage changes (e.g., HIP Plus to HIP Basic) and when the State/MCE receives and updates data, in conjunction with member changes in FPL across months
- Inconsistencies in FPL data transfer between eligibility and the Medicaid Management Information System that resulted in null FPL values on disenrollment which appear as zero in the provided enrollment data and in some cases in the application of updated FPL numbers to prior months (the State has indicated that this data issue is resolved but in a minority of historical records included in these analyses, such data artifacts remain)

Since the objective of Goal 4 is to analyze member perception of POWER Account payment policy and continued coverage, Lewin included any HIP Plus members irrespective of the FPL in the monthly enrollment data in the related analyses.

Summary of Goal 4 HIP Member Enrollment, Disenrollment, and Demographics

Due to the parameters of the Goal 4 population definition, only members whose coverage can potentially be affected by the change in the POWER Account payment tiers are included in the analytic cohort and thus does not reflect the total HIP population. For instance, the Goal 4 member cohort\textsuperscript{140} ranged from 99% of the HIP member population in 2015 to 96% of the HIP population in 2019 (see Attachment IX: Exhibit IX.1). In 2020, the proportion of the Goal 4 HIP member cohort declined slightly to 94% of the HIP population. Attachment IX: Exhibit IX.2 presents additional comparisons of the Goal 4 member cohort to the total HIP population based on income and sex. Differences between the two populations is largely due to the exclusion of pregnant members in the Goal 4 cohort.

Exhibit F.4.2a provides a summary of the HIP member population and Goal 4 HIP member characteristics for two selected years: 2017 and 2019\textsuperscript{141}. The Goal 4 HIP member population decreased by 4% between 2017 and 2019, with the Goal 4 HIP Plus Only population increasing by 6%, the Goal 4 HIP Basic population decreasing by 25% and Goal 4 HIP Switchers population increasing by 5%. The Goal

\textsuperscript{140} The “Goal 4 HIP member cohort” will be used interchangeably with “Goal 4 HIP members” when referring to the HIP member population used for Goal 4 analyses \textsuperscript{141} To study changes in the composition of the Goal 4 HIP member cohort, we selected one year prior to the current waiver and one year post start of the current demonstration period.
4 HIP member population distribution and trends are similar to the overall HIP population for 2017 and 2019 (see Attachment I: HIP Sociodemographic Statistics), for example:

- The Goal 4 HIP member population decreased from 2017 (543,480) to 2019 (523,245). The overall HIP member population had a similar decline in members from 2017 (556,429) to 2019 (546,451).
- The majority of the overall HIP population and Goal 4 HIP member cohort were between ages 19 – 39.
- The majority of the overall HIP population and Goal 4 HIP member cohort were female.
- The majority of the overall and Goal 4 HIP member cohort were Caucasian (approximately 66% of Goal 4 HIP cohort in 2019). Approximately 18% of Goal 4 HIP members were Black in 2019. The proportion of Caucasian members in Goal 4 HIP Plus Only population is higher (approximately 68%) as compared to Goal 4 HIP Basic Only members (approximately 61%) in 2019.
- Approximately 79% of Goal 4 HIP members lived in a metro region in 2019, similar to the overall HIP population.

Although the Goal 4 HIP member population and overall HIP population is similar, the following differences should be noted:

- The Goal 4 HIP population has a slightly higher proportion of medically frail members than the overall HIP population.
- The Goal 4 HIP population has a higher proportion of members with an income below 23% FPL.
### Exhibit F.4.2a: HIP Member Population by Selected Demographic Characteristics, 2017 and 2019

*Note: Analyses use the Goal 4 definition of HIP member categories, as described in Exhibit F.4.1*

<table>
<thead>
<tr>
<th>Demographic Characteristics</th>
<th>Jan 2017 - Dec 2017</th>
<th>Jan 2019 - Dec 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Goal 4 HIP Basic Only</td>
<td>Goal 4 HIP Plus Only</td>
</tr>
<tr>
<td>All</td>
<td>173,612</td>
<td>312,229</td>
</tr>
<tr>
<td>FPL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0%-22% FPL</td>
<td>65.0%</td>
<td>52.7%</td>
</tr>
<tr>
<td>23%-50% FPL</td>
<td>7.4%</td>
<td>6.5%</td>
</tr>
<tr>
<td>51%-75% FPL</td>
<td>10.6%</td>
<td>9.3%</td>
</tr>
<tr>
<td>76%-100% FPL</td>
<td>11.5%</td>
<td>11.4%</td>
</tr>
<tr>
<td>101%-138% FPL</td>
<td>5.2%</td>
<td>19.6%</td>
</tr>
<tr>
<td>&gt; 138% FPL</td>
<td>0.4%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>62.0%</td>
<td>61.5%</td>
</tr>
<tr>
<td>Male</td>
<td>38.0%</td>
<td>38.5%</td>
</tr>
<tr>
<td>Age Group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age 19-29</td>
<td>46.3%</td>
<td>25.6%</td>
</tr>
<tr>
<td>Age 30-39</td>
<td>30.5%</td>
<td>25.0%</td>
</tr>
<tr>
<td>Age 40-49</td>
<td>14.4%</td>
<td>20.7%</td>
</tr>
<tr>
<td>Age 50-59</td>
<td>7.1%</td>
<td>20.1%</td>
</tr>
<tr>
<td>Age 60+</td>
<td>1.7%</td>
<td>8.6%</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>61.7%</td>
<td>71.2%</td>
</tr>
<tr>
<td>Black</td>
<td>25.9%</td>
<td>13.5%</td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>1.2%</td>
<td>3.0%</td>
</tr>
<tr>
<td>Other</td>
<td>11.2%</td>
<td>12.3%</td>
</tr>
<tr>
<td>Region</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metro</td>
<td>80.2%</td>
<td>77.3%</td>
</tr>
<tr>
<td>Nonmetro (20,000 or more)</td>
<td>6.9%</td>
<td>7.1%</td>
</tr>
<tr>
<td>Nonmetro (2,500 - 19,999)</td>
<td>12.1%</td>
<td>14.6%</td>
</tr>
<tr>
<td>Nonmetro (Rural, less than 2,500)</td>
<td>0.7%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Medically Frail</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not Medically Frail</td>
<td>86.4%</td>
<td>76.4%</td>
</tr>
<tr>
<td>Medically Frail</td>
<td>13.6%</td>
<td>23.6%</td>
</tr>
</tbody>
</table>

*Source: HIP monthly enrollment files, Calendar Years 2017 and 2019.*

*Note: The top row provides the population count for each HIP member category as defined in Exhibit F.4.1. The percentages within each demographic characteristics denote the population distribution for the HIP member category by demographic characteristic. FPL is based on FPL observed in first month of enrollment in the calendar year.*

**Exhibit F.4.2b** shows a high-level summary of Goal 4 HIP member disenrollment trends over time. Member disenrollment (HIP Plus and HIP Basic members) increased from February 2015 – May 2018 and decreased starting in June 2018. Additionally, the total disenrollment rates in 2019 are higher than the total.
disenrollment rates per year in 2015 – 2017. Approximately 3.4%\textsuperscript{142} of June 2017 HIP recipients disenrolled in July 2017 (4.3% of HIP Basic and 2.9% of HIP Plus). In comparison, approximately 4.2% of June 2019 HIP recipients disenrolled in July 2019 (5.9% of HIP Basic and 3.7% of HIP Plus). Average monthly disenrollment in 2019 was approximately 13% higher compared to 2017. The slight decrease in disenrollment from 2018 – 2019 was mostly due to income and other administrative reasons (see Goal 4, Hypothesis 2 Research Question 2.2 for more details). State officials indicated that the increase in members disenrolling for other administrative reasons in 2018 was due to the alignment of the HIP verification policy with the Medicaid verification policy at the start of 2018. Exhibit F.4.2c shows the members disenrolled due to nonpayment split into the three disenrollment reason codes: nonpayment of initial POWER Account Contribution, nonpayment of POWER Account Contribution with a six-month lockout, and increased income + nonpayment of POWER Account Contribution disenrolled without a six-month lockout. From 2016 – 2019, the majority of members disenrolled due to nonpayment are in the cohort of members disenrolled due to nonpayment of POWER Account Contribution with a six-month lockout.

Attachment IX: Goal 4 Detailed Results provides a more detailed discussion of monthly disenrollment (overall and due to nonpayment of POWER Account Contribution) trend by member plan and attribute (e.g., income [see Attachment IX: Exhibit IX.10b], medically frail [see Attachment IX: Exhibit IX.13b]). The number and proportion of disenrollment due to nonpayment has decreased from 2018 – 2019. As discussed in Definition of HIP Member Population Used for Goal 4 in this attachment, not all HIP members are subject to disenrollment or lock-out. Attachment IX: Goal 4 Detailed Results also presents a discussion of the disenrollment rate due to nonpayment restricted to the member population who could be subject to disenrollment determined based on known income and medical frailty status in the monthly enrollment data. The disenrollment rate decreased from an average of 2.2% in 2016 to an average of 1.4% in 2019 when restricted to members who could disenroll for nonpayment (see Attachment IX: Exhibit IX.15).

COVID-19 PHE (2020): As expected, the disenrollment rates declined in 2020 in response to the Maintenance of Effort (MOE) provisions which required Indiana to limit disenrollment and ensure member coverage until the end of the PHE.

\textsuperscript{142} The disenrollment rate is the proportion of enrolled members who disenrolled at the end of the month, calculated using the number of monthly disenrollments (see Exhibit F.4.2b) and the number of monthly enrollments. For June 2017, for example, of the 370,915 members enrolled, 12,525 members disenrolled after June 2017 with July 2017 month of disenrollment in the disenrollment data (3.4% disenrollment rate).
Exhibit F.4.2b: Monthly Disenrollment Trend for Goal 4 HIP Basic and Plus Members, Overall and Disenrolled due to Nonpayment (February 2015 – December 2020)

Note: Analyses use the Goal 4 definition of HIP member categories, as described in Exhibit F.4.1


Note: Used reason codes “001” (“Nonpayment of Initial POWER Account Contribution”), “002” (“Nonpayment of POWER Account Contribution with a six-month lockout”) and “003” (increased income + nonpayment of POWER Account Contribution, disenrolled without a six-month lockout) for nonpayment. HIP Plus / HIP Basic in this chart represents the member benefit plan for the specific month (HIP Plus = RP, SP and HIP Basic = RB, SB). Disenrolled HIP Basic or Plus members having TMA / ER only / Pregnancy for that month are not included in the counts. This exhibit displays all disenrollment due to any reason in each month and can include individuals who were conditionally enrolled and could have been subject to the POWER Account policy.

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143 Reason code 001 typically applies for conditionally enrolled members (not in scope for Goal 4). However, analysis of the disenrollment data showed less than 10 instances in each year with HIP member having disenrollment with reason code 001. Most of these members never showed up as HIP Plus after the disenrollment.
Exhibit F.4.2c: Monthly Disenrollment Due to Nonpayment of POWER Account Contribution by Reason Code for Goal 4 HIP Basic and Plus Members, (February 2015 – December 2020)

Note: Analyses use the **Goal 4** definition of HIP member categories, as described in Exhibit F.4.1


Note: Used reason codes “001” (“Nonpayment of Initial POWER Account Contribution”), 144 “002” (“Nonpayment of POWER Account Contribution with a six-month lockout) and “003” (increased income + nonpayment of POWER Account Contribution, disenrolled without a six-month lockout) for nonpayment. HIP Plus / HIP Basic in this chart represents the member benefit plan for the specific month (HIP Plus = RP, SP and HIP Basic = RB, SB). HIP Basic or Plus members having TMA / ER only / Pregnancy for specific month and having disenrollment are not included in the counts.

**Hypothesis 1 – HIP’s new income tier structure for POWER Account Contributions will be clear to HIP members.**

Lewin conducted analyses related to this hypothesis by analyzing feedback received during key informant interviews and reviewing enrollment and disenrollment trends during the first three years of the HIP waiver renewal period (February 2018 – December 2020). As previously noted, the State suspended all cost-sharing during the COVID-19 PHE and thereby also suspended disenrollment due to nonpayment of POWER Account Contribution. As no contribution was collected and other HIP policies were suspended due to the COVID-19 PHE, analyses related to these research questions may be limited.

Primary Research Question 1.1 – Do HIP members with POWER Account payment requirements understand their payment obligations?

The State and the MCEs both communicate with members about POWER Account Contribution policies. The State communicates general information about the POWER Account via online tools and maintains two call centers to answer member questions (enrollment broker and the Division of Family Resources).

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144 Reason code 001 typically applies for conditionally enrolled members (not in scope for Goal 4). However, analysis of the disenrollment data showed less than 10 instances in each year with HIP member having disenrollment with reason code 001. Most of these members never showed up as HIP Plus after the disenrollment.
Some of these online tools include interactive tutorial videos, “how-to” guides, an eligibility and contribution calculator, and other documents that explain the POWER Account Contribution.\textsuperscript{145} The MCEs inform their respective members about the policy and support compliance through online tools, outbound and inbound call centers, and other layered outreach including text message, email, mail, and social media. MCEs bill for and collect HIP Plus POWER Account Contributions and share monthly statements with all HIP members. The State and MCEs also utilized these channels to provide information on the COVID-19 PHE policy changes pertaining to POWER Accounts. Due to the COVID-19 PHE, POWER Account Contributions were paused starting in March 2020.

\textbf{Brief Summary:} During interviews conducted in 2020, key informants were asked to recall their knowledge of POWER Account requirements before the PHE. Subsequently, results from 2020 are limited and may be affected by recall bias. Given the changes made to POWER Account policies during the PHE, knowledge of these requirements varied. The policy changes resulted in some member confusion about payment requirements and required several layers of communications to members.

MCEs and the State are responsible for communicating POWER Account Contribution requirements to HIP members. Lewin identified several themes related to member understanding through key informant interviews with MCE executives, State officials, provider associations, and HIP members.

In 2019, MCE executives and State officials stated that member understanding has improved as a result of layered communications, ongoing education, and the transition to the tiered POWER Account structure. In both 2019 and 2020 interviews, these interviewees also indicated that communications and education are invaluable given the complexity and confusion that sometimes arises related to the POWER Account policies. Interviews with MCEs in 2020 suggested that simplifying tiers even more may promote understanding.

Findings from the 2019 provider interviews, indicated that the majority of members have a baseline understanding of their POWER Account Contribution requirements and understand overall POWER Account policies. About half of the providers mentioned challenges with the POWER Accounts, including understanding payment amount approvals, nonpayments, renewal deadlines, and cultural or language issues. In 2020 provider associations interviewees shared similar challenges, noting that the language and overall structure of the POWER Account is sometimes difficult to understand for both members and administrators.

In both 2019 and 2020, most members interviewed indicated that they understood the POWER Account generally. However, fewer members understood the consequences of nonpayment. According to a survey administered to members by the State in 2019, the rate at which members with POWER Account Contribution requirements are making payments is increasing, and fewer members are confused about the POWER Account or have issues with making their POWER Account Contribution. All interviewees agreed that the various mechanisms for making POWER Account Contribution payments, such as online or in-person or through third parties, are helpful for continued understanding of and compliance with POWER Account Contribution requirements.

\textsuperscript{145} Indiana FSSA. POWER Accounts. Retrieved from https://www.in.gov/fssa/hip/2590.htm
Qualitative Results

Key Informant Interviews – Members

The 2019 and 2020 key informant interviews with members included questions regarding POWER Account Contributions and member understanding of their obligations. These questions were modified for the 2020 interviews as members were asked to recall their experience and knowledge of policies before the COVID-19 PHE (i.e., before March 2020), which may result in some recall bias.

Of the 27 member interviewees from 2019, 24 were aware of the POWER Account and the different aspects of HIP and 17 reported making payments toward their HIP coverage. When asked what would happen if they did not make payments, five of the 17 members who reported making payments stated that they knew failure to make a payment could affect their participation in the program, three responded that they did not know what would happen, and the remaining eight did not answer the question. Of the 30 member interviewees from 2020, 19 were aware of the POWER Accounts and the different aspects of HIP and 15 reported making payments toward their HIP coverage. When asked what would happen if they did not make payments, eight of the 15 members who reported making payments stated that they knew failure to make a payment could affect their participation in the program and the remaining seven responded that they did not know what would happen. The results indicate roughly half of HIP members understand their payment requirements and the consequences of noncompliance, with an observed increase in understanding between 2019 and 2020.

The State launched a separate communications campaign to explain various HIP-related definitions, which included materials and a video on POWER Accounts. According to a summary of a 2019 member email survey conducted by the State to improve ongoing communications and outreach, there have been improvements in member understanding of POWER Account Contributions. The summary of the 2019 survey, which compared results to a similar survey in 2017, also included the following observations:

- Of the respondents who responded to a question about making a POWER Account Contribution, 13% said they do not make their POWER Account payments (statistically unchanged from 16% in 2017). Among those, the main reason for stopping a payment was that they could not afford a payment, which decreased from 45% in 2017 to 22% in 2019. Of the remaining responses, 8% of respondents said they did not know why or how they had to make a payment and 5% stated they did not know how to make a payment. The number of respondents reporting that they did not know why or how they had to make a payment decreased from 21% in 2017 to 8% in 2019.
- Once enrolled in HIP, 19% of respondents reported difficulties in making POWER Account payments, a decrease from 33% in 2017.
- Of respondents who had been confused about some part of HIP, 58% said they were confused by the POWER Account, a decrease of 11 percentage points from 69% in 2017.

\[146\] This survey was distributed via email by FSSA and yielded a 2.2% response rate (883 responses). The contractor conducting the survey indicated that this response was a statistically significant representation of the approximately 400,000 HIP members within ±3% and reflected a “good representation” across all 10 districts of the state. Lewin notes that the survey’s function was limited to informing the State’s communications strategy, and that its reliance on email to distribute the survey introduced notable selection bias.
Key Informant Interviews – FSSA Officials and MCE Executives

While overall feedback from State officials and MCE executives and the member key informant interviews indicate that the tiered POWER Account Contribution structure better supports member understanding of the related payment contributions, interviewees also acknowledged that disseminating simple and clear communications which distinguishes Power Accounts and Power Account Contributions remains a challenge and should continue to be a focus as the program evolves.

In 2019, interviewees shared that the tiered POWER Account structure was an improvement over the pre-existing percent of income approach under HIP 2.0. Interviewees shared that the predictable monthly cost helps members to better understand their POWER Account Contribution amount. MCE executives commented that the tiered structure simplified the invoicing process and member-related communications, and that member understanding of the POWER Account Contributions had improved over time. In 2020 MCE interviews, one entity noted that there may be additional opportunities to tiered structure, promoting greater understanding and compliance. While we did not ask members specifically about the switch to tiered payments, members varied in their level of understanding about the POWER Account Contributions. Findings from the 2019 and 2020 member key informant interviews and a separate 2019 State email survey of HIP members revealed that although some members understand the POWER Account Contribution, the POWER Account and rollover policies remain confusing to many members.

In 2019, both State officials and MCE executives shared that ongoing education and layered communications are critical, as information about POWER Account Contributions, POWER Accounts, and consequences of nonpayment can be complex and therefore difficult to relay clearly to members. State officials reported that improving HIP member understanding of POWER Account Contributions has been a priority in recent years, and they have seen improvements in member understanding over time. Some MCE executives identified challenges disseminating communications to members, highlighting inaccurate email or mailing addresses or limited use of these channels. Given that member communications are primarily disseminated via email and printed materials sent by mail, those who do not receive these communications may be less likely to understand the policy.

The MCEs also highlighted the various Power Account Contribution payment options available to members as beneficial to fulfilling payment obligations. For example, members can pay online, via U.S. mail, by phone, with cash or in-person payments with MoneyGram, with an automatic bank deduction, or an employer or other non-member payer; some MCEs allow members to pay using their MCE-specific rewards program.

In 2020, as the State implemented COVID-19 PHE policy changes, State officials and MCE executives reiterated the importance of ongoing education and layered communications. When POWER Account payment requirements were suspended in March 2020, State officials worked closely with MCE executives to relay this information across a variety of platforms (e.g., mail, email, social media, websites) to ensure members understood that they would not need to submit any payments while the PHE was in place.

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147 This survey was distributed via email by FSSA and yielded a 2.2% response rate (883 responses). The contractor conducting the survey indicated that this response was a statistically significant representation of the approximately 400,000 HIP members within ±3% and reflected a “good representation” across all 10 districts of the state. Lewin notes that the survey’s function was limited to informing the State’s communications strategy, and that its reliance on email to distribute the survey introduced notable selection bias.
State Key Informant Interviews

The State has been responsible for the POWER Account Contribution rollout and related policies, including the pause of payment requirements at the start of the COVID-19 PHE in March 2020. In 2019 interviews, State officials shared some responsibilities and initiatives for improved member understanding of the POWER Account, including:

- Hiring a marketing firm to conduct surveys to assess member understanding of various HIP policies and targeted member outreach (e.g., videos and social media).
- Tailoring the State communications across the HIP program, including multilingual brochures and strategic framing to encourage member buy-in related to the importance of health through investment in the POWER Account. State officials said this framing and the tiered system of the POWER Account have allowed members who may be uncomfortable with the idea of public assistance to buy-in to HIP more readily and feel a sense of value with their health coverage.

State officials interviewed in 2019 discussed how the branding of the contribution as a cost-sharing feature and differing slightly from a premium can pose some confusion when members switch to commercial plans. While the State designed the POWER Account Contributions to be similar in nature to monthly premiums, the policy also explicitly avoids the word “premium” since the monthly POWER Account Contribution is deposited into an account and can be refunded or carried over between calendar years. Some interviewees hypothesized that this may cause some concerns about how to best support member transitions to commercial plans. On the other hand, some State officials appreciated the distinction between the contribution and a premium when explaining the policy to members. This issue is an example of HIP’s complexities.

Further, interviews with State officials in 2020 indicated a continued commitment to ensuring members understand POWER Account policies. Similar to 2019 interviews, 2020 interviews found that State officials felt the tiered system provided predictability for members and helped support access to care. Both before and after the COVID-19 PHE, the State noted that POWER Accounts are a major component to the ongoing communications plan. During the COVID-19 PHE, State officials observed a higher volume of members reaching out to the MCEs with questions about the POWER Account. In response to this, FSSA provided detailed call scripts for the MCEs to use. FSSA developed these call scripts throughout March, April, and May 2020 (when the payment policy was changing) to ensure use of standardized language across the four entities.

MCE Key Informant Interviews

In addition to informing members about the policy and supporting member compliance with the POWER Account Contributions, MCEs provided general communications to members about POWER Accounts and monthly statements with information about their individual payment amount. MCE executives described a variety of strategies used to communicate POWER Account policies to members, including:

- Layered communications via text message, phone, email, and mail to notify members of POWER Account payment responsibilities, including payment reminders and delinquency notices
- Strategic communications that encourage HIP Basic members to pay the monthly contribution and move to HIP Plus, such as highlighting the benefits of HIP Plus when communicating with

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148 These strategies were pursued throughout the evaluation period until the enactment of the COVID-19 PHE in March 2020. Once the PHE was in place, MCEs shifted all communications to emphasize the suspension of payment requirements.
members, emphasizing that HIP Plus provides the best value with low, predictable monthly payments, and additional benefits including the ability to save money by paying the monthly POWER Account Contributions instead of paying multiple copayments

- Designated POWER Account outbound call centers for member support
- Supplemental videos and other online instructional tools

In 2019, one MCE executive reported that the MCE had created a separate invoice system specifically for POWER Accounts to support member services and streamline internal administrative processes. Another MCE executive said that the MCE had combined the eligibility and invoicing system to maintain accurate and appropriate statements regardless of eligibility changes. One MCE executive shared that their organization has automated invoicing. Across MCEs, executives cited their respective customer service teams as a critical component to support member understanding of the POWER Account Contribution and rollover.

In 2020 interviews, one MCE executive suggested that the tiered structure could be simplified even more. The MCE executive suggested that assessing disenrollment due to nonpayment data may be valuable to discern which members are benefitting from the tiered system and which members are not. Additionally, before the enactment of the COVID-19 PHE policy changes, MCE executives shared that they observed more HIP Basic members opting into HIP Plus and making POWER Account Contributions. Also, before the COVID-19 PHE, MCE executives noted that that many members at risk of being moved to HIP Basic or being disenrolled due to nonpayment were difficult to reach. MCE executives added that these members were often new to the program and lacked knowledge of the POWER Account Contribution and payment process, suggesting that providing education continues to be a need for the member population.

As mentioned under the State key informant interviews, the MCEs disseminated State-approved standardized language via social media, phone calls, mailers, and other communication modalities. Throughout the COVID-19 PHE, FSSA and the MCEs coordinated to ensure that multiple levels of FSSA staff reviews were conducted prior to releasing communications to the public. Despite these efforts, several MCEs reported that several layers of messaging were required for communications to resonate with members. For example, although communications were disseminated relaying information that payments were paused, some members continued to make payments during and after March 2020. To slow/stop member payment, additional layers of messaging (e.g., mail, phone) were disseminated.

Key Informant Interviews – Provider Associations and Advocacy Organizations

In 2019, Lewin interviewed 36 providers; the discussion around the POWER Account yielded mixed feedback. Some providers said that most members had a firm understanding of the POWER Accounts and how to make payments. However, almost half (17 of the 36) of providers mentioned member challenges with making contributions and using the POWER Accounts. For example, some providers indicated that members had difficulties making payments, especially when a member is new and is required to determine the amount to pay, a finding reiterated during MCE interviews in 2020. Other providers

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149 The “invoice system” refers to the process of billing for and collecting HIP Plus POWER Account Contributions and sending monthly statements to members. HIP Basic members also receive monthly account statements to assist them in managing the POWER Account and copayments and to increase awareness of the cost of the health care services received.
mentioned that members experience confusion regarding approval; some members assume the State has given final approval on their plan status and payment amount when the approval is provisional.

One provider said there are some issues with nonpayments as well as keeping track of renewal deadlines. Another provider indicated that members who did not elect an MCE and are auto-assigned were less likely to understand the POWER Account than those members who did elect an MCE. This provider also described issues related to members’ culture and language differences as a potential impact for understanding. Further, some members may have difficulty understanding the information provided by their MCE over the phone versus in writing and thus mode of communication should be considered when communicating complex topics. Overall, providers reported that the ability to pay the required amount is not the main challenge for members; rather, the main challenge is knowing what the payment amount is and when to make those payments. Three providers cited prepaid cards as part of the MCE benefits as helpful in making payments; one said these are especially helpful to members experiencing homelessness who cannot pay in cash.

In provider association interviews conducted in 2020, interviewees shared similar perceptions. For example, the flexibility in payment method remains a consistent benefit to members, improving compliance. One provider association noted that member understanding of POWER Accounts is continuously supported by the ability of a third party to submit payments on a member’s behalf. Beyond this, provider associations agreed that the language used in MCE and State materials continues to be confusing to members, and program navigators are critical to explaining benefits and POWER Account Contributions.

**Research Question 1.1 Findings Summary - Do HIP members with POWER Account payment requirements understand their payment obligation?**

Feedback received from MCE and State officials indicates that member understanding has improved since the first key informant interviews in 2019 as a result of layered communications, ongoing education, and the transition to the tiered POWER Account structure. However, fewer members understood the consequences of nonpayment indicating that improvements for ongoing communications and outreach should continue to be a program focus. All interviewees agreed that the various mechanisms for making POWER Account Contribution payments, such as online or in-person or through third parties, are helpful for continued understanding of and compliance with POWER Account Contribution requirements.

**Subsidiary Research Question 1.1a – Do HIP members that are subject to POWER Account payment requirements have different disenrollment compared to other HIP members?**

HIP Plus members with incomes over 100% of the FPL and not identified as medically frail lose HIP coverage and may not re-enroll for six months (also referred to as the “six-month lockout period”) for not making monthly POWER Account Contribution payments (after a 60-day payment grace period). For this research question Lewin examined if HIP Plus members with incomes over 100% of FPL and not identified as medically frail have different disenrollment rates compared to other HIP Plus members.

**Quantitative Methodology**

The primary measure used to examine this research question is disenrollment due to nonpayment of POWER Account Contribution. As the payment policy is applicable to HIP Plus members, we examined the disenrollment rate annually and monthly for: (1) Goal 4 HIP Plus members with income more than 100% FPL at any time in the year and not medically frail (members who could be disenrolled for...
nonpayment) and (2) All other Goal 4 HIP Plus members (not medically frail and irrespective of income level). Due to issues with FPL in the enrollment data (see subsection Identification of FPL), findings based on the population cohort identified using member FPL should be interpreted with caution. For purposes of this analysis, we used available FPL in the monthly enrollment data for the month level disenrollment analysis. For annual rates, we identified HIP Plus members based on an income of more than 100% of FPL at their first disenrollment in the year. Members have been identified as medically frail if they had frailty status at any point in the year. The measures calculated for this analysis are:

- **Measure 1:** Annual Disenrollment (overall and due to nonpayment of POWER Account Contribution): The disenrollment rate for these analyses was calculated as total number of members having at least one disenrollment (overall and due to nonpayment) among Goal 4 HIP Plus members for each of the mutually exclusive population cohorts divided by the total population size for each cohort.

- **Measure 2:** Monthly Disenrollment due to nonpayment of POWER Account Contribution: The disenrollment rate for these analyses was calculated as follows:
  
  - Numerator: Number of HIP members having disenrollment due to nonpayment in month ‘t+1’ (members enrolled in month ‘t’ who disenroll after the month are reported in disenrollment data in month ‘t+1’).
  - Denominator: Enrolled HIP members in month ‘t’ having income more than 100% FPL and not having a medically frail indicator. This cohort of members can be considered as members who can be disenrolled for not making POWER Account Contribution payment. This member cohort can potentially include (but not known based on available data) some members who are residing in a domestic violence shelter or in a state-declared disaster area and hence not subject to disenrollment.
  - Rate: Disenrollment rate for month ‘t’ is numerator based on month ‘t+1’ divided by denominator based on month ‘t’

**Quantitative Results**

**Annual Disenrollment**

Between 2017 and 2018, approximately 19% of HIP Plus members were likely subject to POWER Account Contribution nonpayment penalties (these are typically members not identified as medically frail and had income greater than 100% of FPL during the year). In 2019, this proportion decreased to comprise about 17% of HIP Plus members – which is likely due to small increases in proportion of members identified as medically frail in 2019 (see Attachment IX: Exhibit IX.12). This cohort of members had a higher rate of disenrollment compared to other HIP Plus members (see Exhibit F.4.3). As expected, majority of the disenrollment due to nonpayment were associated with members subject to the POWER Account Contribution payment policies.
### Exhibit F.4.3: Disenrollment Rate Goal 4 HIP Plus Members (February 2015 – December 2020)

**Note:** Analyses use the **Goal 4** definition of HIP member categories, as described in **Exhibit F.4.1**

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Goal 4 HIP Plus Members</th>
<th>Goal 4 HIP Plus Members (&gt;100% FPL and Not Medically Frail)</th>
<th>Goal 4 HIP Plus Members Not Subject to PAC Policies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Population</td>
<td>DR</td>
<td>DR - NP</td>
</tr>
<tr>
<td>2015</td>
<td>265,321</td>
<td>13.5%</td>
<td>0.80%</td>
</tr>
<tr>
<td>2016</td>
<td>346,610</td>
<td>23.4%</td>
<td>2.20%</td>
</tr>
<tr>
<td>2017</td>
<td>369,868</td>
<td>25.5%</td>
<td>1.90%</td>
</tr>
<tr>
<td>2018</td>
<td>392,317</td>
<td>32.4%</td>
<td>1.40%</td>
</tr>
<tr>
<td>2019</td>
<td>392,244</td>
<td>29.7%</td>
<td>1.40%</td>
</tr>
<tr>
<td>2020</td>
<td>461,575</td>
<td>7.3%</td>
<td>0.10%</td>
</tr>
</tbody>
</table>


**Note:** PAC = POWER Account Contribution, DR = Overall disenrollment rate, DR – NP = Disenrollment rate due to nonpayment of POWER Account Contribution. HIP members with income at or below 100% of FPL or identified as medically frail are not subject to disenrollment and 6-month lockout. A relatively small number of members identified for this analysis as not subject to POWER Account Contribution policies had disenrollment due to nonpayment. Most of the members did not have FPL greater than 100% and hence were not included in the cohort defined as members “subject to POWER Account Contribution payment policies.”

**COVID-19 PHE (2020):** In response to the COVID-19 PHE, the State suspended disenrollment policies (including disenrollment due to nonpayment of POWER Account Contribution) as required by the MOE to ensure member coverage until the end of the PHE. Subsequently, disenrollment rates in 2020 were low with majority of the disenrollments prior to COVID-19 PHE.

**Monthly Disenrollment due to Nonpayment of POWER Account Contribution**

Monthly disenrollment due to nonpayment is highly variable – irrespective of benefit plan, income level or medically frail status (see **Attachment IX, subsection Disenrollment Trends**). For HIP Plus members with income greater than 100% of FPL and not medically frail, the disenrollment rate varied across months ranging between 0% and 3.5%. The average number of disenrollments among HIP Plus members by month declined starting from 2016 (711 members per month, on average) to 2019 (462 members per month, on average). This disenrollment trend for members who could have been disenrolled is similar to the trends observed for the Goal 4 population analyzing by income and medical frail status (discussed in **Attachment IX, section Disenrollment Trends**).

Some HIP Basic members also had disenrollment due to nonpayment. Although this member population represents a relatively small cohort of members (on average 4,600 members each month as illustrated in **Attachment IX: Exhibit IX.9**), the number of disenrollments in comparison to HIP Plus members are not small (e.g., for 2015 – 2019, the average number of disenrollments in a month for HIP Basic members was 393 in comparison to 503 for HIP Plus). The majority of disenrollments among HIP Basic members were for members with income greater than 100% FPL (see **Attachment IX: Exhibit IX.11a**); it is possible that these are members who had increase in income and needed to make the POWER Account payment to maintain coverage.
Research Question 1.1a Findings Summary – Do HIP members that are subject to POWER Account payment requirements have different disenrollment compared to other HIP members?

HIP members that are subject to POWER Account payment requirements have higher annual disenrollment (e.g., base disenrollment and nonpayment disenrollment) compared to other HIP Plus members. As expected, the majority of disenrollment due to nonpayment were associated with members subject to the POWER Account Contribution payment policies. Monthly disenrollment due to nonpayment is highly variable – irrespective of benefit plan, income level or medically frail status. The average number of disenrollments among HIP Plus members by month declined starting from 2016 – 2019. This disenrollment trend for members who could have been disenrolled is similar to the trends observed for the Goal 4 population.

Primary Research Question 1.2 – Do HIP members with POWER Account payment requirements who initiate payments continue to make regular payments throughout their 12-month enrollment period?

The purpose of this research question is to examine changes in continuity of HIP Plus coverage after initial POWER Account Contribution payment with the new POWER Account tiered payment structure.

Brief Summary: The number of Goal 4 HIP Plus members with changed POWER Account tiered payment structure was higher (and similar between 2018 and 2019) during waiver period as compared to prior years. Additionally, the number of continuously enrolled members increased steadily, the number of members disenrolled due to not making their initial POWER account contribution decreased during the same time period. Although the number of members disenrolled due to nonpayment remained similar between 2018 and 2019 – it was lower compared to the period prior to the tiered payment structure, potentially suggesting improved member understanding of POWER Account Contribution payments. However, results also indicate an increase in the number of HIP Plus members that moved from HIP Plus to HIP Basic in 2019. As HIP program policies were suspended, there is no conclusive evidence on whether the increased switch from higher benefit Plus to Basic was related to POWER Account payment policies.

Quantitative Methodology

This research question assesses continuity of HIP Plus coverage using three outcome measures:

- **Measure 1**: Proportion of members in a calendar year with payment obligations who make a contribution before the end of the grace period – defined as continuously enrolled in HIP Plus until the end of the calendar year for this analysis.

- **Measure 2**: Proportion of members in a calendar year with payment obligations who are disenrolled due to nonpayment.

- **Measure 3**: Proportion of members in a calendar year who moved from HIP Plus to HIP Basic due to nonpayment by year.

Since only members with the HIP Plus benefit plan have a payment obligation, analyses focused on the HIP members enrolled in HIP Plus at any time during each calendar year (see inclusion and exclusion criteria described in section: Definition of HIP Member Population Used for Goal 4 Analyses). Exhibit F.4.4 provides a description of the measure calculations. Monthly HIP enrollment and disenrollment data from February 2015 – December 2019 was used for this analysis.
Exhibit F.4.4: Goal 4 Hypothesis 1 Research Question 1.2 Measure Calculation

<table>
<thead>
<tr>
<th>Measure</th>
<th>Metric</th>
<th>Numerator</th>
<th>Denominator</th>
<th>Notes</th>
</tr>
</thead>
</table>
| **Measure 1: Continuously enrolled in HIP Plus until the end of year** | Proportion of HIP Plus members having continuous enrollment in a calendar year | Number of unique Goal 4 members enrolled in HIP Plus and having HIP Plus coverage with no break until the end of the calendar year | Number of unique Goal 4 members having HIP Plus coverage at any time during the calendar year | - Includes members having State or Regular Plus plans.  
- Excludes any members who disenrolled prior to the end of the calendar year (December) or moved to HIP Basic. |
| **Measure 2: Disenrolled due to nonpayment** | Proportion of HIP Plus members disenrolled having nonpayment as a reason | Number of unique Goal 4 HIP Plus members identified as having a disenrollment due to nonpayment reason (disenrollment reason codes 001, 002 and 003) in the calendar year following the first observation of enrollment in HIP Plus | Number of unique Goal 4 members having HIP Plus coverage at any time during the calendar year | - Members can have multiple disenrollments in a year; A member was counted once if any of the disenrollments had nonpayment as a reason. |
| **Measure 3: Moved from HIP Plus to HIP Basic** | Proportion of HIP Plus members who moved to HIP Basic | Number of unique Goal 4 members having HIP Plus for a particular month and moving to HIP Basic in the following months within the calendar year | Number of unique Goal 4 members having HIP Plus coverage at any time during the year | - Members may switch plans multiple times during the year. This metric identifies unique members who moved from HIP Plus to HIP Basic at least once during the calendar year between two months.  
- We did not include the months of enrollment with TMA in the analyses for those members that had TMA at any time during the year. We considered the benefit plan prior to TMA and the benefit plan post-TMA in the calendar year to identify the potential move between benefit plans. |

*a Included all Goal 4 HIP Plus members irrespective of the FPL in the monthly enrollment data in the analyses (see discussion in Identification of FPL for details). |


Disenrollment reason 001 is “Nonpayment of Initial POWER Account Contribution (i.e., never fully enrolled in HIP Plus)”. Disenrollment reason 002 is “Nonpayment of POWER Account Contribution (i.e., disenrolled from HIP Plus WITH 6 month lockout).” Disenrollment reason 003 is “Increased Income + Nonpayment of POWER Account Contribution (i.e., disenrolled from HIP Basic WITHOUT 6 month lockout).”
Quantitative Results

Exhibit F.4.5a provides a summary of the outcome measures for this research question. The number of Goal 4 HIP members enrolled in HIP Plus at any point in time during a year increased by almost 48% from 2015 – 2019 (265,321 and 392,244, respectively). Almost 31% of Goal 4 HIP Plus members in 2019 (approximately 123,000) had HIP Plus coverage during some point in time (at least a month) every year from 2015 – 2019. These members may have also switched to HIP Basic, or disenrolled or reenrolled at some point during that same period (see Exhibit F.4.5b).

For Outcome Measure 1 (Continuously enrolled in HIP Plus until the end of year), the number of continuously enrolled Goal 4 HIP Plus members increased from 202,046 in 2015 to 240,283 in 2019, although at a relatively lower rate of increase (approximately 19%) as compared to the rate of increase in the Goal 4 HIP Plus population (approximately 48%). The proportion of the Goal 4 HIP Plus population having continuous coverage has decreased over time. In 2015, 76.2% of the Goal 4 HIP Plus members had continuous coverage as compared to 61.3% in 2019. A similar decrease in continuous coverage in 2018 and 2019 was also observed in Goal 1 analyses for all HIP members (see Exhibit F.1.2, with continuous coverage defined as 11 months or more of coverage in a calendar year).

The remaining two outcome measures (Outcome Measure 2: Disenrolled due to Nonpayment and Outcome Measure 3: Moved from HIP Plus to HIP Basic) explore possible causes of members not having continued coverage until the end of the year. As observed in Exhibit F.4.5a, the overall disenrollment rate increased from 2015 – mid-2018 and then started to decline. The overall disenrollment rate continued to decline through 2019. However, the count and proportion of Goal 4 HIP members who disenrolled from HIP Plus with nonpayment as a reason (see Exhibit F.4.5a) is relatively low and seems to be decreasing over time (2.4% in 2016 to 1.5% in 2019). The majority of the disenrollment with nonpayment as a reason were for members with income greater than 100% FPL\(^{151}\) (3,851 in 2019).

Between 2016 and 2019, there were members who initiated HIP Plus enrollment but did not make the initial POWER Account Contribution payments and did not become HIP Plus members in that calendar year (approximately 5,236 members in 2016 and 2,722 in 2019). Most of these members who reenrolled received HIP Basic coverage after not making the initial POWER Account Contribution payment (approximately 99% in 2016 and 98% in 2019). In 2016 and 2017, the majority of these disenrollments occurred in January for members enrolled in HIP Plus in the prior calendar year (see Exhibit F.4.2c for the total number of disenrollments each month). In 2019 on the other hand, the majority of these disenrollments occurred in July and August, which may coincide with the observed increase in enrollment to receive basic plan coverage from July 2019. There were also a few HIP Basic members who had initiated HIP Plus enrollment but did not make initial POWER Account Contribution and did not become HIP Plus members (less than 300 annually from 2015 – 2019). These members were receiving TMA or ER Only Services or pregnant so were not eligible to receive HIP Plus coverage (but could receive other Medicaid coverage).

Between approximately 6% – 9% of Goal 4 HIP Plus members moved to HIP Basic during a calendar year. Of the Goal 4 HIP members that switched between HIP Plus and HIP Basic in 2019, approximately 4% had multiple transitions in the calendar year. Attachment IX: Exhibits IX.3 and IX.4 provide detailed results by FPL.

Goal 4 HIP Plus member enrollment in 2018 was similar to 2019 and thus does not suggest an increased member interest in 2019. Disenrollment due to nonpayment hovered between 1.4% and 1.5% for the

\(^{151}\) Refers to the member population identified in the enrollment data with income between 100% – 138% FPL.
two years of the demonstration period and was lower compared to prior years (2017 and before). The increase in the proportion of HIP Plus members having continued coverage in a year is further examined in research question 2.2.

**COVID-19 PHE (2020):** In response to the COVID-19 PHE, the State suspended disenrollment policies (including disenrollment due to nonpayment of POWER Account Contribution) as required by the MOE to ensure member coverage until the end of the PHE. Additionally, members did not have to make POWER Account Contribution payments to continue receiving HIP Plus coverage. As expected, the number of continuously enrolled Goal 4 HIP Plus members increased from 240,283 (61.3% of all Goal 4 HIP Plus members) in 2019 to 417,225 (90.4% of all Goal 4 HIP Plus members) while few Goal 4 HIP Plus members disenrolled due to nonpayment (0.1%) or moved from HIP Plus to HIP Basic (0.6%). Since the PHE policies did not begin until March 2020, a small number of members were disenrolled based on the disenrollment policies.

**Exhibit F.4.5a: Outcome Measure Results for Research Question 1.2 (February 2015 – December 2020)**

*Note: Analyses use the Goal 4 definition of HIP member categories, as described in Exhibit F.4.1. Exhibit F.4.3 provides a summary of the calculation of the different measures.*

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Count of Goal 4 HIP Plus Members</th>
<th>Measure 1: Goal 4 HIP Plus Members Continuously Enrolled (Until End of Calendar Year)</th>
<th>Measure 2: Goal 4 HIP Plus Members Disenrolled from Plus due to Nonpayment</th>
<th>Measure 2: Count of Members Not Enrolled for Not Making Initial POWER Account Contribution Payment</th>
<th>Measure 3: Goal 4 HIP Plus Members that Moved from HIP Plus to HIP Basic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td>Percent</td>
<td>Count</td>
<td>Percent</td>
<td>Count</td>
</tr>
<tr>
<td>2015</td>
<td>265,321</td>
<td>202,046</td>
<td>76.2%</td>
<td>2,428</td>
<td>0.9%</td>
</tr>
<tr>
<td>2016</td>
<td>346,610</td>
<td>227,951</td>
<td>65.8%</td>
<td>8,274</td>
<td>2.4%</td>
</tr>
<tr>
<td>2017</td>
<td>369,868</td>
<td>234,413</td>
<td>63.4%</td>
<td>7,060</td>
<td>1.9%</td>
</tr>
<tr>
<td>2018</td>
<td>392,317</td>
<td>237,028</td>
<td>60.4%</td>
<td>5,662</td>
<td>1.4%</td>
</tr>
<tr>
<td>2019</td>
<td>392,244</td>
<td>240,283</td>
<td>61.3%</td>
<td>5,742</td>
<td>1.5%</td>
</tr>
<tr>
<td>2020</td>
<td>461,575</td>
<td>417,225</td>
<td>90.4%</td>
<td>643</td>
<td>0.1%</td>
</tr>
</tbody>
</table>

- Percent calculated as proportion of all Goal 4 HIP Plus members having disenrollment with nonpayment as a reason, regardless of FPL.
- Most of the members were enrolled in HIP Basic at some point during the calendar year. In 2019 for example, 2,083 of these members received HIP Basic coverage. Member counts include individuals disenrolled for nonpayment of POWER Account Contribution who were not HIP Plus members during the calendar year.
- Typically members receiving State plan HIP Plus (SP) benefits switch to receive State Basic plan (SB), while regular Plus (RP) switch to receiving regular Basic (RB). Among the Goal 4 HIP Plus members who switched plan from HIP Plus to HIP Basic, approximately 48% had State Plan (Plus) before switch and 44% continued to have State plan (Basic) after changing plans in 2018. Comparatively, in 2019, approximately 54% of the members switching from HIP Plus to HIP Basic had State plan (Plus) and 51% continued to receive State plan benefits after change in HIP plan.
- Approximately 71% of the members switched from HIP Plus to Basic before May 2020.

Exhibit F.4.5b: Number of 2019 Goal 4 HIP Plus Members by Number of Years of HIP Enrollment (February 2015 – December 2019)

Note: Analyses use the Goal 4 definition of HIP member categories, as described in Exhibit F.4.1

<table>
<thead>
<tr>
<th>Number of Years with HIP Plus Coverage</th>
<th>1 - 2019 Only</th>
<th>2 - 2019 + 1 year</th>
<th>3 - 2019 + 2 years</th>
<th>4 - 2019 + 3 years</th>
<th>5 - All 5 years</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - HIP Plus in 2019 only</td>
<td>64,784</td>
<td>8,021</td>
<td>7,429</td>
<td>4,489</td>
<td>3,653</td>
<td>88,376</td>
</tr>
<tr>
<td>2 - HIP Plus in 2019 and 1 other year</td>
<td>58,870</td>
<td>10,169</td>
<td>8,897</td>
<td>8,396</td>
<td>67,139</td>
<td>86,332</td>
</tr>
<tr>
<td>3 - HIP Plus in 2019 and 2 other years</td>
<td>47,123</td>
<td>9,972</td>
<td>10,044</td>
<td>67</td>
<td>517,139</td>
<td>64,308</td>
</tr>
<tr>
<td>4 - HIP Plus in 2019 and 3 other years</td>
<td></td>
<td></td>
<td>49,317</td>
<td>14,991</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 - HIP Plus in all 5 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>86,089</td>
<td>86,089</td>
</tr>
<tr>
<td>Total</td>
<td>64,784</td>
<td>66,891</td>
<td>64,721</td>
<td>72,675</td>
<td>123,173</td>
<td>392,244</td>
</tr>
</tbody>
</table>


Note: We identified the number of years with HIP Plus coverage by looking across five years of member enrollment data to identify if a Goal 4 HIP Plus member in 2019 had enrollment during any of the five years. Members can have HIP coverage with a gap (e.g., we classify a member having coverage in 2015 and 2019 as having two years of HIP coverage). We identified the number of years with HIP Plus coverage by looking across five years of member enrollment data to identify if the HIP Plus member in 2019 had HIP Plus coverage during any other calendar year (using the Goal 4 definition). The State indicated at the end of the Interim Evaluation Report analysis period that there is the possibility that encounter data for some members in Quarter 4, 2018 may reflect more than one recipient identification number per member. As such, unique member counts for 2018 may be slightly overstated (see Section E: Methodological Limitation).

Research Question 1.2 Findings Summary – Do HIP members with POWER Account payment requirements who initiate payments continue to make regular payments throughout their 12-month enrollment period?

The number of Goal 4 HIP Plus members with changed POWER Account tiered payment structure was higher (similar between 2018 – 2019) during waiver period as compared to prior years. Additionally, the number of continuously enrolled members increased steadily.

Goal 4 HIP Plus member disenrollment with nonpayment as reason (irrespective of member FPL) was low (relative to overall disenrollment rate with disenrollment due to administrative reasons accounting for large proportion of disenrollment) and decreased from 2017 – 2019. Additionally, the number of members disenrolled due to not making their initial POWER account contribution decreased during the same time period. Most of these members received HIP Basic coverage after not making the initial POWER Account Contribution payment (approximately 99% in 2016 and approximately 98% in 2019). Although the number of members disenrolled due to nonpayment remained similar between 2018 – 2019 – it was lower compared to the period prior to the tiered payment structure, potentially suggesting that the tiered structure improves member understanding of POWER Account Contribution payments and the ability to make payments on time.

Results also indicate an increase in the number of HIP Plus members that moved from HIP Plus to HIP Basic in 2019. As HIP program policies were suspended, there is no conclusive evidence on whether the increased switch from higher benefit Plus to Basic was related to POWER Account Contribution payment policies.
Hypothesis 2 – Enrollment and enrollment continuity will vary for the POWER Account payment tiers.

As discussed in Section B: Description of the Demonstration and Implementation Plan and at the beginning of Goal 4, the State implemented a simplified payment tier approach for member POWER Account Contributions in 2018. This hypothesis assesses the extent to which enrollment and enrollment continuity has changed since the implementation of this approach. Since the State suspended all cost-sharing during the COVID-19 PHE and also suspended disenrollment due to nonpayment of the POWER Account Contribution, the period of analysis for this will be limited to before the COVID-19 PHE.

Primary Research Question 2.1 – Is there a relationship between POWER Account payment tiers and total and new enrollment in Medicaid?

This research question uses two sources of data (State administrative data and ACS data – publicly available) to assess whether a relationship exists between the new POWER Account payment tiers and changes in HIP enrollment. Analyses using State administrative data provides perspective on total and new HIP Plus enrollment (members most likely impacted by the POWER Account payment changes – refer to methodology below for analytic population description) while ACS data provides perspective on changes (e.g., uptick) in the proportion of the potential eligible population enrolling in Medicaid pre and post implementation of the tiered payment structure.

Brief Summary: The total number of HIP Plus members increased between 2015 and 2019. However, the number and proportion of new HIP Plus members between 2017 and 2019 were lower compared to 2016. Additionally, although the proportion of members having higher FPLs increased across time, the number of new HIP Plus members having income greater than 100% FPL was lower in 2017 – 2019 compared to 2016. Given these inconsistent trends, conclusions cannot be drawn at this time.

An estimated 35% of the Medicaid eligible population in Indiana have income less than 23% of FPL, 11% have income between 23% – 50% of FPL, 12% have income between 51% – 75% of FPL, 16% have income between 75% – 100% of FPL and 26% have income between 101% – 138% of FPL during 2015 – 2019. Individuals with income between 51% – 75% of FPL have highest enrollment rate (37% in 2015 and increasing to 45% in 2019) across all years while Medicaid individuals with income less than 23% or more than 100% FPL had the lowest enrollment rate (24% in 2015 and increasing to approximately 33% in 2019). Although the enrollment rates increased and was higher after implementation of new POWER Account payment tier structure in 2018, there is variability in the enrollment rate as well as change in rate over time based on income.

Quantitative Methodology

HIP Enrollment Using State Administrative (Enrollment) Data

The unique number of overall HIP Plus members and new HIP Plus members per year were calculated using February 2015 – December 2020 enrollment data as follows:

- **Goal 4 HIP First Enrolled Plus members**: Total unique members enrolled in HIP Plus based on the first enrollment month in the calendar year, using the Goal 4 inclusion and exclusion criteria (see section Definition of HIP Member Population Used in Goal 4). This HIP Plus member cohort represents a subset of Goal 4 HIP Plus members (as described in Exhibit F.4.1) as we did not include HIP Plus members who were enrolled in HIP Basic prior to the HIP Plus enrollment within
the same calendar year. For example, if a member had HIP RB from January to March and then moved to HIP RP in April, this member was not included in total HIP Plus member count for this outcome measure. For this research question we refer to this population as HIP Plus.

- **New Goal 4 HIP First Enrolled Plus members**: Total HIP Plus members (as defined for this research question above) who did not have HIP coverage in the last 12 months prior to the first HIP Plus enrollment month in a calendar year. We used the Goal 4 inclusion and exclusion criteria described at the beginning of Goal 4 and defined HIP coverage for the 12 month “look back” as one or more months with the following enrollment status: HIP Basic (RB, SB), HIP Plus (RP, RP), Pregnant (MA), HIP Plus Copay (PC), and Native American (NA). Members having only conditional enrollment (C) in the 12-month look back time period were considered as new enrollees. For this research question we refer to this population as new HIP Plus.

**Medicaid Enrollment Rate Using ACS Data**

To examine the changes in Medicaid enrollment rates in Indiana across different POWER Account income tiers, we used the ACS data for the period of 2015 – 2019. Refer to Goal 1 for details describing the Indiana Medicaid eligible population sample used for this analysis. While the ACS data is useful in estimating total Medicaid enrollment rates, it does not allow the tracking of new Medicaid enrollment as the data is not longitudinal in nature. Hence, we focus only on total Medicaid enrollment rates for the current analysis.

Interrupted time series (ITS) analysis was used to examine the change in Medicaid enrollment rates in Indiana across POWER account income tiers over the years. The primary focus was to examine the change in Medicaid enrollment rates after 2018 (i.e., 2018 HIP waiver renewal and policy interventions) that may vary by income tiers. The ITS regression model examined the average change in enrollment rates before and after 2018 for each income tier after controlling for population characteristics.

**Quantitative Results**

**HIP Enrollment Using State Administrative (Enrollment) Data**

The total count of HIP Plus members (as defined for this research question) has steadily increased over time (see Exhibit F.4.6). The proportion of HIP Plus members who are new enrollees was lower in 2017 – 2019 at approximately 23% (approximately 81,500 each year) in comparison to 34% in 2016 (114,029).

Approximately 78% of HIP Plus members in 2019 were returning members from 2018. Additionally, about 392,244 HIP Plus 2019 members had more than one year of HIP Plus coverage; 123,173 members had a HIP Basic or Plus plan in all five years (2015 – 2019) (see Exhibit F.4.5b).

**COVID-19 PHE (2020)**: In 2020, the proportion of new HIP Plus members increased by 36% (164,028). This was expected as all new HIP members were enrolled in HIP Plus irrespective of member payment status during the COVID-19 PHE, and members were not allowed to downgrade to Basic during the PHE.

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152 We considered members having ER services only in prior 12 months and meeting Goal 4 enrollment criteria as new enrollees for this research question.

153 Members with an enrollment code of NA are exempt from HIP policies.
Exhibit F.4.6: Total and New Goal 4 HIP Members who Enrolled to Receive Plus Benefits in the First Month in a Calendar Year (as Defined for Research Question 2.1, February 2015 – December 2020)

Note: Analyses use the Goal 4 Research Question 1.2 HIP member exclusions and inclusions.

<table>
<thead>
<tr>
<th>Time Period</th>
<th>HIP Plus Members</th>
<th>New HIP Plus Members</th>
<th>% New HIP Plus Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>240,539</td>
<td>n.a. (due to 12 month look back)</td>
<td>n.a. (due to 12 month look back)</td>
</tr>
<tr>
<td>2016</td>
<td>335,129</td>
<td>114,029</td>
<td>34.0%</td>
</tr>
<tr>
<td>2017</td>
<td>347,566</td>
<td>81,529</td>
<td>23.5%</td>
</tr>
<tr>
<td>2018</td>
<td>355,044</td>
<td>80,744</td>
<td>22.7%</td>
</tr>
<tr>
<td>2019</td>
<td>365,124</td>
<td>82,367</td>
<td>22.6%</td>
</tr>
<tr>
<td>2020</td>
<td>456,012</td>
<td>164,028</td>
<td>36.0%</td>
</tr>
</tbody>
</table>


For a deeper look into member enrollment, we studied the member counts by FPL as observed in the first enrollment month in the calendar year (see Exhibit F.4.7). Key observations include:

- For 2019, approximately 53% of the HIP Plus members had income less than 23% of FPL while 80% had income less than 100% FPL (similar member income trend as discussed in Section B).
- Compared to 2018, the number of members in 2019 having income less than 23% FPL was higher.
- The number of HIP Plus members with income between 101% and 138% FPL increased from 34,790 in 2015 to 71,393 in 2018, before declining in 2019 to 67,906 members. However, the number (and proportion) of new HIP Plus members for this FPL category decreased across the years (20,446 in 2016 to 14,592 in 2019) indicating most of the increase from 2015 – 2018 was due to returning members from previous enrollment years (see Exhibit F.4.8).
- The number of new HIP Plus members in 2018 and 2019 was similar across different FPL ranges.

COVID-19 PHE (2020): The HIP Plus members in 2020 had a similar income distribution across FPL ranges as in prior years, with a majority of members having incomes less than 23% of FPL. The percent of HIP Plus members with incomes less than 23% of FPL was 53.1% in 2019 and increased to 54.3% in 2020. This increase may be due to a change in the enrollment processes during the PHE (rather than substantial difference in FPL enrollment) that enabled the state to accept self-attestation of income rather than require the individual to submit income documentation. Subsequently, members were not disenrolled if they failed to verify income, they were not subject to disenrollment.
**Exhibit F.4.7: HIP Plus Members by FPL at Time of HIP Plus Enrollment (February 2015 – December 2020)**

**Notes:** Analyses use the **Goal 4 Research Question 1.2 HIP member exclusions and inclusions. FPL reflects FPL observed in first month of HIP Plus enrollment in the calendar year.**

<table>
<thead>
<tr>
<th>Time Period</th>
<th>&lt;23% FPL Count (%)</th>
<th>23-50% FPL Count (%)</th>
<th>51-75% FPL Count (%)</th>
<th>76-100% FPL Count (%)</th>
<th>101-138% FPL Count (%)</th>
<th>&gt;138% FPL Count (%)</th>
<th>Total Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>124,006 (51.6%)</td>
<td>19,688 (8.2%)</td>
<td>27,020 (11.2%)</td>
<td>30,233 (12.6%)</td>
<td>34,790 (14.5%)</td>
<td>4,802 (2.0%)</td>
<td>240,539</td>
</tr>
<tr>
<td>2016</td>
<td>181,480 (54.2%)</td>
<td>23,075 (6.9%)</td>
<td>32,216 (9.6%)</td>
<td>37,861 (11.3%)</td>
<td>54,350 (16.2%)</td>
<td>6,147 (1.8%)</td>
<td>335,129</td>
</tr>
<tr>
<td>2017</td>
<td>181,729 (52.3%)</td>
<td>24,203 (7.0%)</td>
<td>34,018 (9.8%)</td>
<td>40,662 (11.7%)</td>
<td>63,593 (18.3%)</td>
<td>3,361 (1.0%)</td>
<td>347,566</td>
</tr>
<tr>
<td>2018</td>
<td>168,520 (47.5%)</td>
<td>27,485 (7.7%)</td>
<td>37,978 (10.7%)</td>
<td>45,591 (12.8%)</td>
<td>71,393 (20.1%)</td>
<td>4,077 (1.1%)</td>
<td>355,044</td>
</tr>
<tr>
<td>2019</td>
<td>193,944 (53.1%)</td>
<td>23,796 (6.5%)</td>
<td>33,567 (9.2%)</td>
<td>41,777 (11.4%)</td>
<td>67,906 (18.6%)</td>
<td>4,134 (1.1%)</td>
<td>365,124</td>
</tr>
<tr>
<td>2020</td>
<td>247,566 (54.3%)</td>
<td>29,053 (6.4%)</td>
<td>40,968 (9.0%)</td>
<td>50,239 (11.0%)</td>
<td>82,789 (18.2%)</td>
<td>5,397 (1.2%)</td>
<td>456,012</td>
</tr>
</tbody>
</table>


**Exhibit F.4.8: New HIP Plus Members by FPL (January 2016 – December 2020)**

**Notes:** Analyses use the **Goal 4 Research Question 1.2 HIP member exclusions and inclusions. FPL reflects FPL observed in first month of HIP Plus enrollment in the calendar year.**

<table>
<thead>
<tr>
<th>Time Period</th>
<th>&lt;23% FPL Count (%)</th>
<th>23-50% FPL Count (%)</th>
<th>51-75% FPL Count (%)</th>
<th>76-100% FPL Count (%)</th>
<th>101-138% FPL Count (%)</th>
<th>&gt;138% FPL Count (%)</th>
<th>Total Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>64,027 (35.3%)</td>
<td>6,684 (29.0%)</td>
<td>9,881 (30.7%)</td>
<td>12,323 (32.5%)</td>
<td>20,446 (37.6%)</td>
<td>668 (10.9%)</td>
<td>114,029</td>
</tr>
<tr>
<td>2017</td>
<td>44,506 (24.5%)</td>
<td>4,729 (19.5%)</td>
<td>6,946 (20.4%)</td>
<td>9,140 (22.5%)</td>
<td>15,830 (24.9%)</td>
<td>378 (11.2%)</td>
<td>81,529</td>
</tr>
<tr>
<td>2018</td>
<td>45,406 (26.9%)</td>
<td>4,458 (16.2%)</td>
<td>6,496 (17.1%)</td>
<td>8,552 (18.8%)</td>
<td>15,456 (21.6%)</td>
<td>376 (9.2%)</td>
<td>80,744</td>
</tr>
<tr>
<td>2019</td>
<td>48,418 (25.0%)</td>
<td>4,215 (17.7%)</td>
<td>6,389 (19.0%)</td>
<td>8,453 (20.2%)</td>
<td>14,592 (21.5%)</td>
<td>300 (7.3%)</td>
<td>82,367</td>
</tr>
<tr>
<td>2020</td>
<td>94,804 (38.3%)</td>
<td>9,247 (31.8%)</td>
<td>13,289 (32.4%)</td>
<td>16,118 (32.1%)</td>
<td>28,688 (34.7%)</td>
<td>1,882 (34.9%)</td>
<td>164,028</td>
</tr>
</tbody>
</table>


Note: 2015 was first year of HIP 2.0 program. Thus, all members in 2015 were new HIP enrollees. New HIP Plus members in 2016 were members not enrolled in 2015 (using definition outlined for this measure).

The number (and proportion) of members with previous HIP Plus enrollment who returned to receive HIP Plus coverage is higher (approximately 77% for 2017, 2018, and 2019) relative to 2016 (66%).
Medicaid Enrollment Rate Using ACS Data

Enrollment Trend over Time

After the Medicaid expansion in 2015 under the Affordable Care Act the state of Indiana had an increase in the number of Medicaid enrolled population. Based on the ACS data we estimated that the Medicaid enrollment rate among the Medicaid eligible population ages 19 – 64 increased from 27.0% to 32.0% from 2015 – 2016 after the Medicaid expansion and the enrollment rate continued to rise to almost 35.5% in 2019. The growth in Medicaid enrollment rate may vary by income categories. While the growth in Medicaid enrollment rates between 2015 and 2016 is largely due the Medicaid expansion in 2015, the growth in the subsequent years could vary due a variety of policy changes including 2018 HIP waiver renewal policies related to POWER Account income tiers. These policy changes could lead to differential growth in Medicaid enrollment rates across POWER Account income tiers.

Based on the ACS data, an estimated 35% of the Medicaid eligible population in Indiana are in the lowest POWER Account income category (income less than 23% of FPL during 2015 – 2019. Almost 26% of the Medicaid eligible population in the state is in the highest POWER Account income tier of 101% – 138% of FPL. An estimated 11%, 12%, and 16% of the Medicaid eligible population are in income tiers of 23% – 50% of FPL, 51% – 75% of FPL, and 75% – 100% of FPL, respectively. Exhibit F.4.9a provides the annual trends in Medicaid enrollment rates among the Medicaid eligible population ages 19 – 64 in Indiana within each POWER Account income tier. The Medicaid eligible population in the 51% – 75% FPL has the largest Medicaid enrollment rates during the data period, with enrollment rates increasing from 37.3% in 2015 to 45.3% in 2019. Alternatively, among Medicaid eligible population in income tier of 101% – 138% FPL, the Medicaid enrollment rates increased from 23.6% in 2015 to 32.9% in 2019. The smallest change in Medicaid enrollment rates is observed among the Medicaid eligible population in the income tier of 23% – 50% FPL: the rate increased from 31.5% in 2015 to 36.9% in 2019.\textsuperscript{154}

\textsuperscript{154} Lack of awareness or lack of information on eligibility may drive low Medicaid enrollment rates among the population in income tier of less than 23% FPL. Additional analysis of the ACS data shows that the population in this income tier is relatively younger and less educated.
Medicaid Eligible Population Characteristics and Impact on Enrollment Rates

The variation in Medicaid enrollment rates across income tiers may provide useful insights for understanding the Medicaid coverage gaps. While some of these trends in Medicaid enrollment rates across income tiers are driven by the changes in the HIP policies in the state, the characteristics of the Medicaid eligible population in those income tiers may also impact the enrollment rates. Hence, we estimated ITS regression model to account for these characteristics and examine the changes in Medicaid enrollment rates across POWER account income tiers after 2018 HIP policy interventions.

For the ITS model we estimated a linear regression of the Medicaid enrollment status (a binary indicator). The key covariates of interest are the interactions between the binary indicator of years 2018 or after and five binary indicators of five income tiers. The estimated parameters of the ITS model are presented in Attachment IX: Exhibit IX.28. The estimated coefficients of these interaction variables show the estimated change in average Medicaid enrollment rates in 2018 – 2019 period for the corresponding income tier (relative to the average enrollment rates before 2018) after controlling for population demographic characteristics and the income level of the Medicaid eligible population ages 19 – 64. The estimated coefficients of the interaction terms are positive for income tier less 23% of FPL, 51% – 75% FPL, and 101% – 138% FPL. These coefficients indicate that the Medicaid enrollment rates increased by 3.7 percentage points among Medicaid eligible population with income under 23% of FPL. This estimate is statistically significant and represents a sizable magnitude given that average enrollment

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155 Given that the change in Medicaid enrollment between 2015 and 2016 is largely driven by the 2015 Medicaid expansion, we excluded the data from 2015 for the purpose of the ITS regression model.
in this income tier was less than 30% before 2018. Similarly, the estimated increases in Medicaid enrollment rates for income tiers 51% – 75% FPL and 101% – 138% FPL are 4.5 and 4.0 percentage points respectively in 2018 – 2019 relative to the rates in 2016 – 2017. These two effects are also statistically significant and economically sizeable given the mean enrollment rates prior to 2018. The estimated model does not show any statistically significant change in Medicaid enrollment rates for other two income tiers: 23% – 50% and 76% – 100% of FPL.

The variation in the estimated changes in the enrollment rates across income tiers indicate differential changes in coverage gaps. This suggests that additional outreach efforts may be needed to identify barriers and address coverage gaps across those income tiers that did not have significant change in enrollment rates after 2018 HIP waiver renewal and policy interventions (e.g., income tiers of 23% – 50% and 76% – 100% FPL). Additional research may be needed to better understand the latter income tiers in relation to health status need for Medicaid, barriers to HIP enrollment, and understanding of HIP policies.

Research Question 2.1 Findings Summary – Is there a relationship between POWER Account payment tiers and total and new enrolment in Medicaid?

The number of HIP Plus members during the waiver period with changed POWER Account tiered payment structure was higher (and similar between 2018 and 2019) compared to prior years. Additionally, the number of continuously enrolled members increased steadily. Additionally, although the proportion of members having higher FPLs increased across time, the number of new HIP Plus members having income greater than 100% FPL was lower in 2017 – 2019 compared to 2016.

An estimated 35% of the Medicaid eligible population in Indiana have income less than 23% of FPL, 11% have income between 23% – 50% of FPL, 12% have income between 51% – 75% of FPL, 16% have income between 75% – 100% of FPL and 26% have income between 101% – 138% of FPL during 2015 – 2019. Individuals with income between 51% – 75% of FPL have highest enrollment rate (37% in 2015 and increasing to 45% in 2019) across all years while Medicaid individuals with income less than 23% or more than 100% FPL had the lowest enrollment rate (24% in 2015 and increasing to approximately 33% in 2019). Although the enrollment rates increased (especially among individuals with income less 23% of FPL, 51% – 75% of FPL, and 101% – 138% of FPL) and was higher after implementation of new POWER Account payment tier structure in 2018, there is variability in the enrollment rate as well as change in rate over time based on income. This finding is further reinforced by the results of the ITS model which identified a relationship between enrollment growth and POWER Account income tiers.

The variation in the estimated changes in the enrollment rates across income tiers indicate differential changes in coverage gaps. This suggests that additional research and outreach efforts may be needed to identify barriers and address coverage gaps across those income tiers that did not have significant change in enrollment rates after 2018 HIP waiver renewal and policy interventions (e.g., income tiers of 23% – 50% and 76% – 100% FPL).

Primary Research Question 2.2 – Is there a relationship between POWER Account payment tiers and continued enrollment in Medicaid?

The purpose of this research question is to assess whether POWER Account payment tier influences continued member enrollment. The analyses presented in this section expand on the HIP coverage

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156 Given the binary nature of the outcome (Medicaid enrollment status) we also estimated Logistic version of the ITS model as an alternative to the Linear model to test for sensitivity of the estimated parameters. The estimated changes over time across the income tiers are very similar to the ones presented based on the Linear ITS model.
analyses performed for Research Question 1.2 and further explore disenrollment for nonpayment, movement between HIP Plus and HIP Basic and the number of months with HIP coverage in a year. Since the State suspended all cost-sharing during the COVID-19 PHE and also suspended disenrollment due to nonpayment of POWER Account Contribution, the period of analysis is limited to before the COVID-19 PHE.

**Brief Summary:** Four outcomes were assessed to examine the relationship between POWER Account payment tiers and continued enrollment in Medicaid. Findings are highlighted below.

- **Probability of disenrollment due to nonpayment:** Goal 4 HIP Plus member disenrollment with nonpayment as a reason (irrespective of member FPL) was low and decreased from 2016 (2.2%) to 2019 (1.4%). Controlling for various sociodemographic characteristics, members in 2018 and 2019 had lower likelihood of disenrollment with nonpayment as a reason compared to 2017 (odds ratio [OR]=0.83 in 2018 and OR=0.82 in 2019), but a higher likelihood of disenrollment for other reasons (OR=1.4 in 2018 and OR=1.2 in 2019). Additionally, Goal 4 HIP Plus members who were Black had a higher likelihood of disenrollment due to nonpayment compared to non-Hispanic White HIP Plus members.

- **Probability of members moving from HIP Plus to Basic:** The proportion of Goal 4 HIP Plus members moving from HIP Plus to HIP Basic in a year has been variable between 5.9% and 8.7% from 2015 – 2019. In 2019, 34,083 Goal 4 HIP Plus members moved from HIP Plus to HIP Basic representing approximately 8.7% of the 392,244 HIP Plus individuals. Controlling for various sociodemographic characteristics, Black Goal 4 HIP Plus members had a higher likelihood of moving to HIP Basic compared to non-Hispanic White members while members ages 40 or older had a lower likelihood to move from HIP Plus to HIP Basic as compared to members ages 19 – 29. Members having a frail indicator had a slightly increased likelihood of moving to HIP Basic from HIP Plus as compared to members without a frail indicator.

- **Probability of members moving from HIP Basic to Plus:** The number of Goal 4 HIP members moving from HIP Basic to Plus increased from 2016 (20,977) to 2018 (44,229). In 2019, this number dropped to 28,354 members moving from HIP Basic to HIP Plus representing 14.8% of the HIP Basic population (still a higher proportion than in 2016 and 2017). Controlling for various sociodemographic characteristics, female members had a higher likelihood of moving from HIP Basic to HIP Plus compared to male members and members ages 30 and older had a higher likelihood of moving to HIP Plus compared to members ages 19 – 29.

- **Number of months with Medicaid coverage during year:** There was no observable difference in the number of months with HIP coverage across time for Goal 4 HIP Plus members.

---

157 By HIP policy HIP Plus members with income at or less than 100% FPL may move to the HIP Basic plan upon nonpayment of POWER Account Contribution (as discussed earlier in Goal 4). These members are sometimes referred as “eligible to move to Basic.” As discussed earlier in this section, we have included all HIP Plus members instead of limiting the analysis to members having income at or less than 100% FPL.
Quantitative Methodology

We calculated the following four outcome measures to explore this research question:

- **Measure 1**: Probability of disenrollment due to nonpayment
- **Measure 2**: Probability of members moving from HIP Plus to Basic
- **Measure 3**: Probability of members moving from HIP Basic to Plus
- **Measure 4**: Number of months with Medicaid coverage during year

As discussed in the *Summary of POWER Account and Enrollment* subsection, HIP Plus members can move to HIP Basic or be disenrolled if they do not make POWER Account Contributions. Additionally, HIP Basic members can move to HIP Plus.

*Exhibit F.4.10* shows the specifications to calculate the outcome measures. Lewin used HIP enrollment and disenrollment data from February 2015 – December 2020 and applied the Goal 4 HIP member inclusions and exclusions described in *Definition of HIP Member Population Used in Goal 4* subsection. Since member FPL can change across months and some members can have multiple disenrollments, for consistency, we identified the FPL using the first enrollment month in the calendar year when necessary for analysis. Based on analyses and feedback from the State, we included all HIP Plus members for analyses for all measures regardless of FPL in the enrollment data (*Identification of FPL* subsection at the beginning of *Goal 4* contains additional detail).

In addition to providing annual descriptive statistics for the outcome measures, Lewin also analyzed the impact of the POWER Account payment tier on the outcome measures adjusting for member characteristics using standard regression techniques. A summary of these analyses are available in *Attachment IX*.

**Exhibit F.4.10: Goal 4 Hypothesis 2 Research Question 2.2 Outcome Measure Calculation**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Metric</th>
<th>Numerator</th>
<th>Denominator</th>
<th>Notes</th>
</tr>
</thead>
</table>
| Measure 1: Probability of disenrollment due to nonpayment | Proportion of HIP Plus members who disenrolled – by reason  
*Note: While the metric in the HIP Evaluation Plan was specific to disenrollment analyses for nonpayment, we present analyses for all reasons.* | Number of unique Goal 4 HIP Plus members having disenrollment reason:  
- Nonpayment  
- Increase in income  
- Disability / pregnancy  
- Other administrative reasons | Number of unique Goal 4 HIP Plus members | *Members can have multiple disenrollments in a year and have multiple reasons for a single disenrollment.*  
- A member is included once in the count for a specific disenrollment reason if any of the member’s disenrollments had the corresponding disenrollment reason code.  
- A member can be included in the counts for multiple disenrollment reasons.  
- Includes all income levels. |

---

158 Disenrollment reason 001 is “Nonpayment of Initial POWER Account Contribution (i.e., never fully enrolled in HIP Plus)”. Disenrollment reason 002 is “Nonpayment of POWER Account Contribution (i.e., disenrolled from HIP Plus WITH 6 month lockout).” Disenrollment reason 003 is “Increased Income + Nonpayment of POWER Account Contribution (i.e., disenrolled from HIP Basic WITHOUT 6 month lockout).”
<table>
<thead>
<tr>
<th>Measure</th>
<th>Metric</th>
<th>Numerator</th>
<th>Denominator</th>
<th>Notes</th>
</tr>
</thead>
</table>
| Measure 2: Probability of members moving from HIP Plus to Basic       | Proportion of members who move from HIP Plus to Basic                   | Number of unique Goal 4 HIP Plus members that moved to HIP Basic in a later month within the calendar year | Number of unique Goal 4 HIP Plus members                                 | • Members can switch plans multiple times during the year. This metric identifies unique members who moved from HIP Plus to HIP Basic at least once in the calendar year.  
  • In the instance of members that had TMA or pregnant at any time during the year, this measure:  
    o Did not include months of enrollment with TMA or pregnancy  
    o Included months in which a member did not have TMA or pregnancy  
    o Considered the benefit plan prior to TMA / pregnancy and the benefit plan post-TMA / pregnancy to identify the potential move between benefit plans |
| Measure 3: Probability of members moving from HIP Basic to Plus        | Proportion of HIP Basic members who moved to HIP Plus                   | Number of unique Goal 4 members having HIP Basic for a particular month and moved to HIP Plus in a later month within the calendar year | Number of unique Goal 4 HIP Basic members                                  | • Members can switch plans multiple times during the year. The metric identifies unique members who experienced a move from HIP Basic to HIP Plus at least once in a calendar year.  
  • In the instance of members that had TMA or pregnant at any time during the year, this measure:  
    o Did not include months of enrollment with TMA or pregnancy  
    o Included months in which a member did not have TMA or pregnancy  
    o Considered the benefit plan prior to TMA / pregnancy and the benefit plan post-TMA / pregnancy to identify the potential move between benefit plans |
| Measure 4: Number of months with Medicaid coverage                    | Number of months with HIP Plus or HIP Basic coverage                   | Total number of months Goal 4 HIP Plus members had HIP coverage in a calendar year | n.a., not a proportion                                                      | • Members can switch plans multiple times during the year. Coverage months include coverage under HIP Plus and HIP Basic.  
  • If members had TMA at any time during the year or were pregnant, we did not include the associated months in this metric. |
Quantitative Results

Measure 1: Probability of disenrollment due to nonpayment\textsuperscript{159}

As discussed earlier, the overall number of disenrollments and the disenrollment rate increased from 2015 – 2018. In 2019, the number and proportion of disenrollments decreased slightly. Additionally, the disenrollment rate for members having nonpayment as a reason has decreased across time (see Exhibit F.4.5a). For this research question, we examined all reasons for disenrollment. Exhibit F.4.11 shows the disenrollment rate for Goal 4 HIP Plus members overall as well as by disenrollment reason. Key observations include:

- The rate and number of disenrollments increased from 13.5% (35,759) in 2015 to 32.4% (127,290) in 2018 and dropped slightly to 29.7% (116,438) in 2019.
- While the disenrollment rate resulting from nonpayment has remained the same, the proportion of disenrollments resulting from an increase in income or other administrative reasons increased from 2015 – 2018, with a slight drop in 2019.
- The proportion of members having disability or pregnancy as a reason for disenrollment from HIP to other Indiana Medicaid programs was fairly steady, ranging from 0.6% in 2015 to 0.8% in 2019.

COVID-19 PHE (2020): As expected, the disenrollment rates for Goal 4 HIP Plus members declined to 7.3% (33,788) in 2020 as a result of the MOE provisions which required Indiana to limit disenrollment and ensure member coverage until the end of the PHE.

State officials have indicated that the increase in members disenrolling for other administrative reasons is due to the alignment of the HIP verification policy with the Medicaid verification policy at the start of 2018. In 2015, the State requested verification on any known information including information entered into the system from Supplemental Nutrition Assistance Program (SNAP) and Temporary Assistance for Needy Families (TANF) determinations (a process in alignment with Medicaid rules). The Medicaid policy which requests ongoing verifications for known program data and applies verified information across programs (inclusive of SNAP/TANF) was put on hold for HIP in 2015 as it resulted in short benefit periods and additional POWER Accounts since individuals would churn off and on the program more frequently. In 2018, HIP changed to a calendar year benefit period and the Medicaid verification rules were reinstated in HIP. With the new verification process, any HIP member losing eligibility due to failure to verify during the calendar year could come back to the same health plan and POWER Account once the verification was resolved.

\textsuperscript{159} Disenrollment reason 001 is “Nonpayment of Initial POWER Account Contribution (i.e., never fully enrolled in HIP Plus)”. Disenrollment reason 002 is “Nonpayment of POWER Account Contribution (i.e., disenrolled from HIP Plus WITH 6 month lockout).” Disenrollment reason 003 is “Increased Income + Nonpayment of POWER Account Contribution (i.e., disenrolled from HIP Basic WITHOUT 6 month lockout).
Exhibit F.4.11: Disenrollment Reason for Goal 4 HIP Plus Members (February 2015 – December 2020)

**Note:** Analyses use the Goal 4 definition of HIP member categories, as described in Exhibit F.4.1

<table>
<thead>
<tr>
<th>Time Period</th>
<th>All Goal 4 HIP Plus Members&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Goal 4 HIP Plus Members Disenrolled&lt;sup&gt;d&lt;/sup&gt;</th>
<th>Goal 4 HIP Plus Members Disenrolled Due to Nonpayment</th>
<th>Goal 4 HIP Plus Members Disenrolled Due to Income</th>
<th>Goal 4 HIP Plus Members Disenrolled Due to Disability or Pregnancy&lt;sup&gt;c&lt;/sup&gt;</th>
<th>Goal 4 HIP Plus Members Disenrolled Due to Other Administrative Reasons&lt;sup&gt;d&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td>%&lt;sup&gt;b&lt;/sup&gt;</td>
<td>Count</td>
<td>%</td>
<td>Count</td>
<td>%&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>2015</td>
<td>265,321</td>
<td>35,759</td>
<td>13.5%</td>
<td>2,166</td>
<td>0.8%</td>
<td>16,229</td>
</tr>
<tr>
<td>2016</td>
<td>346,610</td>
<td>80,981</td>
<td>23.4%</td>
<td>7,750</td>
<td>2.2%</td>
<td>29,775</td>
</tr>
<tr>
<td>2017</td>
<td>369,868</td>
<td>94,221</td>
<td>25.5%</td>
<td>6,859</td>
<td>1.9%</td>
<td>33,719</td>
</tr>
<tr>
<td>2018</td>
<td>392,317</td>
<td>127,290</td>
<td>32.4%</td>
<td>5,504</td>
<td>1.4%</td>
<td>51,873</td>
</tr>
<tr>
<td>2019</td>
<td>392,244</td>
<td>116,438</td>
<td>29.7%</td>
<td>5,679</td>
<td>1.4%</td>
<td>49,593</td>
</tr>
<tr>
<td>2020</td>
<td>461,575</td>
<td>33,788</td>
<td>7.3%</td>
<td>447</td>
<td>0.1%</td>
<td>9,512</td>
</tr>
</tbody>
</table>

<sup>a</sup> Unique count of members having disenrollment in the calendar year. Members can have multiple reasons for disenrollment. Additionally, members can have multiple disenrollment in a year. Adding counts of members for different reasons for disenrollment is not recommended to obtain the number of disenrollment.

<sup>b</sup> Percent calculated as proportion of all Goal 4 HIP Plus members having disenrollment with specific reason.

<sup>c</sup> Less than 1% of the members with disenrollment reason “Disability or Pregnancy” (moved to different Medicaid coverage for disability or pregnancy) have HIP enrollment aid category of Plus Copay (PC) or Pregnant (MA) in the same calendar year. The majority of the HIP Plus members having PC or MA do not have disenrollment. Approximately 8% of the members with this disenrollment reason reenroll within next month and 25% reenroll within the same calendar year with Regular or State Basic or Plus benefit plan.

<sup>d</sup> Includes disenrollment codes 006 – Moved out-of-state, 007 – Did not submit paperwork for redetermination, 008 – Failure to verify information, and 009 – Other (e.g., “deceased,” “incarcerated”).


**Attachment IX: Exhibit IX.3** shows detailed Goal 4 HIP Plus member counts and disenrollment rates by FPL. The majority of the disenrollment due to nonpayment are for members having greater than 100% FPL. As only individuals with income greater than 100% FPL can be disenrolled for nonpayment, subsection Identification of FPL at the beginning of this goal provides a discussion of reasons why the FPL identified for analyses might not be consistent with HIP policy. The trend at the FPL level for all other disenrollment reason codes is similar to the yearly trend – irrespective of income level, there is an increase from 2015 – 2018 and a decrease in 2019 in the disenrollment rate due to an increase in income or other administrative reasons.

We developed logistic models to identify main effects and potential factors that can affect a member’s chance of disenrollment due to nonpayment (see **Attachment IX: Exhibit IX.6a**). For the explanatory factors, we used member characteristics including year of membership, FPL, age, sex, race, income, medically frail indicator, marital status, and number of months with HIP coverage in the calendar year. We limited the analysis to Goal 4 HIP Plus members.

As observed previously, the prevalence of disenrollment having nonpayment as a reason is low (ranging between 0.1% and 2.2% annually from February 2015 – December 2020). Similar to the trend observed based on raw member counts, controlling for member characteristics, members had a lower likelihood to disenroll due to nonpayment in 2018 and 2019 compared to 2017. Interestingly, controlling for the
member characteristics, members appear to have higher likelihood of having disenrollment due to other reasons in 2018 and 2019 compared to 2017.

Compared to non-Hispanic White members, Black HIP Plus members had a higher likelihood of disenrolling due to nonpayment (OR=1.4) than other reasons (OR=1.3). Members ages 40 and older disenrolled less frequently due to nonpayment or other reasons compared to members younger than age 30. These findings are consistent with patterns observed in member enrollment and disenrollment data from February 2015 – December 2019, most notably:

On average, 2.9% of Black members had nonpayment as a reason for disenrollment as compared to 1.9% of non-Hispanic White members. Considering all other reasons for disenrollment, on average, 31.2% of Black members disenrolled for other reasons, compared to 27.6% for non-Hispanic White members.

From 2015 through 2019, on average, 2.7% of members ages 19 – 29 had nonpayment as a reason for disenrollment while 1% of members ages 50 – 59 and 0.70% of members ages 60 and older had nonpayment as reason for disenrolling. The pattern was similar considering all reasons for disenrollment. The average disenrollment rate for members for reasons other than nonpayment for members ages 19 – 29 was 40.9%. In comparison, 31.29% of members ages 50 – 59, and 33.9% of members ages 60 and older had disenrollment due to other reasons.

Measure 2: Probability of moving from HIP Plus to HIP Basic

As discussed in Research Question 1.2, Regular HIP Plus members with income at or less than 100% FPL can move to HIP Basic for not making POWER Account Contribution. These members will lose the more robust HIP Plus benefits. This outcome measure analyzes if the simplified POWER Account payment tier policy helped members maintain their HIP Plus coverage longer (instead of moving from HIP Plus to Basic). Exhibit F.4.12 provides a summary of movement between HIP Basic and HIP Plus by observed FPL. The following are key observations from this summary:

- As discussed in Research Question 1.2, the proportion of Goal 4 HIP Plus members moving from HIP Plus to HIP Basic in a year varied between 5.9% and 8.7% from 2015 – 2019.
- In 2019, 34,083 Goal 4 HIP Plus members moved from HIP Plus to HIP Basic representing approximately 8.7% of the 392,244 HIP Plus individuals.\(^{160}\)
- There was a small number of members with more than one move between HIP Plus and HIP Basic in a calendar year. For instance, in 2019 there were 3,939 Goal 4 HIP members who moved from HIP Basic to HIP Plus and also moved from HIP Plus to HIP Basic.
- A proportion of Goal 4 HIP members having income over 100% FPL appear to move from HIP Plus to HIP Basic (based on enrollment data), which would not be expected as only members with incomes at or under 100% FPL should be able to make this transition. For example, in 2019, 2,152 Goal 4 HIP Plus members with incomes over 100% FPL moved from HIP Plus to HIP Basic (6.0% of all Goal 4 HIP Plus members that moved to HIP Basic). Subsection Identification of FPL

\(^{160}\) By HIP policy HIP Plus members with income at or less than 100% FPL may move to the HIP Basic plan upon nonpayment of POWER Account Contribution (as discussed earlier in Goal 4). These members are sometimes referred to as “eligible to move to Basic”. As discussed earlier in this section, we have included all HIP Plus members instead of limiting the analysis to members having income at or less than 100% FPL.
provides a description of reasons for inconsistencies in FPL amounts as compared to HIP policy. We also conducted additional analyses on this subgroup for 2019 and observe the following:

- Most of the members appear to have 0% FPL in the month they moved from HIP Plus to HIP Basic; we observed a similar pattern for other years.
- The members had Regular or State Plan and moved between these plans: 470 members had State Plan benefits and moved between HIP Plus and HIP Basic; 823 members moved between RP and RB benefit plans; 859 members moved between State and Regular benefit plans. We observed similar pattern for other years.

- COVID-19 PHE (2020): The proportion of HIP Plus members that moved from HIP Plus to HIP Basic was 0.6%. This finding was expected as disenrollment due to nonpayment of POWER Account Contribution (as well as generally) was suspended.

Consistent with the prior analysis, we developed a main effects logistic model to identify potential factors that can affect members moving from HIP Plus to HIP Basic (see Attachment IX: Exhibit IX.7a). For the explanatory factors, we used member characteristics including year of membership, FPL, age, sex, race, marital status, medically frail indicator (limiting to the Goal 4 HIP member population who had the HIP Plus plan at any time in the membership year). The model also included covariates measuring the interactions between FPL and race, and FPL and the frailty indicator. We limited the analysis to Goal 4 HIP Plus members. Key observations based on the estimated regression and February 2015 – December 2019 member enrollment and disenrollment data are:

- HIP Plus members ages 30 and over were less likely to move from HIP Plus to HIP Basic compared to members below 30. Between February 2015 and December 2019, approximately 4.6% of HIP Plus members ages 30 and below moved from HIP Plus to HIP Basic each year. In comparison, 2.3% of HIP Plus members ages 60 and older moved from HIP Plus to HIP Basic.
- Black HIP Plus members had higher likelihood of moving to HIP Basic compared to non-Hispanic White members. During the five years used for analysis, 10.5% of Black HIP Plus members switched to HIP Basic compared to between 6.7% of non-Hispanic White HIP Plus members.
- Members with higher incomes, specifically over 100% of FPL, had a lower likelihood of switching to HIP Basic, compared to members whose income was below 22% of FPL.
- Members identified as medically frail had a higher likelihood of moving from HIP Plus to Basic. The model estimate reflects the pattern observed in the recent years. The proportion of the member population identified as medically frail has increased over time from 2015 – 2019, from 18% of HIP Plus members in 2015 to 35% in 2019. This trend may be attributed to the fact that members who are medically frail receive State Plan benefits.
  - Prior to 2017, the proportion of HIP Plus members identified as medically frail who moved from HIP Plus to Basic was lower in comparison to members not medically frail. In 2015, the proportion of HIP Plus members who moved to HIP Basic was 4.2% for the medically frail and 6.3% for those who identified as not medically frail. However, after 2017, a higher proportion of members identified as medically frail moved from HIP Basic to HIP Plus, compared to members not identified as medically frail. In 2018, 8.5% of medically frail members changed plans from HIP Plus to HIP Basic, compared to 5.6% of the members not medically frail. In 2019, 10.5% of medically frail members changed to HIP Basic, compared to 7.8% of non-medically frail members.
Exhibit F.4.12: Goal 4 Member Movement Between Benefit Plans by FPL (February 2015 – December 2020)

*Note: Analyses use the Goal 4 definition of HIP member categories, as described in Exhibit F.4.1*

<table>
<thead>
<tr>
<th>Time Period</th>
<th>FPL</th>
<th>Goal 4 HIP Plus</th>
<th>Goal 4 HIP Basic</th>
<th>Moved from HIP Basic to HIP Plus</th>
<th>Moved from HIP Plus to HIP Basic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Number</td>
<td>Percent of</td>
<td>Number</td>
<td>Percent of</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Basic</td>
<td></td>
<td></td>
<td>Basic</td>
</tr>
<tr>
<td>2015</td>
<td>0-100% FPL</td>
<td>226,122</td>
<td>120%</td>
<td>156,902</td>
<td>16.6%</td>
</tr>
<tr>
<td></td>
<td>&gt;100% FPL</td>
<td>39,199</td>
<td>13%</td>
<td>4,173</td>
<td>1.4%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>265,321</td>
<td></td>
<td>161,075</td>
<td>16.2%</td>
</tr>
<tr>
<td>2016</td>
<td>0-100% FPL</td>
<td>287,361</td>
<td>100%</td>
<td>191,092</td>
<td>10.2%</td>
</tr>
<tr>
<td></td>
<td>&gt;100% FPL</td>
<td>59,249</td>
<td>20%</td>
<td>9,366</td>
<td>16.4%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>346,610</td>
<td></td>
<td>200,458</td>
<td>10.5%</td>
</tr>
<tr>
<td>2017</td>
<td>0-100% FPL</td>
<td>302,986</td>
<td>100%</td>
<td>217,708</td>
<td>13.2%</td>
</tr>
<tr>
<td></td>
<td>&gt;100% FPL</td>
<td>66,882</td>
<td>22%</td>
<td>13,543</td>
<td>16.5%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>369,868</td>
<td></td>
<td>231,251</td>
<td>13.4%</td>
</tr>
<tr>
<td>2018</td>
<td>0-100% FPL</td>
<td>316,213</td>
<td>100%</td>
<td>203,915</td>
<td>20.1%</td>
</tr>
<tr>
<td></td>
<td>&gt;100% FPL</td>
<td>76,104</td>
<td>25%</td>
<td>15,780</td>
<td>21.1%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>392,317</td>
<td></td>
<td>219,695</td>
<td>20.1%</td>
</tr>
<tr>
<td>2019</td>
<td>0-100% FPL</td>
<td>320,309</td>
<td>100%</td>
<td>179,803</td>
<td>14.5%</td>
</tr>
<tr>
<td></td>
<td>&gt;100% FPL</td>
<td>71,935</td>
<td>23%</td>
<td>11,984</td>
<td>18.8%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>392,244</td>
<td></td>
<td>191,787</td>
<td>14.8%</td>
</tr>
<tr>
<td>2020</td>
<td>0-100% FPL</td>
<td>375,502</td>
<td>100%</td>
<td>134,502</td>
<td>7.5%</td>
</tr>
<tr>
<td></td>
<td>&gt;100% FPL</td>
<td>86,073</td>
<td>23%</td>
<td>7,780</td>
<td>10.7%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>461,575</td>
<td></td>
<td>142,282</td>
<td>7.6%</td>
</tr>
</tbody>
</table>

a FPL is based on the FPL observed in first month of enrollment in the calendar year

b Represents members having at least one month of HIP Plus or HIP Basic enrollment in the calendar year regardless of other enrollment status (this is not the same as “HIP Plus Only” or “HIP Basic Only”). There are some members who are included in both the totals as they have switched between HIP Basic and HIP Plus. Adding the two columns is not recommended at it would overstate the total HIP membership population.

c Members can switch plans multiple times in a calendar year. Analyses of monthly enrollment data showed small number of members having more than two switches between HIP Basic and HIP Plus. Counts reported are unique member counts for each direction of the move between coverage plans and are not count of the number of moves (for members with multiple plan changes). Members with multiple movements between plans are counted in both columns; adding the two columns is not recommended as it will overstate the total number of members switching between HIP plans.


**Measure 3: Probability of moving from HIP Basic to HIP Plus**

This outcome measure analyzes if the simplified POWER Account payment tier policy helped members move from HIP Basic to HIP Plus. Exhibit F.4.12 provides a summary of movement between HIP Basic
and HIP Plus by observed FPL for Goal 4 HIP member population from February 2015 – December 2020. The following are key observations from this summary:

- The proportion of Goal 4 HIP Basic members moving from HIP Basic to HIP Plus annually has increased steadily from 2016 – 2018 (10.5% in 2016, 13.4% in 2017, 20.1% in 2018) before dropping to 14.8% in 2019.
- Goal 4 HIP Basic members with income 100% FPL or less represent over 94% of all members transitioning to HIP Plus in 2015 – 2019.
- There appears to be a small proportion of members having income over 100% FPL who moved from HIP Basic to HIP Plus. For example, in 2019, 2,252 Goal 4 HIP members with incomes over 100% FPL moved from HIP Basic to HIP Plus (approximately 8% of all Goal 4 HIP members that moved to HIP Plus in 2019—consistent to 2016 – 2018). This subgroup of members may reflect a variety of scenarios. For example, individuals transferring from another Medicaid category first enroll in HIP Basic and then have the opportunity to move to HIP Plus. Additionally, HIP Basic members who have income increase over 100% of the FPL remain in HIP Basic while assessing if they will move to HIP Plus. Subsection Identification of FPL also provides a description of reasons for variation in FPL amounts used for analysis. We conducted additional analyses on this subgroup and observed the following pattern:
  - Most of the members appear to have 0%-22% FPL in the month they moved from HIP Basic to HIP Plus; we observed a similar pattern for other years.
  - The members had Regular or State Plan and moved between these plans: 251 members had State Plan benefits and moved between HIP Basic and HIP Plus; 1,439 members moved between RB and RP benefit plans; 562 members moved between State and Regular benefit plans. We observed a similar pattern for other years.
- **COVID-19 PHE (2020):** The proportion of HIP Basic members that moved from HIP Basic to HIP Plus was 7.6%. This finding was expected as new members were enrolled HIP Plus irrespective of income and disenrollment was limited in compliance with the MOE.

An increase in the number of members moving from HIP Basic to HIP Plus could occur for a variety of reasons, including demand for the HIP Plus benefit package, decrease in POWER Account Contribution due to the new payment tier structure or new rollover process, and improved member affordability due to an increase in income.

Consistent with the other outcome measures, we developed a main effects logistic model to identify potential factors that can affect a member’s move from HIP Basic to HIP Plus (see Attachment IX: Exhibit IX.8). For the explanatory factors, we used member characteristics including year of membership, type of residence (metro versus non metro), sex, age, race, marital status, medically frail indicator, income as a percentage of FPL and unemployment rate. The model also included covariates measuring the interactions between FPL category and race, and FPL category and the frailty indicator. We limited the analysis to Goal 4 HIP Basic members. Key observations based on the estimated regression and February 2015 – December 2019 member enrollment and disenrollment data are:

- Female members had a higher likelihood of moving to HIP Plus compared to male members, controlling for other sociodemographic factors. The proportion of female members that moved to HIP Plus was higher compared to male HIP Basic members every year. In 2015, 18% of female

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161 Members with income less than 23% FPL have a monthly POWER Account Contribution amount of $1.
HIP Basic members moved to HIP Plus compared to 14% male HIP members while in 2018, 24% of female HIP Basic members moved to HIP Plus compared to 17% of male HIP Basic members, and in 2019, 17.5% of female HIP Basic members moved to HIP Plus compared to 13.5% of male HIP Basic members.

- Members ages 60 and older had nearly twice the likelihood of moving to HIP Plus compared to members ages 19 – 29 controlling for other sociodemographic factors. The model estimate was consistent with member disenrollment data. For example, for 2015, 12% of members ages 19 – 29 and below changed their plan from HIP Basic to Plus while 27% of members ages 50 and older had a change in plan. This pattern was consistent across all years. In 2018, 19% of members ages 19 – 29 switched from HIP Basic to Plus while switchers comprised 27% of members ages 50 – 59 and 26% of members ages 60 and older.

- Black HIP Plus members had lower likelihood of moving to HIP Plus compared to non-Hispanic White members. During the five years used for analysis, 13.1% of Black HIP Basic members switched to HIP Plus compared to 16.1% of Caucasian HIP Basic members.

- Members who identified as medically frail were more likely to move to HIP Plus than those who did not identify as medically frail.

**Measure 4: Number of months with Medicaid coverage during year**

In Research Question 1.2, we assess continuity of coverage in terms of members having continuous HIP Plus coverage through the calendar year once enrolled. For this research question, the measure of interest was the number of months of HIP coverage in a calendar year for Goal 4 HIP Plus members (coverage could be HIP Plus or HIP Basic).

Goal 4 HIP Plus members include members who were only in HIP Plus during the year as well as members moving between HIP Plus and HIP Basic (HIP Switchers). We calculated the months covered (fully enrolled) for these two separate groups. Exhibit F.4.13a and Exhibit F.4.13b shows distribution of members by number of months with HIP coverage (HIP Basic or HIP Plus) in a calendar year. Key observations include:

- During most years, at least 50% of Goal 4 HIP Plus members (HIP Plus Only and HIP Switchers) had 10 – 12 months of coverage within the year.

- In 2019, the proportion of Goal 4 HIP Switchers having 10 – 12 months coverage increased slightly from 55.4% in 2018 to 65.6% in 2019, while the proportion of switchers having 7 – 9 months of coverage decreased from 24.1% in 2018 to 20.1% in 2019. Approximately 80% of these members who change plans (HIP Basic/HIP Plus) have more than seven months of coverage in a year (pattern is consistent across all five years)

- Members with Goal 4 HIP Plus Only coverage during a year appear to have had similar distribution of coverage months for 2016 – 2019:
  
  o On average, 17% of members had 1 – 3 months coverage, 16% members have 4 – 6 months coverage, 16% members had 7 – 9 months, and 50% had 10 – 12 months coverage across all the years.

**COVID-19 PHE (2020):** In 2020, the Goal 4 HIP Plus and HIP Switchers had a slightly larger proportion of 10 – 12 months Medicaid coverage and a slightly smaller proportion of 4 – 6 months Medicaid coverage, as compared to the proportions in 2015 – 2019.
Exhibit F.4.13a: Number of Months with Medicaid Coverage within the Year – Goal 4 HIP Plus Only Population (February 2015 – December 2020)

Note: Analyses use the Goal 4 definition of HIP member categories, as described in Exhibit F.4.1


Exhibit F.4.13b: Number of Months with Medicaid Coverage within the Year – Goal 4 HIP Switchers Population\(^a\) (February 2015 – December 2020)

\(^a\) This population includes HIP Plus members who at some point in the calendar year had at least one month of HIP Basic enrollment.

Research Question 2.2 Findings Summary - Is there a relationship between POWER Account payment tiers and continued enrollment in Medicaid?

The overall number of disenrollments and the disenrollment rate increased from 2015 – 2018. In 2019, the number and proportion of disenrollments decreased slightly. Additionally, the disenrollment rate for members having nonpayment as a reason has decreased across time.

The prevalence of disenrollment having nonpayment as a reason is low. Similar to the trend observed based on raw member counts, controlling for member characteristics, members had a lower likelihood to disenroll due to nonpayment in 2018 and 2019 compared to 2017. Interestingly, controlling for the member characteristics, members appear to have higher likelihood of having disenrollment due to other reasons in 2018 and 2019 compared to 2017.

The number and proportion of HIP Plus members (who could be impacted by POWER Account Contribution payment policies) moving from HIP Plus to HIP Basic in a year has been variable across the years (largest in 2019). Goal 4 HIP Plus members who were Black had a higher likelihood of disenrollment due to nonpayment as well as a higher likelihood of moving to HIP Basic compared to non-Hispanic White HIP Plus members. However, even after controlling for sociodemographic characteristics, there was a higher likelihood of disenrollment for all other reasons (other than nonpayment) in 2018 and 2019, compared to 2017. Given both disparities and disenrollment reasons other than nonpayment, research investigating underlying causes for disenrollment may provide insights for targeted strategies that more fully engage all subpopulations.

The proportion of Goal 4 HIP Basic members moving from HIP Basic to HIP Plus annually has increased steadily from 2016 – 2018 before declining in 2019. Goal 4 HIP Basic members with income 100% FPL or less represent over 94% of all members transitioning to HIP Plus in 2015 – 2019. An increase in the number of members moving from HIP Basic to HIP Plus could occur for a variety of reasons, including demand for the HIP Plus benefit package, decrease in POWER Account Contribution due to the new payment tier structure or new rollover process, and improved member affordability due to an increase in income.

During most years, at least 50% of Goal 4 HIP Plus members (HIP Plus Only and HIP Switchers) had 10 – 12 months of coverage within the year. Approximately 80% of members who change plans (HIP Basic or HIP Plus) have more than 7 months of coverage in a year.

Primary Research Question 2.3 – Do HIP members who receive rollover have greater coverage continuity than members who do not receive rollover?

HIP members receiving qualifying preventive services can receive rollover in the following year. HIP Plus members having remaining funds at year-end that received qualifying preventive services can double the rollover amount (portion of unused POWER Account Contribution payments). Members may use these rollover funds to reduce or offset member POWER Account Contribution payments, which increases the affordability of HIP Plus coverage and potentially increases members maintaining coverage. Section B: Summary of HIP Demonstration provides additional detail on the State’s rollover policy.

Starting in 2018, the State made all member benefit periods equal to the calendar year. Prior to 2017, members enrolling multiple times within a year had multiple POWER Accounts and the State applied rollover based on the individual member benefit period (based on the dates the member enrolled).
This research question assesses whether receipt of rollover supports greater continuity of coverage for HIP Plus members. Since the change to calendar year rollover and to the new POWER Account Contribution payment tier was implemented from 2018, Lewin presents observations from 2017 – 2020 in this report using descriptive statistics. Since the State suspended all cost-sharing during the COVID-19 PHE and thereby also suspended disenrollment due to nonpayment of POWER Account Contribution, the period of analysis for this will be limited to before the COVID-19 PHE.

**Brief Summary:** Compared to 2017, the disenrollment rates declined and the average length of coverage increased for members receiving rollover status in 2019. Approximately 36% of Goal 4 HIP Plus members in 2019 received rollover benefits; approximately 67% (88,722) had coverage between 10 and 12 months. Goal 4 HIP Plus members receiving rollover benefits had a higher disenrollment rate (35.0%) compared to members identified as not having earned rollover (26.7%).

**Quantitative Methodology**

We calculated two outcome measures to address this research question:

- Number of months with Medicaid coverage
- Probability of disenrollment

Exhibit F.4.14 outlines the specifications we used to calculate the outcome measures. Both HIP Basic and Plus members can earn rollover (see Exhibits B.6 and B.7). For this analysis, we identified any member having earned rollover (irrespective of Basic or Plus membership) in the prior calendar year (i.e., 2018) and having enrollment in the year of analyses (i.e., 2019) as receiving rollover in the current year of analyses (i.e., 2019).

Since this research question is associated with the impact of POWER Account payment tiers, we focused our analyses on Goal 4 HIP Plus members. Based on four years of available data, the majority of members earning rollover are enrolled in HIP Plus in the following year. For example, approximately 162,328 members had earned rollover in 2018 and 87% of the members were enrolled in HIP Plus (140,829 members out of 162,328), approximately 13% of whom had changes between Basic and Plus; the remaining 13% of 2019 HIP members that had earned rollover in 2018 enrolled only in HIP Basic plan.

We present summary results for 2017 through 2020 (based on enrollment data from 2016 – 2020) in this report due to the change in the benefit period definition effective in 2018 as described previously. We also note that the rollover results from 2017 are not comparable due to this change.

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162 As earned rollover information was captured based on benefit period and some members could have multiple benefit periods, this approach may overstate members receiving rollover in 2017.
Exhibit F.4.14: Goal 4 Hypothesis 2 Research Question 2.3 Outcome Measure Calculation

<table>
<thead>
<tr>
<th>Measure</th>
<th>Metric</th>
<th>Numerator</th>
<th>Denominator</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measure 1: Number of months with Medicaid coverage</td>
<td>Number of months with HIP coverage</td>
<td>Total number of months that Goal 4 HIP Plus members had HIP coverage in a calendar year</td>
<td>n.a., not a proportion</td>
<td>Members can switch plans (HIP Plus / HIP Basic) multiple times during the year. Coverage months include coverage with either HIP Plus or Basic plan. If members had TMA at any time during the year or were pregnant, we did not include the associated months in this metric.</td>
</tr>
<tr>
<td>Measure 2: Probability of Disenrollment</td>
<td>Proportion of HIP Plus members who disenrolled</td>
<td>Unique number of Goal 4 HIP Plus members by disenrollment reason:  • Nonpayment  • Increase income  • Disability / pregnancy  • Other administrative reasons</td>
<td>Unique number of Goal 4 HIP Plus members</td>
<td>Members can have multiple disenrollment in a year and multiple reasons for a disenrollment. We counted members once if any of their disenrollment had a specific reason code. Member can be included in the counts for multiple disenrollment reasons.</td>
</tr>
</tbody>
</table>

Quantitative Results

State applies member earned rollover during first quarter of the calendar year. Approximately 140,000 HIP members received earned rollover in 2019 and 2020. Exhibit: F.4.15 shows the distribution of Goal 4 HIP Plus members by the number of months of coverage, comparing the sub-populations receiving and not receiving rollover.

- About 36% (140,829) of Goal 4 HIP Plus members in 2019 (392,244) had earned rollover in the 2018 calendar year and were identified to receive rollover in 2019.
- Goal 4 HIP Plus members receiving rollover appear to have longer coverage compared to those not receiving rollover (includes new and returning members). In 2019, approximately 67% (88,722) of Goal 4 HIP Plus members receiving rollover and 47% (117,913) of Goal 4 HIP Plus members not receiving rollover had between 10 – 12 months of HIP coverage.
Exhibit F.4.15: Distribution of Goal 4 HIP Plus Members by Number of Coverage Months for Members Not Receiving (No) and Receiving (Yes) Rollover (January 2017 – December 2020)

Note: Analyses use the Goal 4 definition of HIP member categories, as described in Exhibit F.4.1


Note: The coverage months are HIP coverage (HIP Basic or HIP Plus). The rollover process prior to 2018 was different as described above. As such, comparisons between the 2017 and 2018 results are not appropriate. Analyses for this goal do not include any HIP Basic members in the analysis year, irrespective of whether member had earned rollover from previous year.
Exhibit F.4.16: HIP Plus Members Disenrollment Rate by Not Receiving (No) and Receiving (Yes) Rollover (2017 – 2020)

*Note: Analyses use the Goal 4 definition of HIP member categories, as described in Exhibit F.4.1*

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Received Rollover (Yes/No)</th>
<th>All Goal 4 HIP Plus Members</th>
<th>Goal 4 HIP Plus Members Disenrolled</th>
<th>Goal 4 HIP Plus Members Disenrolled Due to Nonpayment</th>
<th>Goal 4 HIP Plus Members Disenrolled Due to Income</th>
<th>Goal 4 HIP Plus Members Disenrolled Due to Pregnancy</th>
<th>Goal 4 HIP Plus Members Disenrolled Due to Other Administrative Reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td>Count</td>
<td>%</td>
<td>Count</td>
<td>Count</td>
<td>Count</td>
<td>Count</td>
</tr>
<tr>
<td>2017</td>
<td>Yes</td>
<td>119,785</td>
<td>23,061</td>
<td>1,837</td>
<td>8,837</td>
<td>511</td>
<td>12,092</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>19.3%</td>
<td>1.5%</td>
<td>7.4%</td>
<td>0.4%</td>
<td>10.1%</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>250,083</td>
<td>71,160</td>
<td>5,022</td>
<td>24,882</td>
<td>2,570</td>
<td>39,491</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>28.5%</td>
<td>2.0%</td>
<td>9.9%</td>
<td>1.0%</td>
<td>15.8%</td>
</tr>
<tr>
<td>2018</td>
<td>Yes</td>
<td>165,732</td>
<td>60,765</td>
<td>2,212</td>
<td>24,344</td>
<td>776</td>
<td>34,094</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>36.7%</td>
<td>1.3%</td>
<td>14.7%</td>
<td>0.5%</td>
<td>20.6%</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>226,585</td>
<td>66,525</td>
<td>3,292</td>
<td>27,529</td>
<td>2,135</td>
<td>34,305</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>29.4%</td>
<td>1.5%</td>
<td>12.1%</td>
<td>0.9%</td>
<td>15.1%</td>
</tr>
<tr>
<td>2019</td>
<td>Yes</td>
<td>140,829</td>
<td>49,267</td>
<td>2,187</td>
<td>20,576</td>
<td>513</td>
<td>26,365</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>35.0%</td>
<td>1.4%</td>
<td>14.6%</td>
<td>0.4%</td>
<td>18.7%</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>251,415</td>
<td>67,171</td>
<td>3,492</td>
<td>29,017</td>
<td>2,471</td>
<td>32,687</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>26.7%</td>
<td>1.4%</td>
<td>11.5%</td>
<td>1.0%</td>
<td>13.0%</td>
</tr>
<tr>
<td>2020</td>
<td>Yes</td>
<td>141,461</td>
<td>14,991</td>
<td>288</td>
<td>5,024</td>
<td>146</td>
<td>9,130</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10.6%</td>
<td>0.2%</td>
<td>3.6%</td>
<td>0.1%</td>
<td>6.5%</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>320,114</td>
<td>18,797</td>
<td>159</td>
<td>4,488</td>
<td>700</td>
<td>12,893</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5.9%</td>
<td>0.0%</td>
<td>1.4%</td>
<td>0.2%</td>
<td>4.0%</td>
</tr>
</tbody>
</table>


Note: The rollover process prior to 2018 was different as described above. As such, comparisons between the 2017 and 2018 results are not appropriate. Analyses for this goal do not include any HIP Basic members in the analysis year, irrespective of whether member had earned rollover from previous year.
The disenrollment rate among Goal 4 HIP members that received rollover and who did not receive rollover (includes new and returning members) varied across years (see Exhibit: F.4.16). In 2018 and 2019, the overall disenrollment rate for HIP Plus members who received rollover was higher (2018: 36.7%, 2019: 35%) relative to HIP Plus members who did not receive rollover (2018: 29.4%, 2019: 26.7%). In 2018, HIP Plus members who received rollover had slightly lower disenrollment rates due to nonpayment compared to members who did not receive rollover. However, in 2019, members who received rollover had a higher disenrollment rate. This finding is unexpected as it was anticipated that members with rollover would have lower disenrollment rates. Further exploration to examine the drivers associated with higher disenrollment rates among those members who received rollover is recommended.

Using negative binomial models, we found that the number of months of continuous coverage was 1.2 times higher for members who received rollover (IRR=1.23), compared to members who did not receive rollover, while controlling for beneficiary sociodemographic characteristics. However, the number of months of continuous coverage was lower after 2017 (IRR=0.92 in 2018 and IRR=0.94 in 2019, compared to 2017).

Using logistic regression models controlling for beneficiary sociodemographic characteristics, we found that members who received rollover had a lower likelihood of disenrollment due to nonpayment (OR = 0.69), but a higher likelihood of disenrollment due to other reasons (OR = 1.03). While members had an overall lower likelihood of disenrollment due to nonpayment after 2017 (OR=0.86 in 2018 and OR =0.85 in 2019, relative to 2017), they had a higher likelihood of disenrollment due to other reasons after 2017 (OR=1.43 in 2018 and OR =1.20 in 2019, relative to 2017).

**COVID-19 PHE (2020):** As expected, the disenrollment rates declined in 2020 in response to the MOE provisions which required Indiana to limit disenrollment and ensure member coverage until the end of the PHE.

Since 2017, the disenrollment rate declined and the length of coverage within a year increased among Goal 4 HIP Plus members receiving rollover status. Compared to members not receiving rollover status, the length of coverage was higher, but the disenrollment rates were also higher among members receiving rollover status. These results suggest that the receipt of rollover supports greater continuity of coverage for HIP Plus members.

**Research Question 2.3 Findings Summary – Do HIP members who receive rollover have greater coverage continuing than members who do not receive rollover?**

Goal 4 HIP Plus members receiving rollover appear to have longer coverage compared to those not receiving rollover. In 2019, approximately 67% of Goal 4 HIP Plus members receiving rollover and 47% of Goal 4 HIP Plus members not receiving rollover had between 10 and 12 months of HIP coverage.

The disenrollment rate among Goal 4 HIP members that received rollover and who did not receive rollover varied across years. In 2018 and 2019 the overall disenrollment rate for HIP Plus members who received rollover was higher relative to HIP Plus members who did not receive rollover. In 2018 HIP Plus members who received rollover had slightly lower disenrollment rates due to nonpayment compared to members who did not receive rollover. However, in 2019, members who received rollover had a higher disenrollment rate. This finding is surprising and further exploration is needed to better understand the drivers associated with higher disenrollment rates among those members who received rollover.
Since 2017, the disenrollment rate declined and the length of coverage within a year increased among Goal 4 HIP Plus members receiving rollover status. Compared to members not receiving rollover status, the length of coverage was higher, but the disenrollment rates were also higher among members receiving rollover status. These results suggest that the receipt of rollover supports greater continuity of coverage for HIP Plus members.

**Goal 5 – Ensure HIP program policies align with commercial policies, are understood by members, and promote positive member experience and minimize gaps in coverage**

This goal tests whether HIP policies align with commercial policies, are understood by members, and result in a positive member experience for all HIP members, including minimizing coverage gaps. The State designed its HIP policies to mirror a commercial market health insurance plan, including the use of copayments and monthly payment amounts (varying by benefit plan), offering members choices between benefit plans and managed care entities (MCEs), and including incentives to obtain preventive services and disincentives to continue tobacco use. Section B: Summary of HIP Demonstration provides a detailed description of the differences between the HIP Plus and the HIP Basic benefit plans, and the structure of the POWER Account and members’ POWER Account Contributions. Due to the COVID-19 PHE, several HIP policies (e.g., choice of benefit plan, cost-sharing, tobacco surcharge) were not in effect during the final year of the evaluation period.

Starting immediately after the end of the 2018 – 2020 waiver period in January 2021, the State suspended the six-month non-eligibility criterion pending Supreme Court resolution of Azar v. Gresham and in compliance with the newly approved waiver terms and conditions. Members will not be “locked out” for nonpayment of POWER Account Contributions. Research questions related to non-eligibility will not be addressed and analyzed for the Summative Evaluation Report since the State has not reinstated the policy (pending lawsuit decision). Additionally, as a result of HIP policies being suspended during the COVID-19 PHE (starting in March 2020), the ability to analyze research questions related to member knowledge of HIP policies on POWER Account Contribution, preventive care, and rollover was limited.

This Summative Evaluation Report examines three hypotheses associated with Goal 5—whether HIP members understand program policies; satisfaction with the HIP program; and if HIP members subject to non-eligibility periods are similar to commercial market populations.

**Hypothesis 1 – Beneficiaries who are required to participate in HIP policies will understand program policies.**

Lewin conducted analyses related to this hypothesis by analyzing feedback gathered during key informant interviews with State officials, MCE executives, provider associations, advocacy organizations, and members. This Summative Evaluation Report includes findings from key informant interviews and analyses of program administrative data.

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Primary Research Question 1.1 – Are HIP members knowledgeable about policies on payment of POWER Account Contributions, preventive care, and rollover?

HIP Basic and Plus members can roll over their unused POWER Account Contributions to the next year if their annual health care expenses are less than the annual $2,500 ceiling. When HIP members receive preventive care services, they are eligible for additional rollover. Section B: Summary of HIP Demonstration provides information about the rollover and preventive care policies affiliated with the POWER Account. Refer to Goal 4 for additional information on member knowledge of POWER Accounts.

Brief Summary: Due to the COVID-19 PHE policy changes, key informants were asked to recall their knowledge of HIP policies related to POWER Account requirements and rollover prior to March 2020. Subsequently the time frame between the interviews and the recall period was more than eight months. Consequently any findings should be interpreted with caution given the likelihood of recall bias.

Lewin found that members’ knowledge differs on various HIP policies. Notably, several members reported not understanding the POWER Account and rollover, and MCE executives and providers cited the length and complexity of processes, such as reconciliation, as a source of confusion to members and their associated refund.

Results of Qualitative Analysis

Overall, MCE executives and State officials indicated that their collaboration specific to member communications has been critical in conveying HIP policies, particularly in regard to layered communication strategies and especially during the COVID-19 PHE. State officials described the State communications team’s distinct focus on clarity, simplification, and standardization across all HIP materials, including digital and print. The State communications team’s strategy also involves sharing their materials with MCEs and other partner organizations to support member understanding regardless of how they learned about HIP. As mentioned in Goal 4, the State collaborated closely with the MCEs to standardize language related to the policy changes enacted in response to the COVID-19 PHE.

In both 2019 and 2020 interviews, MCE executives and State officials indicated that rural members and members who are less engaged (e.g., lower HIP utilization) and have lower health literacy are harder to reach (both in terms of physical location and access to resources such as community partners and the Internet). This challenge was particularly evident during the COVID-19 PHE, when most communications had to be virtual. In 2019 interviews, MCE executives indicated that some challenges members and staff reported include explaining the POWER Account Contribution (and its distinction from a premium) and rollover. Some MCEs noted that the long reconciliation process for POWER Account Contributions could be a source of confusion to members as it might impact the delivery and receipt of the rollover benefit. In 2020 interviews, one MCE executive noted that rollover remains a significant challenge to members, and customer service staff expressed difficulty explaining rollover policies and POWER Account structure in simple ways to help members understand.

Member understanding of POWER Account Contributions and rollover varied in both 2019 and 2020 interviews. In 2019, two of the eight interviewees who responded to follow-up questions about POWER Account Contributions knew that they could rollover remaining balances, five of eight knew what happens if they did not make a payment, and three of eight knew that they could keep unused funds if they left HIP. Regarding rollover payments, two of the eight interviewees stated that they were aware that rollover was an option when health care expenses are less than the $2,500 per year, while six of the eight did not know,
and nine did not respond. In 2020, six of the 15 interviewees who responded to follow-up questions about POWER Account Contributions knew that they could roll over remaining balances and eight of 15 knew what happens if they did not make a payment. Regarding rollover payments, three of the 15 stated that they were aware that rollover was an option when health care expenses are less than the $2,500 per year. The low number of respondents does not allow for general conclusions.

**Findings from the key informant interviews with State officials, MCE executives, and members indicate that opportunities exist to further support member understanding of policies related to POWER Account Contributions, rollover, and preventive care. Findings should be interpreted with caution given the lengthy time frame between the recall time period and the interviews and the likelihood of information bias. Research Question 1.1 Findings Summary – Are HIP members knowledgeable about policies on payment of POWER Account Contributions, preventive care, and rollover?**

Overall, MCE executives and State officials indicated that their collaboration specific to member communications has been critical in conveying HIP policies, particularly in regard to layered communication strategies and especially during the COVID-19 PHE. State officials described the State communications team’s distinct focus on clarity, simplification, and standardization across all HIP materials, including digital and print. Member understanding of POWER Account Contributions and rollover varied in both 2019 and 2020 interviews.

Findings from the key informant interviews with State officials, MCE executives, and members indicate member understanding of POWER Account Contributions and rollover varied in both 2019 and 2020 interviews. All interviews suggested that opportunities exist to further support member understanding of policies related to POWER Account Contributions, rollover, and preventive care. Findings should be interpreted with caution given the lengthy time frame between the recall time period and the interviews and the likelihood of information bias.

**Primary Research Question 1.2 – Do HIP members subject to non-eligibility periods understand program requirements and how to comply with them?**

Due to the COVID-19 PHE, Lewin did not conduct a Longitudinal Member Survey in 2020 and 2021 (see Exhibit D.3). Key informant interviews from 2020 and 2021 also did not ask directly about non-eligibility periods due to the COVID-19 PHE. Moreover, 2019 interviews did not yield sufficient information on this topic. Given the latter impacts due to the COVID-19 PHE, this research question was not answered.

**Primary Research Question 1.3 – Do HIP members subject to non-eligibility periods understand the non-eligibility period consequence for non-compliance with program requirements?**

Primary Research Questions 1.2 and 1.3 address whether HIP members who are subject to non-eligibility or lockout periods understand the program requirements and the consequences for non-compliance. Lockout periods in HIP refer to the six-month disenrollment period that HIP Plus members are subjected to if they do not pay their HIP POWER Account Contribution. Due to the PHE, the non-eligibility period and lockout policies were not in effect and were not discussed during the 2020 key informant interviews.

**Research Question 1.3 Findings Summary – Do HIP members subject to non-eligibility periods understand the non-eligibility period consequence for non-compliance with program requirements?**

From the 2019 key informant interviews, there appears to be limited member understanding of the lockout period for nonpayment of POWER Account Contributions, although more surveying of members is needed.
Primary Research Question 1.4 – What are common barriers to compliance with program requirements that have non-eligibility period consequences for non-compliance?

Lockout periods in HIP refer to the six-month disenrollment period that individuals are subjected to if they do not pay their HIP POWER Account Contribution. Due to the COVID-19 PHE, disenrollment was suspended and was not discussed during the 2020 key informant interviews.

Research Question 1.4 Findings Summary – What are common barriers to compliance with program requirements that have non-eligibility period consequences for non-compliance?

From the 2019 key informant interviews, common barriers to compliance with POWER Account Contributions include navigating the online payment system, inaccurate statements, and the financial burden of the payment amount. Some interviewees noted the variety of avenues to make a payment (e.g., phone, in-person, online) as supporting compliance.

Hypothesis 2 – Beneficiaries will be satisfied with the HIP program.

Lewin conducted analyses related to this hypothesis by analyzing information received from the key informant interviews.

Primary Research Question 2.1 – What is the level of satisfaction with HIP among HIP members?

Satisfaction among HIP members with the HIP program is important to HIP’s implementation across the State. Satisfaction was assessed using qualitative findings that asked members to rank how satisfied they were with their overall experience with HIP in the past six months (e.g., access to care and support, HIP policies, and processes for payment, eligibility, and enrollment). Key informant interviews with State officials, MCE executives, provider associations, and advocacy organizations also reflected some of these themes in their responses related to their understanding of member satisfaction.

Brief Summary: Among interviewees, there was a general satisfaction with the HIP program, including access to a large network of providers, health insurance coverage not previously accessible, specialty care (e.g., chronic disease, dental, vision), and care management supports. Members continued to report challenges related to the required documentation members submit for eligibility determination and confusion about the plan types and associated requirements. During the COVID-19 PHE, stakeholders indicated satisfaction with telehealth services and, more broadly, the State’s policy changes (i.e., turning off cost-sharing and expanding benefits). While FSSA officials, MCE executives, provider associations, and advocacy organizations agreed that the COVID-19 PHE has provided opportunities for them to address health disparities with greater urgency, interviewees reiterated a required focus on other persistent access issues, such as broadband, equipment access, and digital literacy to truly penetrate the barriers and areas of dissatisfaction reported by members.

Results of Qualitative Analysis

Key Informant Interviews – Members

The majority of members interviewed in 2019 and 2020 indicated they were either “very satisfied” or “somewhat satisfied” with the HIP program, with a greater proportion of individuals indicating “very satisfied” in 2020.
Information from the 2019 member key informant interviews revealed that 24 of the 27 interviewees had some level of satisfaction with the program, with 16 identifying as “very satisfied” and eight as “somewhat satisfied.” The remaining responses included two that were “somewhat dissatisfied” and seven that did not know or did not respond. While members responding as very satisfied shared positive experiences with level of coverage, payment options, available physicians, and ease of use, members responding as somewhat satisfied focused on their negative experiences. The top reasons for a somewhat satisfied rating included negative feedback related to process breaks such as miscommunication of information and lost documentation. The top reasons for a somewhat dissatisfied response included plan requirements, the number of available physicians, and the location options available. Data from a 2019 email survey administered by FSSA with 883 respondents found that 61% of members are “very satisfied” with HIP and 26% are “satisfied.” The survey also found that older members are more satisfied with HIP compared to younger members. Over half of the responding members who left the plan left because they obtained a new job and/or were no longer eligible for HIP.

Information from the 2020 member key informant interviews indicated satisfaction with the HIP program, with 21 of 28 question respondents identifying as “very satisfied” and two as “somewhat satisfied” with the program. One interviewee was “somewhat dissatisfied”, and one was “very dissatisfied”; the remaining three did not respond. Among members who reported some level of satisfaction, findings from 2019 and 2020 were generally the same. Members reported satisfaction with the level of coverage and physician availability, and reported some level of dissatisfaction with plan requirements, specifically the approval waiting period and documentation burden. Improvement opportunities suggested across member interviews included:

- Increase medical coverage, such as broader coverage for dental and vision;
- Expand assistance for conditions surrounding social determinants of health, such as grocery incentives;
- Improve accessibility, such as a centralized source to search for doctors who accept HIP; and
- Provide more detailed program information, such as about the different types of programs and benefits offered by HIP.

**Key Informant Interviews – FSSA Officials and MCE Executives**

FSSA officials and MCE executives regularly monitor member satisfaction through mail, e-mail, and phone call surveys. The MCE executives interviewed in 2020 indicated that members appreciate the ability to access preventive care (including dental and vision) and manage chronic conditions under HIP, a finding consistent with 2019 interviews. Further, MCE executives shared that the majority of enrolling members move to HIP Plus coverage, potentially indicating satisfaction with the HIP Plus plan specifically. One MCE executive noted that members find “peace of mind” with the HIP program.

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164 This survey was distributed via email by FSSA and yielded a 2.2% response rate (883 responses). The contractor conducting the survey indicated that this response was a statistically significant representation of the approximately 400,000 HIP members within ±3% and reflected a “good representation” across all 10 districts of the state. Lewin notes that the survey’s function was limited to informing the State’s communications strategy, and that its reliance on email to distribute the survey introduced notable selection bias inconsistent with surveys conducted for quantitative evaluation purposes.

165 This finding was anecdotally reported based on the time period before the COVID-19 PHE.
overall as they are able to seek care and services without large medical bills. Other areas of satisfaction identified by MCE executives include access to:

- Specialty care, including dental and vision;
- Transportation services;
- Opioid and substance use resources, including treatment; and
- Care management supports.

Consistent with findings from 2019, 2020 interviews with MCE executives and FSSA officials indicated that the overall complexity and nuance associated with the HIP program and policies is the most significant area of dissatisfaction among members. Findings across key informant interviews from 2019 had previously indicated a similar source of dissatisfaction as a result of program complexity, both among members and program administrators. In 2020, one MCE executive specifically highlighted the complexity of the various plans (including maternity plan options), noting that although members do not select an MCE, members often express confusion about their role in selecting a suitable plan (i.e., members think they select their MCE but according to the policy, members do not select an MCE). One MCE executive also shared that some members are less satisfied with and confused by the length of time between when they engage in preventive services and when they receive the associated reward in their rollover, post-reconciliation. One FSSA official noted that eligibility processes, including income guidelines, presumptive eligibility, Fast Track, and the logistics of payments are a source of confusion for members. Another FSSA official noted the main barrier to presumptive eligibility is a lack of transportation to presumptive eligibility providers in rural areas, and moreover, a lack of presumptive eligibility providers in rural areas.

Further, while all MCE executives interviewed in 2020 indicated that members are generally satisfied with dental service accessibility via HIP, some members are dissatisfied with the extent of dental coverage. For example, one MCE executive shared an anecdote from a member who stated that the limitations on the number of visits annually (i.e., maximum two procedures) can be prohibitive. Another MCE executive added that dental providers do not always understand the benefits packages that members have and experience challenges with determining what procedures require prior authorization, creating a potential lag in access to services. Despite these challenges, one FSSA staff noted that member satisfaction continues to improve each year, and as the eligibility system has matured, the ability to communicate with members more effectively has become easier.

As HIP policies changed during the COVID-19 PHE, MCE executives and FSSA officials received feedback from a variety of stakeholders, including members and providers, about how these changes were impacting satisfaction with HIP. FSSA officials noted that, since the State was aware of the COVID-19 pandemic developments and pending PHE, the team was able to adjust policies quickly. One FSSA official added that with the HIP Workforce Bridge program approved to begin after the PHE, transitions from HIP will be smoother once the PHE ends. FSSA officials also noted that MCEs were critical in communicating with members and ensuring they understood policy changes, and the program’s design more broadly (e.g., reimbursement policies) allowed for provider coverage and access without interruption throughout the pandemic. All MCE executives noted that members were very satisfied when the PHE policy changes went into place, including waiving of cost-sharing with continued security of benefits and access to care. Two MCEs added that the policy changes, including the removal of cost-sharing, gave members and MCE
staff the opportunity to focus on other pressing needs. Pressing needs raised by members and MCEs included childcare, rent support, and behavioral health.

MCE and State staff as well as members highlighted satisfaction with telehealth during the COVID-19 PHE. Several FSSA officials shared that the intent for telehealth benefits and policies to remain in effect beyond the COVID-19 PHE was demonstrated by the introduction of two bills to the state legislature supporting continued access to telehealth (Senate Bill 3 and Senate Bill 377). Several FSSA officials and MCE executives reported that members have benefited from behavioral health services provided virtually.

Although members were generally satisfied with HIP during the COVID-19 PHE, one MCE noted that access to preventive care during the initial months of the pandemic likely slowed progress made (prior to the pandemic) with engaging members in preventive services. Additionally, even though one FSSA official noted that telehealth helps the State address social determinants of health (e.g., geographic, transportation, child care barriers), members experienced challenges with accessing broadband, internet-enabled devices, operability of technology, and translation services. Additional areas of low satisfaction during the pandemic include:

- Availability of COVID-19 testing sites;
- Ability to disenroll from Medicaid in a timely manner; and
- Ability to move more easily between HIP plans.

**Key Informant Interviews – Provider Associations and Advocacy Organizations**

Provider associations and advocacy organizations work intimately with members, often in one-on-one settings, to provide personalized support as they navigate the HIP program. As a result, these stakeholders receive anecdotal, real-time feedback from members on a regular basis.

Interviews with 36 providers in 2019 offered insights to provider understanding of member perceptions on HIP. These interviews included physicians, nurses, navigators, and administrators. Most of the providers interviewed reported that HIP members are satisfied with their plan. Of the 21 providers who answered the question about overall member satisfaction, five said they are “very satisfied” and 12 said they are “somewhat satisfied.” One of the 36 providers said that HIP members are “somewhat dissatisfied.” Providers frequently agreed that access to coverage, including dental and vision services, contributed to member satisfaction. As part of the 2020 key informant interviews, one advocacy organization shared that members reported satisfaction with obtaining coverage among individuals who had not previously had coverage for an extended period of time (e.g., previously incarcerated) or had never had coverage. Unlike findings from the 2019 interviews, provider associations did not report loss of coverage, confusing language, or poor provider selection among areas of dissatisfaction with HIP members.

Similar to FSSA officials and MCE executives, provider associations and advocacy organizations interviewed in 2020 reported several areas of satisfaction as a direct result of the COVID-19 PHE policy changes. Interviewees shared that these changes were a critical way to relieve members of additional burden during the pandemic. Advocacy organizations added that, while the pandemic exposed and led to various care gaps across the country, the State’s policy changes reduced HIP member burden and subsequently alleviated care gaps. The advocacy organizations shared that they expect improvements in member access to care, including by race and ethnicity, during the COVID-19 PHE. Specific to telehealth, interviewees agreed that flexibilities in virtual care delivery options improved access to health care. One provider association noted that behavioral health providers were able to increase their caseloads,
meeting with a greater number of members virtually as compared to in-person sessions. Further, behavioral health providers reported dramatic decreases in no-show rates, which were typically higher among this patient population. Additional areas of satisfaction noted among provider associations and advocacy organizations included:

- Rapid program application turnover time (14 days during PHE versus 45 days typically);
- Less paperwork requirements, including more flexible allowance of authorized representatives to support an individual’s application;
- Flexible provider point-of-care requirements, allowing providers to see patients in places different from where they are normally credentialed; and
- Changes to the POWER Account payment requirements and suspension of co-payments.

One provider association noted that they developed a personally identifiable information (PII)-secure virtual platform to support program applicants with their application materials, submitting several program applications on behalf of clients during the COVID-19 PHE period. However, advocacy organizations experienced issues with authorized representatives being recognized by the State. The State used a three-way call strategy with the member, member representative, and State representative to authorize eligibility; these calls often took 20 – 30 minutes to connect the three parties, which, according to the interviewees, was a time burden for most members. In addition to this challenge, advocacy organizations noted that office closures due to the pandemic presented barriers to access among HIP’s rural members. Interviewees noted that many members rely on a physical office space to meet with case managers, use office supplies and equipment (e.g., fax machines to send income information), and drop off other materials. The advocacy organizations also noted that there was a miscommunication about whether drop boxes where members often dropped off program materials were open or not, which led to a time lag among staff checking for compliance.

Concerns about access were reiterated when telehealth became the preferred care delivery option. Technology access is central to an individual’s ability to engage in virtual care services, and provider associations and advocacy organizations reported various issues with bandwidth, billable phone hours, and other concerns such as privacy among members. One advocacy organization noted that virtual care may diminish trust and can adversely impact the way that communities of color engage in care, so while members reported satisfaction with telehealth services, the positive feedback should be understood in the context of opportunities for access. One association added that many members they serve use MCE- or government-provided phones to mitigate some of the telephonic access barriers.

Overall, FSSA officials, MCE executives, members, provider associations, and advocacy organizations agreed that simplification and streamlining of POWER Account policies, including rollover, and general HIP program communications are two of the more important priorities to address member dissatisfaction with the HIP program.

Results of Quantitative Analysis – Consumer Assessment of Healthcare Providers & Systems (CAHPS)

Overall, HIP members were satisfied with their health care. To assess satisfaction, data from CAHPS Medicaid Adult 5.0H Member Surveys (2015 – 2020) was compiled for a single item asking respondents to rate their health care on an 11-point Likert scale (i.e., “Using any number from 0 – 10, where 0 is the worst health care possible and 10 is the best health care possible, what number would you use to rate your health care?”). CAHPS Survey data was drawn from HIP members across the four MCEs and
suggests member satisfaction based on a positive rating of their health care. It should be noted that the CAHPS Survey does not explicitly ask about HIP satisfaction nor focus on HIP as their health plan.

**Exhibit F.5.1** presents the percentage of members rating their health care highly, grouped by ratings of 9 & 10 versus 8, 9, & 10. A rating of 8 and above indicates high satisfaction.

**Exhibit F.5.1: Percent of Beneficiaries Reporting Satisfaction with Health Care by MCE and Year (2015 – 2020)**

<table>
<thead>
<tr>
<th>Rating of Health Care (9 &amp; 10)</th>
<th>MCE</th>
<th>Pre-COVID-19 PHE</th>
<th>COVID-19 PHE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50.0%</td>
<td>54.6%</td>
<td>58.0%</td>
</tr>
<tr>
<td>2</td>
<td>NR</td>
<td>NR</td>
<td>50.6%</td>
</tr>
<tr>
<td>3</td>
<td>52.0%</td>
<td>NR</td>
<td>58.6%</td>
</tr>
<tr>
<td>4</td>
<td>46.5%</td>
<td>54.9%</td>
<td>55.3%</td>
</tr>
<tr>
<td>Overall Weighted Average</td>
<td>49.8%</td>
<td>54.7%</td>
<td>56.9%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rating of Health Care (8, 9, &amp; 10)</th>
<th>MCE</th>
<th>Pre-COVID-19 PHE</th>
<th>COVID-19 PHE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>73.6%</td>
<td>78.5%</td>
<td>78.2%</td>
</tr>
<tr>
<td>2</td>
<td>NR</td>
<td>NR</td>
<td>75.3%</td>
</tr>
<tr>
<td>3</td>
<td>70.3%</td>
<td>76.4%</td>
<td>78.9%</td>
</tr>
<tr>
<td>4</td>
<td>67.9%</td>
<td>72.3%</td>
<td>76.0%</td>
</tr>
<tr>
<td>Overall Weighted Average</td>
<td>71.1%</td>
<td>76.4%</td>
<td>77.7%</td>
</tr>
</tbody>
</table>


Notes: NR = not reported (no report for corresponding year or metric not reported)

**Exhibit F.5.2a** depicts the proportion of beneficiaries answering 9 and 10 over the five-year period for all four MCEs. **Exhibit F.5.2b** depicts the proportion of beneficiaries answering 8, 9, and 10.
From 2015 – 2019, there is a steady increase in satisfaction across MCEs, with a steeper slope for the proportion of beneficiaries reporting satisfaction scores of 9 or 10. As indicated in Exhibits F.5.1 and
F.5.2a, the highest proportion of 9 and 10 scores was in 2020 for all four MCEs. The overall weighted average was also the highest in 2020. Exhibit F.5.2a provides key findings for each MCE:

- **MCE 1**: MCE 1 increased steadily by a total of about 11 percentage points from 2015 – 2019. The highest proportion of 9 and 10 scores was in 2020, consistent with the other three MCEs.
- **MCE 2**: MCE 2 increased steadily by a total of about 14 percentage points within a shorter time frame (2017 – 2019). The highest proportion of 9 and 10 scores was in 2020, consistent with the other three MCEs.
- **MCE 3**: MCE 3 had the slowest growth, with a dip in 2018, recovering back in 2019. The highest proportion of 9 and 10 scores was in 2020, consistent with the other three MCEs.
- **MCE 4**: MCE 4 had the largest increase (46.5% to 61.7%) from 2015 – 2019. The highest proportion of 9 and 10 scores was in 2020, consistent with the other three MCEs.

When the score of 8 is added, overall ratings increase but the slopes are not as steep (see Exhibit F.5.2b). Consistent with the 9 and 10 scores, the overall weighted average was also the highest in 2020 for scores 8, 9, and 10 (see Exhibit F.5.1).

Satisfaction with health care varied by sociodemographic groups (see Exhibit F.5.3, which outlines highly satisfied responses [8, 9, or 10] to the health care satisfaction question in 2018). As there did not seem to be large differences across the years on this measure, 2018 was chosen for this report as a point in time example to evaluate differences by specific sociodemographic group. Although CAHPS Surveys were conducted in later years, surveys are conducted in the year following the year being evaluated (i.e., the data reported below for 2018 was collected in a survey fielded in the first half of 2019). Therefore, data for 2019 was collected in the first half of 2020, which coincided with the COVID-19 PHE. Because the COVID-19 PHE impacted HIP policies (e.g., pause on disenrollment and suspension of cost-sharing), data from 2018 provides a more accurate perspective for this report’s evaluations and conclusions.

**Exhibit F.5.3: Percent of Beneficiaries Reporting Satisfaction with Health Care by MCE and Sociodemographic Characteristics (2018)**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Description</th>
<th>MCE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Race</td>
<td>White</td>
<td>83.0%</td>
</tr>
<tr>
<td></td>
<td>Black or African American</td>
<td>70.0%</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>NR</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>Hispanic</td>
<td>NR</td>
</tr>
<tr>
<td></td>
<td>Not Hispanic</td>
<td>NR</td>
</tr>
<tr>
<td>Age</td>
<td>18-34</td>
<td>62.5%</td>
</tr>
<tr>
<td></td>
<td>35-44</td>
<td>79.4%</td>
</tr>
<tr>
<td></td>
<td>45-54</td>
<td>84.6%</td>
</tr>
<tr>
<td></td>
<td>55+</td>
<td>85.5%</td>
</tr>
</tbody>
</table>

² This report grouped ages 35 – 54 together (74% for ages 35 – 54)


Notes: NR = not reported (no report for corresponding year or metric not reported)
In 2018, Black or African American members of MCEs 1, 3, and 4 were less satisfied with their health care than White members. MCE 1 has the largest variation, with 83.0% of White members rating their health care 8, 9, or 10 versus 70.0% of Black or African American members providing the same rating.

Additionally, members appear to be more satisfied as they get older, with at least 75% of members ages 55 and older reporting ratings of 8, 9, or 10 across MCEs (range=75.0% – 85.5%). For example, in MCE 1, members between ages 18 – 34 appear to be much less satisfied (62.5%) than individuals in other age groups (79.4%, 84.6%, and 85.5% in the other three older age groups). Although these findings provide an initial understanding of member satisfaction, additional information is needed to further understand what is contributing to member satisfaction and which health plan and health care experience components resonate with various sociodemographic characteristics. Obtaining a more granular understanding of member perception will be critical for developing improvement strategies.

Research Question 2.1 Findings Summary – What is the level of satisfaction with HIP among HIP members?

Results of member key informant interviews indicated that most members interviewed were satisfied with the HIP program, citing increased access to care (e.g., large network of providers, prevention and chronic care), and care management supports. During the COVID-19 PHE, stakeholders indicated satisfaction with telehealth services and, more broadly, the State’s policy changes (i.e., turning off cost-sharing and expanding benefits). Reasons for dissatisfaction reported by members and providers included: challenges related to the required documentation members submit for eligibility determination as well as confusion about the plan types and associated requirements. Loss of HIP coverage as a result of nonpayment, documentation and time required was also identified as a basis for dissatisfaction. Consistent with findings from 2019, 2020 interviews with MCE executives and FSSA officials indicated that the overall complexity and nuance associated with the HIP program and policies is the most significant area of dissatisfaction among members. Improvement opportunities suggested by members included: increasing medical coverage, expanding assistance for social determinants of health (SDOH), increasing the number of providers who accept HIP, and providing more detailed program information. Results from the CAHPS Survey data was consistent with key informant interviews suggesting that most members were satisfied with the HIP program, with the highest levels of satisfaction in 2020. Findings also indicated that member satisfaction varies between sociodemographic groups, with Black members and younger members generally more dissatisfied.

Hypothesis 3 – Individuals subject to the non-eligibility periods (payment and redetermination) and retroactive eligibility are no different from commercial market populations.

The research questions associated with this hypothesis rely on data from 2015 – 2019, including American Community Survey (ACS) data and program administrative data.

Primary Research Question 3.1 – Do HIP members have similar demographic characteristics as the commercial market population?

Methodology

Analytic Method

From February 2018 – February 2020 when the COVID-19 PHE rules were in effect, HIP Plus members with incomes from 101 – 138% of the federal poverty level (FPL) that did not make monthly POWER Account Contribution payments were disenrolled from HIP and not allowed to re-enroll for six months.
(also referred to as the six-month lockout or non-eligibility period). The HIP policies are designed for non-disabled working age adults who may be moving between eligibility for HIP and eligibility for commercial coverage on a frequent basis and who are more closely aligned with commercial market populations than with traditional Medicaid populations. Hence, Indiana HIP members who are at risk of non-eligibility or lockout period within 101 – 138% of the FPL may have similar characteristics as the commercially insured members. To better understand the potential drivers associated with risk of non-eligibility and the Medicaid enrollment pattern, Lewin examined characteristics of Medicaid populations and compared them to the characteristics of the commercially insured population.

Analytic Population and Data Source

ACS data was used to analyze the socio-economic and demographic characteristics of the Medicaid eligible and commercially insured population and their distribution across federal poverty level. The details about the ACS sample size, and the methodology to determine Medicaid eligible population are discussed in Attachment VI. The weighted (using survey sample weights) counts of population, Medicaid members and Medicaid eligible population in Indiana are presented in Exhibit VI.10.

Analysis Results

The estimated total number of Medicaid population under 139% of FPL based on the ACS data and their distribution by FPL income categories are presented in Exhibit F.5.4 below. Findings denote that about 27% of HIP members are in the lowest income category (under 23% of the FPL). In contrast, estimates produced using the administrative HIP enrollment data indicates that approximately half of HIP Plus enrollees are included in the lowest income group. Potential explanations for the latter difference include: (1) the lack of accurate accounting of the FPL status in the HIP enrollment data; (2) potential inconsistency of the FPL status for individuals across the ACS and the HIP enrollment data (such as reference period of income data); and (3) changes in individual HIP member earnings over time (e.g., individual income at the time of ACS interview may vary from the income reported at the time of administrative HIP enrollment data collection).

Exhibit F.5.4: Distribution of Medicaid Enrolled Population in Indiana Ages 19 – 64 under 139% FPL by Power Account Income Tiers (ACS Data 2015 – 2019)

<table>
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<tbody>
<tr>
<td>FPL &lt;23%</td>
<td>23.5%</td>
<td>25.9%</td>
<td>27.9%</td>
<td>29.5%</td>
<td>28.3%</td>
<td>27.1%</td>
</tr>
<tr>
<td>FPL 23-50%</td>
<td>12.0%</td>
<td>11.1%</td>
<td>11.1%</td>
<td>10.1%</td>
<td>9.8%</td>
<td>10.8%</td>
</tr>
<tr>
<td>FPL 51-75%</td>
<td>21.0%</td>
<td>19.8%</td>
<td>20.2%</td>
<td>20.0%</td>
<td>20.3%</td>
<td>20.3%</td>
</tr>
<tr>
<td>FPL 76-100%</td>
<td>20.1%</td>
<td>20.7%</td>
<td>17.7%</td>
<td>17.1%</td>
<td>16.6%</td>
<td>18.4%</td>
</tr>
<tr>
<td>FPL 101-138%</td>
<td>23.4%</td>
<td>22.4%</td>
<td>23.1%</td>
<td>23.2%</td>
<td>25.0%</td>
<td>23.4%</td>
</tr>
<tr>
<td>All</td>
<td>297,845</td>
<td>323,492</td>
<td>329,278</td>
<td>330,093</td>
<td>327,786</td>
<td>1,608,494</td>
</tr>
</tbody>
</table>


166 The FPL categories are consistent with the POWER Account income tiers. The ACS data is restricted to individuals ages 19 – 64.

167 The ACS data does not allow further break down of Medicaid population by HIP Plus or other HP program categories and the distribution of HIP Plus enrollment by FPL is for all ages. Hence, the ACS-based distribution of Medicaid population by FPL categories may not be completely comparable to the distribution HIP Plus members in the administrative enrollment data.
Exhibit F.5.5 shows the distribution of Medicaid eligible population in Indiana by the same POWER Account income tiers. Approximately 26% of Medicaid eligible population in Indiana are in 101 – 138% of FPL category (i.e., top tier of the POWER Account income levels). The HIP members that are at risk of non-eligibility or lockout periods belong to this income group.


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<tbody>
<tr>
<td>FPL &lt;23%</td>
<td>33.6%</td>
<td>34.2%</td>
<td>35.9%</td>
<td>35.5%</td>
<td>36.8%</td>
<td>35.1%</td>
</tr>
<tr>
<td>FPL 23-50%</td>
<td>11.1%</td>
<td>10.4%</td>
<td>11.3%</td>
<td>11.7%</td>
<td>10.4%</td>
<td>11.0%</td>
</tr>
<tr>
<td>FPL 51-75%</td>
<td>11.8%</td>
<td>12.3%</td>
<td>12.0%</td>
<td>11.4%</td>
<td>11.5%</td>
<td>11.8%</td>
</tr>
<tr>
<td>FPL 76-100%</td>
<td>17.3%</td>
<td>17.6%</td>
<td>14.7%</td>
<td>16.3%</td>
<td>14.4%</td>
<td>16.1%</td>
</tr>
<tr>
<td>FPL 101-138%</td>
<td>26.3%</td>
<td>25.5%</td>
<td>26.1%</td>
<td>25.2%</td>
<td>26.9%</td>
<td>26.0%</td>
</tr>
<tr>
<td><strong>All</strong></td>
<td>775,599</td>
<td>732,277</td>
<td>712,023</td>
<td>682,634</td>
<td>679,584</td>
<td>3,582,117</td>
</tr>
</tbody>
</table>


As discussed above, HIP members above the 100% federal poverty line are at risk of non-eligibility if they do not make POWER Account Contributions. In this top range of POWER Account income tier, the Medicaid eligible population may be moving between eligibility for HIP and eligibility for commercial coverage on a frequent basis. These individuals may be more closely aligned with commercial market populations than with traditional Medicaid populations. Hence, Lewin examined the characteristics of this group of the Medicaid population that may drive their non-eligibility and compared them with the features of the commercially insured members.

Given that, commercially insured populations include a substantially higher proportion of younger individuals as well as college students who are likely to be dependent on their parents’ health insurance coverage, Lewin focused analyses on individuals ages 26 – 64. By restricting the population by age, a more meaningful comparison of the socio-demographic characteristics between the Medicaid enrolled and commercially insured population in Indiana can be drawn. Exhibit F.5.6 provides a comparative summary of key sociodemographic characteristics for Indiana residents (those with private insurance versus Medicaid) between ages 26 – 64 with income in the 101 – 138% FPL (ACS data). Bolded numbers in the table indicate that the differences between the commercially insured and Medicaid enrolled population in those categories are statistically significant.168 Findings suggest that the majority of both groups are White (approximately two-thirds) and, have a high-school degree (approximately three-quarters). It should be noted that both Medicaid and commercially insured populations were becoming increasingly diverse throughout the five-year time frame, with some differences identified. For example, rates of Hispanic commercially insured members were higher than Medicaid members during 2015, 2018, and 2019. Other demographic and socio-economic characteristics identified include age related differences. For example, the Indiana Medicaid population is only marginally older (average age=45) when compared to the commercially insured population (average age=43). Age differences appear for the youngest and oldest cohorts, with higher percentages of commercially insured members in the youngest age bracket (under 40) while Medicaid members had higher proportions in the oldest age bracket (over 60). Additionally, a greater percentage of Medicaid members had less than a high school education.

168 Analyses used paired sample t-tests of comparison of means across two samples (Medicaid versus commercially insured) to meaningful differences. The statistical significance is determined at 5% level of significance.

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education than their commercially insured counterparts. Finally, as expected, and consistent with the Medicaid eligibility rules, the average income of the Medicaid eligible population is about $2,500 lower than the average income of the commercially insured population. The commercially insured population in the state have an average personal income that varies between $15,346 to $17,020 during the 2015 – 2019 period. These differences are worth noting even though these individuals belong to the same POWER Account income tier.\textsuperscript{169}

Given the differences in socio-economic and demographic characteristics between Medicaid and the commercially insured population at risk of the non-eligibility or lockout periods in this top income tier, more in-depth examination is needed to better understand the key drivers of non-eligibility. Future studies should include the use of administrative HIP member data to assess the characteristics of those HIP members who were subject to non-eligibility.

\textsuperscript{169} Indiana has historically marketed HIP as 'not Medicaid'. Hence, the commercially insured population in the ACS data may include individuals who are enrolled in HIP and considered HIP as a commercial insurance. In that case, the characteristics of the commercially insured population may reflect the features of HIP enrollees.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Private Insurance (No Medicaid)</th>
<th>Medicaid Insurance (With or Without Private Insurance)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avg. Age (Years)</td>
<td>42.6</td>
<td>43.5</td>
</tr>
<tr>
<td>Age &lt;30</td>
<td>14.6%</td>
<td>12.0%</td>
</tr>
<tr>
<td>Age 30-39</td>
<td>29.0%</td>
<td>32.2%</td>
</tr>
<tr>
<td>Age 40-49</td>
<td>26.2%</td>
<td>21.8%</td>
</tr>
<tr>
<td>Age 50-59</td>
<td>20.8%</td>
<td>21.2%</td>
</tr>
<tr>
<td>Age 60+</td>
<td>9.4%</td>
<td>12.8%</td>
</tr>
<tr>
<td>Male</td>
<td>41.6%</td>
<td>41.0%</td>
</tr>
<tr>
<td>Female</td>
<td>58.4%</td>
<td>59.0%</td>
</tr>
<tr>
<td>Non-Hispanic White</td>
<td>76.0%</td>
<td>79.5%</td>
</tr>
<tr>
<td>Non-Hispanic Black</td>
<td>14.4%</td>
<td>9.5%</td>
</tr>
<tr>
<td>Non-Hispanic Asian</td>
<td>1.7%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>1.8%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Less Than High School</td>
<td>6.1%</td>
<td>7.0%</td>
</tr>
<tr>
<td>High School Graduate</td>
<td>11.5%</td>
<td>14.4%</td>
</tr>
<tr>
<td>College Graduate</td>
<td>73.3%</td>
<td>66.1%</td>
</tr>
<tr>
<td>Personal Income</td>
<td>$16,550</td>
<td>$16,276</td>
</tr>
</tbody>
</table>


Research Question 3.1 Findings Summary – Do HIP members have similar demographic characteristics as the commercial market population?

Findings suggest that the majority of both populations (HIP and commercial) are White and have a high-school degree. Demographic and socio-economic characteristics differences include:

- Indiana Medicaid population is only marginally older (average age=45) when compared to the commercially insured population (average age=43). Age differences appear for the youngest and oldest cohorts, with higher percentages of commercially insured members in the youngest age bracket (under 40) while Medicaid members had higher proportions in the oldest age bracket (over 60).
• A greater percentage of Medicaid members had less than a high school education than their commercially insured counterparts.

• As expected, and consistent with the Medicaid eligibility rules, the average income of the Medicaid eligible population is about $2,500 lower than the average income of the commercially insured population.

Given the differences in socio-economic and demographic characteristics between Medicaid and the commercially insured population at risk of the non-eligibility or lockout periods in this top income tier (101% - 138% FPL), more in-depth examination is needed to better understand the key drivers of non-eligibility. Future studies should include the use of administrative HIP member data to assess the characteristics of those HIP members who were subject to non-eligibility.

Primary Research Question 3.2 – Do HIP members that are not retroactively eligible have similar demographic characteristics as the commercial market population?

The HIP 2.0 Medicaid coverage in Indiana, implemented in 2015, does not provide retroactive benefits, or health care coverage 90 days before application for Medicaid. The retroactivity feature does not exist in commercial health insurance plans. Hence, given this similarity between the HIP and commercial plan, Lewin compares the characteristics of the Medicaid population ages 26 – 64 under 139% of the FPL with the characteristics of the commercially insured population in the same age and income category in the state of Indiana. Exhibit F.5.7 provides a comparative summary of key sociodemographic characteristics for Indiana residents (those with private insurance versus Medicaid) between ages 26 – 64 with income under 139% of the FPL (ACS data). Consistent with the findings for those with income in the 101 – 138% FPL, the majority of both groups are White and have a high-school degree. However, there are greater differences in socio-demographic characteristics across this sample. Bolded numbers in the table indicate that the differences between the commercially insured and Medicaid enrolled population in those categories are statistically significant.

The percentage of Medicaid enrolled population ages 50 – 59 is about 4 – 5 percentage points higher than the percentage of privately or commercially insured population in the state of Indiana. Race/ethnic differences were identified between the Medicaid enrolled and commercially insured population. Among the Medicaid enrolled members, findings indicate a higher percentage of Black and lower percentage of Asian and Hispanic members than among the commercially insured members. Findings were consistent with the prior analysis across Hispanic populations. Age related differences were also consistent for this income cohort. For example, the Indiana Medicaid population was marginally older (average age=44 in 2019) when compared to the commercially insured population (average age=43 in 2019). Additionally, a greater percentage of Medicaid members were female and had less than a high school education than their commercially insured counterparts. The percentage of college graduates is almost 12 – 16 percentage points higher among the privately insured population than among the Medicaid enrolled population. On average, the commercially insured population have more than three thousand-dollar higher income per person than the Medicaid population in 2015 and 2016. The income gap is slightly lower in 2019. For commercially insured and Medicaid population, the largest share (over 40%) of this population is with income above 100% of FPL; but the share of Medicaid enrolled population in that income category is less than 25%. Noticeably, the share of Medicaid population within 51 – 75% of FPL was substantially higher than the share of commercially insured population in that same income category.

HIP members in Indiana who are in the ACS may misreport their Medicaid coverage status, as some HIP enrollees are unaware they have Medicaid. It is a common misunderstanding among HIP members that HIP is not Medicaid. Therefore, the commercially insured member count may include some HIP members.
income category. The differences in education and income level across these two groups of insured population indicate the differences in social and financial vulnerabilities which may affect their health status and health care need.

These differences may indicate varying health care needs among Medicaid population which likely impacts overall health care utilization, despite the alignment between HIP and commercial insurance in terms of retroactive coverage.

Exhibit F.5.7: Characteristics of Indiana Population Ages 26 – 64 in FPL <139% with Private Insurance and Medicaid (ACS Data 2015 – 2019)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Private Insurance (No Medicaid)</th>
<th>Medicaid Insurance (With or Without Private Ins.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avg. Age (Years)</td>
<td>42.9</td>
<td>43.1</td>
</tr>
<tr>
<td>Age &lt;30</td>
<td>13.6%</td>
<td>13.8%</td>
</tr>
<tr>
<td>Age 30-39</td>
<td>30.5%</td>
<td>31.5%</td>
</tr>
<tr>
<td>Age 40-49</td>
<td>24.1%</td>
<td>21.9%</td>
</tr>
<tr>
<td>Age 50-59</td>
<td>21.3%</td>
<td>21.0%</td>
</tr>
<tr>
<td>Age 60+</td>
<td>10.5%</td>
<td>11.7%</td>
</tr>
<tr>
<td>Male</td>
<td>42.0%</td>
<td>41.6%</td>
</tr>
<tr>
<td>Female</td>
<td>58.0%</td>
<td>58.4%</td>
</tr>
<tr>
<td>Non-Hispanic White</td>
<td>73.3%</td>
<td>71.5%</td>
</tr>
<tr>
<td>Non-Hispanic Black</td>
<td>12.8%</td>
<td>13.8%</td>
</tr>
<tr>
<td>Non-Hispanic Asian</td>
<td>3.5%</td>
<td>5.2%</td>
</tr>
<tr>
<td>Non-Hispanic Other</td>
<td>1.5%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>8.9%</td>
<td>8.7%</td>
</tr>
<tr>
<td>Less Than High School</td>
<td>13.3%</td>
<td>15.0%</td>
</tr>
<tr>
<td>HS Graduate</td>
<td>68.1%</td>
<td>67.4%</td>
</tr>
<tr>
<td>College Graduate</td>
<td>18.6%</td>
<td>17.5%</td>
</tr>
<tr>
<td>Personal Income</td>
<td>$11,867</td>
<td>$11,789</td>
</tr>
<tr>
<td>FPL 23-50%</td>
<td>7.4%</td>
<td>7.8%</td>
</tr>
<tr>
<td>FPL 51-75%</td>
<td>10.7%</td>
<td>11.6%</td>
</tr>
<tr>
<td>FPL 76-100%</td>
<td>21.6%</td>
<td>19.6%</td>
</tr>
<tr>
<td>FPL 101-138%</td>
<td>44.1%</td>
<td>42.2%</td>
</tr>
</tbody>
</table>


Note: The bolded numbers in the Exhibit indicate that the difference in the values of the corresponding variable between privately insured and Medicaid insured population is statistically significant for that year.
Research Question 3.2 Findings Summary – Do HIP members that are not retroactively eligible have similar demographic characteristics as the commercial market?

HIP members with income under 139% FPL and are subject to the retroactive eligibility waiver include higher proportion of females, are less educated, and have substantially lower annual household income than the commercially insured population in the same FPL category. The differences in education and income level across these two groups of insured population indicates differences in social and financial vulnerabilities which may affect their health status and health care need. These differences may indicate varying health care needs among Medicaid population which likely impacts overall health care utilization, despite the alignment between HIP and commercial insurance in terms of retroactive coverage.

Hypothesis 4 – Eliminating or reducing retroactive eligibility will not reduce member enrollment or access to health care; decrease health status; or have adverse financial impact.

Retroactive coverage, for traditional Medicaid programs, is designed to protect people who are either unaware of their Medicaid eligibility or unable to apply in a timely manner because of the sudden onset of disease or injury. The 2015 HIP retroactive eligibility waiver provision does not provide coverage of health care services received prior to Medicaid enrollment. The 2018 HIP waiver renewal continues with the retroactive eligibility and adds some new provisions (including: expand incentives program; require tobacco-user premium surcharge; add new HIP Plus incentive; reestablish an open enrollment period; facilitate enrollment in HIP Maternity coverage for pregnant people; change POWER Account Contributions to a tiered structure instead of a flat 2% of income; see Section B) that may potentially impact enrollment in the program. Since Indiana’s retroactive coverage policy has been in place since 2015, the research questions associated with this hypothesis for the evaluation of the 2018 – 2020 waiver focus on analyzing if there were changes to member enrollment, access to health care or health status with the continued policy. Analyses are based on ACS and Behavioral Risk Factor Surveillance System (BRFSS) data.

Primary Research Question 4.1 – Do eligible people subject to retroactive eligibility waivers enroll in Medicaid at the same rates as other eligible people who have access to retroactive eligibility? (CMS Guidance Hypothesis 1, RQ 1.1)

This research question examines if changes in Medicaid enrollment in Indiana is different compared to other states having retroactive coverage.

Methodology

Analytic Method

To assess how 2018 – 2020 HIP waiver (which continued the retroactive eligibility policy from 2015 and included additional provisions) impacted the Medicaid enrollment in Indiana, Lewin leveraged the difference-in-difference (DiD) method. This approach evaluates the change in Medicaid enrollment in Indiana relative to comparison states, accounting for other factors that may impact Medicaid enrollment and isolate the true impact of the 2018 waiver renewal. The comparison states (Colorado (CO), Minnesota (MN), Pennsylvania (PA), and Washington (WA)) were selected based on a detailed comparison of the population characteristics and Medicaid policies as per CMS guidance (see Attachment VI). The comparison states are Colorado (CO), Minnesota (MN), Pennsylvania (PA), and

171 HIP offers Fast Track and Presumptive Eligibility processes that allows individuals to start coverage by making initial Fast Track or POWER Account Contribution payment health care
Washington (WA). The regression based DiD model controls for key socio-economic and demographic characteristics that may drive the Medicaid enrollment.

**Analysis Results**

From 2015 to 2019, the proportion of Medicaid eligible population in Indiana having Medicaid coverage increased from 26.9% to 35.5% (see Exhibit VI.3, Attachment VI). Compared to 2017, the proportion of eligible population having Medicaid during the 2018 – 2020 waiver period increased by about 2%. Relatively, the Medicaid enrollment rates for comparison states were higher and increased from 38.9% to 42.4% (average 43% for 2017, 2018, and 2019, Exhibit VI.4 in Attachment VI.). Socio-economic and demographic characteristics between Indiana and the comparison states were similar with minor differences (see Exhibit VI.12). The estimated DiD model coefficient (see Exhibit VI.13 in the Attachment VI) of the interaction term (interaction between state indicator Indiana and the period indicator of year 2018 and after) is 0.016. This suggests that the proportion of the Indiana Medicaid eligible population enrolled in Medicaid increased by almost 1.6% during the period of 2018 and after relative to the change in Medicaid enrollment rates in the comparison states. This additional 1.6% increase in Indiana Medicaid enrollment rates after the 2018 waiver renewal indicates that the renewal did not adversely impact the Medicaid enrollment trend in the state of Indiana. This effect is statistically significant at 5% level of significance. However, given that over 33% of Medicaid eligible Indiana population were enrolled in Medicaid in 2017, this effect is relatively small. Although the relative increase in Medicaid enrollment in Indiana was higher compared to other States having retroactive eligibility, the proportion of Medicaid eligible population enrolled in Medicaid was lower. Thus, Lewin has detected some evidence of potential improvement in access to health care through Medicaid enrollment growth. Additionally, since retroactive eligibility was implemented in 2015 and the waiver includes multiple changes in Medicaid coverage, the analyses was not able to capture whether the changes (the proportion of eligible population enrolling in Medicaid continued to increase after implementation) were due to retroactive eligibility or other policies.

**Research Question 4.1 Findings Summary – Do eligible people subject to retroactive eligibility waivers enroll in Medicaid at the same rates as other eligible people who have access to retroactive eligibility?**

The proportion of the Indiana Medicaid eligible population enrolled in Medicaid increased by almost 1.6% during the period of 2018 and after relative to the change in Medicaid enrollment rates in the comparison states. This additional 1.6% increase in Indiana Medicaid enrollment rates after the 2018 waiver renewal indicates that the renewal did not adversely impact the Medicaid enrollment trend in the state of Indiana.

**Primary Research Question 4.2 – Do beneficiaries subject to the retroactive eligibility waiver understand that they will not be covered during enrollment gaps? (CMS Guidance Hypothesis 1, Subsidiary RQ 1.2a)**

Due to the COVID-19 PHE, Lewin did not conduct a member survey in 2021. Therefore, Lewin will not be able to answer this research question.

172 Given the binary nature of the outcome variable in the DiD model, Lewin has also estimated an alternative non-linear Logistic model to derive the implied impact of the 2018 HIP waiver renewal. The Logistic model result shows a very similar 1.8 percentage point increase in Medicaid enrollment rates. Thus, the estimated impact of HIP waiver renewal is robust to functional form of the DiD model.
Subsidiary Research Question 4.2a – What are common barriers to timely renewal for those subject to the retroactive eligibility waiver? (CMS Guidance Hypothesis 1, Subsidiary RQ 1.2b)

Due to the COVID-19 PHE, key informant interviews from 2020 and 2021 did not ask directly about the retroactive eligibility waiver. Therefore, Lewin will not be able to answer this research question.

Primary Research Question 4.3 – Do beneficiaries subject to the retroactive eligibility waiver have better health outcomes than other beneficiaries who have access to retroactive eligibility? (CMS Guidance Hypothesis 3, RQ 3.1)

We used the BRFSS data to analyze the health outcomes of the Medicaid eligible.\textsuperscript{173} Details about the BRFSS sample data and the methodology to determine Medicaid eligible population are discussed in Attachment V.\textsuperscript{174}

To assess the retroactive eligibility waiver’s impact on health outcomes in Indiana and as compared to other states (i.e., comparison states) with retroactive eligibility coverage, Lewin used BRFSS data (i.e., self-reported health status information) for the Indiana Medicaid eligible population during 2013 and 2020. Lewin also used BRFSS data for Medicaid eligible populations in comparison states (CO, MN, PA, WA) for the same time periods. The justification for the choice of these comparison states is provided in Attachment V. Trend in health status among the Indiana Medicaid eligible population is presented in Exhibit F.5.8. The corresponding numerical percentages are displayed in tabular form in Exhibit V.7 in Attachment IV section to document the precise magnitudes. Overall, the trend does not show any dramatic shift in the proportion of Medicaid eligible across different health status categories between before and after the HIP waiver renewal (i.e., 2018). However, from 2019 – 2020, the percentage with relatively superior health status (Very Good, Excellent) increased while those with Good or Fair/Poor status decreased. The trend demonstrates a substantial increase in the proportion of the eligible population with Very Good health status in Indiana: from 22.8% in 2017 to 29.6% in 2020. Exhibit F.5.9 presents health status trends in four comparison states. The corresponding percentages are presented in tabular form in Exhibit V.8 in Attachment V. As stated previously, the trends for the comparison states show no substantial change in the health status of Medicaid eligible population in the comparison states. Consistent with the Indiana trends, the percentage of the Medicaid eligible population with Very Good and Excellent health status in the comparison states increased slightly between 2019 and 2020. The trends suggest that health status in Indiana is similar to the comparison states.

\textsuperscript{173} The information about the Medicaid coverage is not available in BRFSS. Hence, Lewin focuses only on the potentially Medicaid eligible population to examine the pattern in health status.

\textsuperscript{174} There are several limitations in BRFSS data including smaller sample size, unavailability of Medicaid or HIP status that are discussed in Attachment V.
Exhibit F.5.8: Percent of Indiana Medicaid Eligible Population by Health Status (BRFSS Data 2013 – 2020)


Exhibit F.5.9: Percent of Medicaid Eligible Population in Comparison States by Health Status (BRFSS Data 2013 – 2020)


The trends in health status in Indiana and the comparison states presented provides the unadjusted trends where differences in population characteristics are not controlled. These trends provide a visualization of the data that can be used for an informal comparison. Next, Lewin uses a regression
based DiD which accounts for the differences in population characteristics and assesses the changes in health status where the outcome is the likelihood of Medicaid eligible population being in four health status categories or the percentage in those categories: Excellent, Very Good, Good, Fair/Poor. Given the fractional nature of the outcome variable Lewin has estimated a Multinomial Logistic model which adjusts for population characteristics including age, sex, race/ethnicity, education, and income status. The regression-adjusted percentage of Medicaid eligible population in different health status categories in Indiana and comparison states are summarized below in Exhibit F.5.10 across three periods: before Medicaid expansion (2013 – 2014), after Medicaid expansion (2015 – 2017), and after HIP waiver renewal (2018 – 2020).

Findings suggest that the proportion of Medicaid eligible population with Very Good health in Indiana increased from 22.7% during 2013 – 2014 to 25.6% during 2018 – 2020; a 2.9 percentage points increase. In contrast, the percentage with the same health status in the comparison state decreased from 26.9% to 26.4% during the same period. This implies that Lewin estimated almost 3.4 percentage points additional increase in the percentage of Medicaid eligible population with Very Good health in Indiana relative to comparison states. Similarly, Lewin estimated a 2.4 percentage point decline in the percentage of population with Good health. The changes in other health status categories are negligible. None of these estimated changes are statistically significant and subsequently, Lewin finds no evidence of sizable change in health status for Medicaid eligible population in Indiana relative to the comparison states.\(^{175}\)

Exhibit F.5.10: DiD Model of Health Outcomes – Indiana versus Comparison States (BRFSS Data 2013 – 2020)

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Predicted Likelihood of Health Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Excellent</td>
</tr>
<tr>
<td><strong>Indiana</strong></td>
<td></td>
</tr>
<tr>
<td>Year 2013 – 2014</td>
<td>0.144</td>
</tr>
<tr>
<td>Year 2015 – 2017</td>
<td>0.136</td>
</tr>
<tr>
<td>Year 2018 – 2020</td>
<td>0.125</td>
</tr>
<tr>
<td><strong>Comparison States</strong></td>
<td></td>
</tr>
<tr>
<td>Year 2013 – 2014</td>
<td>0.155</td>
</tr>
<tr>
<td>Year 2015 – 2017</td>
<td>0.146</td>
</tr>
<tr>
<td>Year 2018 – 2020</td>
<td>0.148</td>
</tr>
<tr>
<td><strong>DiD Effect (Change)</strong></td>
<td></td>
</tr>
<tr>
<td>Year 2015 – 2017</td>
<td>0.001</td>
</tr>
<tr>
<td>Year 2018 – 2020</td>
<td>-0.011</td>
</tr>
</tbody>
</table>


Note: Result is based on the predicted probabilities of health status outcomes from the Multinomial Logistic regression model. The DiD effects are calculated by taking the differences in predicted probabilities across time (relative to 2013 – 2014 period) between Indiana and comparison states. None of the DiD effects are statistically significant.

Research Question 4.3 Findings Summary - Do beneficiaries subject to the retroactive eligibility waiver have better health outcomes than other beneficiaries who have access to retroactive eligibility?

\(^{175}\) BRFSS analyses and limitations are detailed in Attachment V.
Analysis of health status trend in Indiana relative to the comparison states with retroactive coverage suggests that the health status of the Medicaid population in Indiana is relatively stable. Primary Research Question 4.4 – Does the retroactive eligibility waiver lead to changes in the incidence of beneficiary medical debt? (CMS Guidance Hypothesis 4, RQ 4.1)

To assess changes in the incidence of beneficiary medical and how it was impacted by the retroactive eligibility waiver, BRFSS data which includes a variable specific to outstanding medical payment is needed. After scrutinizing the BRFSS data set, it was determined that a meaningful analysis of this research question could not be conducted due to:

- **Missing Data**: Data was not available for 2015, 2019, and 2020 (for those years that data was available, it was sparsely populated for Indiana)
- **Lack of Medical Debt endorsed**: When the sample was restricted to the Medicaid eligible population in Indiana, none of the sample had any medical debt.

**Goal 6 – Assess the costs to implement and operate HIP and other non-cost outcomes of the demonstration.**

The research questions associated with these hypotheses rely on data from 2013 – 2020, including Healthcare Provider Cost Reporting Information System (HCRIS) data and program administrative data. Years that were utilized for each of the RQs were proposed in Exhibit F.10 (Data Source column) of the HIP Evaluation Plan by Lewin, approved by Centers for Medicare & Medicaid Services (CMS) in October 2020.

- **RQ 1**: For administrative expenditures, current costs from 2018 through 2020 were considered the most relevant
- **RQ 2**: For Medicaid expenditures, post-Medicaid expansion data was used. For Indiana, the first full calendar year was 2016. Expenditures from 2016 – 2020 (2017 – 2020 for Kentucky, as 2016 data was not available) were reported
- **RQ 3**: For uncompensated care, it was necessary to compare data before the Medicaid expansion to data after the expansion. For pre-expansion data, it was necessary to go back to 2013, which was prior to Medicaid expansion in all states. For the post-expansion period, data was summarized from 2018 – 2020

**Goal 6** and its corresponding hypotheses and RQs are based on analysis completed by Indiana’s actuary, Milliman, Inc.\(^{176}\)

**Hypothesis 1 – Costs and non-costs to implement and operate HIP are sustainable.**

Primary Research Question 1 – What are the administrative costs incurred by the State to implement and operate the HIP demonstration?

The following data sources were used to summarize administrative costs incurred by the State to implement and operate the HIP demonstration:

- State administrative data for January 2018 – December 2020;

\(^{176}\) To reduce the duplication of efforts, and thus cost, this analysis was completed by Indiana’s actuary, Milliman, Inc. and appended to the Summative Evaluation Report. The results are incorporated into the overall evaluation analysis where relevant and as appropriate.
State enrollment data for January 2018 – December 2020; and

Per member per month (PMPM) assumptions for the non-benefit costs associated with the capitation payments made to the four managed care entities (MCEs) that provide services to the Indiana HIP program members for January 2018 – December 2020.

The administrative costs reported in the RQ 1 are for all HIP members (Non-Expansion Low-Income Parent and Caretaker members and non-elderly non-disabled adults enrolled due to the Medicaid expansion, pregnant people with a federal poverty level [FPL] up to 138% and hospital Presumptive Eligibility).

Exhibit F.6.1 displays the administrative costs incurred by the State to implement and operate the HIP program from January 2018 – December 2020. The expenditures in the table are sub-divided into direct costs incurred by the State to administer the program, as well as non-benefit cost allowances that are paid to the MCEs through the HIP capitation rates.

There are 15 full-time equivalent (FTE) state employees dedicated to ongoing implementation and administration of the HIP program, including oversight of managed care and communication with members about demonstration policies. The State staff and other expenses line includes their salaries, benefits, and support costs, such as computers, phones, and travel.

The Direct contract spend line represents the agency’s contract costs for supporting the program. The indirect contract spend line represents allocated costs from other state agencies, pursuant to a CMS approved cost allocation plan (42 CFR 433.34).

MCE non-benefit costs included in the capitation reflect claims payment, member services (call centers, complaints, education), membership administration, provider network maintenance, provider services, contracting, and credentialing, utilization management, prior authorizations, quality management, care coordination, medical analytics, accounting, financial reporting, reinsurance, taxes, fees and assessments, risk and profit margin, and cost of capital. For HIP, additional required MCE functions include POWER Account administration, invoice, and collection of monthly member contributions, and in 2019, preparation for community engagement.

Exhibit F.6.1: HIP Administrative Costs by Calendar Year (CY) (January 2018 – December 2020)

<table>
<thead>
<tr>
<th>HIP Administrative Cost Type</th>
<th>CY 2018</th>
<th>CY 2019</th>
<th>CY 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Administrative costs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contractor expenses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct Contract Spend</td>
<td>$ 9,983,348</td>
<td>$ 12,083,881</td>
<td>$ 12,462,898</td>
</tr>
<tr>
<td>Indirect Contract Spend</td>
<td>$ 20,968,719</td>
<td>$ 17,601,085</td>
<td>$ 16,485,612</td>
</tr>
<tr>
<td>Total Contract Spend</td>
<td>$ 30,952,067</td>
<td>$ 29,684,966</td>
<td>$ 28,948,510</td>
</tr>
<tr>
<td>State staff and other expenses</td>
<td>$ 22,853,294</td>
<td>$ 25,145,240</td>
<td>$ 22,021,247</td>
</tr>
<tr>
<td>Total Direct Administrative costs</td>
<td>$ 53,805,361</td>
<td>$ 54,830,206</td>
<td>$ 50,969,757</td>
</tr>
<tr>
<td>MCE non-benefit cost in the capitation</td>
<td>$ 322,264,029</td>
<td>$ 380,915,686</td>
<td>$ 385,737,718</td>
</tr>
<tr>
<td>Total costs to implement and operate HIP</td>
<td>$ 376,069,390</td>
<td>$ 435,745,891</td>
<td>$ 436,707,475</td>
</tr>
<tr>
<td>Average monthly enrolled members</td>
<td>402,884</td>
<td>403,091</td>
<td>506,149</td>
</tr>
<tr>
<td>Administrative costs on a PMPM basis</td>
<td>$77.79</td>
<td>$90.08</td>
<td>$71.90</td>
</tr>
</tbody>
</table>

Source: State enrollment data, capitation development, and state administrative data: January 2018 – December 2020.
Preliminary set up costs for community engagement planned for Gateway to Work were a major contributor to the increase in MCE costs from 2018 – 2019. In addition, the 2019 non-benefit cost allowance was increased by 1.45% of total capitation (approximately $40 million) to reflect reassignment of a portion of the pharmacy administrative cost previously characterized as a benefit cost. Pharmacy spread was removed from the benefit cost reported in pharmacy encounters in compliance with final Medicaid managed care regulations.

COVID-19 PHE (2020): The administrative costs in calendar year 2020 did not increase with enrollment as some of the administrative burdens on the MCEs were reduced due to the PHE (for example, prior authorizations were scaled back, and monthly POWER Account contributions were not collected during the PHE). In addition, Gateway to Work activities from 2019 were discontinued.

Research Question 1 Findings Summary – What are the administrative costs incurred by the State to implement and operate the HIP demonstration?

The administrative costs incurred by the State increased from $77.79 PMPM in CY 2018 to $90.08 PMPM in CY 2019. However, the PMPM cost decreased in CY 2020 to $71.90 due to reduced administrative burdens on the MCEs during the PHE. In 2018 – 2019, the increase was due to preliminary set up costs for community engagement. There are 15 FTE state employees dedicated to ongoing implementation and administration of the HIP program, including oversight of managed care and communication with members about demonstration policies. The State staff and other expenses line includes their salaries, benefits, and support costs, such as computers, phones, and travel.

Primary Research Question 2 – What are the short- and long-term effects of eligibility and coverage policies on Medicaid health care expenditures?

MCE encounter data, fee-for-service data, and state enrollment data were used to summarize historical expenditures and PMPM expenditures for adult populations in Indiana, Ohio, and Kentucky. We are grateful to Ohio and Kentucky for allowing Milliman to summarize raw claims, encounters, and enrollment information to the specifications needed for this report. For Indiana and Ohio, data was summarized for January 2016 through December 2020. For Kentucky, because 2016 data was not available, Milliman has summarized data from 2017 through 2020. Please note that the time periods summarized for this question are post Medicaid expansion for all three states, and data has been stratified into the Medicaid Expansion (new adult) population and Non-Expansion population. Populations that are included in the HIP program summaries are:

- **Expansion**: Non-elderly, non-disabled adult members who are eligible to enroll due to Medicaid expansion, including those who are medically frail. The State is able to claim increased 90% federal match for the expenditures for this population.
- **Non-Expansion**: Low-Income Parent and Caretaker members enrolled in State Basic or State Plus, including those who are medically frail. The State is able to claim regular federal match for the expenditures for this population.
- **Pregnant People**: Pregnant members with income up to 138% FPL (Aid category HIP Maternity [MA]).
- **Hospital Presumptive Eligibility**: For individuals using the HIP Presumptive Eligibility process, this includes the coverage period prior to completion of regular enrollment.

Difference-in-Differences (DiD) regression analysis considered Expansion and Non-Expansion populations only.
Exhibits F.6.2 and F.6.3 display the claims experience expenditures for the HIP program from January 2016 – December 2020, both by total expenditures and PMPM expenditures.

**Exhibit F.6.2: HIP Program Claims Expenditures (in Millions) (January 2016 – December 2020)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Expansion Basic</td>
<td>$ 218.9</td>
<td>$ 306.1</td>
<td>$ 315.5</td>
<td>$ 357.8</td>
<td>$ 494.4</td>
</tr>
<tr>
<td>Expansion Plus</td>
<td>$ 1,368.6</td>
<td>$ 1,577.6</td>
<td>$ 1,857.4</td>
<td>$ 2,111.0</td>
<td>$ 2,414.6</td>
</tr>
<tr>
<td>Total Expansion</td>
<td>$ 1,587.5</td>
<td>$ 1,883.7</td>
<td>$ 2,172.9</td>
<td>$ 2,468.8</td>
<td>$ 2,909.0</td>
</tr>
<tr>
<td>Non-Expansion Basic</td>
<td>$ 137.3</td>
<td>$ 158.9</td>
<td>$ 129.8</td>
<td>$ 115.2</td>
<td>$ 150.4</td>
</tr>
<tr>
<td>Non-Expansion Plus</td>
<td>$ 358.8</td>
<td>$ 361.3</td>
<td>$ 380.2</td>
<td>$ 383.8</td>
<td>$ 464.1</td>
</tr>
<tr>
<td>Total Non-Expansion</td>
<td>$ 496.1</td>
<td>$ 520.2</td>
<td>$ 510.0</td>
<td>$ 499.1</td>
<td>$ 614.4</td>
</tr>
<tr>
<td>Pregnant Members</td>
<td>$ 104.9</td>
<td>$ 128.0</td>
<td>$ 223.1</td>
<td>$ 285.0</td>
<td>$ 304.7</td>
</tr>
<tr>
<td>HIP Presumptive Eligibility</td>
<td>$ 142.6</td>
<td>$ 128.3</td>
<td>$ 185.2</td>
<td>$ 214.1</td>
<td>$ 165.7</td>
</tr>
<tr>
<td><strong>Total HIP</strong></td>
<td><strong>$ 2,331.2</strong></td>
<td><strong>$ 2,660.2</strong></td>
<td><strong>$ 3,091.3</strong></td>
<td><strong>$ 3,467.0</strong></td>
<td><strong>$ 3,993.7</strong></td>
</tr>
</tbody>
</table>


**Exhibit F.6.3: HIP Program PMPM Claims Expenditures (January 2016 – December 2020)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Expansion Basic</td>
<td>$ 274.31</td>
<td>$ 311.81</td>
<td>$ 363.42</td>
<td>$ 431.89</td>
<td>$ 509.57</td>
</tr>
<tr>
<td>Expansion Plus</td>
<td>$ 617.53</td>
<td>$ 648.78</td>
<td>$ 727.79</td>
<td>$ 790.35</td>
<td>$ 708.07</td>
</tr>
<tr>
<td>Total Expansion</td>
<td>$ 526.67</td>
<td>$ 551.86</td>
<td>$ 635.30</td>
<td>$ 705.49</td>
<td>$ 664.11</td>
</tr>
<tr>
<td>Non-Expansion Basic</td>
<td>$ 233.25</td>
<td>$ 264.13</td>
<td>$ 307.23</td>
<td>$ 362.72</td>
<td>$ 387.77</td>
</tr>
<tr>
<td>Non-Expansion Plus</td>
<td>$ 499.59</td>
<td>$ 518.11</td>
<td>$ 571.41</td>
<td>$ 623.03</td>
<td>$ 532.58</td>
</tr>
<tr>
<td>Total Non-Expansion</td>
<td>$ 379.61</td>
<td>$ 400.47</td>
<td>$ 468.83</td>
<td>$ 534.47</td>
<td>$ 487.99</td>
</tr>
<tr>
<td>Pregnant Members</td>
<td>$ 852.66</td>
<td>$ 894.35</td>
<td>$ 1,130.47</td>
<td>$ 1,160.32</td>
<td>$ 910.34</td>
</tr>
<tr>
<td>HIP Presumptive Eligibility</td>
<td>$ 976.93</td>
<td>$ 1,130.34</td>
<td>$ 1,435.18</td>
<td>$ 1,352.57</td>
<td>$ 1,661.38</td>
</tr>
<tr>
<td><strong>Total HIP</strong></td>
<td><strong>$ 507.85</strong></td>
<td><strong>$ 535.36</strong></td>
<td><strong>$ 639.40</strong></td>
<td><strong>$ 716.75</strong></td>
<td><strong>$ 657.54</strong></td>
</tr>
</tbody>
</table>


Calendar year 2016 was the first full year of the HIP program. As the HIP program matured, there was a material increase in acuity, and a tripling in the percentage of medically frail members, driven in part by a sharp increase in the percentage of members with substance use disorder (SUD) or serious mental illness (SMI) conditions. In addition, the increase in state-directed hospital reimbursement exceeded historical medical trend. All throughout the demonstration, per member costs in HIP Plus have been markedly higher than HIP Basic. A part of the difference may be explained by additional benefits available in HIP plus, such as dental and vision, but the more significant contributor is selection, as older members or those with greater medical needs tend to select into the Plus population.

The hospital Presumptive Eligibility population transitioned from managed care to fee for service at the beginning of calendar year 2019.
COVID-19 PHE (2020): Due to the Maintenance of Effort (MOE) during the PHE, HIP served 25.6% more members (average monthly) in 2020 than in 2019. However, health care claim expenditures grew more slowly, as average member acuity declined, and because many members did not seek health services in calendar year 2020 due to the COVID-19 pandemic, especially elective services. The overall PMPM in calendar year 2020 declined 8.3% from the calendar year 2019 level.

The number of hospital Presumptive Eligibility members declined 37% from 2019 – 2020, in large part a result of reduced churn due to the MOE (the MOE ensured no eligible members lost enrollment for administrative reasons, so eligible state residents seeking hospital treatment were more likely to already be enrolled in Medicaid). However, average cost for remaining HIP PE members increased by 23%.

Exhibits F.6.4 and F.6.5 display PMPM claims costs by year for the Non-Expansion Temporary Assistance for Needy Families (TANF) and expansion Medicaid populations in Indiana, Ohio, and Kentucky. The claims costs displayed represent a combination of encounter claims paid by health plans as well as fee-for-service claims paid by the State for carved out services to represent the total claims cost of the members.

Exhibit F.6.4: Non-Expansion (Mandatory) Adult PMPM Claims Costs by Year (January 2016 – December 2020)

<table>
<thead>
<tr>
<th>State and Year</th>
<th>PMPM Cost</th>
<th>% Increase from Previous Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indiana</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>$ 379.61</td>
<td>n.a.</td>
</tr>
<tr>
<td>2017</td>
<td>$ 400.47</td>
<td>5.5%</td>
</tr>
<tr>
<td>2018</td>
<td>$ 468.83</td>
<td>17.1%</td>
</tr>
<tr>
<td>2019</td>
<td>$ 534.47</td>
<td>14.0%</td>
</tr>
<tr>
<td>2020</td>
<td>$ 487.99</td>
<td>-8.7%</td>
</tr>
<tr>
<td><strong>Annual trend, 2016 – 2020</strong></td>
<td></td>
<td>5.2%</td>
</tr>
<tr>
<td>Ohio</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>$ 340.47</td>
<td>n.a.</td>
</tr>
<tr>
<td>2017</td>
<td>$ 338.33</td>
<td>-0.6%</td>
</tr>
<tr>
<td>2018</td>
<td>$ 341.01</td>
<td>0.8%</td>
</tr>
<tr>
<td>2019</td>
<td>$ 365.56</td>
<td>7.2%</td>
</tr>
<tr>
<td>2020</td>
<td>$ 381.29</td>
<td>4.3%</td>
</tr>
<tr>
<td><strong>Annual trend, 2016 – 2020</strong></td>
<td></td>
<td>2.3%</td>
</tr>
<tr>
<td>Kentucky</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>2017</td>
<td>$ 475.41</td>
<td>n.a.</td>
</tr>
<tr>
<td>2018</td>
<td>$ 475.63</td>
<td>0.0%</td>
</tr>
<tr>
<td>2019</td>
<td>$ 509.76</td>
<td>7.2%</td>
</tr>
<tr>
<td>2020</td>
<td>$ 487.07</td>
<td>-4.5%</td>
</tr>
<tr>
<td><strong>Annual trend, 2016 – 2020</strong></td>
<td></td>
<td>0.6%</td>
</tr>
</tbody>
</table>


Note: Values for Indiana, Ohio, and Kentucky were all summarized from raw enrollment, claims, and encounter data by Milliman, with permission for each of the state Medicaid agencies.
### Exhibit F.6.5: Medicaid Expansion (Newly Eligible) Adult PMPM Claims Costs by Year (January 2016 – December 2020)

<table>
<thead>
<tr>
<th>State and Year</th>
<th>PMPM Cost</th>
<th>% Increase from Previous Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indiana</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>$526.67</td>
<td>n.a.</td>
</tr>
<tr>
<td>2017</td>
<td>$551.86</td>
<td>4.8%</td>
</tr>
<tr>
<td>2018</td>
<td>$635.30</td>
<td>15.1%</td>
</tr>
<tr>
<td>2019</td>
<td>$705.49</td>
<td>11.0%</td>
</tr>
<tr>
<td>2020</td>
<td>$664.11</td>
<td>-5.9%</td>
</tr>
<tr>
<td><strong>Annual trend, 2016 – 2020</strong></td>
<td></td>
<td>4.7%</td>
</tr>
<tr>
<td>Ohio</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>$581.57</td>
<td>n.a.</td>
</tr>
<tr>
<td>2017</td>
<td>$570.14</td>
<td>-2.0%</td>
</tr>
<tr>
<td>2018</td>
<td>$574.83</td>
<td>0.8%</td>
</tr>
<tr>
<td>2019</td>
<td>$652.89</td>
<td>13.6%</td>
</tr>
<tr>
<td>2020</td>
<td>$669.12</td>
<td>2.5%</td>
</tr>
<tr>
<td><strong>Annual trend, 2016 – 2020</strong></td>
<td></td>
<td>2.8%</td>
</tr>
<tr>
<td>Kentucky</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>2017</td>
<td>$447.80</td>
<td>n.a.</td>
</tr>
<tr>
<td>2018</td>
<td>$482.67</td>
<td>7.8%</td>
</tr>
<tr>
<td>2019</td>
<td>$515.01</td>
<td>6.7%</td>
</tr>
<tr>
<td>2020</td>
<td>$515.08</td>
<td>0.0%</td>
</tr>
<tr>
<td><strong>Annual trend, 2016 – 2020</strong></td>
<td></td>
<td>3.6%</td>
</tr>
</tbody>
</table>


Note: Values for Indiana, Ohio, and Kentucky were all summarized from raw enrollment, claims, and encounter data by Milliman, with permission for each of the state Medicaid agencies.

PMPM cost growth was generally higher in Indiana, especially from 2017 – 2018 and 2018 – 2019. However, it is difficult to draw meaningful conclusions as there are differences in the programs among the states listed above. Program changes during the study period and changes in the average member profiles/demographics, may also vary across the states. HIP is required to pay at the Medicare fee schedule for non-hospital services, whereas Ohio and Kentucky do not have a similar requirement. In addition, there is also a benefit package difference across the states.

**COVID-19 PHE (2020):** The PHE reduced average member acuity in all states. Under normal conditions, healthy members are more likely to “churn” in and out of the program, while those with more significant health needs are more likely to remain consistently enrolled. MOE requirements resulted in a higher proportion of healthy individuals staying in Medicaid, reducing average acuity. Indiana experienced decreases in the calendar year 2020 PMPM for both Expansion and Non-Expansion populations as illustrated in Exhibits F.6.4 and F.6.5 above.
Exhibits F.6.6 and F.6.7 display PMPM claims costs values from Exhibits F.6.4. and F.6.5 in graphical form.

Exhibit F.6.6: Medicaid Expansion (Newly Eligible) Adult and Non-Expansion (Mandatory) Adult PMPM Claims Costs by Year (January 2016 – December 2020), comparing Indiana and Ohio


Note: Values for Indiana, Ohio, and Kentucky were all summarized from raw enrollment, claims, and encounter data by Milliman, with permission for each of the state Medicaid agencies.
Exhibit F.6.7: Medicaid Expansion (Newly Eligible) Adult Non-Expansion (Mandatory) Adult PMPM Claims Costs by Year (January 2017 – December 2020), comparing Indiana and Kentucky

In addition to comparing trends over the last five years, a DiD regression was also performed on the PMPM claims data above for Indiana, Kentucky, and Ohio as described in the evaluation plan. This analysis shows the cost relationship of Expansion population in Indiana to the Non-Expansion population in Indiana and Expansion and Non-Expansion populations in two comparable states (Kentucky and Ohio).

DiD regression compares a treatment group (assumed to be Expansion population in Indiana) against a control group (assumed to be Non-Expansion population in Indiana and Expansion and Non-Expansion populations in Kentucky and Ohio). The following regression equation was utilized in the analysis:

\[
\text{Cost}_i = \beta_0 + \beta_1 \times \text{Expansion} + \beta_2 \times \text{Indiana} + \beta_3 \times (\text{Expansion} \times \text{Indiana}) + \epsilon_i
\]

Where:
- Cost – expenditures being evaluated (PMPM for each state)
- \(i\) – individual state
- Expansion – binary indicator of whether the population is Expansion (1) or Non-Expansion (0)
- Indiana – binary indicator of whether the state is Indiana (1) or Kentucky and Ohio (0)
- Expansion \(\times\) Indiana – binary interaction term set to 1 for Expansion Indiana population and to 0 for all other populations.


Note: Values for Indiana, Ohio, and Kentucky were all summarized from raw enrollment, claims, and encounter data by Milliman, with permission for each of the state Medicaid agencies.
Healthy Indiana Plan Summative Evaluation Report

- $\beta_0$ – Coefficient, estimates the baseline of the cost at time 0 (Intercept)
- $\beta_1$ – Coefficient, estimates the change in costs associated with Expansion population (Expansion)
- $\beta_2$ – Coefficient, estimates the change in costs associated with the population in Indiana (Indiana)
- $\beta_3$ – Coefficient, estimates the change in costs associated with the Expansion population in Indiana (Interaction term)
- $\varepsilon$ – error terms that represents random variability not explained by the model

Exhibit F.6.8 displays some of the key metrics of the regression results, using data from the three states.

**Exhibit F.6.8: DiD Regression Results on PMPM Claims Costs (January 2016 – December 2020)**

<table>
<thead>
<tr>
<th>Regression Feature</th>
<th>Coefficients</th>
<th>Standard Error</th>
<th>t Stat</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>412.7252</td>
<td>24.0379</td>
<td>17.1698</td>
<td>0.0000</td>
</tr>
<tr>
<td>Expansion</td>
<td>143.8423</td>
<td>33.9947</td>
<td>4.2313</td>
<td>0.0003</td>
</tr>
<tr>
<td>Indiana</td>
<td>41.5455</td>
<td>40.2231</td>
<td>1.0329</td>
<td>0.3120</td>
</tr>
<tr>
<td>Interaction term</td>
<td>18.5710</td>
<td>56.8841</td>
<td>0.3265</td>
<td>0.7469</td>
</tr>
</tbody>
</table>


The results of the regression illustrate the relationship of the PMPM costs (dependent variable) to the following potential explanatory variables:

- **Expansion** or Non-Expansion adult population
- **Indiana** compared to non-Indiana states (Ohio and Kentucky)
- The **Interaction** term tests whether combining the first two variables (Expansion and Indiana) has a greater or lesser impact than they might have independently

**Expansion:** The coefficient of 143.8423 tells us that expansion population PMPMs are approximately $143 higher than Non-Expansion, with a standard error of +/- $34. Expansion populations are higher in all three states although only marginally in Kentucky. This may not be surprising, since expansion populations include non-parents, who will tend to be older than the Low-Income Parent and Caretaker Non-Expansion population. The t-Stat and p-value (the p-value is derived from the T-test), both address the statistical significance. For “Expansion”, a high t-stat and a low p-value indicate statistical significance. To interpret the p-value, there is a 0.03% chance, if Expansion status did not affect PMPM, that the results could have occurred by chance alone. Therefore, it is reasonable to conclude that Expansion status is statistically significant – that Medicaid Expansion populations will tend to have higher PMPMs than Non-Expansion.

**Indiana:** The coefficient and standard error indicate that Indiana’s PMPM costs are higher by $42 +/- $40. Higher costs for Indiana is not surprising, given that Indiana directs MCEs to pay providers at Medicare reimbursement rates under the HIP program. However, the standard error indicates a large
uncertainty, and the p-value indicates that if Indiana was not any more costly than other states, there is still a 31% chance that the results could have occurred by chance alone. This is generally not considered a statistically significant p-value.

**Interaction Term**: The coefficient of 18.5710 is a positive amount, but the standard error of 56 is much larger than the coefficient. Further, the p-value of 0.7469 indicated that this finding is not statistically significant and is likely due to chance.

**Research Question 2 Findings Summary – What are the short- and long-term effects of eligibility and coverage policies on Medicaid health care expenditures?**

The analysis suggests a strong probability that the cost for Expansion populations is materially higher than for Non-Expansion populations. This may be expected, since Expansion populations are often older and less healthy. No statistically significant conclusions may be drawn with regard to the cost of Indiana’s program relative to Ohio and Kentucky, and any higher costs may potentially be attributable to higher (Medicare) reimbursement to providers under HIP.

**Primary Research Question 3 – What are the impacts of eligibility and coverage policies on provider uncompensated care costs?**

HCRIS Medicare cost report data (Worksheet S10 and Worksheet C) for January 2013 – December 2014 (pre-expansion for Indiana) and January 2018 – December 2020 for Indiana, Kentucky, Ohio, and South Carolina is summarized. Medicare cost report data include uncompensated care, bad debt, and charity care information. The exhibits below display uncompensated hospital care costs (Line 31 of the Worksheet S10) *as a percentage* of total reported hospital care costs (Line 200 of Worksheet C) to allow us to make comparisons across the states. This metric is displayed for Indiana as well as for Kentucky and Ohio (two states that expanded Medicaid) and South Carolina (a state that did not expand Medicaid).

**Exhibit F.6.9** displays this metric by year, while **Exhibit F.6.10** displays the metric by pre-expansion and post-expansion period. The pre-expansion and post-expansion periods are defined as follows:

- For all states displayed, the pre-expansion period represents the metric from 2013 (since Ohio and Kentucky expanded Medicaid in 2014).
- For all states displayed, the post-expansion period represents the metric from 2018 through 2020.

**Exhibit F.6.9: Uncompensated Hospital Care as a Percentage of Total Hospital Costs by Year (January 2013 – December 2014 and January 2018 – December 2020)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Indiana</td>
<td>9.9%</td>
<td>10.1%</td>
<td>8.5%</td>
<td>7.8%</td>
<td>8.3%</td>
</tr>
<tr>
<td>Kentucky</td>
<td>8.9%</td>
<td>7.0%</td>
<td>4.9%</td>
<td>4.3%</td>
<td>3.7%</td>
</tr>
<tr>
<td>Ohio</td>
<td>7.5%</td>
<td>7.0%</td>
<td>6.3%</td>
<td>7.1%</td>
<td>7.0%</td>
</tr>
<tr>
<td>South Carolina</td>
<td>10.3%</td>
<td>9.7%</td>
<td>9.5%</td>
<td>9.6%</td>
<td>10.6%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>8.7%</td>
<td>8.1%</td>
<td>7.1%</td>
<td>7.2%</td>
<td>7.3%</td>
</tr>
</tbody>
</table>

* Kentuck and Ohio expansion was effective January 1, 2014

Source: Medicare cost reports (Worksheet S10)
### Exhibit F.6.10: Uncompensated Hospital Care as a Percentage of Total Hospital Costs – Pre-versus Post-Expansion (January 2013 – December 2013 and January 2018 – December 2020)

<table>
<thead>
<tr>
<th>State</th>
<th>Pre-Expansion Period&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Post-Expansion Period&lt;sup&gt;b&lt;/sup&gt;</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indiana</td>
<td>9.9%</td>
<td>8.2%</td>
<td>-1.7%</td>
</tr>
<tr>
<td>Kentucky</td>
<td>8.9%</td>
<td>4.3%</td>
<td>-4.7%</td>
</tr>
<tr>
<td>Ohio</td>
<td>7.5%</td>
<td>6.8%</td>
<td>-0.7%</td>
</tr>
<tr>
<td>South Carolina</td>
<td>10.3%</td>
<td>9.9%</td>
<td>-0.4%</td>
</tr>
</tbody>
</table>

<sup>a</sup> For all states utilizing CY 2013 for pre-expansion period.

<sup>b</sup> For all states, utilizing CY 2018 – CY 2020 for the post-expansion period.

Source: Medicare cost reports (Worksheet S10)

The percentages for the difference between pre-expansion period and post-expansion period provided above for the three states that implemented Medicaid expansion (Indiana, Kentucky, and Ohio) show a decrease in the uncompensated hospital care percentage with Kentucky showing the highest decrease of all the expansion states. South Carolina (the state that did not implement the expansion) also had a decrease in the uncompensated hospital care percentage, but a smaller decrease than the expansion states. It may be concluded that the decrease in uncompensated care in Indiana, Kentucky, and Ohio was correlated with the Medicaid expansion in those states as more individuals in the state received health care coverage, reducing uncompensated hospital care. Of the states that expanded Medicaid, Ohio had the smallest decrease in the uncompensated care percentage. One reason for the smaller impact may be that Ohio already had a relatively high-income threshold for low-income parents at 90% of FPL. The low-income parent income thresholds for Indiana and Kentucky are 17% and 22% respectively.

**COVID-19 PHE (2020):** The PHE had an impact on hospitals during March 2020 – December 2020, affecting states in the analysis in different ways. Hence, some states experienced an increase in the uncompensated care percentage from calendar year 2019 and some experienced a decrease. However, it is still evident that the uncompensated care percentage for calendar year 2020 remains lower than the percentage in the pre-expansion period for the states that implemented Medicaid expansion.

In addition to comparing the trends in the uncompensated care percentage, Milliman also performed a DiD regression on the uncompensated care percentage data above for Indiana, Kentucky, Ohio, and South Carolina as described in the evaluation plan. This analysis shows the relationship of uncompensated care percentages for states that implemented Medicaid expansion as compared to the state that chose not to implement the expansion.

DiD regression compares a treatment group (assumed to be states that implemented Medicaid expansion) against a control group (state that did not implement Medicaid expansion) in the post-expansion time period. The following regression equation was utilized in the analysis:

\[
\text{Cost}_i = \beta_0 + \beta_1 \times \text{Post-Expansion} + \beta_2 \times \text{Expansion State} + \beta_3 \times \text{Indiana} + \beta_4 \times (\text{Post-Expansion} \times \text{Expansion State} \times \text{Indiana}) + \epsilon_i
\]
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Where:
- Cost – Uncompensated care cost percentage
- $i$ – individual state
- Post-Expansion – binary indicator of whether the time period is post-expansion (1) or pre-expansion (0)
- Expansion State – binary indicator of whether the state implemented Medicaid expansion (1 for Indiana, Kentucky, and Ohio) or Non-Expansion (0 for South Carolina)
- Post-Expansion * Expansion State – binary interaction term set to 1 for post-expansion period for Indiana, Kentucky, and Ohio and to 0 for all other combinations.
- Post-Expansion * Expansion State * Indiana – binary interaction term set to 1 for post-expansion period for Indiana and to 0 for all other combinations.
- $\beta_0$ – Coefficient, estimates the baseline of the cost percentage at time 0 (Intercept)
- $\beta_1$ – Coefficient, estimates the change in cost percentage associated with post-expansion period (Post-Expansion)
- $\beta_2$ – Coefficient, estimates the change in cost percentage associated with implementation of Medicaid expansion (Expansion State)
- $\beta_3$ – Coefficient, estimates the change in costs associated with the population in Indiana (Indiana)
- $\beta_4$ – Coefficient, estimates the change in costs associated with post-expansion time period for the Medicaid expansion state of Indiana
- $\epsilon$ – error terms that represents random variability not explained by the model

Exhibit F.6.11 displays some of the key metrics of the regression results.

**Exhibit F.6.11: DiD Regression Results on Uncompensated Care as a Percentage of Hospital Costs in Indiana, Kentucky, Ohio, and South Carolina (January 2013 – December 2013 and January 2018 – December 2020)**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Coefficients</th>
<th>Standard Error</th>
<th>t Stat</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.1142</td>
<td>0.0083</td>
<td>13.7408</td>
<td>0.0000</td>
</tr>
<tr>
<td>Post Expansion</td>
<td>(0.0192)</td>
<td>0.0078</td>
<td>(2.4510)</td>
<td>0.0322</td>
</tr>
<tr>
<td>Expansion State</td>
<td>(0.0376)</td>
<td>0.0072</td>
<td>(5.2192)</td>
<td>0.0003</td>
</tr>
<tr>
<td>Indiana</td>
<td>0.0227</td>
<td>0.0138</td>
<td>1.6500</td>
<td>0.1272</td>
</tr>
<tr>
<td>Interaction Term</td>
<td>0.0022</td>
<td>0.0157</td>
<td>0.1376</td>
<td>0.8930</td>
</tr>
</tbody>
</table>

Source: Medicare cost reports (Worksheet S10 and Worksheet C) from Indiana, Kentucky, Ohio, and South Carolina

The results of the regression illustrate the change in the uncompensated care costs between three states that chose to expand Medicaid and one state that did not.
Post-Expansion: The Post-Expansion term coefficient of (0.0192) is negative, indicating that the uncompensated care cost percentage decreased approximately 1.92% more in the post-expansion time period. This finding has a p-value of 0.0322, indicating it is likely to be statistically significant (not due to chance). A standard threshold for statistical significance is that the p-value should be less than 0.05.

Expansion state: The Expansion State coefficient of (0.0376) is also negative, indicating the uncompensated care cost percentage is approximately 3.76% lower for states that expanded Medicaid relative to the state that did not expand Medicaid (South Carolina). This variable has an extremely low p-value of 0.0003, indicating strong statistical significance.

Indiana: The Indiana term has a positive coefficient of 0.0227, indicating the potential for a higher uncompensated care cost percentage in Indiana relative to other states in the analysis. However, the p-value of 0.1272 is above the normal 0.05 threshold for statistical significance, indicating a relatively high 12.72% probability the correlation with Indiana is due entirely to chance.

Interaction: The interaction term has a small coefficient (impact) and a large p-value, indicating low statistical significance. This indicates little additional information from the interaction of the three terms listed above, beyond their individual contributions.

Research Question 3 Findings Summary – What are the impacts of eligibility and coverage policies on provider uncompensated care costs?

The analysis provides strong and statistically significant support for the power of Medicaid expansion to reduce uncompensated care costs. All expansion states experienced larger declines in uncompensated care than South Carolina (Non-Expansion control state). No statistically significant conclusions may be drawn on the impact of HIP specifically. Indiana experienced smaller declines in uncompensated care than Kentucky, and larger declines in uncompensated care than Ohio. However, we should take into consideration that the low-income parent income threshold in Ohio is higher than in Indiana and Kentucky (90% of FPL\(^{177}\)), reducing the impact of expansion to 138% FPL.

\(^{177}\) From Medicaid.gov CMS 64 data: [Medicaid Enrollment - New Adult Group](https://www.medicaid.gov)

Lewin Group – 6/30/2022

*Final for CMS Review*
G. Conclusions

For Indiana and other states testing new approaches and flexibilities in their Medicaid programs through Section 1115 waiver demonstrations, evaluations allow states to build on successes and adjust their approach based on lessons learned. This Summative Evaluation Report provides a comprehensive evaluation of the three-year demonstration period from February 2018 – December 2020. These observations will inform the State’s continued implementation of these policies.

Several HIP policies were modified or paused in March 2020 in response to the COVID-19 PHE. These included policies related to member eligibility, cost-sharing, tobacco surcharge, and prescription filling processes, among others. The details of these policy changes and their implications for the evaluation (i.e., certain data and analyses were omitted or adjusted) were noted throughout this report as appropriate. This section provides high-level observations for each goal of the HIP program under evaluation, along with Lewin’s recommended key areas of focus for the State going forward. Section F: Results by Demonstration Goal provides additional detail by hypothesis and research question.

Goal 1 – Improve health care access, appropriate utilization, and health outcomes among HIP members

State officials, managed care entities (MCE), providers, and members recognize HIP as critical for supporting health care access to individuals at or under 138% of the FPL. The quantitative and qualitative analyses performed for the Summative Evaluation Report (described in Section F: Results by Demonstration Goal) provide observations related to member utilization of services and ability to access services. Goal 1 tested five hypotheses and examined whether HIP enrollment and coverage supports member use of key services (including appropriate use of ED services), positive health outcomes, and member satisfaction with access to services. Additionally, Goal 1 provides comparisons of the HIP enrollment rate to other Medicaid expansion states. Key observations for Goal 1 include the following.  

Service Participation and Utilization

Based on enrollment and encounter data, service participation (percentage of continuously enrolled members participating in the services) and utilization varied between 2018 and 2019 as well as across service. Results for preventive care services are mixed, while changes in primary care service findings specifically for 2019 are likely due to state data system enhancements. Consequently, interpretations for both these services on promoting member service use is limited. For all HIP members and particularly for HIP Plus, urgent care participation and service utilization increased. In contrast, both ED visits and specialty care participation and service utilization decreased. Findings also indicate that the overall avoidable ED rate decreased from 2015 – 2019, suggesting that HIP members were using the ED less frequently for non-urgent conditions. Increased coverage may be contributing to reductions in the overuse or misuse of EDs and thereby accounting for the lower utilization and participation of the ED.

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178 Section F: Results by Demonstration Goal provides a detailed description of the HIP members included in analyses for Goal 1. The participation and utilization rates are not adjusted for member characteristics and should not be used for making any inferences on impact of HIP policies on member health access.
Key participation and service utilization findings from 2015 – 2019 include:

- **Preventive Services**: The preventive services participation and utilization rates for all HIP members increased in 2018 and declined in 2019. HIP Plus Only members were more likely to have at least one preventive visit as well as a greater number of visits relative to HIP Basic Only members. Males were less than half as likely to receive preventive care and were associated with using fewer preventive care services.

- **Primary Care**: Participation and utilization rates for primary care visits increased in 2019. However, the increase in 2019 is likely due to enhancements in the claims or encounter data that began recording the “Rendering Provider Specialty” at the claim line level. Members with chronic conditions had an increased likelihood of receiving primary care.

- **Specialty Care**: Participation and utilization rates for specialty care services decreased from 2015 – 2019. However, specialty care use for 2018 and 2019 were higher relative to 2017. HIP Plus Only members and HIP Switchers were more likely to receive specialty care compared with HIP Basic Only members. Relative to Caucasian members, Asian or Pacific Islander members were less likely to receive specialty services.

- **Urgent Care**: Both the participation and utilization rates increased for HIP members from 2015 – 2019. Even adjusting for case mix over time, members in the demonstration period (2018, 2019) had higher likelihood of using urgent care relative to prior years. Asian or Pacific Islander, Black, and Other races were all less likely to receive urgent care services relative to Caucasian members.

- **ED Visits**: The participation rate fluctuated between 2015 – 2019. Utilization rates for ED services decreased across time. Relative to 2017, HIP members were more likely to receive ED services in 2016 than in 2018 and 2019 (demonstration period). HIP Plus Only members were less likely to have an ED visit relative to Basic Only members and were associated with lower ED utilization. Findings indicate that 42.9% of ED visits in the HIP program in 2019 were seen as “avoidable.” When stratified by benefit plan, avoidable ED visits for all benefit plans decreased consistently from 2015 – 2019, with HIP Basic Only decreasing 15.1%, HIP Plus Only decreasing 10.1%, and HIP Switchers decreasing avoidable ED visits by 16.8%.

**Health Outcomes and Satisfaction with Health Care Access**

Analyses of summarized MCE reports based on CAHPS Survey data collected annually from 2015 – 2019 for each MCE indicate HIP members are highly satisfied with access to care (greater than 80% of respondents reported to be usually or always getting needed care and getting care quickly). Members also are considered to be in good or better overall and mental or emotional health (approximately two-thirds of the respondents reported overall health status and mental health status as good or better). There were no observed patterns in changes prior to and post 2018 – 2020 waiver renewal. Findings related to HIP member health status align with reported health status among Medicaid eligible members collected thru the BRFSS Survey. Additionally, based on the BRFSS data, the percentage of the Medicaid eligible population in Indiana with Very Good health increased slightly (by about 2.4 percentage points, not statistically significant) during the 2018 – 2020 period relative to 2013 – 2014 (prior to HIP waiver implementation).

Although findings to date suggest that members have good or better health outcomes and are satisfied with their health care access, caution should be used when interpreting results given the methodological limitations identified for both CAHPS (e.g., small sample size, sample not designed to ensure sufficient response across varied beneficiary characteristics [e.g., benefit plan, income, health condition, sex]) and
BRFSS data (e.g., state level survey does not allow for identification of individuals in the sample enrolled in HIP) (see Attachment J.IV and J.V). Enhancing MCE data to capture health care activities or using additional survey strategies which directly sample HIP members may enable more affirmative conclusions to be drawn that are specific to HIP member health outcomes or satisfaction with health care access.

**Coverage through Fast Track and Presumptive Eligibility**

Although both Fast Track and Presumptive Eligibility allows individuals to obtain coverage sooner and stay covered longer, many individuals who initiate enrollment using either process do not complete enrollment or qualify for HIP. While not everyone who initiates enrollment is ultimately enrolled, individuals across the years use either the Fast Track prepayment option or Presumptive Eligibility to access needed care. For individuals that used Fast Track or Presumptive Eligibility and enrolled in HIP, many received HIP coverage for more than 12 months reinforcing that these policies support access to needed care and may be preferable to retroactive coverage. Findings do not disentangle if individuals with the greatest needs for services enrolled. Future studies examining individual characteristics associated with enrollment as well as whether or not those that needed services retained coverage may support the State in making needed improvements to converting applicants to enrolled members.

**Medicaid Enrollment Rates**

The 2018 HIP waiver renewal continues most components of HIP 2.0 (initiated in 2015) and adds some new provisions. The ACS data was used to examine the changes in Medicaid enrollment rates among the Medicaid eligible population in Indiana relative to selected comparison states that had traditional Medicaid expansion. These comparison states did not have the same policies as HIP. Results indicate that the Medicaid enrollment rates in Indiana increased from 33.3% in 2017 to 35.5% in 2019. In contrast, the Medicaid enrollment rates in the comparison states declined slightly or remained relatively stable from 44.0% to 43.7% during the same period. Additionally, the increase in the proportion of Medicaid eligible population enrolled in Medicaid (from before 2018 to 2018 – 2019) was higher by almost 1.6 percentage points for Indiana relative to the change in the comparison states. This additional 1.6 percentage point increase in Medicaid enrollment rates in Indiana suggests that there is no adverse change in the access to and enrollment in the Medicaid program in the State after the 2018 HIP waiver renewal and policy interventions. However, given that over 33.0% of the Medicaid eligible Indiana population was enrolled in Medicaid in 2017, this effect is relatively small. Additionally, although the rate of increase in Medicaid enrollment in Indiana was higher relative to the comparison states, the overall proportion of the Medicaid eligible population enrolled in Medicaid was lower for Indiana relative to the comparison states.

Medicaid enrollment analyses did not assess the drivers of high versus low rates of the proportion of the Medicaid eligible population enrolled in Medicaid. Future studies that examine the drivers of Medicaid enrollment will be an important next step for improving access to needed care.

**Goal 1 Recommendations**

- Continue to collaborate with health care providers to provide equitable access to health care services.
- Continue to develop policies and action plans to increase utilization of preventive care services.
- Continue to develop plans and policies to decrease avoidable ED use.
• Enhance MCE data capture activities or use additional survey strategies which directly sample HIP members on topics, such as health care outcomes or satisfaction with access to care.

• Conduct studies examining individual characteristics associated with enrollment as well as whether or not those that needed services maintained coverage.

• Build on findings of observational changes in Medicaid enrollment by examining the drivers of Medicaid enrollment.

Goal 2 – Increase community engagement leading to sustainable employment and improved health outcomes among HIP members.

Effective October 31, 2019, the State no longer required members to report their Gateway to Work (Indiana’s community engagement program) hours. Effective April 30, 2020, the State indefinitely stopped all Gateway to Work activities in response to the stay in the federal lawsuit involving Indiana Medicaid and the COVID-19 PHE. Additionally, on June 24, 2021, the Centers for Medicare & Medicaid Services (CMS) withdrew its conditional approval of the community engagement requirement. Therefore, Goal 2 will not be evaluated.

Goal 3 – Discourage tobacco use among HIP members through a premium surcharge and the utilization of tobacco cessation benefits.

All members have access to HIP covered tobacco cessation services which have remained unchanged since the 2018 waiver renewal. However, as part of the 2018 renewal, HIP added a tobacco use surcharge policy. HIP Plus members having continuous enrollment with an MCE and continuing to report tobacco use in the second year of enrollment have a surcharge applied to their POWER Account Contributions at the beginning of the new benefit period. Members having continuous enrollment and reported tobacco use at intake are assumed to be tobacco users unless they report a tobacco use status change. Goal 3 tested two hypotheses and tested whether the premium tobacco surcharge increased the use of tobacco cessation services and if both the surcharge and availability of cessation benefits decreased tobacco use. Key observations for Goal 3 are summarized below.

Member Understanding of the Tobacco Premium Surcharge Policy and Available Cessation Services

Although 2020 member interviews did not include references to the surcharge policy, results from the 2019 member interviews suggest that HIP members are generally aware of the tobacco surcharge as well as the availability of cessation services (e.g., counseling or medications). In contrast, MCE representatives expressed some uncertainty related to member awareness of the surcharge and noted that member understanding of the tobacco surcharge continued to be a challenge requiring supplemental communications to reinforce messages and further facilitate knowledge sharing. Given the inconsistent findings, caution should be used when interpreting results. Additional studies which directly examine member awareness and policy comprehension may result in more conclusive findings and provide insights for potential improvement strategies.

Provider interviews indicated that few providers were familiar with the tobacco surcharge and the consequences for a HIP member who was unable to quit tobacco use. Additionally, findings from CAHPS Surveys suggest considerable variation among the proportion of members who self-report regular tobacco use and who are advised by their providers to quit. CAHPS Survey findings also indicate a gap
between the proportion of members advised to quit smoking or using tobacco and those who are offered information on cessation methods. Together, these findings suggest a need for provider training that covers the premium surcharge policy, available cessation services, and strategies that encourage member’s use of cessation services (e.g., motivational interviewing).

**Tobacco Premium Surcharge and Use of Tobacco Cessation Benefits**

Between 2017 (year prior to surcharge policy) and 2019 (first year surcharge policy applied), the proportion of HIP members using cessation services increased from 6.0% to 6.3% among those reporting use of tobacco. The proportion of HIP members with known tobacco use information and who used cessation services in the same year increased from 5.6% to 12.7% between 2015 – 2019. Of those with known tobacco use information, Caucasian Females between ages 30 – 66 living in metro areas had the highest proportion of cessation service use. To reduce disparities and encourage utilization of tobacco cessation efforts, targeted outreach to HIP members should be conducted.

Nicotine replacement therapy had the highest proportion of utilization followed by medication and counseling. Total number of cessation services used and average services per member using the cessation services increased over time – from before the implementation of the surcharge policy (2015 – 2017) to implementation of the policy (2018) and application of the surcharge (members charged during 2019), suggesting that the surcharge encouraged the increase in cessation service utilization.

**Tobacco Premium Surcharge – Availability of Tobacco Cessation Benefits and Decrease in Tobacco use**

Prior to the surcharge policy, the percentage of members who reported quitting tobacco use (among members reporting using tobacco) was less than 2%. In 2018 (first year of surcharge policy), 16.3% of tobacco users reported quitting tobacco use regardless of using tobacco cessation services. Among the 9,891 tobacco users who also used tobacco cessation services in 2018, approximately 14% of tobacco users, reported quitting tobacco use. In 2019, when the surcharge was implemented, 27.6% of tobacco users who used cessation services reported quitting tobacco use (i.e., first surcharge year was applied in 2019; second year of continuous enrollment after the surcharge was applied).

In 2019, 32,271 tobacco users out of 92,554 members with known tobacco use information (34.5%) reported quitting tobacco compared to 16.3% in 2018. The higher percentage of members who reported quitting tobacco in 2019 suggests that the tobacco cessation surcharge process encourages members to report quitting even though the application of the surcharge does not appear to impact quitting. HIP Plus and Switcher members who use tobacco and tobacco cessation services quit tobacco at higher rates (average of 15.2%) than Basic members (average of 12.6%).

Although, members who had a surcharge applied were not as likely to quit as the overall HIP population (12.0% versus 27.6%) in 2019, cessation rates declined when the surcharge was paused in 2020. This may suggest that the surcharge in conjunction with policy communications as well as cessation service availability may contribute to tobacco use quit rates.

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179 Although members are only eligible for the HIP program until age 64, the analysis includes some members who are 65 or 66.
**Goal 3 Recommendations**

- Continue providing clear and succinct messaging of the surcharge policy and available cessation services to members and providers to further facilitate awareness and knowledge.
- Conduct studies which directly examine member awareness and policy comprehension.
- Implement provider training that 1) increases familiarity with the surcharge policy and consequences to HIP members who are unable to quit tobacco use; 2) promotes regular tobacco screening; 3) highlights cessation services; and 4) provides strategies to encourage member’s use of cessation services (e.g., motivational interviewing).
- Conduct outreach to HIP members with known tobacco information who reported tobacco use. Outreach should focus on Caucasian Males between ages 30 — 50 who live in nonmetro areas.
- Conduct regular reviews of HIP-covered or new, emerging tobacco cessation services (e.g., Transcranial magnetic stimulation, nicotine vaccine) to determine if additional services should be covered.

**Goal 4 – Promote member understanding and increase compliance with payment requirements by changing the monthly POWER Account payment requirement to a tiered structure.**

The State’s transition from a percent of income POWER Account Contribution structure to a simplified tiered structure in 2018 intended to reduce administrative burden, support initial and sustained enrollment in HIP, and reduce disenrollment due to members’ misunderstanding their POWER Account Contribution payment amounts. Subsequently, this goal tests whether the tiered structure improves member understanding of and compliance with POWER Account payments. Key observations include the following.

**Member Understanding of the Income Tier Structure for POWER Account Contributions**

Feedback received from MCE and State officials indicates that member understanding has improved since the first key informant interviews in 2019 as a result of layered communications, ongoing education, and the transition to the tiered POWER Account structure. However, fewer members understood the consequences of nonpayment indicating that improvements for ongoing communications and outreach should continue to be a program focus. All interviewees agreed that the various mechanisms for making POWER Account Contribution payments, such as online, in-person, or through third parties, are helpful for continued understanding of and compliance with POWER Account Contribution requirements.

**Differential Disenrollment and POWER Account Payments**

HIP members that are subject to POWER Account payment requirements have higher annual disenrollment (e.g., base disenrollment and nonpayment disenrollment) compared to other HIP Plus members. As expected, the majority of member disenrollment due to nonpayment was associated with members subject to the POWER Account Contribution payment policies. Monthly disenrollment due to nonpayment was highly variable – irrespective of benefit plan, income level, or medically frail status. The average number of disenrollments among HIP Plus members by month declined starting from 2016 to 2019.
The number of Goal 4 HIP Plus members with changed POWER Account tiered payment structure was higher (similar between 2018 – 2019) during the waiver period as compared to prior years. Additionally, the number of continuously enrolled members increased steadily.

Goal 4 HIP Plus member disenrollment with nonpayment as a reason (irrespective of member FPL) was low (relative to overall disenrollment rate with disenrollment due to administrative reasons accounting for a large proportion of disenrollment) and decreased from 2017 – 2019. Additionally, the number of members disenrolled due to not making their initial POWER Account Contribution decreased during the same period. Most of these members received HIP Basic coverage after not making the initial POWER Account Contribution payment (approximately 99% in 2016 and 98% in 2019. Although the number of members disenrolled due to nonpayment remained similar between 2018 – 2019 – it was lower compared to the period prior to the tiered payment structure, potentially suggesting that the tiered structure improves member understanding of POWER Account Contribution payments and the ability to make payments on time.

Results also indicate an increase in the number of HIP Plus members that moved from HIP Plus to HIP Basic in 2019. As HIP program policies were suspended, there is no conclusive evidence on whether the increased switch from higher benefit Plus to Basic was related to POWER Account Contribution payment policies.

**Enrollment Across POWER Account Payment Tiers**

The number of HIP Plus members during the waiver period with changed POWER Account tiered payment structure was higher (and similar between 2018 and 2019) compared to prior years. Additionally, the number of continuously enrolled members increased steadily. Although the proportion of members having higher FPLs increased across time, the number of new HIP Plus members having income greater than 100% FPL was lower in 2017 – 2019 compared to 2016.

During 2015 – 2019, an estimated 35% of the Medicaid eligible population in Indiana had income less than 23% of FPL, 11% had income between 23% – 50% of FPL, 12% had income between 51% – 75% of FPL, 16% had income between 75% – 100% of FPL, and 26% had income between 101% – 138% of FPL. Individuals with income between 51% – 75% of FPL had the highest enrollment rate (37% in 2015 and increasing to 45% in 2019) across all years while Medicaid individuals with income less than 23% or more than 100% FPL had the lowest enrollment rate (24% in 2015 and increasing to approximately 33% in 2019). Although the enrollment rates increased (especially among individuals with income less than 23% of FPL, 51% – 75% of FPL, and 101% – 138% of FPL) and was higher after implementation of the new POWER Account payment tier structure in 2018, there is variability in the enrollment rate as well as a change in the rate over time based on income. This finding is further reinforced by the results of the ITS model which identified a relationship between enrollment growth and POWER Account income tiers.

The variation in the estimated changes in the enrollment rates across income tiers indicate differential changes in coverage gaps. This suggests that additional research and outreach efforts may be needed to identify barriers and address coverage gaps across those income tiers that did not have significant change in enrollment rates after the 2018 HIP waiver renewal and policy interventions (e.g., income tiers of 23% – 50% and 76% – 100% FPL).
**POWER Account Payment Tiers and Continued Medicaid Enrollment**

The overall number of disenrollments and the disenrollment rate increased from 2015 to 2018. In 2019, the number and proportion of disenrollments decreased slightly. Additionally, the disenrollment rate for members having nonpayment as a reason has decreased across time.

The prevalence of disenrollment having nonpayment as a reason is low. Similar to the trend observed based on raw member counts, controlling for member characteristics, members had a lower likelihood to disenroll due to nonpayment in 2018 and 2019 compared to 2017. Interestingly, controlling for the member characteristics, members appeared to have a higher likelihood of having disenrollment due to other reasons in 2018 and 2019 compared to 2017.

The number and proportion of HIP Plus members (who could be impacted by POWER Account Contribution payment policies) moving from HIP Plus to HIP Basic in a year has been variable across the years (largest in 2019). Goal 4 HIP Plus members who were Black had a higher likelihood of disenrollment due to nonpayment as well as a higher likelihood of moving to HIP Basic compared to non-Hispanic White HIP Plus members. However, even after controlling for sociodemographic characteristics, there was a higher likelihood of disenrollment for all other reasons (other than nonpayment) in 2018 and 2019, compared to 2017. Given both disparities and disenrollment reasons other than nonpayment, research investigating underlying causes for disenrollment may provide insights for targeted strategies that more fully engage all subpopulations.

The proportion of Goal 4 HIP Basic members moving from HIP Basic to HIP Plus annually has increased steadily from 2016 to 2018 before declining in 2019. Goal 4 HIP Basic members with income of 100% FPL or less represent over 94% of all members transitioning to HIP Plus in 2015 – 2019. An increase in the number of members moving from HIP Basic to HIP Plus could occur for a variety of reasons, including demand for the HIP Plus benefit package, decrease in POWER Account Contribution due to the new payment tier structure or new rollover process, and improved member affordability due to an increase in income.

During most years, at least 50% of Goal 4 HIP Plus members (HIP Plus Only and HIP Switchers) had 10 – 12 months of coverage within the year. Approximately 80% of members who changed plans (HIP Basic or HIP Plus) had more than seven months of coverage in a year.

**Rollover and Coverage Continuity**

Goal 4 HIP Plus members receiving rollover appear to have longer coverage compared to those not receiving rollover. In 2019, approximately 67% of Goal 4 HIP Plus members receiving rollover and 47% of Goal 4 HIP Plus members not receiving rollover had between 10 – 12 months of HIP coverage.

The disenrollment rate among Goal 4 HIP members that received rollover and who did not receive rollover varied across years. In 2018 and 2019, the overall disenrollment rate for HIP Plus members who received rollover was higher relative to HIP Plus members who did not receive rollover. In 2018, HIP Plus members who received rollover had slightly lower disenrollment rates due to nonpayment compared to members who did not receive rollover. However, in 2019, members who received rollover had a higher disenrollment rate. This finding requires further exploration to better understand the drivers associated with higher disenrollment rates among those members who received rollover.

Since 2017, the disenrollment rate declined and the length of coverage within a year increased among Goal 4 HIP Plus members receiving rollover status. Compared to members not receiving rollover status,
the length of coverage was higher, but the disenrollment rates were also higher among members receiving rollover status. These results suggest that the receipt of rollover supports greater continuity of coverage for HIP Plus members.

**Goal 4 Recommendations**

- Continue to improve ongoing communications and outreach to ensure members understand the consequences of nonpayment.
- Conduct additional outreach efforts to identify barriers and address coverage gaps across those income tiers that did not have significant change in enrollment rates after 2018 HIP waiver renewal and policy interventions (e.g., income tiers of 23% – 50% and 76% – 100% FPL).
- Investigate underlying causes of the increased disenrollment rate and movement from HIP Plus to HIP Basic for Black HIP members.
- Consider a targeted and culturally appropriate communication strategy to more fully engage all subpopulations and providers.
- Conduct further exploration to assess the drivers associated with higher disenrollment rates among those members who received rollover.

**Goal 5 – Ensure HIP program policies align with commercial policies, are understood by members, and promote positive member experience and minimize gaps in coverage.**

The State designed its HIP policies to mirror a commercial market health insurance plan, including the use of copayments and monthly payment amounts (varying by benefit plan), offering members choices between benefit plans and MCEs, and including incentives to obtain preventive services and disincentives to continue tobacco use. The State, MCEs, provider associations, and advocacy organizations work together in distinct capacities to support member understanding of HIP policies. Goal 5 tested four hypotheses and examined whether or not members understood policies and were satisfied with HIP as well as differences between HIP member and commercial beneficiary characteristics as it relates to non-eligibility periods and retroactive eligibility. Additionally, Goal 5 examines the impact of eliminating or reducing retroactive eligibility. Lewin’s key observations for Goal 5 are summarized below.

**Member Understanding of HIP Policies**

Overall, MCE executives and State officials indicated that their collaboration specific to member communications has been critical in conveying HIP policies, particularly in regard to layered communication strategies and especially during the COVID-19 PHE. State officials described the State communications team’s distinct focus on clarity, simplification, and standardization across all HIP materials, including digital and print.

Findings from the key informant interviews with State officials, MCE executives, and members indicate member understanding of POWER Account Contributions and rollover varied in both 2019 and 2020 interviews. All interviews suggested that opportunities exist to further support member understanding of policies related to POWER Account Contributions, rollover, and preventive care. Findings should be interpreted with caution given the lengthy time frame between the recall time period and the interviews and the likelihood of information bias.
**Member Satisfaction with HIP**

Results of member key informant interviews indicated that most members interviewed were satisfied with the HIP program, citing increased access to care (e.g., large network of providers, preventive and chronic care), and care management supports. During the COVID-19 PHE, stakeholders indicated satisfaction with telehealth services and, more broadly, the State’s policy changes (i.e., turning off cost-sharing and expanding benefits). Reasons for dissatisfaction reported by members and providers included: challenges related to the required documentation members submit for eligibility determination as well as confusion about the plan types and associated requirements. Loss of HIP coverage as a result of nonpayment, documentation, and time required for completing paperwork was also identified as a basis for dissatisfaction. Consistent with findings from 2019, 2020 interviews with MCE executives and FSSA officials indicated that the overall complexity and nuance associated with the HIP program and policies is the most significant area of dissatisfaction among members. Improvement opportunities suggested by members included: increasing medical coverage, expanding assistance for social determinants of health (SDOH), increasing the number of providers who accept HIP, and providing more detailed program information. Results from the CAHPS Survey data was consistent with key informant interviews suggesting that most members were satisfied with the HIP program, with the highest levels of satisfaction in 2020. Findings also indicated that member satisfaction varied between sociodemographic groups, with Black members and younger members generally more dissatisfied.

**Individuals Subject to Non-eligibility Periods and Retroactive Eligibility – Member and Commercial Beneficiary Characteristics**

The socioeconomic and demographic characteristics of HIP members who are at risk of the non-eligibility or lockout periods (payment and redetermination) are different from commercial market populations in terms of income, education, race, and gender. Given the differences in socio-economic and demographic characteristics between Medicaid and the commercially insured population at risk of the non-eligibility or lockout periods, more in-depth examination is needed to better understand why members lose HIP coverage (and may become ineligible/locked out from getting coverage) and any relevant patterns may provide the state with insights for possible improvements.

**Retroactive Eligibility, Enrollment in Medicaid, and Health Outcomes**

The proportion of the Indiana Medicaid eligible population enrolled in Medicaid increased by almost 1.6% during the period of 2018 and after relative to the change in Medicaid enrollment rates in the comparison states. This additional 1.6% increase in Indiana Medicaid enrollment rates after the 2018 waiver renewal indicates that the renewal did not adversely impact the Medicaid enrollment trend in the state of Indiana.

Analysis of health status trend in Indiana relative to the selected comparison states with retroactive coverage suggests that the health status of Medicaid population in Indiana is relatively similar during this time period.

**Goal 5 Recommendations**

- Continue to work with MCEs to carefully test and further streamline communications to support member understanding of POWER Account policies, along with other HIP policies such as rollover, Fast Track, and Presumptive Eligibility, including continuing a layered communication approach (e.g., social media, text message, email, mail) and multiple communication releases reframing the same message to reinforce the policies.
- Examine member perceptions of their health care and how it varies among sociodemographic groups to identify improvement strategies.
- Conduct additional analysis to better understand why members lose HIP coverage (and may become ineligible/locked out from getting coverage) and any patterns that indicate a certain group is more at risk than others.

**Goal 6 – Assess the costs to implement and operate HIP and other non-cost outcomes of the demonstration.**

Goal 6 examined the costs and non-costs associated with implementing and operating HIP. Key observations for Goal 6 are summarized below.

**Administrative Costs for Implementing and Operating HIP**

Direct administrative costs to the State stayed relatively level in calendar year 2018 and calendar year 2019, with a decrease in calendar year 2020. Administrative costs paid to the MCEs increased from calendar year 2018 to calendar year 2019, due to a one-time change in how Pharmacy Benefit Managers spread is reflected, and also due to 2019 set-up costs for community engagement efforts, which have been discontinued. MCE administrative costs were stable from calendar year 2019 to calendar year 2020, despite a 25.6% increase in covered members, because the administrative burden of the MCEs was reduced as some operations such as prior authorizations and collection of monthly contributions were suspended during the COVID-19 PHE – total administrative cost stayed stable even as enrollment increased due to the COVID-19 PHE.

**Short and Long-term Effects of Eligibility and Coverage Policies on Medicaid Health Expenditures**

Claims costs in the HIP program were summarized by year and compared to costs for similar populations in Ohio and Kentucky. Due to differences in programs among these states, it was difficult to draw firm conclusions. For example, during this time there may have been different changes in average member profile across the states being analyzed. Additionally, HIP health plans in Indiana are required to pay at the Medicare fee schedule for non-hospital services, while Ohio and Kentucky likely have different reimbursement structures in place for the programs serving these members. There are also differences in benefit packages across the states since the HIP expansion population is covered by an alternative benefit plan. Although similar populations were studied across states in this research question, there are too many confounding variables to draw meaningful conclusions.

**Impacts of Eligibility and Coverage Policies on Provider Uncompensated Care Costs**

Since Indiana expanded Medicaid in 2015, the percentage of hospital costs associated with uncompensated care has decreased, as shown in Exhibit F.6.10. Similar effects were observed in the two other expansion states that were studied as part of this research question – Ohio and Kentucky, though Kentucky’s decrease was much more significant compared to Indiana and Ohio. Ohio might be expected to have a smaller decrease in uncompensated care than Kentucky and Indiana, because pre-expansion Low-Income Parent and Caregiver coverage in Ohio was much more expansive, covering parents of minor children up to 90% of FPL. Indiana and Kentucky experienced the highest declines in uncompensated care, although Kentucky outperformed Indiana by a significant margin. This is likely related to the larger impact of Medicaid expansion on coverage in Kentucky. As of January 2020,
Kentucky reported 450,634 new adult members compared with 305,297 in Indiana. Meanwhile, the Non-Expansion state that was included in this research – South Carolina – exhibited a smaller decrease in the percentage of uncompensated care than any of the Medicaid Expansion states. Although cause and effect cannot be concluded from this analysis, it is reasonable to hypothesize that Medicaid Expansion increased the health care coverage in Expansion states, which led to a decrease in the percentage of uncompensated hospital care.

**Goal 6 Recommendations**

- Consider simplification of the HIP program to reduce the number of administrative tasks required from the MCEs and the overall cost of the program.
- Monitor key drivers of benefit cost increases in future emerging experience and discuss root causes with MCEs.
- Collaborate with providers and MCEs serving the HIP program to ensure that benefit cost growth in the program continues to be sustainable.

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180 From Medicaid.gov CMS 64 data: [Medicaid Enrollment - New Adult Group](https://medicaid.gov)
H. Interpretations, Policy Implications, and Interactions with Other State Initiatives

HIP provides health care coverage for qualified low-income, non-disabled adults ages 19 – 64. HIP seeks to engage members and empower them to become active consumers of health care services. Indiana’s 2018 waiver renewal allowed Indiana to continue offering coverage to individuals up to 138% of the FPL coverage through the HIP Plus and HIP Basic benefit plans, in effect since 2015. The new policies implemented under the HIP waiver renewal – tobacco surcharge, community engagement reporting requirements (via the Gateway to Work Program), and simplified POWER Account tiers – aimed to increase member engagement in community activities and in their health. The POWER Account Contributions, differences between HIP Plus and Basic benefit plans (benefits and costs), and tobacco surcharge seek to help members prepare for commercial coverage; individuals participating in the commercial market typically pay monthly premium amounts and copayments, make decisions between benefit packages based on costs and covered benefits, and may be assessed a tobacco surcharge.

Many of the HIP policies evaluated for the Summative Evaluation have been affected by the COVID-19 PHE. As stated throughout this report, beginning in March 2020, the State suspended all cost-sharing, including monthly POWER Account Contributions and the tobacco surcharge, for the duration of the COVID-19 PHE. The State also indefinitely stopped all Gateway to Work activities (Indiana’s community engagement program) in response to the stay in the federal lawsuit involving Indiana Medicaid in 2019 and the COVID-19 PHE in 2020. Section B: Summary of HIP Demonstration provides additional detail on current HIP policies and policy modifications due to the COVID-19 PHE.

Our analysis identified that service participation and utilization varied across the study time period (2018 – 2019) and across services. Observations were affected by several waiver and non-waiver developments (e.g., implementation of a new Medicaid Management Information System, removal of a graduated ED copayment, the impact of the COVID-19 PHE) – yielding difficulties in distinguishing impacts of the individual initiative or policy and thus limits implications.

Findings also indicated that most HIP members reported positive health status, satisfaction with HIP, and that there was no adverse change in access to and enrollment in the Medicaid program after the 2018 HIP waiver renewal and policy interventions. Despite this, member experience and satisfaction varied across sociodemographic characteristics which may exacerbate health disparities. Policy and plan design must evolve to reflect the growing diversity of Indiana and account for socioeconomic factors that contribute to health disparities. Inclusive and equitable health plans that focus on conditions and treatments, personalizing whole person needs and navigation are critical for improving member health. Indiana is making considerable strides in this area with the recent launch of a state-wide interactive map which allows communities to identify and prioritize emerging social needs and target services to proactively address those needs. Additionally, the State has focused efforts to improve diversity, equity, and inclusion by hiring a diversity officer and adding a requirement to MCE contracts to add a Diversity Officer as one of their required key staff.

Implementing a multifaceted program such as HIP requires a significant commitment to both member and provider communications. Findings indicated that members and providers continue to have insufficient understanding of monthly payment requirements and the tobacco surcharge as well as confusion relative to policy pauses or suspensions. Effective communication and ongoing feedback loops to ensure member understanding of key policies (particularly related to POWER Account Contributions, tobacco surcharge, and the potential “lock out” from HIP coverage for nonpayment for HIP members

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Final for CMS Review
over 100% of the FPL) is critical for ensuring continued access to care. This must occur when policies are turned back on following the COVID-19 PHE and throughout the member’s enrollment in HIP since policy adjustments or changes occur over time.

Additionally, members transitioning out of a program like HIP—most notably due to nonpayment of POWER Account Contributions or increased income—require a different set of supports. Indiana’s HIP Workforce Bridge program was approved by CMS on May 29, 2020. This initiative will help members who are transitioning out of Medicaid coverage to an employer-based or marketplace coverage. The one-time $1,000 POWER Account payment that the State will make for these members once the PHE is over and transitions begin, will help individuals transition and maintain health coverage. The State believes continuous coverage will help members maintain good health and retain employment. This will reduce the likelihood of reenrollment in HIP and create savings for the State in the long-term.
I. Lessons Learned and Recommendations

This section describes lessons learned and recommendations from the 2018 – 2020 HIP demonstration evaluation. Exhibit I.1 summarizes each lesson learned from the three-year HIP waiver renewal and the related recommendation(s) for FSSA.

Exhibit I.1: Lessons Learned from HIP

<table>
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<th>Lessons Learned</th>
<th>Recommendations</th>
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| Observations related to member utilization of services and the ability to access services were affected by several waiver and non-waiver developments (e.g., implementation of a new Medicaid Management Information System, removal of a graduated ED copayment, the impact of the COVID-19 PHE) – yielding difficulties in distinguishing impacts of the individual initiative or policy. | • Interpret findings with caution.  
• Provide context for the interpretation of results when discussing findings with stakeholders.  
• Extend the evaluation timeframe. |
| Efforts to reduce tobacco use requires a multi-pronged approach that includes MCEs, providers, and members. | • Implement provider training that 1) increases familiarity with the surcharge policy and consequences to HIP members who are unable to quit smoking; 2) promotes regular tobacco screening; 3) highlights cessation services; and 4) provides strategies to encourage member’s use of cessation services (e.g., motivational interviewing).  
• Conduct outreach to HIP members with known tobacco information who reported tobacco use. Tailor outreach to high-risk demographic groups (e.g., Caucasian Males between ages 30 – 50 who live in nonmetro areas).  
• Conduct regular reviews of HIP-covered or new, emerging tobacco cessation services (e.g., Transcranial magnetic stimulation, nicotine vaccine) to determine if additional services should be covered. |
| Effective member communication remains key to member satisfaction and access to and utilization of services. | • Maintain a dedicated communications team and consider using an outside marketing firm to perform targeted analyses to improve messaging.  
• Continually develop and refine materials based on an interactive feedback loop including, for example, member surveys and provider focus groups.  
• Perform consistent and frequent outreach to members, assessing feedback on member experience based on sociodemographic and income differences and consider how these differences may impact member experience and engagement; design and implement outreach strategies accordingly.  
• Continue providing clear and succinct messaging of the surcharge policy and available cessation services to members and providers to further facilitate awareness and knowledge. |
| Closely collaborating with MCEs responsible for implementing key policies reduces the “disconnect” between what members may hear from the State versus their health plans. | • Spend time and resources on MCE or health plan and State staff training.  
• Share resources and data between the State and the MCE or health plans to aid in continuous quality improvement. |
## Lessons Learned

### Understanding the member population in-depth and having a continual feedback loop contributes to developing appropriate policies and eligibility requirements.
- Regularly review and update disenrollment and eligibility policies to determine if changes are needed.
- Provide a clear process for members to request switching benefit plans.

### Simplifying payment tiers for POWER Accounts eased administrative burden.
- Continue to reassess eligibility categories and tiered payment categories, determining readjustments as needed.
- Use a phase-in period for complex policies to support member and stakeholder understanding.

### Maintaining the HIP expansion may have benefits to the state economy, such as reducing uncompensated care.
- Benefits of HIP may extend beyond the primary beneficiaries to hospitals, businesses, and the state economy.

### The economy and other outside factors can affect the cost of HIP.
- The impact of the PHE and economy on substance use disorder (SUD) and serious mental illness (SMI) prevalence may impact acuity and costs in the HIP program.

### Simplifying the administrative requirements under HIP may be beneficial.
- Benefits could include lower administrative costs for both the State and MCEs, and streamlined coverage.

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<td>determining readjustments as needed.</td>
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<td>and streamlined coverage.</td>
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J. Attachments

Attachment I: HIP Sociodemographic Statistics

This attachment provides a summary of the Healthy Indiana Plan (HIP) population by benefit plan (HIP Basic or HIP Plus), income, race, age, sex, health status, and type of geographic location for each year between 2015 and 2020. Lewin developed these summaries using the following data sources:

- Geographic data from the United States Department of Agriculture to classify members’ area of residence by Rural-Urban Continuum Code (RUCC).

Lewin provided results overall and by benefit plan for 2015 – 2020. Many of the HIP policies (e.g., disenrollment and payment requirements) or activities (e.g., Gateway to Work activities) were suspended beginning in March 2020 due to the ongoing COVID-19 public health emergency (PHE). Pre-COVID-19 PHE data for 2020 is available for the first two months of the year – which is not a sufficient time period to observe the majority of the policy impacts (e.g., disenrollment from Plus due to nonpayment of Personal Wellness and Responsibility (POWER) Account Contributions, receiving preventive care services for rollover). Hence, analysis to examine the impact of the HIP program policies relevant for the evaluation were restricted to data prior to the PHE and only includes the 2015 – 2019 benefit years. Lewin structured the narrative to separate results and examine findings relevant to the pre-COVID-19 PHE time period versus the COVID-19 PHE time period (2020). Lewin included 2020 data to provide additional context, which will ultimately support interpretations for future evaluations.

Lewin included members in this analysis with the following HIP enrollment statuses: Regular Plus (RP), Regular Basic (RB), State Plan Plus (SP), State Plan Basic (SB), HIP Plus Copay (PC), HIP Maternity (MA). Lewin did not include members with Emergency Services Only (Emergency Room services flag of “Y”) or with a presumptive eligibility or conditional enrollment status. Prior to the introduction of HIP Maternity category in 2018, pregnant members were moved from HIP to another Medicaid category upon redetermination prior to this time. Lewin notes that there is no upper income limit for Transitional Medical Assistance (TMA) recipients and no upper age limit for low-income parents and caretakers. Section B: HIP Program Description provides additional information on the different HIP enrollment statuses and benefit plans.

When developing analyses by benefit plan, Lewin has included State Plan Basic and State Plan Plus members. While the State provides these members with a specific set of State Plan services due to their qualifying health condition or eligibility category, the HIP Plus and HIP Basic member cost-sharing requirements still apply. As such, they do not experience the same choices between the HIP Plus and HIP Basic benefit plans but do experience similar tradeoffs in cost-sharing in terms of paying copayments under HIP Basic versus the monthly POWER Account Contribution amount under HIP Plus.

Lewin defined the benefit plan of a HIP member for a calendar year such that an individual who is only enrolled in HIP Basic or HIP Plus for all months enrolled in the calendar year is classified as HIP Basic Only or HIP Plus Only accordingly. Members who are enrolled in HIP Basic during some months of the

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2 Medically frail, TMA participants, Section 1931 low-income (<19% of the FPL) parents and caretakers, and low-income (<19% of the FPL) ages 19 – 20.
year and HIP Plus in others during the calendar year are classified as “HIP Switchers.” HIP Switchers also include members with enrollment statuses of HIP Plus Copay and HIP Maternity.

**Total HIP Enrollment**

Overall HIP enrollment, presented in Exhibit I.1, increased 33% from 389,942 to 520,136 from 2015 – 2016 and continued to increase annually to 569,994 in 2018. HIP enrollment decreased slightly in 2019 (546,451).

**COVID-19 PHE (2020):** In 2020 the HIP program increased an additional 15% to 629,240 unique members. Medicaid enrollment grew considerably during the PHE due to individual changes in income and decreases in disenrollment.³

**Exhibit I.1: Count of Unique HIP Members by Year (February 2015 – December 2020)**

![Graph of HIP enrollment by year]


**HIP Members by Benefit Plan**

Exhibits I.1 through I.4 provide detail on the number of HIP members by benefit plan from February 2015 through December 2020.

Exhibits I.2 through I.4 presents the HIP population by benefit plan. The number of members in HIP Basic increased from 2015 – 2017 and then decreased from 2017 – 2019. The number of members in HIP Basic in 2015 (112,152) was approximately the same in 2019 (113,479). The number of members in HIP Plus steadily increased from 2015 – 2019. Each benefit plan increased annually from 2015 – 2018 except for HIP Basic Only members whose enrollment decreased from 2017 – 2018 (15%). There were 954,572 unique members enrolled in HIP over the time period analyzed.

**COVID-19 PHE (2020):** In 2020, approximately 69% of members (435,972) were enrolled only in HIP Plus during the year, an increase of 11 percentage points from 2019. Increases in HIP Plus enrollment were expected, as members did not have to make POWER Account Contributions as a condition of eligibility during the COVID-19 PHE. Thus, those with eligibility (including conditional eligibility) in a Plus category were not switched to a Basic category or denied for nonpayment of POWER Account Contributions.

³ During the COVID-19 PHE, member disenrollment was paused. Moreover, no members were downgraded to a plan with less coverage starting March 1, 2020, regardless of change in income. During the PHE, the only reasons for closure were death, change in residency (i.e., no longer resident of Indiana), and written voluntary withdrawal from assistance. Member coverage could be suspended if they were incarcerated or admitted to a psychiatric facility.
Moreover, any newly enrolled members were automatically enrolled in HIP Plus due to the PHE. The State chose to enroll all newly eligible HIP members into HIP Plus because cost sharing was suspended due to the PHE. Without the ability to make POWER Account Contribution payments, there was not a way to distinguish whether a member should go to Plus or Basic; therefore, the State opted to place members in the plan with the most benefits.

**Exhibit I.2: Count of HIP Members by Benefit Plan and Year (February 2015 – December 2020)**


**Exhibit I.3: Composition of HIP Population by Benefit Plan and Year (February 2015 – December 2020)**

Exhibit I.4: Count and Percent of HIP Members by Benefit Plan and Year (February 2015 – December 2020)

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<td>Count (%)</td>
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<tr>
<td>HIP Basic Only</td>
<td>112,152</td>
<td>151,469</td>
<td>163,450</td>
<td>141,798</td>
<td>113,479</td>
<td>117,170</td>
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<td></td>
<td>(29%)</td>
<td>(29%)</td>
<td>(29%)</td>
<td>(25%)</td>
<td>(21%)</td>
<td>(19%)</td>
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<tr>
<td>HIP Plus Only</td>
<td>219,802</td>
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<td>301,606</td>
<td>313,248</td>
<td>317,589</td>
<td>435,972</td>
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<tr>
<td></td>
<td>(56%)</td>
<td>(57%)</td>
<td>(54%)</td>
<td>(55%)</td>
<td>(58%)</td>
<td>(69%)</td>
</tr>
<tr>
<td>HIP Switchers</td>
<td>57,988</td>
<td>71,789</td>
<td>91,373</td>
<td>114,948</td>
<td>115,383</td>
<td>76,098</td>
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<td></td>
<td>(15%)</td>
<td>(14%)</td>
<td>(16%)</td>
<td>(20%)</td>
<td>(21%)</td>
<td>(12%)</td>
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<td>Total</td>
<td>389,942</td>
<td>520,136</td>
<td>556,429</td>
<td>569,994</td>
<td>546,451</td>
<td>629,240</td>
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Exhibit I.5 provides a breakdown of the HIP Switchers benefit plan by type of switcher. The number and proportion of members switching benefit plan (Basic to Plus or Plus to Basic) varied across years. The number of individuals moving to HIP Plus increased from 2017 – 2018, while for 2019 the number (and proportion) of members moving from Basic to Plus decreased. State officials have indicated that full implementation of the POWER Account rollover policy during this same time period may have contributed to this increase. Lewin also notes that the reconciliation process in which rollover is determined was reconfigured during this time period.

The number of members with an enrollment status related to HIP Maternity (MA) increased by 20 percentage points between 2015 – 2019, with a high of 53,463 members in 2019. The State brought all HIP-eligible pregnant members into the HIP program beginning in 2018. The number of HIP Plus Copay members increased over time from 150 in 2015 to 3,790 in 2019. Exhibits II.5 to II.8 provide additional detail specific to each switcher category.

COVID-19 PHE (2020): The number of members with an enrollment status related to HIP Maternity (MA) in 2020 was 58,898, increasing 31 percentage points from 2019. This increase was expected as individuals who were already in this cohort (regardless of their current pregnancy status) remained as disenrollment policies were turned off due to the PHE. The number of HIP Plus Copay members declined from 3,790 in 2019 to 2,040 in 2020. This decrease in medically frail members who have income above 100% of the federal poverty level (FPL) and did not pay their HIP Plus POWER Account Contribution was expected as the State suspended all cost-sharing activities due to the PHE.

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4 There also is a special pregnancy category for pregnant members with income over the regular HIP limit of 138% FPL.
Exhibit I.5: Composition of HIP Switchers Population by Benefit Plan and Year (February 2015 – December 2020)


Exhibit I.6a: Distribution and Direction of Movement Between Benefit Plans Among Members Moving Between HIP Plus and HIP Basic (February 2015 – December 2020)

## Exhibit I.6b: Count and Percent of HIP Members Switching Plans (February 2015 – December 2020)

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<tbody>
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<td></td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
</tr>
<tr>
<td>HIP Plus Copay</td>
<td>150 (0.3%)</td>
<td>1,504 (2.1%)</td>
<td>2,469 (2.7%)</td>
<td>3,138 (2.7%)</td>
<td>3,790 (3.3%)</td>
<td>2,040 (2.7%)</td>
</tr>
<tr>
<td>HIP Maternity</td>
<td>14,919 (26%)</td>
<td>25,110 (35%)</td>
<td>28,198 (31%)</td>
<td>44,916 (39%)</td>
<td>53,463 (46%)</td>
<td>58,898 (77%)</td>
</tr>
<tr>
<td>HIP Plus to HIP Basic</td>
<td>14,293 (25%)</td>
<td>25,096 (35%)</td>
<td>31,541 (35%)</td>
<td>23,746 (21%)</td>
<td>32,821 (28%)</td>
<td>2,832 (4%)</td>
</tr>
<tr>
<td>HIP Basic to HIP Plus</td>
<td>28,626 (49%)</td>
<td>20,079 (28%)</td>
<td>29,165 (32%)</td>
<td>43,148 (38%)</td>
<td>25,309 (22%)</td>
<td>12,328 (16%)</td>
</tr>
<tr>
<td>Total</td>
<td>57,988</td>
<td>71,789</td>
<td>91,373</td>
<td>114,948</td>
<td>115,383</td>
<td>76,098</td>
</tr>
</tbody>
</table>


Exhibits I.7 and I.8 indicate the HIP Switchers distribution of pregnant and HIP Plus Copay members.

### Exhibit I.7: Count of HIP Members with Enrollment Status Related to Pregnancy by Year (February 2015 – December 2020)


Note: These members are identified using the enrollment status HIP Maternity (MA) code in the monthly enrollment data.
Income

Lewin identified the income of HIP members as a percent of the FPL as reported in the first month of enrollment on record in the calendar year. Member income can change throughout the year and as often as monthly. Lewin defined member FPL based on the first enrollment month in the calendar year under analysis (based on analyses of the income in enrollment data and feedback from the State).

In some instances, Lewin observed FPL amounts that appeared inconsistent with HIP policies (for example, a small number of HIP Plus members with income at or less than 100% had disenrollments with nonpayment as a reason). Based on discussions with the State, there are several possible reasons for these inconsistencies, for example:

- The member changed income after the first HIP Plus enrollment month in the calendar year under analysis.
- Interplay between the required member notification for coverage changes (e.g., HIP Plus to HIP Basic) and when the State or managed care entity (MCE) received and updates data, in conjunction with member changes in FPL across months.
- Inconsistencies in FPL data transfer between eligibility and the Medicaid Management Information System that resulted in null FPL values on disenrollment which appear as zero in the provided enrollment data and in some cases in the application of updated FPL numbers to prior months. The State has indicated that this data issue is resolved but on a minority of historical records included in these analyses these data artifacts remain. While most HIP Basic Only members must be 100% of the FPL or below, there are some enrollment categories (e.g., TMA) where a member may be enrolled in HIP Basic Only and over 100% of the FPL. Additionally, starting in 2018, individuals transferring from other Medicaid categories or enrolling using presumptive eligibility automatically enroll in HIP Basic with 60 days to transfer to HIP Plus regardless of income.
Lewin presents the composition of the HIP population by income range in Exhibits I.9 through I.14; Exhibits I.15 through I.17 provide detail on the statewide Indiana unemployment rate.

The proportion of HIP members at higher levels of income increased from 2015 – 2017. This change in the proportion of HIP members at higher income levels corresponds to a reduction in the statewide Indiana unemployment rate over the same period (5.4% in January 2015 compared to 3.3% in January 2018). The percentage of members with zero income increased from 51% in 2018 to 53% in 2019, indicating a smaller proportion of members in higher levels of income.

**COVID-19 PHE (2020):** In 2020, the percentage of members with zero income increased to 56%, consistent with observed increases in prior years.

Exhibit I.10 outlines the composition of the HIP population by income, benefit plan, and year. A higher proportion of HIP Basic members had zero income as compared to HIP Plus members in every year evaluated. In 2020, 68% of HIP Basic members had zero income compared to 52% in HIP Plus.

Exhibit I.9: Composition of HIP Population by Income Range and Year (February 2015 – December 2020)


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Exhibit I.10: Composition of HIP Population by Income, Benefit Plan, and Year (February 2015 – December 2020)

### Exhibit I.11: Count and Percent of HIP Members by Income Range and Year – All Members (February 2015 – December 2020)

<table>
<thead>
<tr>
<th>Income Range</th>
<th>2015 Count (%)</th>
<th>2016 Count (%)</th>
<th>2017 Count (%)</th>
<th>2018 Count (%)</th>
<th>2019 Count (%)</th>
<th>2020 Count (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0% FPL</td>
<td>223,272 (57%)</td>
<td>286,375 (55%)</td>
<td>252,950 (45%)</td>
<td>288,948 (51%)</td>
<td>287,118 (53%)</td>
<td>354,215 (56%)</td>
</tr>
<tr>
<td>1% – 22% FPL</td>
<td>14,051 (4%)</td>
<td>15,546 (3%)</td>
<td>20,636 (4%)</td>
<td>17,284 (3%)</td>
<td>15,815 (3%)</td>
<td>18,752 (3%)</td>
</tr>
<tr>
<td>23% – 50% FPL</td>
<td>25,844 (7%)</td>
<td>34,713 (7%)</td>
<td>45,029 (8%)</td>
<td>38,883 (7%)</td>
<td>35,612 (7%)</td>
<td>41,794 (7%)</td>
</tr>
<tr>
<td>51% – 75% FPL</td>
<td>34,886 (9%)</td>
<td>48,752 (9%)</td>
<td>61,904 (11%)</td>
<td>54,628 (10%)</td>
<td>49,966 (9%)</td>
<td>53,504 (9%)</td>
</tr>
<tr>
<td>76% – 100% FPL</td>
<td>38,336 (10%)</td>
<td>55,127 (11%)</td>
<td>72,030 (13%)</td>
<td>66,796 (12%)</td>
<td>61,786 (11%)</td>
<td>56,823 (9%)</td>
</tr>
<tr>
<td>101% – 138% FPL</td>
<td>42,981 (11%)</td>
<td>67,883 (13%)</td>
<td>92,257 (17%)</td>
<td>87,703 (16%)</td>
<td>81,758 (13%)</td>
<td></td>
</tr>
<tr>
<td>&gt;138% FPL</td>
<td>10,572 (3%)</td>
<td>11,740 (2%)</td>
<td>11,623 (2%)</td>
<td>10,628 (2%)</td>
<td>8,451 (2%)</td>
<td>22,394 (4%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>389,942</strong></td>
<td><strong>520,136</strong></td>
<td><strong>556,429</strong></td>
<td><strong>569,994</strong></td>
<td><strong>546,451</strong></td>
<td><strong>629,240</strong></td>
</tr>
</tbody>
</table>


### Exhibit I.12: Count and Percent of HIP Members by Income Range and Year – HIP Basic Only (February 2015 – December 2020)

<table>
<thead>
<tr>
<th>Income Range</th>
<th>2015 Count (%)</th>
<th>2016 Count (%)</th>
<th>2017 Count (%)</th>
<th>2018 Count (%)</th>
<th>2019 Count (%)</th>
<th>2020 Count (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0% FPL</td>
<td>79,553 (71%)</td>
<td>99,309 (66%)</td>
<td>90,058 (55%)</td>
<td>87,457 (62%)</td>
<td>76,616 (68%)</td>
<td>79,160 (68%)</td>
</tr>
<tr>
<td>1% – 22% FPL</td>
<td>4,053 (4%)</td>
<td>4,506 (3%)</td>
<td>5,946 (4%)</td>
<td>4,091 (3%)</td>
<td>2,768 (2%)</td>
<td>3,355 (3%)</td>
</tr>
<tr>
<td>23% – 50% FPL</td>
<td>5,973 (5%)</td>
<td>9,525 (6%)</td>
<td>12,966 (8%)</td>
<td>9,062 (6%)</td>
<td>6,518 (6%)</td>
<td>7,987 (7%)</td>
</tr>
<tr>
<td>51% – 75% FPL</td>
<td>7,696 (7%)</td>
<td>13,207 (9%)</td>
<td>17,964 (11%)</td>
<td>13,150 (9%)</td>
<td>9,194 (8%)</td>
<td>9,343 (8%)</td>
</tr>
<tr>
<td>76% – 100% FPL</td>
<td>7,620 (7%)</td>
<td>14,078 (9%)</td>
<td>19,877 (12%)</td>
<td>15,662 (11%)</td>
<td>10,867 (10%)</td>
<td>8,610 (7%)</td>
</tr>
<tr>
<td>101% – 138% FPL</td>
<td>5,182 (5%)</td>
<td>8,153 (5%)</td>
<td>13,660 (8%)</td>
<td>10,892 (8%)</td>
<td>7,227 (6%)</td>
<td>6,246 (5%)</td>
</tr>
<tr>
<td>&gt;138% FPL</td>
<td>2,075 (2%)</td>
<td>2,691 (2%)</td>
<td>2,979 (2%)</td>
<td>1,484 (1%)</td>
<td>289 (0%)</td>
<td>2,469 (2%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>112,152</strong></td>
<td><strong>151,469</strong></td>
<td><strong>163,450</strong></td>
<td><strong>141,798</strong></td>
<td><strong>113,479</strong></td>
<td><strong>117,170</strong></td>
</tr>
</tbody>
</table>

### Exhibit I.13: Count and Percent of HIP Members by Income Range and Year – HIP Plus Only (February 2015 – December 2020)

<table>
<thead>
<tr>
<th>Income Range</th>
<th>2015 Count (%)</th>
<th>2016 Count (%)</th>
<th>2017 Count (%)</th>
<th>2018 Count (%)</th>
<th>2019 Count (%)</th>
<th>2020 Count (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0% FPL</td>
<td>107,020 (49%)</td>
<td>150,753 (51%)</td>
<td>127,595 (42%)</td>
<td>143,701 (46%)</td>
<td>150,142 (47%)</td>
<td>228,189 (52%)</td>
</tr>
<tr>
<td>1%-22% FPL</td>
<td>7,535 (3%)</td>
<td>8,336 (3%)</td>
<td>10,266 (3%)</td>
<td>9,557 (3%)</td>
<td>9,359 (3%)</td>
<td>13,042 (3%)</td>
</tr>
<tr>
<td>23%-50% FPL</td>
<td>15,833 (7%)</td>
<td>18,503 (6%)</td>
<td>21,678 (7%)</td>
<td>20,390 (7%)</td>
<td>20,151 (6%)</td>
<td>28,565 (7%)</td>
</tr>
<tr>
<td>51%-75% FPL</td>
<td>22,243 (10%)</td>
<td>26,543 (9%)</td>
<td>30,813 (10%)</td>
<td>29,181 (9%)</td>
<td>29,012 (9%)</td>
<td>38,971 (9%)</td>
</tr>
<tr>
<td>76%-100% FPL</td>
<td>25,896 (12%)</td>
<td>31,844 (11%)</td>
<td>38,493 (13%)</td>
<td>37,390 (12%)</td>
<td>37,420 (12%)</td>
<td>42,783 (10%)</td>
</tr>
<tr>
<td>101%-138% FPL</td>
<td>34,229 (16%)</td>
<td>53,167 (18%)</td>
<td>66,559 (22%)</td>
<td>66,896 (21%)</td>
<td>65,944 (21%)</td>
<td>67,751 (16%)</td>
</tr>
<tr>
<td>&gt;138% FPL</td>
<td>34,229 (16%)</td>
<td>53,167 (18%)</td>
<td>66,559 (22%)</td>
<td>66,896 (21%)</td>
<td>65,944 (21%)</td>
<td>67,751 (16%)</td>
</tr>
<tr>
<td>Total</td>
<td>219,802</td>
<td>296,878</td>
<td>301,606</td>
<td>313,248</td>
<td>317,589</td>
<td>435,972</td>
</tr>
</tbody>
</table>


### Exhibit I.14: Count and Percent of HIP Members by Income Range and Year – HIP Switchers (February 2015 – December 2020)

<table>
<thead>
<tr>
<th>Income Range</th>
<th>2015 Count (%)</th>
<th>2016 Count (%)</th>
<th>2017 Count (%)</th>
<th>2018 Count (%)</th>
<th>2019 Count (%)</th>
<th>2020 Count (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0% FPL</td>
<td>36,699 (63%)</td>
<td>36,313 (51%)</td>
<td>35,297 (39%)</td>
<td>57,790 (50%)</td>
<td>60,360 (52%)</td>
<td>46,866 (62%)</td>
</tr>
<tr>
<td>1%-22% FPL</td>
<td>36,699 (63%)</td>
<td>36,313 (51%)</td>
<td>35,297 (39%)</td>
<td>57,790 (50%)</td>
<td>60,360 (52%)</td>
<td>46,866 (62%)</td>
</tr>
<tr>
<td>23%-50% FPL</td>
<td>4,038 (7%)</td>
<td>6,685 (9%)</td>
<td>10,385 (11%)</td>
<td>9,431 (8%)</td>
<td>8,943 (8%)</td>
<td>5,242 (7%)</td>
</tr>
<tr>
<td>51%-75% FPL</td>
<td>4,947 (9%)</td>
<td>9,002 (13%)</td>
<td>13,127 (14%)</td>
<td>12,297 (11%)</td>
<td>11,760 (10%)</td>
<td>5,190 (7%)</td>
</tr>
<tr>
<td>76%-100% FPL</td>
<td>4,947 (9%)</td>
<td>9,002 (13%)</td>
<td>13,127 (14%)</td>
<td>12,297 (11%)</td>
<td>11,760 (10%)</td>
<td>5,190 (7%)</td>
</tr>
<tr>
<td>101%-138% FPL</td>
<td>4,947 (9%)</td>
<td>9,002 (13%)</td>
<td>13,127 (14%)</td>
<td>12,297 (11%)</td>
<td>11,760 (10%)</td>
<td>5,190 (7%)</td>
</tr>
<tr>
<td>&gt;138% FPL</td>
<td>4,947 (9%)</td>
<td>9,002 (13%)</td>
<td>13,127 (14%)</td>
<td>12,297 (11%)</td>
<td>11,760 (10%)</td>
<td>5,190 (7%)</td>
</tr>
<tr>
<td>Total</td>
<td>57,988</td>
<td>71,789</td>
<td>91,373</td>
<td>114,948</td>
<td>115,383</td>
<td>76,098</td>
</tr>
</tbody>
</table>

Exhibit I.15: Statewide Unemployment in Indiana by Month and Year (January 2015 – December 2020)


Exhibit I.16: Statewide Unemployment Rate in Indiana by Month and Year (January 2015 – December 2020)

<table>
<thead>
<tr>
<th>Year</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>5.4%</td>
<td>5.2%</td>
<td>5.1%</td>
<td>4.9%</td>
<td>4.8%</td>
<td>4.7%</td>
<td>4.6%</td>
<td>4.6%</td>
<td>4.5%</td>
<td>4.5%</td>
<td>4.5%</td>
<td>4.6%</td>
</tr>
<tr>
<td>2016</td>
<td>4.6%</td>
<td>4.6%</td>
<td>4.6%</td>
<td>4.6%</td>
<td>4.5%</td>
<td>4.4%</td>
<td>4.4%</td>
<td>4.3%</td>
<td>4.2%</td>
<td>4.1%</td>
<td>4.1%</td>
<td>4.0%</td>
</tr>
<tr>
<td>2017</td>
<td>3.8%</td>
<td>3.7%</td>
<td>3.5%</td>
<td>3.4%</td>
<td>3.4%</td>
<td>3.5%</td>
<td>3.5%</td>
<td>3.5%</td>
<td>3.5%</td>
<td>3.4%</td>
<td>3.3%</td>
<td>3.3%</td>
</tr>
<tr>
<td>2018</td>
<td>3.3%</td>
<td>3.3%</td>
<td>3.3%</td>
<td>3.3%</td>
<td>3.4%</td>
<td>3.4%</td>
<td>3.4%</td>
<td>3.5%</td>
<td>3.5%</td>
<td>3.5%</td>
<td>3.5%</td>
<td>3.5%</td>
</tr>
<tr>
<td>2019</td>
<td>3.5%</td>
<td>3.4%</td>
<td>3.3%</td>
<td>3.2%</td>
<td>3.2%</td>
<td>3.2%</td>
<td>3.3%</td>
<td>3.3%</td>
<td>3.3%</td>
<td>3.3%</td>
<td>3.3%</td>
<td>3.3%</td>
</tr>
<tr>
<td>2020</td>
<td>3.4%</td>
<td>3.4%</td>
<td>3.5%</td>
<td>16.8%</td>
<td>12.3%</td>
<td>10.2%</td>
<td>8.8%</td>
<td>7.2%</td>
<td>6.3%</td>
<td>5.5%</td>
<td>5.1%</td>
<td>4.8%</td>
</tr>
</tbody>
</table>


Exhibit I.17: Statewide Unemployment Rate in Indiana Averaged Over All Months (January 2015 – December 2020)

<table>
<thead>
<tr>
<th>Year</th>
<th>Average Unemployment Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>4.8%</td>
</tr>
<tr>
<td>2016</td>
<td>4.4%</td>
</tr>
<tr>
<td>2017</td>
<td>3.5%</td>
</tr>
<tr>
<td>2018</td>
<td>3.4%</td>
</tr>
<tr>
<td>2019</td>
<td>3.3%</td>
</tr>
<tr>
<td>2020</td>
<td>7.3%</td>
</tr>
</tbody>
</table>

**Sex**

Most HIP members are Female (overall and by benefit plan). HIP Plus Only members are more likely to be Female as compared to HIP Basic Only members (61% in 2019 as compared to 53%). From 2015 – 2019, the percentage of HIP Basic Only Male members increased from 32% to 47% while the percentage of HIP Plus Only Male members stayed similar ranging between 38% – 40% (38% in 2016 and 40% in 2017 – 2018, and 39% in 2019). HIP Switcher members were more likely to be Female (81% in 2019) as this population included pregnant members.

**COVID-19 PHE (2020):** The distribution of sex did not change in 2020, with most HIP members being Female (overall and by benefit plan). The proportion of HIP Switcher Female members increased 11 percentage points in 2020. This increase was primarily because the number of members switching from HIP Plus and Basic decreased due to COVID-19 PHE and, since the population of HIP Switchers includes pregnant members, the majority of the members identified as Switchers were pregnant members only.

Lewin presents the composition of the HIP population by sex in Exhibits I.18 through I.23.

**Exhibit I.18: Composition of HIP Population by Sex and Year (February 2015 – December 2020)**

![Percentage of HIP Population by Sex and Year]

Exhibit I.19: Composition of HIP Population by Sex, Benefit Plan, and Year (February 2015 – December 2020)

### Exhibit I.20: Count and Percent of HIP Members by Sex for All Members (February 2015 – December 2020)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
</tr>
<tr>
<td>Female</td>
<td>264,131 (68%)</td>
<td>334,670 (64%)</td>
<td>349,603 (63%)</td>
<td>359,643 (63%)</td>
<td>346,466 (63%)</td>
<td>389,050 (62%)</td>
</tr>
<tr>
<td>Male</td>
<td>125,810 (32%)</td>
<td>185,466 (36%)</td>
<td>206,825 (37%)</td>
<td>210,350 (37%)</td>
<td>199,985 (37%)</td>
<td>240,190 (38%)</td>
</tr>
<tr>
<td>Unknown</td>
<td>1 (0%)</td>
<td>0 (0%)</td>
<td>1 (0%)</td>
<td>1 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Total</td>
<td>389,942</td>
<td>520,136</td>
<td>556,429</td>
<td>569,994</td>
<td>546,451</td>
<td>629,240</td>
</tr>
</tbody>
</table>


### Exhibit I.21: Count and Percent of HIP Members by Sex and Year – HIP Basic Only (February 2015 – December 2020)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
</tr>
<tr>
<td>Female</td>
<td>76,824 (68%)</td>
<td>93,717 (62%)</td>
<td>97,457 (60%)</td>
<td>78,617 (55%)</td>
<td>60,089 (53%)</td>
<td>62,215 (53%)</td>
</tr>
<tr>
<td>Male</td>
<td>35,328 (32%)</td>
<td>57,752 (38%)</td>
<td>65,993 (40%)</td>
<td>63,181 (45%)</td>
<td>53,390 (47%)</td>
<td>54,955 (47%)</td>
</tr>
<tr>
<td>Total</td>
<td>112,152</td>
<td>151,469</td>
<td>163,450</td>
<td>141,798</td>
<td>113,479</td>
<td>117,170</td>
</tr>
</tbody>
</table>


Note: The count of HIP Basic Only members with unknown sex was zero from 2015 – 2020.

### Exhibit I.22: Count and Percent of HIP Members by Sex and Year – HIP Plus Only (February 2015 – December 2020)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
</tr>
<tr>
<td>Female</td>
<td>140,650 (64%)</td>
<td>183,110 (62%)</td>
<td>181,693 (60%)</td>
<td>188,915 (60%)</td>
<td>193,063 (61%)</td>
<td>256,638 (59%)</td>
</tr>
<tr>
<td>Male</td>
<td>79,151 (36%)</td>
<td>113,768 (38%)</td>
<td>119,912 (40%)</td>
<td>124,332 (40%)</td>
<td>124,526 (39%)</td>
<td>179,334 (41%)</td>
</tr>
<tr>
<td>Unknown</td>
<td>1 (0%)</td>
<td>0 (0%)</td>
<td>1 (0%)</td>
<td>1 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Total</td>
<td>219,802</td>
<td>296,878</td>
<td>301,606</td>
<td>313,248</td>
<td>317,589</td>
<td>435,972</td>
</tr>
</tbody>
</table>

Exhibit I.23: Count and Percent of HIP Members by Sex and Year – HIP Switchers (February 2015 – December 2020)

<table>
<thead>
<tr>
<th>Sex</th>
<th>2015 Count (%)</th>
<th>2015 Count (%)</th>
<th>2017 Count (%)</th>
<th>2017 Count (%)</th>
<th>2018 Count (%)</th>
<th>2018 Count (%)</th>
<th>2019 Count (%)</th>
<th>2019 Count (%)</th>
<th>2020 Count (%)</th>
<th>2020 Count (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>46,657 (80%)</td>
<td>57,075 (81%)</td>
<td>70,453 (77%)</td>
<td>92,111 (80%)</td>
<td>93,314 (81%)</td>
<td>70,197 (92%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>11,331 (20%)</td>
<td>13,069 (19%)</td>
<td>20,920 (23%)</td>
<td>22,837 (20%)</td>
<td>22,069 (19%)</td>
<td>5,901 (8%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>57,988</td>
<td>71,789</td>
<td>91,373</td>
<td>114,948</td>
<td>115,383</td>
<td>76,098</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: The count of HIP Switchers with unknown sex was zero from 2015 – 2020.

Health Status

Lewin identified health status based on the medically frail indicator in the monthly HIP enrollment data. Medically frail refers to a federally required designation of members who have disabling mental disorders, including serious mental illness; chronic substance use disorders; serious or complex medical conditions; physical, intellectual, or developmental disabilities that significantly impair the ability to perform one or more activities of daily living; or a disability determination based on Social Security Administration criteria. These members have a medically frail flag of Y in the monthly enrollment data. Lewin designated HIP Members as medically frail if the member appears in the monthly enrollment data with a medically frail indicator value “Y” for at least one month of enrollment during the calendar year.

The proportion of medically frail HIP members increased over time from 14% in 2015 to 30% in 2019. HIP Plus Only members were more likely to be medically frail than HIP Basic Only members from 2015 – 2019, with 2019 having the largest percentage difference of 12 percentage points (HIP Basic – 21% versus HIP Plus – 33%).

- Between 10% and 21% of members with only HIP Basic coverage were medically frail per year from 2015 – 2019.
- Between 15% and 33% of members with only HIP Plus coverage were medically frail per year from 2015 – 2019.

COVID-19 PHE (2020): In 2020, the percentage of medically frail members was equal (33%) between HIP Basic and HIP Plus coverage.

Exhibit I.24 through I.29 provide a breakdown of HIP members by benefit plan and medically frail status.
Exhibit I.24: Composition of HIP Population by Health Status and Year (February 2015 – December 2020)


Exhibit I.25: Composition of HIP Population by Enrollment Category and Health Status (February 2015 – December 2020)

Exhibit I.26: Count and Percent of HIP Members by Health Status and Year – All Members (February 2015 – December 2020)

<table>
<thead>
<tr>
<th>Health Status</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
</tr>
<tr>
<td>Not Medically Frail</td>
<td>335,785</td>
<td>438,974</td>
<td>455,255</td>
<td>440,123</td>
<td>384,686</td>
<td>426,312</td>
</tr>
<tr>
<td></td>
<td>(86%)</td>
<td>(84%)</td>
<td>(82%)</td>
<td>(77%)</td>
<td>(70%)</td>
<td>(68%)</td>
</tr>
<tr>
<td>Medically Frail</td>
<td>53,857</td>
<td>80,981</td>
<td>101,061</td>
<td>129,760</td>
<td>161,706</td>
<td>202,880</td>
</tr>
<tr>
<td></td>
<td>(14%)</td>
<td>(16%)</td>
<td>(18%)</td>
<td>(23%)</td>
<td>(30%)</td>
<td>(32%)</td>
</tr>
<tr>
<td>Total</td>
<td>389,642</td>
<td>519,955</td>
<td>556,316</td>
<td>569,883</td>
<td>546,392</td>
<td>629,192</td>
</tr>
</tbody>
</table>


Exhibit I.27: Count and Percent of HIP Members by Health Status and Year – HIP Basic Only (February 2015 – December 2020)

<table>
<thead>
<tr>
<th>Health Status</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
</tr>
<tr>
<td>Not Medically Frail</td>
<td>99,991</td>
<td>136,924</td>
<td>144,130</td>
<td>120,817</td>
<td>89,946</td>
<td>78,130</td>
</tr>
<tr>
<td></td>
<td>(89%)</td>
<td>(90%)</td>
<td>(88%)</td>
<td>(85%)</td>
<td>(79%)</td>
<td>(67%)</td>
</tr>
<tr>
<td>Medically Frail</td>
<td>12,081</td>
<td>14,488</td>
<td>19,255</td>
<td>20,924</td>
<td>23,501</td>
<td>39,014</td>
</tr>
<tr>
<td></td>
<td>(11%)</td>
<td>(10%)</td>
<td>(12%)</td>
<td>(15%)</td>
<td>(21%)</td>
<td>(33%)</td>
</tr>
<tr>
<td>Total</td>
<td>112,072</td>
<td>151,412</td>
<td>163,385</td>
<td>141,741</td>
<td>113,447</td>
<td>117,144</td>
</tr>
</tbody>
</table>


Exhibit I.28: Count and Percent of HIP Members by Health Status and Year – HIP Plus Only (February 2015 – December 2020)

<table>
<thead>
<tr>
<th>Health Status</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
</tr>
<tr>
<td>Not Medically Frail</td>
<td>186,454</td>
<td>242,708</td>
<td>238,786</td>
<td>233,273</td>
<td>214,303</td>
<td>294,026</td>
</tr>
<tr>
<td></td>
<td>(85%)</td>
<td>(82%)</td>
<td>(79%)</td>
<td>(74%)</td>
<td>(67%)</td>
<td>(67%)</td>
</tr>
<tr>
<td>Medically Frail</td>
<td>33,141</td>
<td>54,056</td>
<td>62,782</td>
<td>79,395</td>
<td>103,264</td>
<td>141,928</td>
</tr>
<tr>
<td></td>
<td>(15%)</td>
<td>(18%)</td>
<td>(21%)</td>
<td>(26%)</td>
<td>(33%)</td>
<td>(33%)</td>
</tr>
<tr>
<td>Total</td>
<td>219,595</td>
<td>296,764</td>
<td>301,568</td>
<td>313,208</td>
<td>317,567</td>
<td>435,954</td>
</tr>
</tbody>
</table>


Exhibit I.29: Count and Percent of HIP Members by Health Status and Year – HIP Switchers (February 2015 – December 2020)

<table>
<thead>
<tr>
<th>Health Status</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
</tr>
<tr>
<td>Not Medically Frail</td>
<td>49,340</td>
<td>59,342</td>
<td>72,339</td>
<td>86,033</td>
<td>80,437</td>
<td>54,156</td>
</tr>
<tr>
<td></td>
<td>(85%)</td>
<td>(83%)</td>
<td>(79%)</td>
<td>(75%)</td>
<td>(70%)</td>
<td>(71%)</td>
</tr>
<tr>
<td>Medically Frail</td>
<td>8,635</td>
<td>12,437</td>
<td>19,024</td>
<td>28,901</td>
<td>34,941</td>
<td>21,938</td>
</tr>
<tr>
<td></td>
<td>(15%)</td>
<td>(17%)</td>
<td>(21%)</td>
<td>(25%)</td>
<td>(30%)</td>
<td>(29%)</td>
</tr>
<tr>
<td>Total</td>
<td>57,975</td>
<td>71,779</td>
<td>91,363</td>
<td>114,934</td>
<td>115,378</td>
<td>76,094</td>
</tr>
</tbody>
</table>

Race

Lewin reviewed descriptive characteristics for race by analyzing the reported race by HIP members upon enrollment. The race categories are as follows:

- Caucasian
- Black
- Asian or Pacific Islander
- Other

The composition of the overall HIP population in terms of race remained consistent across time. In 2019, Caucasian members comprised approximately 66% of the overall HIP population, Black members approximately 18%, and Asian or Pacific Islander members approximately 3%. The composition of race by HIP benefit plan was also consistent across time.

HIP Basic Only members were more likely to be Black than HIP Plus Only members (by approximately 12 percentage points in 2019). HIP Plus members included a smaller proportion of Black HIP members (14%) as compared to the HIP Basic Only members (26%) in 2019. Asian and Pacific Islander members comprised similar proportions of the HIP Basic Only, HIP Plus Only, and HIP Switchers subpopulations at 1% to 3% of members each (see Exhibit I.31).

From 2015 – 2019, HIP members were more likely to be Black as compared to the overall Indiana population and as likely to be Black as compared to the potentially eligible HIP population. This comparison used HIP monthly enrollment data and the most recently available American Community Survey (ACS) data.

In comparison to the overall Indiana population:

- HIP members were less likely to be Caucasian (in 2019, 66% of the HIP population was Caucasian as compared to 83% of Indiana residents).
- HIP members were almost twice as likely to be Black as compared to Indiana residents (in 2019, 18% of HIP members were Black, 10% of Indiana residents were Black).
- HIP members were as likely to be Asian or Pacific Islander as compared to Indiana residents (2% and 3%, respectively from 2015 – 2019).

In comparison to potentially HIP-eligible members:

- HIP members were less likely to be Caucasian (in 2019, 66% of HIP members as compared to 72% of potentially HIP-eligible members).
- HIP members were as likely to be Black (in 2019, 18% of HIP members compared to 17% of potentially HIP-eligible members).

---

6 Defined as those with income below 150% FPL, between the ages of 19 – 64, without Medicare coverage and without Supplemental Security Income (i.e., those who are eligible for Medicaid).
8 Defined as those with income below 150% FPL, between the ages of 19 – 64, without Medicare coverage and without Supplemental Security Income (i.e., those who are eligible for Medicaid).
COVID-19 PHE (2020): The distribution of race did not change in 2020. Most HIP members were Caucasian members (overall and by benefit plan).

Lewin presents the composition of the HIP population in terms of race in Exhibits I.30 through I.35 and the composition of the overall Indiana population in terms of race in Exhibits I.36 through I.38.

Exhibit I.30: Percent of HIP Population by Race and Year (February 2015 – December 2020)

Note: Total sum may be above or below 100% due to rounding.
Exhibit I.31: Composition of HIP Population by Benefit Plan, Race, and Year (February 2015 – December 2020)

Note: Total sum may be above or below 100% due to rounding.
Exhibit I.32: Count and Percent of HIP Members by Race and Year – All Members (February 2015 – December 2020)

<table>
<thead>
<tr>
<th>Race</th>
<th>2015 Count (%)</th>
<th>2016 Count (%)</th>
<th>2017 Count (%)</th>
<th>2018 Count (%)</th>
<th>2019 Count (%)</th>
<th>2020 Count (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caucasian</td>
<td>263,828 (68%)</td>
<td>351,830 (68%)</td>
<td>374,888 (67%)</td>
<td>380,589 (67%)</td>
<td>359,848 (66%)</td>
<td>412,998 (66%)</td>
</tr>
<tr>
<td>Black</td>
<td>72,836 (19%)</td>
<td>96,444 (19%)</td>
<td>102,106 (18%)</td>
<td>104,194 (18%)</td>
<td>99,513 (18%)</td>
<td>114,053 (18%)</td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>7,984 (2%)</td>
<td>11,109 (2%)</td>
<td>12,601 (2%)</td>
<td>13,595 (2%)</td>
<td>13,815 (3%)</td>
<td>16,246 (3%)</td>
</tr>
<tr>
<td>Other</td>
<td>45,294 (12%)</td>
<td>60,752 (12%)</td>
<td>66,833 (12%)</td>
<td>71,616 (13%)</td>
<td>73,275 (13%)</td>
<td>85,943 (14%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>389,942</strong></td>
<td><strong>520,135</strong></td>
<td><strong>556,428</strong></td>
<td><strong>569,994</strong></td>
<td><strong>546,451</strong></td>
<td><strong>629,240</strong></td>
</tr>
</tbody>
</table>


Exhibit I.33: Count and Percent of HIP Members by Race and Year – HIP Basic Only (February 2015 – December 2020)

<table>
<thead>
<tr>
<th>Race</th>
<th>2015 Count (%)</th>
<th>2016 Count (%)</th>
<th>2017 Count (%)</th>
<th>2018 Count (%)</th>
<th>2019 Count (%)</th>
<th>2020 Count (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caucasian</td>
<td>68,392 (61%)</td>
<td>92,698 (61%)</td>
<td>100,946 (62%)</td>
<td>88,183 (62%)</td>
<td>69,531 (61%)</td>
<td>72,758 (62%)</td>
</tr>
<tr>
<td>Black</td>
<td>29,623 (26%)</td>
<td>40,040 (26%)</td>
<td>42,192 (26%)</td>
<td>35,926 (25%)</td>
<td>28,957 (26%)</td>
<td>27,220 (23%)</td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>1,298 (1%)</td>
<td>1,852 (1%)</td>
<td>1,982 (1%)</td>
<td>1,478 (1%)</td>
<td>1,132 (1%)</td>
<td>1,283 (1%)</td>
</tr>
<tr>
<td>Other</td>
<td>12,839 (11%)</td>
<td>16,878 (11%)</td>
<td>18,329 (11%)</td>
<td>16,211 (11%)</td>
<td>13,859 (12%)</td>
<td>15,909 (14%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>112,152</strong></td>
<td><strong>151,468</strong></td>
<td><strong>163,449</strong></td>
<td><strong>141,798</strong></td>
<td><strong>113,479</strong></td>
<td><strong>117,170</strong></td>
</tr>
</tbody>
</table>


Exhibit I.34: Count and Percent of HIP Members by Race and Year – HIP Plus Only (February 2015 – December 2020)

<table>
<thead>
<tr>
<th>Race</th>
<th>2015 Count (%)</th>
<th>2016 Count (%)</th>
<th>2017 Count (%)</th>
<th>2018 Count (%)</th>
<th>2019 Count (%)</th>
<th>2020 Count (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caucasian</td>
<td>158,022 (72%)</td>
<td>213,241 (72%)</td>
<td>215,273 (71%)</td>
<td>219,459 (70%)</td>
<td>217,545 (68%)</td>
<td>292,212 (67%)</td>
</tr>
<tr>
<td>Black</td>
<td>30,720 (14%)</td>
<td>40,093 (14%)</td>
<td>39,993 (13%)</td>
<td>42,734 (14%)</td>
<td>44,909 (14%)</td>
<td>69,676 (16%)</td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>5,575 (3%)</td>
<td>7,962 (3%)</td>
<td>8,990 (3%)</td>
<td>10,036 (3%)</td>
<td>10,704 (3%)</td>
<td>13,311 (3%)</td>
</tr>
<tr>
<td>Other</td>
<td>25,485 (12%)</td>
<td>35,582 (12%)</td>
<td>37,350 (12%)</td>
<td>41,019 (13%)</td>
<td>44,431 (14%)</td>
<td>60,773 (14%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>219,802</strong></td>
<td><strong>296,878</strong></td>
<td><strong>301,606</strong></td>
<td><strong>313,248</strong></td>
<td><strong>317,589</strong></td>
<td><strong>435,972</strong></td>
</tr>
</tbody>
</table>

### Exhibit I.35: Count and Percent of HIP Members by Race and Year – HIP Switchers (February 2015 – December 2020)

<table>
<thead>
<tr>
<th>Race</th>
<th>2015 Count (%)</th>
<th>2016 Count (%)</th>
<th>2017 Count (%)</th>
<th>2018 Count (%)</th>
<th>2019 Count (%)</th>
<th>2020 Count (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caucasian</td>
<td>37,414 (65%)</td>
<td>45,891 (64%)</td>
<td>58,669 (64%)</td>
<td>72,947 (63%)</td>
<td>72,772 (63%)</td>
<td>48,028 (63%)</td>
</tr>
<tr>
<td>Black</td>
<td>12,493 (22%)</td>
<td>16,311 (23%)</td>
<td>19,921 (22%)</td>
<td>25,534 (22%)</td>
<td>25,647 (22%)</td>
<td>17,157 (23%)</td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>1,111 (2%)</td>
<td>1,295 (2%)</td>
<td>1,629 (2%)</td>
<td>2,081 (2%)</td>
<td>1,979 (2%)</td>
<td>1,652 (2%)</td>
</tr>
<tr>
<td>Other</td>
<td>6,970 (12%)</td>
<td>8,292 (12%)</td>
<td>11,154 (13%)</td>
<td>14,386 (13%)</td>
<td>14,985 (13%)</td>
<td>9,261 (12%)</td>
</tr>
<tr>
<td>Total</td>
<td>57,988</td>
<td>71,789</td>
<td>91,373</td>
<td>114,948</td>
<td>115,383</td>
<td>76,098</td>
</tr>
</tbody>
</table>


*Defined as those with income below 150% FPL, between the ages of 19 and 64, without Medicare coverage and without Supplemental Security Income (i.e., those who are eligible for Medicaid).


Note: Data from the Integrated Public Use Microdata Series (IPUMS) is only compiled through 2019.
Exhibit I.37: Count and Percent of Indiana Population by Race and Year (February 2015 – December 2019)

<table>
<thead>
<tr>
<th>Race</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
</tr>
<tr>
<td>Caucasian</td>
<td>5,561,958</td>
<td>5,539,000</td>
<td>5,584,314</td>
<td>5,539,137</td>
<td>5,574,860</td>
</tr>
<tr>
<td></td>
<td>(84%)</td>
<td>(84%)</td>
<td>(84%)</td>
<td>(83%)</td>
<td>(83%)</td>
</tr>
<tr>
<td>Black</td>
<td>613,843</td>
<td>615,558</td>
<td>622,495</td>
<td>640,118</td>
<td>643,105</td>
</tr>
<tr>
<td></td>
<td>(9%)</td>
<td>(9%)</td>
<td>(9%)</td>
<td>(10%)</td>
<td>(10%)</td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>156,899</td>
<td>166,060</td>
<td>162,187</td>
<td>173,511</td>
<td>188,499</td>
</tr>
<tr>
<td></td>
<td>(2%)</td>
<td>(3%)</td>
<td>(2%)</td>
<td>(3%)</td>
<td>(3%)</td>
</tr>
<tr>
<td>Other or Not Available</td>
<td>286,980</td>
<td>312,435</td>
<td>297,822</td>
<td>339,112</td>
<td>325,755</td>
</tr>
<tr>
<td></td>
<td>(4%)</td>
<td>(5%)</td>
<td>(4%)</td>
<td>(5%)</td>
<td>(5%)</td>
</tr>
<tr>
<td>Total</td>
<td>6,619,680</td>
<td>6,633,053</td>
<td>6,666,818</td>
<td>6,691,878</td>
<td>6,732,219</td>
</tr>
</tbody>
</table>

Note: Data from the IPUMS is only compiled through 2019.

Exhibit I.38: Count and Percent of Potentially HIP-Eligible Population by Race and Year (February 2015 – December 2019)

<table>
<thead>
<tr>
<th>Race</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
</tr>
<tr>
<td>Caucasian</td>
<td>655,389</td>
<td>619,959</td>
<td>606,727</td>
<td>559,173</td>
<td>565,461</td>
</tr>
<tr>
<td></td>
<td>(74%)</td>
<td>(74%)</td>
<td>(74%)</td>
<td>(71%)</td>
<td>(72%)</td>
</tr>
<tr>
<td>Black</td>
<td>139,150</td>
<td>123,643</td>
<td>125,938</td>
<td>131,637</td>
<td>129,013</td>
</tr>
<tr>
<td></td>
<td>(16%)</td>
<td>(15%)</td>
<td>(15%)</td>
<td>(17%)</td>
<td>(17%)</td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>32,585</td>
<td>39,363</td>
<td>34,783</td>
<td>37,710</td>
<td>33,372</td>
</tr>
<tr>
<td></td>
<td>(4%)</td>
<td>(5%)</td>
<td>(4%)</td>
<td>(5%)</td>
<td>(4%)</td>
</tr>
<tr>
<td>Other or Not Available</td>
<td>58,185</td>
<td>56,380</td>
<td>49,076</td>
<td>61,281</td>
<td>53,071</td>
</tr>
<tr>
<td></td>
<td>(7%)</td>
<td>(7%)</td>
<td>(6%)</td>
<td>(8%)</td>
<td>(7%)</td>
</tr>
<tr>
<td>Total</td>
<td>885,309</td>
<td>839,345</td>
<td>816,524</td>
<td>789,801</td>
<td>780,917</td>
</tr>
</tbody>
</table>

Note: Data from the IPUMS is only compiled through 2019.

**Ethnicity**

The composition of the overall HIP population in terms of populations by Hispanic origin remained consistent across time. In 2019, Hispanic members comprised approximately 6% of the overall HIP population. The composition of Hispanic members by HIP benefit plan was also consistent across time.

**COVID-19 PHE (2020):** The distribution of Hispanic populations did not change in 2020 (6% of HIP members were Hispanic).

Exhibits I.39 to I.44 summarizes the HIP Hispanic population and provides comparisons by benefit plan.
Healthy Indiana Plan Summative Evaluation Report

Exhibit I.39: Percent of HIP Population by Hispanic Origin and Year (February 2015 – December 2020)


Exhibit I.40: Composition of HIP Population by Benefit Plan, Hispanic Origin, and Year (February 2015 – December 2020)

### Exhibit I.41: Count and Percent of HIP Members by Hispanic Origin and Year – All Members (February 2015 – December 2020)

<table>
<thead>
<tr>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>20,534 (5%)</td>
<td>28,160 (5%)</td>
<td>31,069 (6%)</td>
<td>33,744 (6%)</td>
<td>33,645 (6%)</td>
<td>39,365 (6%)</td>
</tr>
<tr>
<td>Not Hispanic</td>
<td>308,901 (79%)</td>
<td>427,003 (82%)</td>
<td>485,067 (87%)</td>
<td>500,317 (88%)</td>
<td>482,068 (88%)</td>
<td>533,479 (85%)</td>
</tr>
<tr>
<td>Not reported</td>
<td>60,507 (16%)</td>
<td>64,973 (12%)</td>
<td>40,293 (7%)</td>
<td>35,933 (6%)</td>
<td>30,738 (6%)</td>
<td>56,396 (9%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>389,942</td>
<td>520,136</td>
<td>556,429</td>
<td>569,994</td>
<td>546,451</td>
<td>629,240</td>
</tr>
</tbody>
</table>


### Exhibit I.42: Count and Percent of HIP Members by Hispanic Origin and Year – HIP Basic Only (February 2015 – December 2020)

<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>6,451 (6%)</td>
<td>8,886 (6%)</td>
<td>9,760 (6%)</td>
<td>8,557 (6%)</td>
<td>7,039 (6%)</td>
<td>7,562 (6%)</td>
</tr>
<tr>
<td>Not Hispanic</td>
<td>86,680 (77%)</td>
<td>120,639 (80%)</td>
<td>139,762 (86%)</td>
<td>122,485 (86%)</td>
<td>98,855 (87%)</td>
<td>102,488 (87%)</td>
</tr>
<tr>
<td>Not reported</td>
<td>19,021 (17%)</td>
<td>21,944 (14%)</td>
<td>13,928 (9%)</td>
<td>10,756 (8%)</td>
<td>7,585 (7%)</td>
<td>7,120 (6%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>112,152</td>
<td>151,469</td>
<td>163,450</td>
<td>141,798</td>
<td>113,479</td>
<td>117,170</td>
</tr>
</tbody>
</table>


### Exhibit I.43: Count and Percent of HIP Members by Hispanic Origin and Year – HIP Plus Only (February 2015 – December 2020)

<table>
<thead>
<tr>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>10,747 (5%)</td>
<td>15,052 (5%)</td>
<td>15,758 (5%)</td>
<td>17,484 (6%)</td>
<td>18,382 (6%)</td>
<td>25,633 (6%)</td>
</tr>
<tr>
<td>Not Hispanic</td>
<td>174,490 (79%)</td>
<td>244,815 (82%)</td>
<td>264,770 (88%)</td>
<td>277,099 (88%)</td>
<td>282,009 (89%)</td>
<td>366,618 (84%)</td>
</tr>
<tr>
<td>Not reported</td>
<td>34,565 (16%)</td>
<td>37,011 (12%)</td>
<td>21,078 (7%)</td>
<td>18,665 (6%)</td>
<td>17,198 (5%)</td>
<td>43,721 (10%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>219,802</td>
<td>296,878</td>
<td>301,606</td>
<td>313,248</td>
<td>317,589</td>
<td>435,972</td>
</tr>
</tbody>
</table>

Exhibit I.44: Count and Percent of HIP Members by Hispanic Origin and Year – HIP Switchers (February 2015 – December 2020)

<table>
<thead>
<tr>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>3,336 (6%)</td>
<td>4,222 (6%)</td>
<td>5,551 (6%)</td>
<td>7,703 (7%)</td>
<td>8,224 (7%)</td>
<td>6,170 (8%)</td>
</tr>
<tr>
<td>Not Hispanic</td>
<td>47,731 (82%)</td>
<td>61,549 (86%)</td>
<td>80,535 (88%)</td>
<td>100,733 (88%)</td>
<td>101,204 (88%)</td>
<td>64,373 (85%)</td>
</tr>
<tr>
<td>Not reported</td>
<td>6,921 (12%)</td>
<td>6,018 (8%)</td>
<td>5,287 (6%)</td>
<td>6,512 (6%)</td>
<td>5,955 (5%)</td>
<td>5,555 (7%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>57,988</strong></td>
<td><strong>71,789</strong></td>
<td><strong>91,373</strong></td>
<td><strong>114,948</strong></td>
<td><strong>115,383</strong></td>
<td><strong>76,098</strong></td>
</tr>
</tbody>
</table>


**Geographic Area of Residence**

Lewin determined the type of geographic region of residence for HIP members based on the county of residence as observed in the last month of enrollment on record in the calendar year. Lewin then used the corresponding 2013 RUCC designation\(^9\) to classify members as follows:

- Metro area – RUCC designation 1, 2, or 3
- Nonmetro area of 20,000 or more – RUCC designation 4 or 5
- Nonmetro area of 2,500 to 19,999 – RUCC designation 6 or 7
- Nonmetro, Completely rural or less than 2,500 urban pop – RUCC designation 8 or 9

Exhibits I.45 through I.50 presents the geographic distribution of the HIP population from 2015 – 2020. This distribution – both overall and by benefit plan – has remained relatively constant over time, with most members living in metro areas followed by nonmetro areas with populations of 2,500 to 19,999. Exhibits I.51 and I.52 present the geographic distribution of the overall Indiana population. The geographic distribution of HIP members is similar to the overall Indiana population.

The distribution of geographic location for the HIP population has generally remained unchanged since 2015. HIP Basic Only members were more likely to live in a metro area than HIP Plus Only members by approximately two- to four percentage points each year, with HIP Plus Only members approximately two- to three percentage points more likely to live in nonmetro areas of 2,500 to 19,999. The composition of HIP Switchers in terms of type of geographic area was similar to that of HIP Plus Only members in each year. Across the years, the distribution of the HIP population for all four geographic area categories closely aligns with that of the greater Indiana population.

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Lewin Group – 6/30/2022
Final for CMS Review
Exhibit I.45: Composition of HIP Population by Geographic Area of Residence and Year (February 2015 – December 2020)


Exhibit I.46: Composition of HIP Population by Benefit Plan, Geographic Area of Residence, and Year (February 2015 – December 2020)

### Exhibit I.47: Count and Percent of HIP Members by Geographic Area of Residence and Year – All Members (February 2015 – December 2020)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
</tr>
<tr>
<td>Metro</td>
<td>305,404</td>
<td>(78%)</td>
<td>407,362</td>
<td>(78%)</td>
<td>435,875</td>
<td>(78%)</td>
</tr>
<tr>
<td></td>
<td>447,223</td>
<td>(79%)</td>
<td>429,734</td>
<td>(79%)</td>
<td>495,417</td>
<td>(79%)</td>
</tr>
<tr>
<td>Nonmetro, 2,500 to 19,999</td>
<td>53,804</td>
<td>(14%)</td>
<td>71,025</td>
<td>(14%)</td>
<td>76,064</td>
<td>(14%)</td>
</tr>
<tr>
<td></td>
<td>77,453</td>
<td>(14%)</td>
<td>73,432</td>
<td>(13%)</td>
<td>84,031</td>
<td>(13%)</td>
</tr>
<tr>
<td>Nonmetro, 20,000 or more</td>
<td>26,925</td>
<td>(7%)</td>
<td>36,698</td>
<td>(7%)</td>
<td>39,140</td>
<td>(7%)</td>
</tr>
<tr>
<td></td>
<td>39,923</td>
<td>(7%)</td>
<td>38,231</td>
<td>(7%)</td>
<td>44,142</td>
<td>(7%)</td>
</tr>
<tr>
<td>Nonmetro, Completely Rural or less than 2,500 urban pop</td>
<td>3,416</td>
<td>(1%)</td>
<td>4,523</td>
<td>(1%)</td>
<td>4,832</td>
<td>(1%)</td>
</tr>
<tr>
<td></td>
<td>4,934</td>
<td>(1%)</td>
<td>4,671</td>
<td>(1%)</td>
<td>5,258</td>
<td>(1%)</td>
</tr>
<tr>
<td>Total</td>
<td>389,549</td>
<td>519,608</td>
<td>555,911</td>
<td>569,533</td>
<td>546,068</td>
<td>628,848</td>
</tr>
</tbody>
</table>


### Exhibit I.48: Count and Percent of HIP Members by Type of Geographic Area of Residence and Year – HIP Basic Only (February 2015 – December 2020)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
</tr>
<tr>
<td>Metro</td>
<td>90,381</td>
<td>(81%)</td>
<td>122,050</td>
<td>(81%)</td>
<td>131,156</td>
<td>(80%)</td>
</tr>
<tr>
<td></td>
<td>114,115</td>
<td>(81%)</td>
<td>91,801</td>
<td>(81%)</td>
<td>94,214</td>
<td>(80%)</td>
</tr>
<tr>
<td>Nonmetro, 2,500 to 19,999</td>
<td>13,265</td>
<td>(12%)</td>
<td>17,695</td>
<td>(12%)</td>
<td>19,653</td>
<td>(12%)</td>
</tr>
<tr>
<td></td>
<td>16,819</td>
<td>(12%)</td>
<td>13,188</td>
<td>(12%)</td>
<td>14,216</td>
<td>(12%)</td>
</tr>
<tr>
<td>Nonmetro, 20,000 or more</td>
<td>7,562</td>
<td>(7%)</td>
<td>10,482</td>
<td>(7%)</td>
<td>11,225</td>
<td>(7%)</td>
</tr>
<tr>
<td></td>
<td>9,608</td>
<td>(7%)</td>
<td>7,572</td>
<td>(7%)</td>
<td>7,797</td>
<td>(7%)</td>
</tr>
<tr>
<td>Nonmetro, Completely Rural or less than 2,500 urban pop</td>
<td>810</td>
<td>(1%)</td>
<td>1,049</td>
<td>(1%)</td>
<td>1,218</td>
<td>(1%)</td>
</tr>
<tr>
<td></td>
<td>1,121</td>
<td>(1%)</td>
<td>817</td>
<td>(1%)</td>
<td>853</td>
<td>(1%)</td>
</tr>
<tr>
<td>Total</td>
<td>112,018</td>
<td>151,276</td>
<td>163,252</td>
<td>141,663</td>
<td>113,378</td>
<td>117,080</td>
</tr>
</tbody>
</table>

### Exhibit I.49: Count and Percent of HIP Members by Type of Geographic Area of Residence and Year – HIP Plus Only (February 2015 – December 2020)

<table>
<thead>
<tr>
<th>Geographic Area</th>
<th>2015 Count (%)</th>
<th>2016 Count (%)</th>
<th>2017 Count (%)</th>
<th>2018 Count (%)</th>
<th>2019 Count (%)</th>
<th>2020 Count (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metro</td>
<td>168,896 (77%)</td>
<td>228,460 (77%)</td>
<td>232,879 (77%)</td>
<td>242,570 (77%)</td>
<td>246,602 (78%)</td>
<td>341,257 (78%)</td>
</tr>
<tr>
<td>Nonmetro 2,500 to 19,999</td>
<td>32,916 (15%)</td>
<td>43,763 (15%)</td>
<td>44,037 (15%)</td>
<td>45,087 (14%)</td>
<td>45,137 (14%)</td>
<td>59,745 (14%)</td>
</tr>
<tr>
<td>Nonmetro 20,000 or more</td>
<td>15,660 (7%)</td>
<td>21,463 (7%)</td>
<td>21,514 (7%)</td>
<td>22,390 (7%)</td>
<td>22,726 (7%)</td>
<td>30,891 (7%)</td>
</tr>
<tr>
<td>Nonmetro, Completely Rural or less than 2,500 urban pop</td>
<td>2,130 (1%)</td>
<td>2,930 (1%)</td>
<td>2,912 (1%)</td>
<td>2,958 (1%)</td>
<td>2,919 (1%)</td>
<td>3,810 (1%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>219,602</strong></td>
<td><strong>296,616</strong></td>
<td><strong>301,342</strong></td>
<td><strong>313,005</strong></td>
<td><strong>317,384</strong></td>
<td><strong>435,703</strong></td>
</tr>
</tbody>
</table>


### Exhibit I.50: Count and Percent of HIP Members by Geographic Area of Residence and Year – HIP Switchers (February 2015 – December 2020)

<table>
<thead>
<tr>
<th>Geographic Area</th>
<th>2015 Count (%)</th>
<th>2016 Count (%)</th>
<th>2017 Count (%)</th>
<th>2018 Count (%)</th>
<th>2019 Count (%)</th>
<th>2020 Count (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metro</td>
<td>46,127 (80%)</td>
<td>56,852 (79%)</td>
<td>71,840 (79%)</td>
<td>90,538 (79%)</td>
<td>91,331 (79%)</td>
<td>59,946 (79%)</td>
</tr>
<tr>
<td>Nonmetro 2,500 to 19,999</td>
<td>7,623 (13%)</td>
<td>9,567 (13%)</td>
<td>12,374 (14%)</td>
<td>15,547 (14%)</td>
<td>15,107 (13%)</td>
<td>10,070 (13%)</td>
</tr>
<tr>
<td>Nonmetro 20,000 or more</td>
<td>3,703 (6%)</td>
<td>4,753 (7%)</td>
<td>6,401 (7%)</td>
<td>7,925 (7%)</td>
<td>7,933 (7%)</td>
<td>5,454 (7%)</td>
</tr>
<tr>
<td>Nonmetro, Completely Rural or less than 2,500 urban pop</td>
<td>476 (1%)</td>
<td>544 (1%)</td>
<td>702 (1%)</td>
<td>855 (1%)</td>
<td>935 (1%)</td>
<td>595 (1%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>57,929</strong></td>
<td><strong>71,716</strong></td>
<td><strong>91,317</strong></td>
<td><strong>114,865</strong></td>
<td><strong>115,306</strong></td>
<td><strong>76,065</strong></td>
</tr>
</tbody>
</table>

Exhibit I.51: Composition of General Indiana Population by Geographic Area of Residence and Year (February 2015 – December 2020)

### Exhibit I.52: Count and Percent of General Indiana Population by Geographic Area of Residence and Year (February 2015 – December 2020)

<table>
<thead>
<tr>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
</tr>
<tr>
<td>Metro</td>
<td>3,127,906 (79%)</td>
<td>3,134,585 (79%)</td>
<td>3,138,099 (79%)</td>
<td>3,148,257 (79%)</td>
<td>3,156,479 (79%)</td>
<td>3,160,346 (79%)</td>
</tr>
<tr>
<td>Nonmetro 2,500 to 19,999</td>
<td>540,109 (14%)</td>
<td>536,153 (13%)</td>
<td>533,190 (13%)</td>
<td>530,933 (13%)</td>
<td>528,674 (13%)</td>
<td>525,694 (13%)</td>
</tr>
<tr>
<td>Nonmetro 20,000 or more</td>
<td>274,973 (7%)</td>
<td>272,803 (7%)</td>
<td>271,149 (7%)</td>
<td>269,988 (7%)</td>
<td>268,626 (7%)</td>
<td>266,240 (7%)</td>
</tr>
<tr>
<td>Nonmetro, Completely Rural or less than 2,500 urban population</td>
<td>36,158 (1%)</td>
<td>35,754 (1%)</td>
<td>35,591 (1%)</td>
<td>35,508 (1%)</td>
<td>35,326 (1%)</td>
<td>35,129 (1%)</td>
</tr>
<tr>
<td>Total</td>
<td>3,979,146</td>
<td>3,979,295</td>
<td>3,978,029</td>
<td>3,984,686</td>
<td>3,989,105</td>
<td>3,987,409</td>
</tr>
</tbody>
</table>

**Age Group**

Lewin developed descriptive analyses for HIP members by age group according to members’ age at the end of the calendar year.

The population of HIP Basic Only members and Switchers was younger in general than the HIP Plus Only population. Approximately 72% – 77% of HIP Basic Only members and 74% – 79% of HIP Switchers were younger than age 40 between 2015 – 2019, compared to approximately 49% – 51% of HIP Plus Only each year. The HIP Basic Only population aged somewhat over time, as the proportion of members younger than age 30 decreased from 46% to 40% and the proportion of members ages 40 and older increased from 22% – 28%. The composition of the overall HIP population in terms of age remained constant from 2015 – 2019.

**COVID-19 PHE (2020):** Although the overall distribution of age did not change from 2019 – 2020, the HIP Basic Only population continued to age, as the proportion of members younger than age 30 decreased from 40% in 2019 to 33% in 2020. The HIP Switcher population was younger in 2020 as the proportion of members younger than age 30 increased from 49% in 2019 to 59% in 2020.

Lewin presents the composition of the HIP population by age group in Exhibits I.53 through I.58.

**Exhibit I.53: HIP Population by Age Group and Year (February 2015 – December 2020)**

![Exhibit I.53: HIP Population by Age Group and Year (February 2015 – December 2020)](image)


Note: There was a small number of HIP members ages 0 – 17 excluded from the analysis. These member’s enrollment in HIP would be an error or pending appeal since these members are not eligible for the program until age 18. Exclusion of this group affects the totals slightly as compared to other exhibits.
Exhibit I.54: Composition of HIP Population by Benefit Plan, Age Group, and Year (February 2015 – December 2020)


Note: There was a small number of HIP members ages 0 – 17 excluded from the analysis. These members’ enrollment in HIP would be an error or pending appeal since these members are not eligible for the program until age 18. Exclusion of this group affects the totals slightly as compared to other exhibits.
### Exhibit I.55: Count and Percent of HIP Members by Age Group and Year – All Members (February 2015 – December 2020)

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count (% )</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
</tr>
<tr>
<td>Age 18 – 29</td>
<td>134,041 (34%)</td>
<td>176,129 (34%)</td>
<td>186,370 (36%)</td>
<td>191,464 (37%)</td>
<td>177,188 (34%)</td>
<td>197,070 (38%)</td>
</tr>
<tr>
<td>Age 30 – 39</td>
<td>108,572 (28%)</td>
<td>143,792 (28%)</td>
<td>153,233 (29%)</td>
<td>157,202 (30%)</td>
<td>151,831 (29%)</td>
<td>178,557 (34%)</td>
</tr>
<tr>
<td>Age 40 – 49</td>
<td>71,967 (18%)</td>
<td>95,672 (18%)</td>
<td>102,250 (20%)</td>
<td>104,182 (20%)</td>
<td>101,830 (20%)</td>
<td>120,439 (23%)</td>
</tr>
<tr>
<td>Age 50 – 59</td>
<td>56,339 (14%)</td>
<td>76,180 (15%)</td>
<td>82,022 (16%)</td>
<td>82,750 (16%)</td>
<td>80,151 (15%)</td>
<td>91,944 (18%)</td>
</tr>
<tr>
<td>Age 60+</td>
<td>19,006 (5%)</td>
<td>28,346 (5%)</td>
<td>32,545 (6%)</td>
<td>34,393 (7%)</td>
<td>35,449 (7%)</td>
<td>41,224 (8%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>389,925</td>
<td>520,119</td>
<td>556,420</td>
<td>569,991</td>
<td>546,449</td>
<td>629,234</td>
</tr>
</tbody>
</table>


Note: There was a small number of HIP members ages 0 – 17 excluded from the analysis. These members’ enrollment in HIP would be an error or pending appeal since these members are not eligible for the program until age 18. Exclusion of this group affects the totals slightly as compared to other exhibits.

### Exhibit I.56: Count and Percent of HIP Members by Age Group and Year – HIP Basic Only (February 2015 – December 2020)

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count (% )</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
</tr>
<tr>
<td>Age 18 – 29</td>
<td>51,386 (46%)</td>
<td>68,090 (45%)</td>
<td>72,479 (44%)</td>
<td>59,481 (42%)</td>
<td>44,840 (40%)</td>
<td>38,651 (33%)</td>
</tr>
<tr>
<td>Age 30 – 39</td>
<td>35,151 (31%)</td>
<td>46,995 (31%)</td>
<td>50,678 (31%)</td>
<td>44,542 (31%)</td>
<td>35,763 (32%)</td>
<td>38,460 (33%)</td>
</tr>
<tr>
<td>Age 40 – 49</td>
<td>16,218 (14%)</td>
<td>22,570 (15%)</td>
<td>24,925 (15%)</td>
<td>23,111 (16%)</td>
<td>19,837 (17%)</td>
<td>23,289 (20%)</td>
</tr>
<tr>
<td>Age 50 – 59</td>
<td>7,799 (7%)</td>
<td>11,258 (7%)</td>
<td>12,300 (8%)</td>
<td>11,653 (8%)</td>
<td>10,224 (9%)</td>
<td>12,964 (11%)</td>
</tr>
<tr>
<td>Age 60+</td>
<td>1,587 (1%)</td>
<td>2,546 (2%)</td>
<td>3,065 (2%)</td>
<td>3,010 (2%)</td>
<td>2,813 (2%)</td>
<td>3,802 (3%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>112,152</td>
<td>151,469</td>
<td>163,450</td>
<td>141,798</td>
<td>113,479</td>
<td>117,170</td>
</tr>
</tbody>
</table>


Note: There was a small number of HIP members ages 0 – 17 excluded from the analysis. These members’ enrollment in HIP would be an error or pending appeal since these members are not eligible for the program until age 18. Exclusion of this group affects the totals slightly as compared to other exhibits.
### Exhibit I.57: Count and Percent of HIP Members by Age Group and Year – HIP Plus Only (February 2015 – December 2020)

<table>
<thead>
<tr>
<th></th>
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<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age 18 – 29</td>
<td>57,652 (26%)</td>
<td>75,993 (26%)</td>
<td>72,917 (24%)</td>
<td>76,394 (24%)</td>
<td>76,253 (24%)</td>
<td>113,598 (26%)</td>
</tr>
<tr>
<td>Age 30 – 39</td>
<td>55,293 (25%)</td>
<td>74,086 (25%)</td>
<td>74,592 (25%)</td>
<td>78,084 (25%)</td>
<td>81,263 (26%)</td>
<td>117,531 (27%)</td>
</tr>
<tr>
<td>Age 40 – 49</td>
<td>46,711 (21%)</td>
<td>62,869 (21%)</td>
<td>64,110 (21%)</td>
<td>66,231 (21%)</td>
<td>67,663 (21%)</td>
<td>91,399 (21%)</td>
</tr>
<tr>
<td>Age 50 – 59</td>
<td>43,758 (20%)</td>
<td>59,439 (20%)</td>
<td>62,376 (21%)</td>
<td>63,222 (21%)</td>
<td>62,049 (20%)</td>
<td>76,685 (18%)</td>
</tr>
<tr>
<td>Age 60+</td>
<td>16,384 (7%)</td>
<td>24,485 (8%)</td>
<td>27,606 (9%)</td>
<td>29,315 (9%)</td>
<td>30,361 (10%)</td>
<td>36,758 (8%)</td>
</tr>
<tr>
<td>Total</td>
<td>219,802</td>
<td>296,878</td>
<td>301,606</td>
<td>313,248</td>
<td>317,589</td>
<td>435,972</td>
</tr>
</tbody>
</table>


Note: There was a small number of HIP members ages 0 – 17 excluded from the analysis. These member’s enrollment in HIP would be an error or pending appeal since these members are not eligible for the program until age 18. Exclusion of this group affects the totals slightly as compared to other exhibits.

### Exhibit I.58: Count and Percent of HIP Members by Age Group for HIP Switchers (February 2015 – December 2020)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age 18 – 29</td>
<td>25,003 (43%)</td>
<td>32,046 (45%)</td>
<td>40,974 (45%)</td>
<td>55,589 (48%)</td>
<td>56,095 (49%)</td>
<td>44,821 (59%)</td>
</tr>
<tr>
<td>Age 30 – 39</td>
<td>18,128 (31%)</td>
<td>22,711 (32%)</td>
<td>27,963 (31%)</td>
<td>34,576 (30%)</td>
<td>34,805 (30%)</td>
<td>22,566 (30%)</td>
</tr>
<tr>
<td>Age 40 – 49</td>
<td>9,038 (16%)</td>
<td>10,233 (14%)</td>
<td>13,215 (14%)</td>
<td>14,840 (13%)</td>
<td>14,330 (12%)</td>
<td>5,751 (8%)</td>
</tr>
<tr>
<td>Age 50 – 59</td>
<td>4,782 (8%)</td>
<td>5,483 (8%)</td>
<td>7,346 (8%)</td>
<td>7,875 (7%)</td>
<td>7,878 (7%)</td>
<td>2,295 (3%)</td>
</tr>
<tr>
<td>Age 60+</td>
<td>1,035 (2%)</td>
<td>1,315 (2%)</td>
<td>1,874 (2%)</td>
<td>2,068 (2%)</td>
<td>2,275 (2%)</td>
<td>664 (1%)</td>
</tr>
<tr>
<td>Total</td>
<td>57,988</td>
<td>71,789</td>
<td>91,373</td>
<td>114,948</td>
<td>115,383</td>
<td>76,098</td>
</tr>
</tbody>
</table>


Note: There was a small number of HIP members ages 0 – 17 excluded from the analysis. These member’s enrollment in HIP would be an error or pending appeal since these members are not eligible for the program until age 18. Exclusion of this group affects the totals slightly as compared to other exhibits.
**Attachment II: Description of Quantitative Data Sources Used in the Summative Report**

**Exhibit II.1: Description of Quantitative Data Sources**

<table>
<thead>
<tr>
<th>Data Type</th>
<th>Time Period</th>
<th>Data Description</th>
</tr>
</thead>
</table>
| Managed care entity (MCE) encounter data      | 2015 – 2020                  | • Submitted by the four Indiana HIP MCEs (i.e., Anthem, Managed Health Services (MHS), MDwise, and CareSource) to the Medicaid agency to detail specific services provided to a member by a provider.  
• Represents HIP-covered services with dates of service from February 2015 through December 2020 and paid through April 30, 2021.  
• Includes patient demographic information, diagnoses, procedure codes, revenue codes, and billing and rendering provider types. |
| Annual enrollment data                         | 2015 – 2020                  | • Provides a member’s POWER Account experience by benefit period, including contributions, expenditures, and rollover status.                                                                                       |
| Annual enrollment data included Personal Wellness and Responsibility (POWER) Account reconciliation files | 2015 – 2020                  | • Provides member enrollment status by month and demographic characteristics (e.g., sex, race, income level).  
• Includes indicators/flags for the following: medically frail, pregnant, Transitional Medical Assistance (TMA) and Emergency Services Only.                     |
| Monthly enrollment data                        | 2015 – 2020                  | • Provides member disenrollment by month, including enrollment status at time of disenrollment and reason(s) associated with disenrollment.                                                                       |
| Monthly disenrollment data                     | 2015 – 2020                  | • Provides member disenrollment by month, including enrollment status at time of disenrollment and reason(s) associated with disenrollment.                                                                       |
| Fast Track data file                           | 2017 – 2020                  | • Identifies members who made a Fast Track payment.                                                                                                                                                              |
| Presumptive eligibility file                   | 2015 – 2020                  | • Identifies members who used the presumptive eligibility enrollment process.                                                                                                                                     |
| Tobacco use data file                          | October 2017 – December 2020 | • Provides self-reported tobacco use by HIP members.  
• Reflects new enrollees or enrollees switching MCEs and self-reported member tobacco use during enrollment.                                                                                               |
| Tobacco surcharge data file                    | 2019, 2020                   | • Identifies members that have received a tobacco surcharge levied by MCEs in 2019 and 2020 for member tobacco use in 2018 and 2019.                                                                              |
| Rural-Urban Continuum Code (RUCC) file         | 2013 (last update)           | • Provides geographic location indicator to characterize members’ area of residence according to RUCC.  
• Developed by the United States Department of Agriculture.                                                                                                   |
### Data Type

<table>
<thead>
<tr>
<th>Data Type</th>
<th>Time Period</th>
<th>Data Description</th>
</tr>
</thead>
</table>
| Consumer Assessment of Healthcare Providers & Systems (CAHPS) Survey Summary Reports | 2015 – 2020 | • Data from CAHPS® Medicaid Adult 5.0H Member Surveys (referred to in this report as CAHPS Survey) was compiled to assess various research questions associated with Goals 1, 3, and 5. Data was drawn from 2015 – 2020 for four MCEs. For this evaluation, CAHPS Survey data is reported by the coverage year, rather than the survey year.  
• The surveys were administered by each MCE both by mail and telephone. Surveys contained a total of 60 questions. However, some survey questions were only asked to a subset of respondents. Each MCE is expected to meet a minimum response total of 411 responses across all their programs to ensure the representative scores are accurate and statistically valid. |
| Behavioral Risk Factor Surveillance System (BRFSS) Data | 2013 – 2020 | • The Behavioral Risk Factor Surveillance System (BRFSS) is a system of health-related telephone surveys that collect state data about U.S. residents regarding their health-related risk behaviors, chronic health conditions, and use of preventive services. BRFSS completes more than 400,000 adult interviews each year, making it the largest continuously conducted health survey system in the world. |
| American Community Survey (ACS) Data | 2015 – 2019 | • ACS data, sponsored jointly by the U.S. Census Bureau and the U.S. Department of Commerce, is a nationally representative sample survey data that includes information on demographic, social, economic, and health insurance coverage characteristics of the U.S. population each year. |
| Administrative Costs | 2018 – 2020 | • Medicaid health expenditures for Goal 6 were calculated using state enrollment data, MCE encounter data for Indiana, Ohio, and Kentucky, and fee-for-service data for Indiana, Ohio, and Kentucky |
| Medicaid Health Expenditures | 2016 – 2020 | • Uncompensated care costs for Goal 6 were calculated using Healthcare Cost Report Information System (HCRIS): Medicare cost report public use data collected by Centers for Medicare & Medicaid Services (CMS) (Worksheet S10 and Worksheet C) for Indiana, Ohio, Kentucky, and South Carolina |
| Uncompensated Care Costs | 2013 – 2014, 2018 – 2020 | • Due to the impact of the COVID-19 pandemic on members, the State elected to minimize burden and delay conducting the Longitudinal Member and Leaver Surveys until the next evaluation period. The surveys would have asked HIP Basic and HIP Plus members as well as individuals who had been fully enrolled in HIP but who left the program about access to care, health status, satisfaction with HIP, and knowledge of HIP policies. In addition to these topics, the Leaver Survey would have asked about current insurance coverage and reasons for leaving HIP. Since the surveys were not completed, several research questions could not be fully addressed. |
| Longitudinal Member and Leaver Surveys | n.a. | |

---

### Attachment III: Indiana HIP Summative Evaluation Comparison State Research

#### Background

**Primary goal:** Estimate impact and effectiveness of HIP waiver on beneficiary health, enrollment in Medicaid (HIP), and access to care (refer to the Exhibit C.1: HIP Evaluation Goals and Hypotheses for details).

**Goal of this research:** Identify States that expanded Medicaid to adults during similar time as Indiana but did not have the same policies as Indiana HIP.

#### Exhibit III.1: Comparison State Research and Data Sources by Goal

<table>
<thead>
<tr>
<th>Goal</th>
<th>Evaluation Hypothesis</th>
<th>Evaluation Research Question (RQ)</th>
<th>Data Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>H.3 – HIP members will report positive health outcomes.</td>
<td>Primary RQ 3.1 – How has reported health status for HIP members changed over time?</td>
<td>Behavioral Risk Factor Surveillance System (BRFSS) (2015 – 2020)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Primary RQ 5.1 – How does the Indiana Medicaid coverage rate compare to other Medicaid expansion states?</td>
<td>Integrated Public Use Microdata Series (IPUMS) American Community Survey (ACS)</td>
</tr>
<tr>
<td>4</td>
<td>H.2 – Enrollment and enrollment continuity will vary for the Personal Wellness and Responsibility (POWER) Account payment tiers.</td>
<td>Primary RQ 2.1 – Is there a relationship between POWER Account payment tiers and total and new enrollment in Medicaid?</td>
<td>IPUMS ACS</td>
</tr>
<tr>
<td>5</td>
<td>H.3 – Individuals subject to the non-eligibility/lockout periods (payment and redetermination) and retroactive eligibility are no different from commercial market populations.</td>
<td>Primary RQ 3.1 – Do HIP members that are subject to non-eligibility periods have similar demographic characteristics as the commercial market population?</td>
<td>IPUMS ACS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Primary RQ 3.2 – Do HIP members that are not retroactively eligible have similar demographic characteristics as the commercial market population?</td>
<td>IPUMS ACS</td>
</tr>
<tr>
<td></td>
<td>H.4 – Eliminating or reducing retroactive eligibility will not reduce member enrollment or access to health care; decrease health status; or have adverse financial impact</td>
<td>Primary RQ 4.1 – Do eligible people subject to retroactive eligibility waivers enroll in Medicaid at the same rates as other eligible people who have access to retroactive eligibility? (Centers for Medicare &amp; Medicaid Services [CMS] Guidance Hypothesis 1, RQ 1.1)</td>
<td>IPUMS ACS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Primary RQ 4.3 – Do beneficiaries subject to the retroactive eligibility waiver have better health outcomes than other beneficiaries who have access to retroactive eligibility? (CMS Guidance Hypothesis 3, RQ 3.1)</td>
<td>BRFSS (2013 – 2020)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Primary RQ 4.4 – Does the retroactive eligibility waiver lead to changes in the incidence of beneficiary medical debt? (CMS Guidance Hypothesis 4, RQ 4.1)</td>
<td>BRFSS (2013 – 2020)</td>
</tr>
</tbody>
</table>
Approach to Identify Comparison States

The below parameters were used to select the preliminary set of states:

- Expanded Medicaid to childless adults, have similar eligibility for childless adults as Indiana, and expansion did not take place during the evaluation time.

- HIP waiver was implemented from 2015. First waiver was for 2015 – 2017. Current evaluation is for 2018 – 2020 waiver. This waiver has similar policies as the 2015 – 2017 waiver with some small changes. Based on research for States with Medicaid expansion around 2015, identified Colorado*, Minnesota*, New Mexico*, Pennsylvania*, Washington*, Arizona, Arkansas, Iowa, Ohio, Michigan, and New Hampshire.

- Have not implemented the 1115(a) waiver policy under study but are similar to Indiana in other Medicaid policies.

Critical features of IN HIP are:

- Starting from 2015 (first year of HIP), IN waived retroactive coverage.²

- Structure like commercial plan with POWER Account Contribution requirements:
  - Beneficiaries with >100% federal poverty level (FPL) and not identified as frail are required to make POWER Account Contribution payments to continue HIP Plus coverage. HIP Plus members with incomes from 101% to 138% of the FPL that do not make monthly POWER Account Contribution payments are disenrolled from HIP and are not allowed to re-enroll for six months (also referred to as the six-month lockout or non-eligibility period)
  - 2015 – 2017 waiver: POWER Account Contribution payment was based on proportion of income
  - 2018 – 2020 waiver:
    - POWER Account Contribution payment based on income tiers
    - Surcharge for tobacco use (implemented from 2019 for members having enrollment in 2018 and given opportunity to use tobacco cessation services)

- Community engagement requirements (in effect from January 1, 2019 to October 31, 2019 when the State no longer required members to report their hours. The State indefinitely stopped all Gateway to Work activities in response to the COVID 19 public health emergency (PHE) and the stay in the federal lawsuit involving Indiana Medicaid effective April 30, 2020. Additionally, on June 24, 2021, CMS withdrew its conditional approval of the community engagement requirement.)

- Rollover any funds remaining in their POWER Account and apply the rollover as a credit toward their POWER Account Contribution in the next benefit period by getting preventive care

- Starting from 2020 due to COVID-19 PHE and court case all HIP policies have been suspended (except for retroactive coverage waiver):
  - Community engagement and work requirements will not be reinstated
  - Beneficiaries are not required to make POWER Account Contribution payments
• Have similar population characteristics.
• Have sufficient sample size for analysis.

**Summary Table**

Based on research, *Exhibit III.2* highlights key features used to identify the comparison states:

• Comparison state had expansion of its traditional Medicaid program
• Comparison state did not have any changes to traditional Medicaid retrospective coverage eligibility
• Comparison state did not have any work requirements
• Comparison state Medicaid program covers similar age population

**Exhibit III.2: Summary of Comparison State Key Features**

<table>
<thead>
<tr>
<th>State</th>
<th>Expansion</th>
<th>Population Age</th>
<th>Retrospective Eligibility Waived / Changes</th>
<th>Work Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indiana (IN)</td>
<td>Waiver</td>
<td>19-64</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Colorado* (CO)</td>
<td>Traditional</td>
<td>19-64</td>
<td>n.a.</td>
<td>No</td>
</tr>
<tr>
<td>Minnesota* (MN)</td>
<td>Traditional</td>
<td>19-64</td>
<td>n.a.</td>
<td>No</td>
</tr>
<tr>
<td>New Mexico* (NM)</td>
<td>Traditional</td>
<td>19-64</td>
<td>Yes**</td>
<td>No</td>
</tr>
<tr>
<td>Pennsylvania* (PA)</td>
<td>Traditional</td>
<td>21-64</td>
<td>n.a.</td>
<td>No</td>
</tr>
<tr>
<td>Washington* (WA)</td>
<td>Traditional</td>
<td>19-64</td>
<td>n.a.</td>
<td>No</td>
</tr>
<tr>
<td>Arizona (AZ)</td>
<td>Waiver</td>
<td>19-64</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Arkansas (AR)</td>
<td>Waiver</td>
<td>19-64</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Iowa (IA)</td>
<td>Waiver</td>
<td>19-64</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Ohio (OH)</td>
<td>Waiver</td>
<td>19-64</td>
<td>n.a.</td>
<td>Yes</td>
</tr>
<tr>
<td>Michigan (MI)</td>
<td>Waiver</td>
<td>19-64</td>
<td>n.a.</td>
<td>Yes</td>
</tr>
<tr>
<td>New Hampshire (NH)</td>
<td>Waiver</td>
<td>19-64</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*States identified as comparison state in the evaluation plan

**The State will phase out the retroactive period of eligibility by reducing it from three months to one month in calendar year 2019 (such that medical assistance can be available starting in the month before the month in which the member applies), for all members covered under the managed care demonstration program, with the exception of individuals eligible for Institutional Care (IC) categories of eligibility, pregnant members (including during the 60-day postpartum period beginning on the last day of the pregnancy), infants under age 1, and individuals under age 19 will continue to be eligible for retroactive coverage starting as early as the third month before the month in which the member applies. The waiver of retroactive eligibility will expire no later than February 7, 2020. Beginning February 8, 2020, New Mexico must again provide three months of retroactive eligibility for all members in the demonstration, as required under section 1902(a)(34) of the Act and 42 CFR § 435.915.”

Based on the criteria below, five comparison states were selected including Colorado, Minnesota, New Mexico, Pennsylvania, and Washington. **Exhibit III.3** summarizes the set of states to considered for comparison based on select characteristics. The below parameters were used to select the preliminary set of five states:

- Expanded Medicaid to childless adults, have similar eligibility for childless adults as Indiana, and expansion did not take place during the evaluation time-period.
- Have not implemented the 1115(a) waiver policy under study (e.g., community engagement requirements) but are similar to Indiana in other Medicaid policies.
- Have similar population characteristics.
- Have sufficient sample size for analysis.
### Exhibit III.3: Summary of Key State Characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Indiana</th>
<th>Colorado</th>
<th>Minnesota</th>
<th>New Mexico</th>
<th>Pennsylvania</th>
<th>Washington</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Elderly Adult Expansion FPL Percent</td>
<td>138%</td>
<td>138%</td>
<td>138%</td>
<td>138%</td>
<td>138%</td>
<td>138%</td>
</tr>
<tr>
<td>Percent Unemployed</td>
<td>3.6%</td>
<td>3.5%</td>
<td>3.2%</td>
<td>5.1%</td>
<td>3.9%</td>
<td>4.6%</td>
</tr>
<tr>
<td>Minimum Wage</td>
<td>$7.25</td>
<td>$11.10</td>
<td>$9.86/$8.04</td>
<td>$7.25</td>
<td>$7.25</td>
<td>$12.00</td>
</tr>
<tr>
<td>Percent Rural Households</td>
<td>31%</td>
<td>24%</td>
<td>35%</td>
<td>35%</td>
<td>17%</td>
<td>16%</td>
</tr>
<tr>
<td>Percent Uninsured</td>
<td>8.2%</td>
<td>7.6%</td>
<td>4.5%</td>
<td>9.1%</td>
<td>5.5%</td>
<td>6.1%</td>
</tr>
<tr>
<td>Percent Employees with Employer Offered Health Insurance</td>
<td>82%</td>
<td>83%</td>
<td>83%</td>
<td>80%</td>
<td>88%</td>
<td>85%</td>
</tr>
<tr>
<td>Race (selected)</td>
<td>79%</td>
<td>68%</td>
<td>80%</td>
<td>37%</td>
<td>77%</td>
<td>69%</td>
</tr>
<tr>
<td>White</td>
<td>9%</td>
<td>4%</td>
<td>6%</td>
<td>2%</td>
<td>11%</td>
<td>3%</td>
</tr>
<tr>
<td>Black</td>
<td>7%</td>
<td>22%</td>
<td>5%</td>
<td>49%</td>
<td>7%</td>
<td>13%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>2%</td>
<td>3%</td>
<td>5%</td>
<td>1%</td>
<td>3%</td>
<td>9%</td>
</tr>
<tr>
<td>Asian</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type of Marketplace</td>
<td>Federally facilitated</td>
<td>State-based</td>
<td>State-based</td>
<td>State-based with Federal Platform</td>
<td>Federally facilitated</td>
<td>State-based</td>
</tr>
</tbody>
</table>

Note: All of the states listed expanded their Medicaid programs prior to 2015.

---


14 For large employers, with an annual sales volume of $500,000 or more, the minimum wage is currently $9.50; for small employers, those with an annual sales volume of less than $500,000, the minimum wage is $7.75.

15 University of Minnesota. 2017 American Community Survey accessed through IPUMS USA. Retrieved May 3, 2019 from [https://usa.ipums.org/usa/](https://usa.ipums.org/usa/)

16 Ibid.


18 Henry J. Kaiser Family Foundation. Population Distribution by Race/Ethnicity, 2017. Retrieved May 11, 2019 from [https://www.kff.org/other/state-indicator/distribution-by-raceethnicity/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D](https://www.kff.org/other/state-indicator/distribution-by-raceethnicity/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D)


20 While New Mexico has a state-based marketplace with a federal platform, the state component of the marketplace only applies to small employers/employees.
Attachment IV: CAHPS® Medicaid Adult 5.0H Member Survey

CAHPS Member Survey Methodology

Data from the Consumer Assessment of Healthcare Providers & Systems (CAHPS)® Medicaid Adult 5.0H Member Surveys (referred to in this report as CAHPS Surveys) was compiled to assess various research questions associated with Goals 1, 3, and 5. Data was drawn from 2015 – 2020 for four managed care entities (MCE).

Survey Time Frame

CAHPS Surveys are typically fielded in the beginning of a calendar year, asking about member experience from the prior calendar year. For this evaluation, CAHPS Survey data is reported by the coverage year, rather than the survey year or the report year. For example, 2018 data reflects experiences from the 2018 calendar year, for which the survey was fielded in 2019.

Many of the CAHPS Survey questions begin with or include the qualifier “In the last six months” (e.g., “In the last six months, did you get information or help from your health plan’s customer service?” and “How many specialists have you seen in the last six months?”). Subsequently, respondent’s answers are time constrained and only reflect the second half of the year being evaluated rather than the entire year. This is particularly relevant for 2020 data. As the survey was fielded at the beginning of 2021 and asked about July – December 2020, the 2020 data likely reflects experiences and policies during the height of the COVID-19 public health emergency (PHE) (since the first few months of 2020, prior to the declaration of the PHE, are not included in the recall period).

Survey Administration and Response Rates

The surveys were administered by each MCE both by mail and telephone. Surveys contained a total of 60 questions. However, some survey questions were only asked to a subset of respondents. For example, the questions on tobacco cessation were only asked to those who indicated regular tobacco use. Each MCE is expected to meet a minimum response total of 411 responses across all their programs to ensure the representative scores are accurate and statistically valid. MCEs oversample and monitor prior year response rates to meet this minimum. Even with oversampling, response rates may vary. MCEs are required to use a certified CAHPS vendor and adhere to Agency for Healthcare Research and Quality (AHRQ) CAHPS requirements.

The total number of respondents to the surveys varied significantly, ranging from 190 respondents to 580 respondents across the MCEs. The average response rate was 21.4% across all MCEs and years. As some survey questions were only asked to a subset of respondents (e.g., the tobacco cessation questions), the sample size was further reduced for those questions. In some cases, a metric was not reported (marked as ‘NR’ in an exhibit) if the denominator was insufficient (i.e., less than 100).

Survey Data Set

As noted in Exhibit E.1, a major methodological limitation for this data source was the inability to access the full CAHPS Survey data set. Each MCE collected and analyzed their survey data, producing summary reports for each survey year. Summary reports do not include the full data set and are structured based on the MCE’s needs. Thus, summary reports are inconsistent across MCEs. Moreover, some MCEs
refined their data visualizations and survey formats over time yielding inconsistent reports across time for the same MCE. Examples of inconsistencies include:

- **Variation in categorical response option analysis.** Reports across MCEs provided inconsistent breakdowns of categorical response options. For example, some reports provided results for each response option (e.g., “Never,” “Sometimes,” “Usually,” and “Always” separately) while others collapsed response options (e.g., merged data from “Usually” and “Always” to create a different a combined option).

- **Variation in continuous response option analysis.** Continuous data was categorized inconsistently across reports and MCEs (e.g., reporting Likert scale scores 8 – 10 together versus Likert scale scores 9 – 10 together).

- **Missing data points across MCEs.** Variation in reporting across MCEs resulted in missing data points, impacting the ability for comparisons to be drawn. Instances of missing data points are noted in exhibits with ‘NR’ (not reported).

- **Variation in summary items analysis.** In several instances, responses for multiple individual questions were compiled together to address a broader category. These broad categories are referred to as summary items. For example, the summary item “Getting Needed Care” comprised two individual questions, the responses for which were collapsed into a single data item. There was variation across reports and MCEs in how these summary items were reported and whether or not the data for the individual questions was provided.

**Satisfaction with Health Plan**

To address Goal 5 Primary Research Question 2.1 (What is the level of satisfaction with HIP among HIP members?), Lewin evaluated CAHPS® Medicaid Adult 5.0H Member Survey data asking about member health care satisfaction with the following question: “Using any number from 0 – 10, where 0 is the worst health care possible and 10 is the best health care possible, what number would you use to rate your health care?” A similar question was asked about member health plan satisfaction: “Using any number from 0 – 10, where 0 is the worst health plan possible and 10 is the best health plan possible, what number would you use to rate your health plan?” Although the health care satisfaction question was selected as a better fit to assess the research question, the data for the health plan satisfaction question (for responses 9 and 10) was compiled and is included in Exhibit IV.1 for reference. This data reflects similar trends as the health care satisfaction question.

**Exhibit IV.1: Percent of Beneficiaries Reporting Satisfaction with Health Plan by MCE and Year (2015 – 2020)**

<table>
<thead>
<tr>
<th>Rating of Health Plan (9 &amp; 10)</th>
<th>MCE</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>57.4%</td>
<td>60.8%</td>
<td>63.5%</td>
<td>64.4%</td>
<td>74.7%</td>
<td>71.9%</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>NR</td>
<td>NR</td>
<td>52.5%</td>
<td>58.1%</td>
<td>59.2%</td>
<td>67.1%</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>54.4%</td>
<td>NR</td>
<td>58.6%</td>
<td>68.9%</td>
<td>67.9%</td>
<td>67.1%</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>56.5%</td>
<td>58.6%</td>
<td>60.7%</td>
<td>58.6%</td>
<td>62.6%</td>
<td>64.4%</td>
<td></td>
</tr>
</tbody>
</table>

Note: NR = not reported (no report for corresponding year or metric not reported)
Attachment V: Behavioral Risk Factor Surveillance System (BRFSS) Data Analytic Details

BRFSS Datasets and Methodology for the Analysis

The Behavioral Risk Factor Surveillance System (BRFSS) is a system of health-related telephone surveys that collect state data about U.S. residents regarding their health-related risk behaviors, chronic health conditions, and use of preventive services. BRFSS completes more than 400,000 adult interviews each year, making it the largest continuously conducted health survey system in the world. An important research question relevant to the analysis of improved health care access in Indiana is whether the reported health status for HIP members changed over time. For this purpose, Lewin uses BRFSS datasets for the period of 2013 – 2020. However, BRFSS data does not identify populations directly covered by Medicaid. Per the Centers for Medicare & Medicaid Services (CMS)’s recommendation, Lewin identified the likely Medicaid eligible population using the following criteria:

- Include respondents ages 18 – 64
- Exclude respondents that report household income of more than $15,000 (BRFSS does not capture federal poverty level [FPL] status)
- Exclude respondents with self-reported employment status of “unable to work”
- Exclude pregnant people

Goal 1

Exhibit V.1 presents the sample size of the BRFSS data relevant for the analysis. The resulting sample size of Medicaid eligible population in Indiana was 2,477 from 2013 – 2020. Exhibit V.2 includes the weighted total population and Medicaid eligible population.

Exhibit V.1: Sample Size for Indiana Ages 18 – 64 (BRFSS Data 2013 – 2020)

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
<th>Medicaid Eligible</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>6,744</td>
<td>457</td>
</tr>
<tr>
<td>2014</td>
<td>7,216</td>
<td>398</td>
</tr>
<tr>
<td>2015</td>
<td>3,647</td>
<td>176</td>
</tr>
<tr>
<td>2016</td>
<td>6,447</td>
<td>324</td>
</tr>
<tr>
<td>2017</td>
<td>8,314</td>
<td>460</td>
</tr>
<tr>
<td>2018</td>
<td>4,446</td>
<td>189</td>
</tr>
<tr>
<td>2019</td>
<td>5,293</td>
<td>253</td>
</tr>
<tr>
<td>2020</td>
<td>5,315</td>
<td>220</td>
</tr>
<tr>
<td>2013-2020</td>
<td>47,422</td>
<td>2,477</td>
</tr>
</tbody>
</table>


21 BRFSS data provides information on age in age groups (not in individual years) and their adult age group starts at 18. Hence, the data limitation does not allow age restriction of 19-64 that we have used for other datasets.
Exhibit V.2: Total Population and Medicaid Eligible Population in Indiana (BRFSS Data 2013 – 2020)

<table>
<thead>
<tr>
<th>Year</th>
<th>Population (18-64)</th>
<th>Medicaid Eligible</th>
<th>Medicaid Eligible (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>4,025,066</td>
<td>299,426</td>
<td>7.4%</td>
</tr>
<tr>
<td>2014</td>
<td>4,019,130</td>
<td>288,040</td>
<td>7.2%</td>
</tr>
<tr>
<td>2015</td>
<td>4,036,973</td>
<td>269,131</td>
<td>6.7%</td>
</tr>
<tr>
<td>2016</td>
<td>4,022,349</td>
<td>240,284</td>
<td>6.0%</td>
</tr>
<tr>
<td>2017</td>
<td>4,014,615</td>
<td>246,133</td>
<td>6.1%</td>
</tr>
<tr>
<td>2018</td>
<td>3,994,839</td>
<td>197,735</td>
<td>4.9%</td>
</tr>
<tr>
<td>2019</td>
<td>3,989,952</td>
<td>230,036</td>
<td>5.8%</td>
</tr>
<tr>
<td>2020</td>
<td>3,980,737</td>
<td>186,643</td>
<td>4.7%</td>
</tr>
</tbody>
</table>


The percentages of Medicaid eligible population ages 18 – 64 by self-reported health status are presented in Exhibit V.3. Lewin created a model of health status to better understand the relationship between specific demographic populations and their self-reported health statuses over time. The estimated marginal effects of the model for each covariate are presented in the Multinomial Logit Model in Exhibit V.4. These effects demonstrate the impact of these variables (e.g., year, age, sex) on the likelihood of different health status controlled for population characteristics.

Exhibit V.3: General (Self-Reported) Health Status of Medicaid Eligible Population in Indiana (BRFSS Data 2013 – 2020)

<table>
<thead>
<tr>
<th>Year</th>
<th>Excellent</th>
<th>Very Good</th>
<th>Good</th>
<th>Fair/Poor</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>14.2%</td>
<td>22.7%</td>
<td>39.9%</td>
<td>22.4%</td>
<td>0.8%</td>
</tr>
<tr>
<td>2014</td>
<td>15.6%</td>
<td>21.1%</td>
<td>36.0%</td>
<td>27.3%</td>
<td>0.0%</td>
</tr>
<tr>
<td>2015</td>
<td>16.6%</td>
<td>18.8%</td>
<td>37.3%</td>
<td>27.4%</td>
<td>0.0%</td>
</tr>
<tr>
<td>2016</td>
<td>14.2%</td>
<td>20.3%</td>
<td>40.8%</td>
<td>24.7%</td>
<td>0.0%</td>
</tr>
<tr>
<td>2017</td>
<td>10.3%</td>
<td>22.8%</td>
<td>37.0%</td>
<td>28.9%</td>
<td>1.0%</td>
</tr>
<tr>
<td>2018</td>
<td>14.7%</td>
<td>19.5%</td>
<td>37.2%</td>
<td>28.6%</td>
<td>0.0%</td>
</tr>
<tr>
<td>2019</td>
<td>8.9%</td>
<td>24.0%</td>
<td>37.5%</td>
<td>29.2%</td>
<td>0.4%</td>
</tr>
<tr>
<td>2020</td>
<td>16.8%</td>
<td>29.6%</td>
<td>30.4%</td>
<td>23.2%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

Note: The sample is restricted to Medicaid eligible ages 18 – 64.
### Exhibit V.4: Multinomial Logit Model of General Health Status (Interrupted-Time-Series) (BRFSS Data 2013 – 2020)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Outcomes</th>
<th>Marginal Effects of Covariates by Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Excellent</td>
</tr>
<tr>
<td><strong>Period (Ref: Year &lt;2015)</strong></td>
<td>Year 2015-2017</td>
<td>-0.007</td>
</tr>
<tr>
<td></td>
<td>Year 2018-2020</td>
<td>0.004</td>
</tr>
<tr>
<td><strong>Age (Ref: 18-24)</strong></td>
<td>Age 25-34</td>
<td>-0.037</td>
</tr>
<tr>
<td></td>
<td>Age 35-44</td>
<td>-0.141</td>
</tr>
<tr>
<td></td>
<td>Age 45-54</td>
<td>-0.129</td>
</tr>
<tr>
<td></td>
<td>Age 55-64</td>
<td>-0.148</td>
</tr>
<tr>
<td><strong>Male (Ref: Female)</strong></td>
<td></td>
<td>0.043</td>
</tr>
<tr>
<td><strong>Race (Ref: Non-Hispanic White)</strong></td>
<td>Non-Hispanic Black</td>
<td>-0.014</td>
</tr>
<tr>
<td></td>
<td>Non-Hispanic Other</td>
<td>-0.054</td>
</tr>
<tr>
<td></td>
<td>Hispanic</td>
<td>0.035</td>
</tr>
<tr>
<td><strong>Education (Ref: Less Than High School)</strong></td>
<td>High School Grad</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>College Grad</td>
<td>0.081</td>
</tr>
<tr>
<td></td>
<td>Unknown Education</td>
<td>-0.140</td>
</tr>
<tr>
<td><strong>Income (Ref: Less Than $10K)</strong></td>
<td>Income $10K-$15k</td>
<td>0.022</td>
</tr>
</tbody>
</table>


Note: The marginal effect shows the changes in the probability of health status category due to the change in the respective control variable. The estimated marginal effects in bold are statistically significant.

### Goal 5

An important research question relevant to the analysis of improved health care access in Indiana is whether the reported health status for HIP members changed over time. For this purpose, Lewin uses Behavioral Risk Factor Surveillance System (BRFSS) datasets for the period of 2013 – 2020. However, BRFSS data does not directly identifies population directly covered by Medicaid. Per CMS recommendation, Lewin identified the likely Medicaid eligible population using the following criteria:

- Include respondents age between 18 and 64
- Exclude respondents that report household income of more than $15,000 (BRFSS does not capture FPL status)
- Exclude respondents with self-reported employment status of “unable to work”
- Exclude pregnant respondents

**Exhibit V.5** presents the sample size of the BRFSS data relevant for the analysis. The resulted sample size of Medicaid eligible population in Indiana was 2,477 from 2013 – 2020. **Exhibit V.6** includes the weighted total population and Medicaid eligible population. It is important to note that, due to the small sample size, the resultant estimate of Medicaid eligible population using the BRFSS data is much smaller compared to the robust estimate from the American Community Survey (ACS) data. **Exhibit V.7 and**
Exhibit V.8 present the general self-reported health status of the Medicaid eligible population in Indiana and comparison states respectively.

Exhibit V.5: BRFSS Sample Size for Indiana Ages 18 – 64 (BRFSS Data 2013 – 2020)

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
<th>Medicaid Eligible</th>
</tr>
</thead>
<tbody>
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</tr>
<tr>
<td>2020</td>
<td>5,315</td>
<td>220</td>
</tr>
<tr>
<td>2013-2020</td>
<td>47,422</td>
<td>2,477</td>
</tr>
</tbody>
</table>

Source: BRFSS Annual Survey Data, Center for Disease Control and Prevention.

Exhibit V.6: Total Population and Medicaid Eligible Population in Indiana (BRFSS Data 2013 – 2020)

<table>
<thead>
<tr>
<th>Year</th>
<th>Population (18-64)</th>
<th>Medicaid Eligible</th>
<th>Medicaid Eligible (%)</th>
</tr>
</thead>
<tbody>
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<td>7.4%</td>
</tr>
<tr>
<td>2014</td>
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</tr>
<tr>
<td>2015</td>
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<td>4.9%</td>
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<tr>
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<td>230,036</td>
<td>5.8%</td>
</tr>
<tr>
<td>2020</td>
<td>3,980,737</td>
<td>186,643</td>
<td>4.7%</td>
</tr>
</tbody>
</table>

Source: BRFSS Annual Survey Data, Center for Disease Control and Prevention.
Exhibit V.7: General (Self-Reported) Health Status of Medicaid Eligible Population in Indiana (BRFSS Data 2013 – 2020)

<table>
<thead>
<tr>
<th>State</th>
<th>Year</th>
<th>Excellent</th>
<th>Very Good</th>
<th>Good</th>
<th>Fair/Poor</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indiana</td>
<td>2013</td>
<td>14.2%</td>
<td>22.7%</td>
<td>39.9%</td>
<td>22.4%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Indiana</td>
<td>2014</td>
<td>15.6%</td>
<td>21.1%</td>
<td>36.0%</td>
<td>27.3%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Indiana</td>
<td>2015</td>
<td>16.6%</td>
<td>18.8%</td>
<td>37.3%</td>
<td>27.4%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Indiana</td>
<td>2016</td>
<td>14.2%</td>
<td>20.3%</td>
<td>40.8%</td>
<td>24.7%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Indiana</td>
<td>2017</td>
<td>10.3%</td>
<td>22.8%</td>
<td>37.0%</td>
<td>28.9%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Indiana</td>
<td>2018</td>
<td>14.7%</td>
<td>19.5%</td>
<td>37.2%</td>
<td>28.6%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Indiana</td>
<td>2019</td>
<td>8.9%</td>
<td>24.0%</td>
<td>37.5%</td>
<td>29.2%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Indiana</td>
<td>2020</td>
<td>16.8%</td>
<td>29.6%</td>
<td>30.4%</td>
<td>23.2%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

Source: BRFSS Annual Survey Data, Center for Disease Control and Prevention.
Note: The sample is restricted to Medicaid eligible ages 18 – 64.

Exhibit V.8: General (Self-Reported) Health Status of Medicaid Eligible Population in Comparison States (BRFSS Data 2013 – 2020)

<table>
<thead>
<tr>
<th>State</th>
<th>Year</th>
<th>Excellent</th>
<th>Very Good</th>
<th>Good</th>
<th>Fair/Poor</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comparison</td>
<td>2013</td>
<td>17.1%</td>
<td>25.8%</td>
<td>33.6%</td>
<td>23.2%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Comparison</td>
<td>2014</td>
<td>15.2%</td>
<td>25.7%</td>
<td>35.2%</td>
<td>23.0%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Comparison</td>
<td>2015</td>
<td>16.9%</td>
<td>25.2%</td>
<td>34.9%</td>
<td>22.3%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Comparison</td>
<td>2016</td>
<td>14.3%</td>
<td>28.2%</td>
<td>32.7%</td>
<td>24.6%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Comparison</td>
<td>2017</td>
<td>13.4%</td>
<td>21.0%</td>
<td>35.9%</td>
<td>29.4%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Comparison</td>
<td>2018</td>
<td>14.9%</td>
<td>23.4%</td>
<td>34.4%</td>
<td>27.0%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Comparison</td>
<td>2019</td>
<td>11.4%</td>
<td>22.8%</td>
<td>35.1%</td>
<td>30.3%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Comparison</td>
<td>2020</td>
<td>18.7%</td>
<td>27.2%</td>
<td>33.1%</td>
<td>20.7%</td>
<td>0.3%</td>
</tr>
</tbody>
</table>

Source: BRFSS Annual Survey Data, Center for Disease Control and Prevention.
Note: The sample is restricted to Medicaid eligible ages 18 – 64. Comparison States are CO, MN, PA, WA.

Limitation of the Analysis of Health Status based on BRFSS Data

The BRFSS data does not provide adequate information to identify the Medicaid population. Thus, the evaluation of health status change over time among HIP members and the potential impact of HIP waiver renewal on the health status among the HIP members was not feasible. While the Medicaid eligible population can be a good proxy for HIP members, the actual HIP members may have reasonably different health conditions. Further, the smaller sample size in BRFSS data may pose additional challenge to improve the robustness of the findings.
Attachment VI: American Community Survey Data Analytic Details

American Community Survey Datasets and Methodology for the Analysis of Medicaid Enrollment

The American Community Survey (ACS) data, sponsored jointly by the U.S. Census Bureau and the U.S. Department of Commerce, is a nationally representative sample survey data that includes information on demographic, social, economic, and health insurance coverage characteristics of the U.S. population each year.\(^{22}\) To analyze enrollment rates in Indiana HIP Medicaid program, Lewin used the ACS data from 2015 – 2019.\(^ {23}\) After restricting the sample to population ages 19 – 64, the raw sample size for Indiana varies by year: from 38,686 to 39,217 during the data period.

**Goal 1**

The raw counts of the sample of individuals ages 19 – 64 in the ACS data by year and the state are presented in **Exhibit VI.1** below. The sample sizes presented in **Exhibit VI.2** shows the raw counts of Medicaid eligible sample from the ACS data for the same states. Medicaid eligible population is defined as those with income of less than 139% of the federal poverty level (FPL), no Medicare coverage, and no supplemental security income. The ACS-based weighted counts of Medicaid eligible and Medicaid enrolled population and enrollment rates in Indiana are presented in **Exhibit VI.3**.


<table>
<thead>
<tr>
<th>Year</th>
<th>Indiana</th>
<th>Colorado</th>
<th>Minnesota</th>
<th>Pennsylvania</th>
<th>Washington</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>38,686</td>
<td>32,484</td>
<td>31,843</td>
<td>75,853</td>
<td>42,761</td>
<td>182,941</td>
</tr>
<tr>
<td>2016</td>
<td>38,697</td>
<td>33,106</td>
<td>31,196</td>
<td>74,465</td>
<td>43,070</td>
<td>181,837</td>
</tr>
<tr>
<td>2017</td>
<td>38,931</td>
<td>33,520</td>
<td>31,836</td>
<td>74,945</td>
<td>44,129</td>
<td>184,430</td>
</tr>
<tr>
<td>2018</td>
<td>39,217</td>
<td>33,598</td>
<td>31,675</td>
<td>75,000</td>
<td>44,891</td>
<td>185,164</td>
</tr>
<tr>
<td>2019</td>
<td>38,949</td>
<td>34,258</td>
<td>31,468</td>
<td>73,982</td>
<td>45,520</td>
<td>185,228</td>
</tr>
<tr>
<td>All</td>
<td>194,480</td>
<td>166,966</td>
<td>158,018</td>
<td>374,245</td>
<td>220,371</td>
<td>919,600</td>
</tr>
</tbody>
</table>


---


\(^{23}\) Because of the COVID-19 pandemic on 2020 ACS data collection and data quality, the Census Bureau did not release their standard data products, including the standard Public Use Microdata Sample (PUMS) data. Instead, they released the 2020 ACS one-year data products with experimental weights designed to account for the impact of the COVID-19 pandemic on the data quality. Hence, Lewin excluded the ACS 2020 data from the analysis to avoid any potential bias that may occur due to the COVID-19 pandemic impact on data quality.

<table>
<thead>
<tr>
<th>Year</th>
<th>Indiana</th>
<th>Colorado</th>
<th>Minnesota</th>
<th>Pennsylvania</th>
<th>Washington</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>7,773</td>
<td>5,103</td>
<td>4,168</td>
<td>12,472</td>
<td>6,692</td>
<td>28,435</td>
</tr>
<tr>
<td>2016</td>
<td>7,216</td>
<td>5,135</td>
<td>4,075</td>
<td>12,370</td>
<td>6,490</td>
<td>28,070</td>
</tr>
<tr>
<td>2017</td>
<td>7,065</td>
<td>5,096</td>
<td>3,957</td>
<td>11,936</td>
<td>6,186</td>
<td>27,175</td>
</tr>
<tr>
<td>2018</td>
<td>6,959</td>
<td>4,722</td>
<td>3,927</td>
<td>12,030</td>
<td>6,232</td>
<td>26,911</td>
</tr>
<tr>
<td>2019</td>
<td>6,760</td>
<td>4,551</td>
<td>3,568</td>
<td>11,035</td>
<td>5,852</td>
<td>25,006</td>
</tr>
<tr>
<td>All</td>
<td>35,773</td>
<td>24,607</td>
<td>19,695</td>
<td>59,843</td>
<td>31,452</td>
<td>135,597</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Year</th>
<th>Population (19-64)</th>
<th>Medicaid Eligible Population</th>
<th>Population with Medicaid</th>
<th>Medicaid Eligible with Medicaid</th>
<th>Percent of Population with Medicaid</th>
<th>Percent of Eligible in Medicaid</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>3,978,989</td>
<td>775,599</td>
<td>463,912</td>
<td>208,852</td>
<td>11.7%</td>
<td>26.9%</td>
</tr>
<tr>
<td>2016</td>
<td>3,968,026</td>
<td>732,277</td>
<td>520,922</td>
<td>234,674</td>
<td>13.1%</td>
<td>32.0%</td>
</tr>
<tr>
<td>2017</td>
<td>3,971,561</td>
<td>712,023</td>
<td>537,491</td>
<td>237,089</td>
<td>13.5%</td>
<td>33.3%</td>
</tr>
<tr>
<td>2018</td>
<td>3,977,671</td>
<td>682,634</td>
<td>533,738</td>
<td>238,340</td>
<td>13.4%</td>
<td>34.9%</td>
</tr>
<tr>
<td>2019</td>
<td>3,980,799</td>
<td>679,584</td>
<td>557,352</td>
<td>241,535</td>
<td>14.0%</td>
<td>35.5%</td>
</tr>
</tbody>
</table>


The Medicaid enrollment rates among the Medicaid eligible population in Indiana and the comparison states are presented in Exhibit VI.4. These estimates are based on the ACS data. The summary of the characteristics of Medicaid eligible population in Indiana and comparison states are presented in Exhibit VI.5. Lewin estimated Difference-in-Differences (DID) regression model of Medicaid enrollment rates to examine the change in enrollment rates in Indiana relative to the comparison states after controlling for population characteristics. The estimated parameters of the model are presented in Exhibit VI.6.


<table>
<thead>
<tr>
<th>Year</th>
<th>Indiana</th>
<th>Colorado</th>
<th>Minnesota</th>
<th>Pennsylvania</th>
<th>Washington</th>
<th>All Comparison States</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>26.9%</td>
<td>39.7%</td>
<td>34.1%</td>
<td>45.0%</td>
<td>42.8%</td>
<td>38.9%</td>
</tr>
<tr>
<td>2016</td>
<td>32.0%</td>
<td>37.2%</td>
<td>40.4%</td>
<td>44.8%</td>
<td>44.2%</td>
<td>41.3%</td>
</tr>
<tr>
<td>2017</td>
<td>33.3%</td>
<td>38.2%</td>
<td>43.7%</td>
<td>44.9%</td>
<td>44.3%</td>
<td>43.0%</td>
</tr>
<tr>
<td>2018</td>
<td>34.9%</td>
<td>40.0%</td>
<td>43.0%</td>
<td>45.0%</td>
<td>45.6%</td>
<td>43.4%</td>
</tr>
<tr>
<td>2019</td>
<td>35.5%</td>
<td>35.5%</td>
<td>42.5%</td>
<td>46.2%</td>
<td>45.5%</td>
<td>42.4%</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Variables</th>
<th>Indiana</th>
<th>Comparison States (CO, MN, PA, WA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>2015-2019</td>
<td>2015-2019</td>
</tr>
<tr>
<td>Age (Years)</td>
<td>34.8</td>
<td>35.2</td>
</tr>
<tr>
<td>Age &lt;30</td>
<td>44.4%</td>
<td>43.5%</td>
</tr>
<tr>
<td>Age 30-39</td>
<td>22.1%</td>
<td>21.9%</td>
</tr>
<tr>
<td>Age 40-49</td>
<td>15.3%</td>
<td>15.2%</td>
</tr>
<tr>
<td>Age 50-59</td>
<td>12.5%</td>
<td>13.3%</td>
</tr>
<tr>
<td>Age 60+</td>
<td>5.8%</td>
<td>6.2%</td>
</tr>
<tr>
<td>Male</td>
<td>45.2%</td>
<td>47.5%</td>
</tr>
<tr>
<td>Non-Hispanic White</td>
<td>67.6%</td>
<td>58.7%</td>
</tr>
<tr>
<td>Non-Hispanic Black</td>
<td>15.4%</td>
<td>13.4%</td>
</tr>
<tr>
<td>Non-Hispanic Asian</td>
<td>4.2%</td>
<td>7.3%</td>
</tr>
<tr>
<td>Non-Hispanic Other</td>
<td>2.5%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>10.3%</td>
<td>17.2%</td>
</tr>
<tr>
<td>Less Than High School</td>
<td>16.5%</td>
<td>13.6%</td>
</tr>
<tr>
<td>High School Graduate</td>
<td>73.1%</td>
<td>72.6%</td>
</tr>
<tr>
<td>Personal Income</td>
<td>$ 8,048</td>
<td>$ 8,199</td>
</tr>
<tr>
<td>FPL &lt;23%</td>
<td>35.1%</td>
<td>34.3%</td>
</tr>
<tr>
<td>FPL 23-50%</td>
<td>11.0%</td>
<td>11.8%</td>
</tr>
<tr>
<td>FPL 51-75%</td>
<td>11.8%</td>
<td>12.3%</td>
</tr>
<tr>
<td>FPL 76-100%</td>
<td>16.1%</td>
<td>15.8%</td>
</tr>
<tr>
<td>FPL 101-138%</td>
<td>26.0%</td>
<td>25.9%</td>
</tr>
</tbody>
</table>


| Outcome (Have Medicaid) | Coef.  | Std. Err. | P>|t| |
|-------------------------|--------|-----------|-----|
| Indiana*(Year>2017)     | 0.016  | 0.006     | 0.011 |
| Indiana                 | -0.103 | 0.004     | 0.000 |
| Year                    |        |           |      |
| 2017                    | 0.018  | 0.004     | 0.000 |
| 2018                    | 0.023  | 0.004     | 0.000 |
| 2019                    | 0.015  | 0.004     | 0.000 |
| Age                     | 0.006  | 0.000     | 0.000 |
| Male                    | -0.100 | 0.003     | 0.000 |
| Race/Ethnicity          |        |           |      |
| (Ref: Non-Hispanic White)|      |           |      |
| Non-Hispanic Black      | 0.100  | 0.004     | 0.000 |
| Non-Hispanic Other      | 0.005  | 0.004     | 0.240 |
| Hispanic                | -0.033 | 0.004     | 0.000 |
| Education               |        |           |      |
| (Ref: Less Than High School)|    |           |      |
| High School Grad        | -0.064 | 0.004     | 0.000 |
| College Grad            | -0.213 | 0.005     | 0.000 |
| FPL                     |        |           |      |
| (Ref: <23% FPL)         |        |           |      |
| 23-50% FPL              | 0.094  | 0.004     | 0.000 |
| 51-75% FPL              | 0.147  | 0.004     | 0.000 |
| 76-100% FPL             | 0.075  | 0.004     | 0.000 |
| 101-138% FPL            | 0.037  | 0.003     | 0.000 |
| Intercept               | 0.273  | 0.006     | 0.000 |
| Observation             | 135,162|           |      |


Note: The DiD model is a linear regression model using the ACS data. The sample includes Medicaid eligible population ages 19 – 64 in Indiana and four comparison states (CO, MN, PA, WA) during 2016 – 2019.

### Goal 4

The Exhibit VI.7 below shows the estimated parameters of the Linear Interrupted-Time-Series (ITS) model of Medicaid enrollment rates in Indiana. The model controls for population demographics and income. The primary focus of the model is to examine the change in Medicaid enrollment rates in 2018 and after relative to 2016 – 2017 period across income tiers.
Exhibit VI.7: Linear ITS Regression Model of Medicaid Enrollment Rates in Indiana (ACS Data 2016 – 2019)

<table>
<thead>
<tr>
<th>Linear Model Covariates</th>
<th>Coef.</th>
<th>Std. Err.</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post (YR&gt;2017)*FPL &lt;23%</td>
<td>0.037</td>
<td>0.009</td>
<td>0.000</td>
</tr>
<tr>
<td>Post (YR&gt;2017)*FPL 23-50%</td>
<td>-0.009</td>
<td>0.017</td>
<td>0.607</td>
</tr>
<tr>
<td>Post (YR&gt;2017)*FPL 51-75%</td>
<td>0.045</td>
<td>0.016</td>
<td>0.005</td>
</tr>
<tr>
<td>Post (YR&gt;2017)*FPL 76-100%</td>
<td>-0.007</td>
<td>0.014</td>
<td>0.630</td>
</tr>
<tr>
<td>Post (YR&gt;2017)*FPL 101-138%</td>
<td>0.040</td>
<td>0.011</td>
<td>0.000</td>
</tr>
<tr>
<td>POWER Account Income Tier (Ref: FPL &lt;23%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FPL 23-50%</td>
<td>0.060</td>
<td>0.013</td>
<td>0.000</td>
</tr>
<tr>
<td>FPL 51-75%</td>
<td>0.094</td>
<td>0.013</td>
<td>0.000</td>
</tr>
<tr>
<td>FPL 76-100%</td>
<td>0.045</td>
<td>0.012</td>
<td>0.000</td>
</tr>
<tr>
<td>FPL 101-138%</td>
<td>-0.039</td>
<td>0.010</td>
<td>0.000</td>
</tr>
<tr>
<td>Age</td>
<td>0.005</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Male</td>
<td>-0.115</td>
<td>0.006</td>
<td>0.000</td>
</tr>
<tr>
<td>Race category (Ref: Non-Hispanic White)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Hispanic Black</td>
<td>0.073</td>
<td>0.008</td>
<td>0.000</td>
</tr>
<tr>
<td>Non-Hispanic Other</td>
<td>-0.035</td>
<td>0.011</td>
<td>0.001</td>
</tr>
<tr>
<td>Hispanic</td>
<td>-0.092</td>
<td>0.009</td>
<td>0.000</td>
</tr>
<tr>
<td>Education category (Ref: Less Than High School)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School Grad</td>
<td>-0.092</td>
<td>0.008</td>
<td>0.000</td>
</tr>
<tr>
<td>College Grad</td>
<td>-0.212</td>
<td>0.011</td>
<td>0.000</td>
</tr>
<tr>
<td>Intercept</td>
<td>0.289</td>
<td>0.012</td>
<td>0.000</td>
</tr>
<tr>
<td>Observations</td>
<td>28,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Note: The sample is restricted to Medicaid eligible population ages 19 – 64 in Indiana. Medicaid eligible population is defined as those with FPL of less than 139%, no Medicare coverage, and no supplemental security income. The effects in bold are the ones of primary interest in the context of the study of the change in Medicaid enrollment rates during 2018 – 2019 period relative to the rates in 2016 – 2017 period for each income tier.

**Goal 5**

The American Community Survey data, sponsored jointly by the U.S. Census Bureau and the U.S. Department of Commerce, is a nationally representative sample of survey data that includes rich information on demographic, social, economic, and health insurance coverage characteristics of the U.S. population each year. To analyze enrollment rates in Indiana HIP Medicaid program Lewin used the ACS data from 2015 – 2019. The raw sample size (restricted to adults between the ages of 19 – 64) for

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25 Because of the impact of the COVID-19 pandemic on 2020 ACS data collection and data quality, the Census Bureau did not release their standard data products, including the standard Public Use Microdata Sample (PUMS) data. Instead, they released the 2020 ACS one-year data products with experimental weights designed to account for the impact of the COVID-19 pandemic on the data quality. Hence, Lewin excluded the ACS 2020 data from the analysis to avoid any potential bias that may occur due to the COVID-19 pandemic impact on data quality.
Indiana varies by year: from 38,686 in 2015 to 39,217 in 2018. The sample size by state and year are presented in Exhibit VI.8 below.

Using the information on health insurance coverage (Medicaid versus Commercial Health Insurance) details and income status defined by the FPL categories, Lewin identified the Medicaid eligible population. For the purpose of the analysis, Lewin classified the Medicaid eligible population as the individuals ages 19 – 64 with income below the 139% of FPL, with no Medicare coverage and no supplemental security income. While the FPL status was used as a proxy for Medicaid income eligibility requirement to identify low-income population, the exclusion of individuals with supplemental security income allows us to identify the non-disabled population. The raw sample size of the Medicaid eligible population by state and year are presented in Exhibit IV.9. The weighted (using survey sample weights) counts of population, Medicaid members and Medicaid eligible population in Indiana are presented in Exhibit IV.10.

HIP Plus members with incomes from 101 – 138% of the FPL that do not make monthly Personal Wellness and Responsibility (POWER) Account Contribution payments are disenrolled from HIP and are not allowed to re-enroll for six months (also referred to as the six-month lockout or non-eligibility period). The State exempts members determined medically frail from nonpayment penalties regardless of income; these members do not lose benefits due to nonpayment of POWER Account Contribution. The enrollment lockout period also does not apply for members residing in a domestic violence shelter or in a state-declared disaster area. Members subject to a lockout period can request a waiver to reenter the program.

To better understand the sub-group of HIP members who might be at risk of non-eligibility and/or lock-out period, Lewin analyzed their socio-economic and demographic characteristics. Lewin used the data from the ACS to identify members enrolled in Medicaid with the relevant income or poverty status in terms of FPL. The ACS also provides information about different types of health insurance coverage status of individuals including Medicaid and private or commercial insurance coverage.

The retroactive eligibility provision covers health care services received up to 90 days before the date a beneficiary applied for Medicaid coverage, provided the beneficiary would have been eligible for the program when the services were received. In general, Medicaid in Indiana does not include retroactive coverage for Indiana HIP members (with a few exceptions for pregnant members and members with disabilities). In more recent Section 1115 waiver applications, state officials have asserted that waiving retroactive eligibility will familiarize beneficiaries with commercial insurance (that provides prospective coverage only), incentivize them to obtain and maintain health coverage even when healthy, and encourage them to apply for coverage as soon as they believe they meet eligibility criteria.26 Hence, Lewin examined at what extent the eligible people subject to retroactive eligibility waivers in Indiana enroll in the state Medicaid program compared to other states who have access to retroactive eligibility.

We used a regression-based DiD model to assess the impact of 2018 HIP policy changes on the Medicaid enrollment growth among the Medicaid eligible population in Indiana. This type of regression model allows comparison of the Medicaid enrollment growth in Indiana before and after the waiver renewal relative to the changes in the Medicaid enrollment trend (during the same period) in the comparison states that did not have any waiver renewal. As a result, it helped eliminate the impact of any secular

trend that may affect the Medicaid enrollment across different states. This method likely reduced the potential bias in the estimated impact of the waiver renewal.

In this DiD model framework Lewin used four comparison states that have retroactive eligibility for their respective Medicaid plan: Colorado (CO), Minnesota (MN), Pennsylvania (PA), and Washington (WA). Per the Centers for Medicare & Medicaid Services (CMS)'s guidance these comparison states were chosen after carefully comparing the Medicaid policy features, population characteristics and the sample size. It is important to note that the retroactive coverage feature of the comparison state is static over time and the DiD model can control for such time invariant feature of the comparison state. The Medicaid enrollment rates among the Medicaid eligible population in Indiana and the comparison states are presented in Exhibit IV.11.

Since the primary focus of the DiD regression model is to estimate the impact of 2018 HIP policy changes in continuation with retroactive eligibility waiver, Lewin has restricted the analysis sample to only 2016 – 2019 period. Elimination of 2015 data from the DiD model allows us to avoid any potential impact of Medicaid expansion in Indiana in 2015. Similarly, data prior to 2015 was also not considered as any changes from pre-Medicaid expansion to post-Medicaid expansion comes with other relevant policy changes. These changes occurred at the same time in 2015 when the retroactive eligibility waiver was implemented. As a result, the data prior to 2015 would not help to isolate any impact of the availability of retroactive coverage. The sample for the DiD model is further restricted to Medicaid eligible individuals ages 19 – 64 across Indiana and the chosen comparison states with retroactive coverage. The summary of characteristics of Medicaid eligible population in Indiana and the comparison states are presented in Exhibit IV.12.

The outcome variable in the DiD model is a binary indicator variable that takes a value of 1 if the person is reported to have Medicaid coverage and 0 otherwise. In this regression model Lewin also controlled for other potential drivers of Medicaid enrollment including age, sex, race, ethnicity, education, income, and state (e.g., indicator of whether an individual’s state of residence is Indiana) and year fixed effects. The main explanatory variable in this DiD regression model was an interaction (i.e., multiplicative form) term of two binary variables: whether the state of residence is Indiana and whether the observation belongs to year 2018 or after (i.e., post-HIP waiver renewal period). Lewin estimated a linear regression version (linear probability model) of the DiD model where the estimated coefficient of this interaction term informs us about whether the 2018 HIP waiver renewal has any statistically significant impact on the Medicaid enrollment rate in Indiana.
### Exhibit VI.8: Sample Size for Five States for Population Ages 19 – 64 (ACS Data 2015 – 2019)

<table>
<thead>
<tr>
<th>Year</th>
<th>Indiana</th>
<th>Colorado</th>
<th>Minnesota</th>
<th>Pennsylvania</th>
<th>Washington</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>38,686</td>
<td>32,484</td>
<td>31,843</td>
<td>75,853</td>
<td>42,761</td>
<td>182,941</td>
</tr>
<tr>
<td>2016</td>
<td>38,697</td>
<td>33,106</td>
<td>31,196</td>
<td>74,465</td>
<td>43,070</td>
<td>181,837</td>
</tr>
<tr>
<td>2017</td>
<td>38,931</td>
<td>33,520</td>
<td>31,836</td>
<td>74,945</td>
<td>44,129</td>
<td>184,430</td>
</tr>
<tr>
<td>2018</td>
<td>39,217</td>
<td>33,598</td>
<td>31,675</td>
<td>75,000</td>
<td>44,891</td>
<td>185,164</td>
</tr>
<tr>
<td>2019</td>
<td>38,949</td>
<td>34,258</td>
<td>31,468</td>
<td>73,982</td>
<td>45,520</td>
<td>185,228</td>
</tr>
<tr>
<td>All</td>
<td>194,480</td>
<td>166,966</td>
<td>158,018</td>
<td>374,245</td>
<td>220,371</td>
<td>919,600</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Year</th>
<th>Indiana</th>
<th>Colorado</th>
<th>Minnesota</th>
<th>Pennsylvania</th>
<th>Washington</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>7,773</td>
<td>5,103</td>
<td>4,168</td>
<td>12,472</td>
<td>6,692</td>
<td>28,435</td>
</tr>
<tr>
<td>2016</td>
<td>7,216</td>
<td>5,135</td>
<td>4,075</td>
<td>12,370</td>
<td>6,490</td>
<td>28,070</td>
</tr>
<tr>
<td>2017</td>
<td>7,065</td>
<td>5,096</td>
<td>3,957</td>
<td>11,936</td>
<td>6,186</td>
<td>27,175</td>
</tr>
<tr>
<td>2018</td>
<td>6,959</td>
<td>4,722</td>
<td>3,927</td>
<td>12,030</td>
<td>6,232</td>
<td>26,911</td>
</tr>
<tr>
<td>2019</td>
<td>6,760</td>
<td>4,551</td>
<td>3,568</td>
<td>11,035</td>
<td>5,852</td>
<td>25,006</td>
</tr>
<tr>
<td>All</td>
<td>35,773</td>
<td>24,607</td>
<td>19,695</td>
<td>59,843</td>
<td>31,452</td>
<td>135,597</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Year</th>
<th>Population (19-64)</th>
<th>Medicaid Eligible Population</th>
<th>Population with Medicaid</th>
<th>Medicaid Eligible with Medicaid</th>
<th>Percent of Population with Medicaid</th>
<th>Percent of Eligible in Medicaid</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>3,978,989</td>
<td>775,599</td>
<td>463,912</td>
<td>208,852</td>
<td>11.7%</td>
<td>26.9%</td>
</tr>
<tr>
<td>2016</td>
<td>3,968,026</td>
<td>732,277</td>
<td>520,922</td>
<td>234,674</td>
<td>13.1%</td>
<td>32.0%</td>
</tr>
<tr>
<td>2017</td>
<td>3,971,561</td>
<td>712,023</td>
<td>537,491</td>
<td>237,089</td>
<td>13.5%</td>
<td>33.3%</td>
</tr>
<tr>
<td>2018</td>
<td>3,977,671</td>
<td>682,634</td>
<td>533,738</td>
<td>238,340</td>
<td>13.4%</td>
<td>34.9%</td>
</tr>
<tr>
<td>2019</td>
<td>3,980,799</td>
<td>679,584</td>
<td>557,352</td>
<td>241,535</td>
<td>14.0%</td>
<td>35.5%</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Year</th>
<th>IN</th>
<th>CO</th>
<th>PA</th>
<th>MN</th>
<th>WA</th>
<th>All Comparison States</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>26.9%</td>
<td>39.7%</td>
<td>34.1%</td>
<td>45.0%</td>
<td>42.8%</td>
<td>38.9%</td>
</tr>
<tr>
<td>2016</td>
<td>32.0%</td>
<td>37.2%</td>
<td>40.4%</td>
<td>44.8%</td>
<td>44.2%</td>
<td>41.3%</td>
</tr>
<tr>
<td>2017</td>
<td>33.3%</td>
<td>38.2%</td>
<td>43.7%</td>
<td>44.9%</td>
<td>44.3%</td>
<td>43.0%</td>
</tr>
<tr>
<td>2018</td>
<td>34.9%</td>
<td>40.0%</td>
<td>43.0%</td>
<td>45.0%</td>
<td>45.6%</td>
<td>43.4%</td>
</tr>
<tr>
<td>2019</td>
<td>35.5%</td>
<td>35.5%</td>
<td>42.5%</td>
<td>46.2%</td>
<td>45.5%</td>
<td>42.4%</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Variables</th>
<th>Indiana</th>
<th>Comparison States (CO, MN, PA, WA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (Years)</td>
<td>34.8</td>
<td>35.2</td>
</tr>
<tr>
<td>Age &lt;30</td>
<td>44.4%</td>
<td>43.5%</td>
</tr>
<tr>
<td>Age 30-39</td>
<td>22.1%</td>
<td>21.9%</td>
</tr>
<tr>
<td>Age 40-49</td>
<td>15.3%</td>
<td>15.2%</td>
</tr>
<tr>
<td>Age 50-59</td>
<td>12.5%</td>
<td>13.3%</td>
</tr>
<tr>
<td>Age 60+</td>
<td>5.8%</td>
<td>6.2%</td>
</tr>
<tr>
<td>Male</td>
<td>45.2%</td>
<td>47.5%</td>
</tr>
<tr>
<td>Non-Hispanic White</td>
<td>67.6%</td>
<td>58.7%</td>
</tr>
<tr>
<td>Non-Hispanic Black</td>
<td>15.4%</td>
<td>13.4%</td>
</tr>
<tr>
<td>Non-Hispanic Asian</td>
<td>4.2%</td>
<td>7.3%</td>
</tr>
<tr>
<td>Non-Hispanic Other</td>
<td>2.5%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>10.3%</td>
<td>17.2%</td>
</tr>
<tr>
<td>Less Than High School</td>
<td>16.5%</td>
<td>13.6%</td>
</tr>
<tr>
<td>High School Grad.</td>
<td>73.1%</td>
<td>72.6%</td>
</tr>
<tr>
<td>College Grad.</td>
<td>10.4%</td>
<td>13.7%</td>
</tr>
<tr>
<td>Personal Income</td>
<td>$ 8,048</td>
<td>$ 8,199</td>
</tr>
<tr>
<td>FPL &lt;23%</td>
<td>35.1%</td>
<td>34.3%</td>
</tr>
<tr>
<td>FPL 23-50%</td>
<td>11.0%</td>
<td>11.8%</td>
</tr>
<tr>
<td>FPL 51-75%</td>
<td>11.8%</td>
<td>12.3%</td>
</tr>
<tr>
<td>FPL 76-100%</td>
<td>16.1%</td>
<td>15.8%</td>
</tr>
<tr>
<td>FPL 101-138%</td>
<td>26.0%</td>
<td>25.9%</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Outcomes (Have Medicaid)</th>
<th>Coef.</th>
<th>Std. Err.</th>
<th>P&gt;t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indiana*(Year&gt;2017)</td>
<td>0.016</td>
<td>0.006</td>
<td>0.011</td>
</tr>
<tr>
<td>Indiana</td>
<td>-0.103</td>
<td>0.004</td>
<td>0.000</td>
</tr>
<tr>
<td>Year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>0.018</td>
<td>0.004</td>
<td>0.000</td>
</tr>
<tr>
<td>2018</td>
<td>0.023</td>
<td>0.004</td>
<td>0.000</td>
</tr>
<tr>
<td>2019</td>
<td>0.015</td>
<td>0.004</td>
<td>0.000</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>-0.100</td>
<td>0.003</td>
<td>0.000</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Ref: Non-Hispanic White)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Hispanic Black</td>
<td>0.100</td>
<td>0.004</td>
<td>0.000</td>
</tr>
<tr>
<td>Non-Hispanic Other</td>
<td>0.005</td>
<td>0.004</td>
<td>0.240</td>
</tr>
<tr>
<td>Hispanic</td>
<td>-0.033</td>
<td>0.004</td>
<td>0.000</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Ref: Less Than High School)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School Grad.</td>
<td>-0.064</td>
<td>0.004</td>
<td>0.000</td>
</tr>
<tr>
<td>College Grad.</td>
<td>-0.213</td>
<td>0.005</td>
<td>0.000</td>
</tr>
<tr>
<td>FPL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Ref: &lt;23% FPL)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23-50% FPL</td>
<td>0.094</td>
<td>0.004</td>
<td>0.000</td>
</tr>
<tr>
<td>51-75% FPL</td>
<td>0.147</td>
<td>0.004</td>
<td>0.000</td>
</tr>
<tr>
<td>76-100% FPL</td>
<td>0.075</td>
<td>0.004</td>
<td>0.000</td>
</tr>
<tr>
<td>101-138% FPL</td>
<td>0.037</td>
<td>0.003</td>
<td>0.000</td>
</tr>
<tr>
<td>Intercept</td>
<td>0.273</td>
<td>0.006</td>
<td>0.000</td>
</tr>
<tr>
<td>Observation</td>
<td>135,162</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Note: The DiD model is a linear regression model using the ACS data. The sample includes Medicaid eligible population ages 19 – 64 in Indiana and four comparison states (CO, MN, PA, WA) during 2016 – 2019.

### Limitation of ACS-based DiD Model to Evaluate the Impact of Retroactive Eligibility Waiver

Due to the limitation of the ACS data, the estimated DiD regression model only captures short-term effects of the 2018 HIP waiver renewal that may occur within the first two years after the waiver renewal. Further, the definition of Medicaid eligible population accounts for income status in the ACS data is based on FPL which is a static measure for the year and based on individual’s income in the past 12 months. However, actual Medicaid income eligibility is based on current income. Hence, the Medicaid eligible population based on the ACS data serves as a close proxy for the truly Medicaid eligible population.
Attachment VII: Goal 1 Detailed Results

Goal 1, Hypothesis 1 (listed below) is targeted toward improving member health care utilization. This section provides a detailed discussion on the outcome measures, analytic methodology and findings.

- **Goal 1** – Improve health care access, appropriate utilization, and health outcomes among HIP members
- This goal evaluates the HIP program’s progress in improving health care access, utilization of health care services, and improved health outcomes. Four hypotheses associated with this goal examine whether HIP enrollment supports member use of key services (including appropriate use of emergency department [ED] services), positive health outcomes, and member satisfaction with access to services.

- **Hypothesis 1** – Enrollment in HIP will promote member use of preventive care, primary care, needed prescription drugs, chronic disease care management, and urgent care.

This hypothesis examines whether HIP enrollment supports member use of preventive services, primary care, specialty care, urgent care, ED, and urgent care. Access to and appropriate use of these services supports positive health outcomes and members’ ability to engage in key community activities such as employment, education, and caregiving, among others. Analyses related to member use of chronic disease care management was performed only during the Interim Evaluation.  

- **Primary Research Question 1.1** – How have the following changed over time for HIP members: preventive, primary, specialty, emergency department, and urgent care?  

This research question assesses member use over time of preventive, primary care, specialty care, urgent care, and ED care. Tracking trends in service utilization over time may help the State determine if sufficient resources are in place across the continuum of care.

**Methodology**

To examine changes in use of health care services, the evaluation team used a multi-step approach:

1. Developed annual measures of service use for descriptive trend analyses
2. Used regression methods to analyze differences in service use over time

Monthly enrollment data from February 2015 – December 2020 was used in conjunction with encounter data to conduct the analyses. The study period of interest for this evaluation is 2018 – 2019 (2018 – 2020 Waiver Demonstration). Summary statistic from 2020 are included yet should be reviewed with caution as utilization trends were likely impacted by the pandemic (e.g., social distancing parameters, re-prioritization of health care resources) as well as the suspension of many HIP policies effective April 2020. Data from 2015 – 2017 is also included and provides information on HIP member service use prior to the current demonstration study period and to examine changes over time.  

Service utilization occurring between 2015 and 2020 was impacted by several waiver and non-waiver developments – implemented in a linear fashion or cooccurring. These include the maturation of the HIP program, dynamics of the state economy, case-mix changes over time, implementation of a new Medicaid Management Information System, removal of a graduated ED copayment, updates to HIP verification processes, the impact of the COVID-19 public health emergency (PHE), and new processes for reporting and tracking community engagement activities. Although a combination of descriptive and regression-based approach allows for controlling of certain impacts (e.g., year indicator for linear...
changes in program, beneficiary characteristics for case-mix), interpretation of findings presented should not be linked to a single HIP policy or program feature.

**Analytic Population**

The analytic population includes all HIP members in monthly HIP enrollment data identified using enrollment category codes (aid category) as follows: Regular Basic (RB), Regular Plus (RP), State Basic (SB), State Plus (SP), Maternity (MA), and HIP Plus Copay (PC). Lewin did not include months when an individual had conditional eligibility or presumptive eligibility status, or members that were eligible for Emergency Services Only (Emergency Room services flag of “Y”). Additionally, for purposes of this research question, HIP member was defined as being continuously enrolled if the member had valid HIP coverage for more than 10 months in the year (11 or 12 months).

As appropriate, analyses are presented for all HIP members as well as for three sub-cohorts based on member benefit plan coverage during the calendar year under analysis:

- **HIP Basic Only**: Members enrolled exclusively in HIP Basic (enrollment codes RB or SB).
- **HIP Plus Only**: Members enrolled exclusively in HIP Plus (enrollment codes RP or SP).
- **HIP Switchers**: Members that moved between HIP Basic and HIP Plus (either direction, State Plan, or regular benefits), or HIP Maternity (MA or pregnancy flag of Y) or HIP Plus Copay.

**Outcome Measures**

Participation and utilization rates among the population of interest was analyzed to study if there were changes in use of services (preventive, primary, specialty, ED, and urgent care) over time. These two metrics (unadjusted for any beneficiary characteristics) convey two important aspects of utilization—the proportion of continuously enrolled members accessing a specific service (participation rate), and how often a particular population accesses the same service (utilization rate) each year irrespective of member demographic characteristics.

**Participation Rate**

The participation rate is the proportion of continuously enrolled members receiving a specific service at least once in the year. This metric reflects that a member participated in a type of care; it does not reflect how frequently the member utilized the service. This rate calculation was restricted to members enrolled for at least 11 months during a year (allowing a gap in coverage of up to 30 days). Consequently, the utilization experience of individuals enrolled for a brief time throughout the year does not influence the rate.

---

27 Valid HIP coverage is defined as member having either of the six enrollment statuses (Regular Basic (RB), Regular Plus (RP), State Basic (SB), State Plus (SP), Maternity (MA), and HIP Plus Copay (PC)) and not eligible for Emergency Services Only (Emergency Room services flag of “Y”).

28 Since HIP program was implemented from February 2015 and only 11 months of enrollment data were available, members were identified as being continuously enrolled if the member had 10 or more months of valid HIP coverage.

29 Due to the COVID-19 PHE, the State temporarily paused plan switches which would result in a benefit downgrade.

30 Pregnant members switch from either HIP Plus or HIP Basic to the MA category, and then from MA to HIP Basic or HIP Plus following the conclusion of the pregnancy. HIP Plus Copay members have switched from HIP Plus to the HIP Plus Copay category and are afforded the opportunity at least annually to return to HIP Plus.
**Utilization Rate**

The utilization rate is the count of services or visits per 1,000 member years (referred to as per 1,000), which reflects the frequency at which members access the service regardless of their length of enrollment. The use of “member years” in the utilization rate reflects the number of services used per 1,000 members during a year and reflects the number of months of enrollment by members. The formula for the utilization rate is:

\[
\frac{\text{(# of services or visits)}}{(\text{member months})} \times 1,000 \times 12 \text{ months}
\]

**Analytic Method**

We used descriptive statistics (annual and monthly participation and utilization rates) to study change in services over time. In addition to comparing trends over time, Lewin used regressions to examine: (1) changes in service use between 2017 (year prior to demonstration period for this evaluation) and during demonstration period; (2) possible association between service use and member sociodemographic characteristics.

**Descriptive Statistics and Trend Analysis**

Descriptive statistics, including annual participation and utilization rates, monthly service utilization was calculated for all years of available HIP data (2015 – 2020). These descriptive statistics were used to examine trends over time.

Due to the unique circumstances of the COVID-19 PHE (e.g., social distancing due to the pandemic, HIP policies suspended), in addition to studying the trends, Lewin performed statistical analyses to analyze the differences in service participation and utilization pre-and post-2020. We used Chi-square tests for differences in participation rate and ANOVA to test for differences in utilization rates. Sensitivity analysis revealed significant differences (see Exhibit VII.6) when comparing 2020 with the two prior program years (2018 and 2019) for all services. As the majority of HIP policies were only effective for the first two months of the year, utilization of services was impacted by confounding effects of the COVID-19 pandemic as well as changes in the HIP program policies, all regressions and any program evaluation analysis were limited till 2019.

**Regression Methods**

Lewin developed service specific regressions for each of the outcome measures: (1) Participation rate and (2) Utilization rate.

Appropriate regression models were identified based on multiple factors including distribution of the dependent variable, type, and format of predictor variables (e.g., utilization counts), relationship between the dependent and predictor variables, independence of observations, multicollinearity between the predictor variables, overdispersion of the dependent variables.
As member participation (received at least one service specific visit in a year) is a binary indicator (1 = received services, 0 = did not receive services), logistic regressions were used to examine the likelihood of member receiving the service at least once during a given year:

\[
\text{logit}(p) = \log\left(\frac{p}{1-p}\right) = a + b_1X_1 + \ldots + b_nX_n
\]

- \(p\) = the probability of member receiving a service in a year
- \(a\) = the intercept
- \(X_i\) = list of member sociodemographic characteristics
- \(b_i\) = coefficient corresponding to \(X_i\)

As member utilization of service in a year is a count variable, Negative Binomial regressions were used to examine change in service utilization per member per year:

\[
\log(u) = a + b_1X_1 + \ldots + b_nX_n
\]

- \(u\) = number of visits per member for a particular service
- \(a\) = the intercept
- \(X_i\) = list of member sociodemographic characteristics
- \(b_i\) = coefficient corresponding to \(X_i\)

The regression models included benefit year as well as beneficiary sociodemographic characteristics that may impact use of health care services including type of benefit member received, age, sex, race, ethnicity, marital status, income, geography of residence (metro or nonmetro), pregnant anytime in the coverage year, identified as medically frail, size of household and selected chronic conditions. Individuals with chronic conditions represent a large percentage of health care costs and utilization. The chronic conditions specified in this analysis were based on the Agency for Healthcare Research and Quality (AHRQ) Health Care Cost and Utilization Project (HCUP) and the high prevalence of these conditions within the general population. The chronic conditions included in this analysis were: diabetes, cancer, hypertension, arthritis, chronic obstructive pulmonary disease (COPD), chronic kidney disease (CKD), and cardiovascular disease. Chronic conditions were identified using the HCUP diagnosis code categorizations for these conditions. 2017 was used as reference year to examine change in demonstration years (2018 and 2019) relative to pre-demonstration period for this evaluation.

To account for variations in health care utilization due to differing lengths of enrollment and to align with the calculation of participation and utilization rates over time in the descriptive analyses, the statistical analyses for participation were limited to members continuously enrolled for at least one year and member months of enrollment were used to weight the estimates for utilization. Estimated odds ratio (OR) was used to examine the likelihood of participation. Estimated incidence rate ratio (IRR), measuring the change in outcome for one unit of change in the control variable, was used to examine likelihood of utilization.

**Analytic Data for Regression Analysis**

The analytic data for the regression analysis was constructed by combining members’ monthly enrollment and claims data. Claims data was limited to months of HIP enrollment with enrollment statuses of Regular Basic (RB), Regular Plus (RP), State Basic (SB), State Plus (SP), HIP Maternity(MA) and HIP Plus Copay (PC). Months when members had conditional or presumptive eligibility, or when members were eligible for Emergency Services Only (Emergency Room services flag of “Y”) were excluded. The monthly data was aggregated to an annual level to obtain summarized information on
member use of services (binary indicator for service use and count of visits) included for this evaluation. As certain characteristics like age, sex, race, ethnicity, rural/urban, income, federal poverty level (FPL), marital status, household size can change across months, for purposes of this analyses we used the first known information in the year for the member. A member who had medically frail status at any point in the year was identified as frail and if were pregnant were identified as pregnant anytime.

**Service Participation and Utilization Trend Over Time**

Monthly trend charts were created to show the utilization and participation rates for selected HIP services over time. In Exhibits VII.1 through VII.5, a vertical red line marks March 2020, the start of the COVID-19 PHE.

**Exhibit VII.1: HIP Members Utilization and Participation for Any Services by Month (February 2015 – December 2020)**

Exhibit VII.2: Count of HIP Members Receiving Services by Service Type and Month (February 2015 – December 2020)

Exhibit VII.3: Participation Rate by Service Type and Month (February 2015 – December 2020)


Exhibit VII.4: Count of Visits by Service Type and Month (February 2015 – December 2020)

Exhibit VII.5: Utilization Rate by Service Type and Month (February 2015 – December 2020)


Exhibit VII.6: Test for Difference in Participation and Utilization in 2020 and Before 2020 for the Demonstration Period (February 2018 – December 2020)

<table>
<thead>
<tr>
<th>Services</th>
<th>Average Service Participation Rate In 2020 / Before (2018-2019)(a)</th>
<th>Average Service Utilization Per Bene Per Year - In 2020 / Before (2018-2019)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>In 2020</td>
<td>Before</td>
</tr>
<tr>
<td>Preventive Care</td>
<td>42.50</td>
<td>43.21</td>
</tr>
<tr>
<td>Preventive Dental/Vision Care</td>
<td>13.42</td>
<td>16.41</td>
</tr>
<tr>
<td>Primary Care</td>
<td>60.46</td>
<td>51.34</td>
</tr>
<tr>
<td>Specialty Care</td>
<td>40.39</td>
<td>39.96</td>
</tr>
<tr>
<td>Emergency Department</td>
<td>33.00</td>
<td>34.13</td>
</tr>
<tr>
<td>Urgent Care</td>
<td>7.15</td>
<td>6.50</td>
</tr>
</tbody>
</table>

\(a\) Analyses includes all HIP members – irrespective of number of months of HIP coverage in a calendar year.

*Results statistically significant with p-value <0.0001 for all tests.

Service Participation and Utilization by Member Sociodemographic Characteristics

HIP members participation and utilization rates varied across member characteristics. This section lists exhibits showing participation rate (PR) and utilization rate (UR) for any services, preventive, primary, specialty, ED, and urgent care services between 2016 – 2020 and by selected member sociodemographic characteristics.

Across years, almost all HIP Plus Only (91% – 94%) and HIP Switchers (91% – 96%) received at least some services (see Exhibit VII.7). HIP Basic Only members tended to have lower participation rates (72% – 75%). Additionally, HIP Plus Only members had three times the utilization rate compared to HIP Basic.

- **Age**: older members have higher participation and utilization rates. For example, members ages 19 – 29 had participation rates ranging from (85% – 89%), across the years. Comparing to members ages 60 – 66, with participation rates ranging from (91% – 93%). Utilization for those ages 60 – 66 had approximately double the utilization rates compared to ages 19 – 29, for all years.

- **Race**: Asian category had the lowest participation rates (83% – 88%). The highest participation rates were seen in the Other category with participation rates ranging from (90% – 93%). Black participation rates ranged from (86% – 89%). Caucasian participation rates ranged from (89% – 91%). Other also had the highest utilization rates compared to Asian. Utilization for Other compared to Black was approximately double for all years. For utilization Other compared to Caucasian was approximately similar for all years.

- **Frail**: the highest utilization and participation was observed in those who were frail compared to members who were not frail across all years. Members who were frail had a higher participation rate with a range of (11% – 15%) higher than members who were not frail. Utilization was approximately triple for members who were frail compared to those who were not frail.

- **Marital Status**: the highest utilization and participation was observed in those who were married compared to members who were single or other. Members who were married had a participation rate range of 90% – 93% and single members had a participation rate range of 88% – 91%. Members who were married had a utilization rate similar to those who were single, across all years. Members who were in the other group had a lower participation range of 69% – 82%. Utilization for other was approximately similar to married for years 2016 – 2017, married had approximately double the utilization compared to other for 2019 and approximately triple for 2020.

  - **Chronic conditions**: arthritis, cancer, cardio, COPD, diabetes, hypertension, and kidney. In all cases, the highest utilization was observed in members with a chronic condition as compared to those who did not have a chronic condition.

  - **Arthritis**: Utilization for those with arthritis was approximately triple the utilization for all years compared to the utilization for those without for all years.

  - **Cancer**: Utilization for those with cancer was approximately double the utilization for those without for all years.

---

Although members are only eligible for the HIP program until age 64, the analysis includes some members who are 65 or 66.
o Cardio: Utilization for those with cardio was approximately three times the utilization for those without for years all years.

o COPD: Utilization for those with COPD was approximately triple the utilization compared to those without for years for all years.

o Diabetes: Utilization for those with diabetes was approximately triple the utilization compared to those without for years for all years.

o Hypertension: Utilization for those with hypertension was approximately double the utilization compared to those without for all years.

o Kidney: Utilization for those with kidney was approximately triple the utilization compared to those without for all years.

- Total Conditions: Members having six chronic conditions had a utilization rate of approximately three times the utilization rate of members having one chronic condition, in 2020. Utilization for six chronic conditions were double for 2016 and 2018 compared to those with one chronic condition. Utilization for six chronic conditions were triple for 2017 and 2019 – 2020 compared to those with one chronic condition.

Due to these observed variances in participation and utilization, Lewin tested for changes over time and association using regression-based methods controlling for member sociodemographic characteristics. **Exhibits VII.8 to VII.13** show similar descriptive statistics for each service.
### Exhibit VII.7: Any Service Care Utilization by Year and Demographic Characteristics (January 2016 – December 2020)

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PR</td>
<td>UR</td>
<td>PR</td>
<td>UR</td>
<td>PR</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age 19-29</td>
<td>85.5%</td>
<td>11,996</td>
<td>84.9%</td>
<td>12,096</td>
<td>86.7%</td>
</tr>
<tr>
<td>Age 30-39</td>
<td>89.0%</td>
<td>18,032</td>
<td>88.3%</td>
<td>18,045</td>
<td>89.2%</td>
</tr>
<tr>
<td>Age 40-49</td>
<td>90.4%</td>
<td>25,164</td>
<td>90.0%</td>
<td>25,033</td>
<td>90.6%</td>
</tr>
<tr>
<td>Age 50-59</td>
<td>92.0%</td>
<td>29,854</td>
<td>91.4%</td>
<td>30,156</td>
<td>91.7%</td>
</tr>
<tr>
<td>Age 60-66</td>
<td>91.9%</td>
<td>29,236</td>
<td>91.8%</td>
<td>29,372</td>
<td>92.0%</td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>82.8%</td>
<td>16,718</td>
<td>82.0%</td>
<td>16,600</td>
<td>82.9%</td>
</tr>
<tr>
<td>Female</td>
<td>91.9%</td>
<td>21,603</td>
<td>91.7%</td>
<td>22,008</td>
<td>92.9%</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>82.9%</td>
<td>10,542</td>
<td>83.6%</td>
<td>10,719</td>
<td>85.7%</td>
</tr>
<tr>
<td>Black</td>
<td>86.3%</td>
<td>13,007</td>
<td>85.6%</td>
<td>13,179</td>
<td>87.2%</td>
</tr>
<tr>
<td>Caucasian</td>
<td>89.5%</td>
<td>21,311</td>
<td>89.0%</td>
<td>21,251</td>
<td>89.8%</td>
</tr>
<tr>
<td>Other</td>
<td>90.5%</td>
<td>24,184</td>
<td>90.0%</td>
<td>25,319</td>
<td>91.2%</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>85.4%</td>
<td>13,951</td>
<td>84.9%</td>
<td>14,128</td>
<td>86.1%</td>
</tr>
<tr>
<td>Non-Hispanic</td>
<td>89.8%</td>
<td>21,019</td>
<td>88.8%</td>
<td>20,696</td>
<td>89.8%</td>
</tr>
<tr>
<td>Unknown</td>
<td>82.4%</td>
<td>14,229</td>
<td>85.9%</td>
<td>16,541</td>
<td>87.1%</td>
</tr>
<tr>
<td><strong>Rural-Urban Status</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metro</td>
<td>88.5%</td>
<td>19,258</td>
<td>88.0%</td>
<td>19,504</td>
<td>89.1%</td>
</tr>
<tr>
<td>Nonmetro</td>
<td>90.6%</td>
<td>22,395</td>
<td>90.0%</td>
<td>22,166</td>
<td>91.0%</td>
</tr>
<tr>
<td><strong>HIP Category</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIP Basic Only</td>
<td>75.0%</td>
<td>8,612</td>
<td>75.2%</td>
<td>9,232</td>
<td>72.1%</td>
</tr>
<tr>
<td>HIP Plus Only</td>
<td>93.3%</td>
<td>25,092</td>
<td>92.8%</td>
<td>25,232</td>
<td>92.8%</td>
</tr>
<tr>
<td>HIP Switchers</td>
<td>92.1%</td>
<td>19,315</td>
<td>90.6%</td>
<td>19,850</td>
<td>92.5%</td>
</tr>
<tr>
<td><strong>Pregnancy</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Y</td>
<td>97.0%</td>
<td>19,996</td>
<td>97.0%</td>
<td>20,680</td>
<td>98.2%</td>
</tr>
<tr>
<td>N</td>
<td>88.5%</td>
<td>19,936</td>
<td>88.0%</td>
<td>20,046</td>
<td>88.8%</td>
</tr>
</tbody>
</table>
### Member Characteristics

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Frail</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Y</td>
<td>97.8% 39,740</td>
<td>97.9% 39,078</td>
<td>98.0% 39,778</td>
<td>98.1% 52,906</td>
<td>96.9% 48,408</td>
</tr>
<tr>
<td>N</td>
<td>86.4% 14,979</td>
<td>85.0% 14,178</td>
<td>85.4% 14,468</td>
<td>86.0% 17,994</td>
<td>82.2% 15,917</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>90.1% 20,056</td>
<td>89.8% 20,410</td>
<td>91.4% 21,923</td>
<td>92.9% 30,750</td>
<td>90.0% 28,623</td>
</tr>
<tr>
<td>Single</td>
<td>88.8% 20,055</td>
<td>88.3% 20,174</td>
<td>89.3% 21,918</td>
<td>90.7% 30,877</td>
<td>88.2% 28,283</td>
</tr>
<tr>
<td>Other</td>
<td>81.7% 14,959</td>
<td>78.4% 13,688</td>
<td>73.1% 11,163</td>
<td>73.7% 13,391</td>
<td>68.6% 10,678</td>
</tr>
<tr>
<td><strong>Preferred Language</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>89.1% 20,091</td>
<td>88.5% 20,247</td>
<td>89.6% 21,918</td>
<td>91.0% 30,909</td>
<td>88.5% 28,455</td>
</tr>
<tr>
<td>Spanish</td>
<td>82.2% 11,353</td>
<td>80.7% 11,379</td>
<td>82.0% 12,481</td>
<td>85.0% 17,117</td>
<td>77.7% 15,484</td>
</tr>
<tr>
<td><strong>Household size</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>01</td>
<td>87.9% 23,109</td>
<td>86.8% 23,049</td>
<td>87.2% 24,707</td>
<td>88.3% 34,284</td>
<td>85.8% 30,633</td>
</tr>
<tr>
<td>02</td>
<td>90.2% 22,390</td>
<td>89.9% 22,605</td>
<td>91.3% 24,374</td>
<td>92.3% 34,481</td>
<td>89.8% 31,782</td>
</tr>
<tr>
<td>03</td>
<td>89.6% 18,488</td>
<td>89.4% 18,663</td>
<td>90.7% 20,405</td>
<td>92.5% 29,125</td>
<td>89.9% 27,499</td>
</tr>
<tr>
<td>4+</td>
<td>88.8% 15,618</td>
<td>88.6% 15,835</td>
<td>90.2% 17,528</td>
<td>92.1% 24,969</td>
<td>89.0% 23,590</td>
</tr>
<tr>
<td><strong>FPL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0%</td>
<td>87.2% 20,134</td>
<td>85.7% 20,471</td>
<td>87.5% 22,768</td>
<td>88.8% 32,161</td>
<td>86.6% 28,656</td>
</tr>
<tr>
<td>1 - 22%</td>
<td>90.0% 20,217</td>
<td>89.7% 20,766</td>
<td>89.7% 21,592</td>
<td>92.0% 30,331</td>
<td>90.1% 27,725</td>
</tr>
<tr>
<td>23 - 50%</td>
<td>90.9% 19,260</td>
<td>90.4% 19,791</td>
<td>91.1% 20,544</td>
<td>92.5% 28,827</td>
<td>90.3% 27,600</td>
</tr>
<tr>
<td>51 - 75%</td>
<td>90.6% 19,110</td>
<td>89.5% 19,278</td>
<td>90.7% 19,930</td>
<td>92.4% 28,256</td>
<td>89.7% 27,198</td>
</tr>
<tr>
<td>76 - 100%</td>
<td>89.9% 18,723</td>
<td>89.3% 18,995</td>
<td>90.6% 19,991</td>
<td>92.6% 28,303</td>
<td>89.9% 27,012</td>
</tr>
<tr>
<td>101 - 138%</td>
<td>92.6% 21,680</td>
<td>92.0% 20,949</td>
<td>93.2% 21,855</td>
<td>94.6% 30,103</td>
<td>91.8% 28,182</td>
</tr>
<tr>
<td>&gt;138%</td>
<td>90.9% 15,475</td>
<td>90.7% 16,704</td>
<td>92.4% 17,971</td>
<td>92.9% 25,208</td>
<td>90.3% 27,197</td>
</tr>
<tr>
<td><strong>Income</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-50%</td>
<td>87.3% 21,046</td>
<td>86.1% 20,793</td>
<td>86.4% 22,375</td>
<td>88.3% 31,878</td>
<td>85.6% 28,566</td>
</tr>
<tr>
<td>51%-100%</td>
<td>90.4% 18,946</td>
<td>90.4% 19,469</td>
<td>91.9% 21,197</td>
<td>93.5% 29,386</td>
<td>91.1% 27,747</td>
</tr>
<tr>
<td><strong>Arthritis</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>88.9% 19,731</td>
<td>88.3% 19,871</td>
<td>89.4% 21,511</td>
<td>90.9% 30,300</td>
<td>88.2% 27,903</td>
</tr>
<tr>
<td>Y</td>
<td>100.0% 55,326</td>
<td>100.0% 56,399</td>
<td>100.0% 57,571</td>
<td>100.0% 80,926</td>
<td>100.0% 77,278</td>
</tr>
<tr>
<td><strong>Cancer</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>88.7% 19,472</td>
<td>88.2% 19,599</td>
<td>89.3% 21,231</td>
<td>90.7% 29,918</td>
<td>88.1% 27,584</td>
</tr>
<tr>
<td>Y</td>
<td>99.9% 47,400</td>
<td>99.9% 48,618</td>
<td>99.9% 48,652</td>
<td>100.0% 65,954</td>
<td>100.0% 62,795</td>
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<tr>
<td></td>
<td>PR</td>
<td>UR</td>
<td>PR</td>
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<td>PR</td>
</tr>
<tr>
<td>Cardio</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>88.7%</td>
<td>19,149</td>
<td>88.1%</td>
<td>19,266</td>
<td>89.2%</td>
</tr>
<tr>
<td>Y</td>
<td>99.9%</td>
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Note: PR = participation rate, UR = utilization rate. Although members are only eligible for the HIP program until age 64, the analysis includes some members who are 65 or 66.
### Exhibit VII.8: Preventive Care Utilization by Year and Demographic Characteristics (January 2016 – December 2020)

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Note: PR = participation rate, UR = utilization rate. Although members are only eligible for the HIP program until age 64, the analysis includes some members who are 65 or 66.
### Exhibit VII.9: Dental Care Utilization by Year and Demographic Characteristics (January 2016 – December 2020)

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Note: PR = participation rate, UR = utilization rate. Although members are only eligible for the HIP program until age 64, the analysis includes some members who are 65 or 66.

### Exhibit VII.10: Primary Care Utilization by Year and Demographic Characteristics (January 2016 – December 2020)

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### Member Characteristics

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Note: PR = participation rate, UR = utilization rate. Although members are only eligible for the HIP program until age 64, the analysis includes some members who are 65 or 66.
### Exhibit VII.11: Specialty Care Utilization by Year and Demographic Characteristics (January 2016 – December 2020)

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### Member Characteristics

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Note: PR = participation rate, UR = utilization rate. Although members are only eligible for the HIP program until age 64, the analysis includes some members who are 65 or 66.


**Exhibit VII.12: Emergency Department Care Utilization by Year and Demographic Characteristics (January 2016 – December 2020)**

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## Member Characteristics

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<td>42.6%</td>
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Note: PR = participation rate, UR = utilization rate. Although members are only eligible for the HIP program until age 64, the analysis includes some members who are 65 or 66.
### Exhibit VII.13: Urgent Care Utilization by Year and Demographic Characteristics (January 2016 – December 2020)

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## Member Characteristics

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Note: PR = participation rate, UR = utilization rate. Although members are only eligible for the HIP program until age 64, the analysis includes some members who are 65 or 66.
**Regression Results**

Exhibit VII.14 displays the odds ratio (OR) and the 95% confidence interval (CI) logistic model regression results for the participation outcome measures. The outcome measure is a binary (0/1) indicator on whether HIP members received each service category within a year. An OR of greater than 1 indicates members have a higher likelihood of receiving the service category relative to the reference group. CIs that do not include 1 are statically significant.

**Exhibit VII.14: Odds Ratio (OR) and the 95% Confidence Interval (CI) Based on Logistic Models for Service Participation Rate**

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<th>Primary Care OR (95% CI)</th>
<th>Specialty Care OR (95% CI)</th>
<th>Urgent Care OR (95% CI)</th>
<th>Emergency Department OR (95% CI)</th>
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<td>1.09 (1.08-1.11)</td>
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<td>0.97 (0.95-0.99)</td>
<td>1.07 (1.06-1.08)</td>
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<td>1.01 (1-1.03)</td>
<td>1.01 (1-1.02)</td>
<td>1.16 (1.15-1.18)</td>
<td>1.14 (1.13-1.15)</td>
<td>1.03 (1.01-1.05)</td>
<td>0.88 (0.87-0.89)</td>
</tr>
<tr>
<td>2019</td>
<td>0.83 (0.82-0.84)</td>
<td>0.80 (0.78-0.81)</td>
<td>2.81 (2.77-2.84)</td>
<td>1.1 (1.08-1.11)</td>
<td>1.23 (1.21-1.25)</td>
<td>0.8 (0.79-0.81)</td>
</tr>
<tr>
<td><strong>Age (Ref = Age 19-29)</strong></td>
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<tr>
<td>Age 30-39</td>
<td>0.99 (0.98-1)</td>
<td>0.92 (0.91-0.93)</td>
<td>1.13 (1.12-1.14)</td>
<td>1.33 (1.32-1.35)</td>
<td>0.97 (0.95-0.98)</td>
<td>1.03 (1.02-1.04)</td>
</tr>
<tr>
<td>Age 40-49</td>
<td>1.02 (1.01-1.03)</td>
<td>0.87 (0.85-0.88)</td>
<td>1.16 (1.15-1.18)</td>
<td>1.78 (1.76-1.81)</td>
<td>0.76 (0.74-0.77)</td>
<td>0.88 (0.87-0.89)</td>
</tr>
<tr>
<td>Age 50-59</td>
<td>1.13 (1.12-1.15)</td>
<td>0.79 (0.78-0.8)</td>
<td>1.11 (1.1-1.13)</td>
<td>1.88 (1.85-1.90)</td>
<td>0.57 (0.55-0.58)</td>
<td>0.62 (0.61-0.63)</td>
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<tr>
<td>Age 60-66</td>
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<td>0.72 (0.71-0.73)</td>
<td>0.96 (0.94-0.98)</td>
<td>1.64 (1.61-1.68)</td>
<td>0.41 (0.39-0.42)</td>
<td>0.41 (0.4-0.42)</td>
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<td><strong>Sex (Ref = Female)</strong></td>
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<tr>
<td>Male</td>
<td>0.40 (0.4-0.41)</td>
<td>0.67 (0.66-0.68)</td>
<td>0.49 (0.49-0.5)</td>
<td>0.57 (0.57-0.58)</td>
<td>0.59 (0.58-0.6)</td>
<td>0.81 (0.81-0.82)</td>
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<tr>
<td><strong>Race (Ref = Caucasian)</strong></td>
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<tr>
<td>Asian or Pacific Islander</td>
<td>1.18 (1.15-1.22)</td>
<td>1.00 (0.98-1.03)</td>
<td>1.05 (1.02-1.08)</td>
<td>0.66 (0.64-0.67)</td>
<td>0.62 (0.59-0.65)</td>
<td>0.46 (0.44-0.47)</td>
</tr>
<tr>
<td>Black</td>
<td>1.23 (1.21-1.24)</td>
<td>1.14 (1.13-1.15)</td>
<td>1.07 (1.06-1.09)</td>
<td>0.86 (0.85-0.87)</td>
<td>0.46 (0.45-0.47)</td>
<td>1.33 (1.32-1.35)</td>
</tr>
<tr>
<td>Other</td>
<td>1.28 (1.26-1.3)</td>
<td>1.1 (1.08-1.11)</td>
<td>1.28 (1.26-1.3)</td>
<td>1.38 (1.36-1.4)</td>
<td>0.89 (0.87-0.91)</td>
<td>1.49 (1.47-1.51)</td>
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<tr>
<td><strong>Ethnicity (Ref = Not Hispanic)</strong></td>
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<tr>
<td>Hispanic</td>
<td>0.87 (0.85-0.89)</td>
<td>1.09 (1.06-1.11)</td>
<td>0.75 (0.73-0.76)</td>
<td>0.64 (0.62-0.65)</td>
<td>0.76 (0.74-0.79)</td>
<td>0.61 (0.6-0.62)</td>
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<tr>
<td><strong>Urban-Rural Status (Ref = Metro)</strong></td>
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<tr>
<td>Nonmetro</td>
<td>0.96 (0.96-0.97)</td>
<td>0.9 (0.89-0.91)</td>
<td>0.89 (0.88-0.9)</td>
<td>0.91 (0.9-0.91)</td>
<td>0.59 (0.58-0.6)</td>
<td>1.08 (1.07-1.09)</td>
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<tr>
<td><strong>HIP Category (Ref = Basic Only)</strong></td>
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<tr>
<td>Plus</td>
<td>2.15 (2.13-2.17)</td>
<td>5.07 (4.99-5.15)</td>
<td>2.29 (2.27-2.32)</td>
<td>1.83 (1.81-1.85)</td>
<td>1.8 (1.76-1.84)</td>
<td>0.74 (0.74-0.75)</td>
</tr>
<tr>
<td>Switcher</td>
<td>1.56 (1.54-1.58)</td>
<td>2.75 (2.7-2.8)</td>
<td>1.77 (1.74-1.79)</td>
<td>1.45 (1.43-1.47)</td>
<td>1.48 (1.44-1.52)</td>
<td>1.05 (1.03-1.06)</td>
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<tr>
<td><strong>Pregnancy (Ref = Not Pregnant)</strong></td>
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<td></td>
</tr>
<tr>
<td>Pregnant</td>
<td>5.29 (5.18-5.42)</td>
<td>1.01 (0.99-1.03)</td>
<td>1.77 (1.73-1.8)</td>
<td>2.69 (2.64-2.74)</td>
<td>0.87 (0.85-0.9)</td>
<td>1.61 (1.58-1.64)</td>
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<tr>
<td>Frailty (Ref = Not Frail)</td>
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<tr>
<td>Frail</td>
<td>1.70 (1.69-1.72)</td>
<td>1.26 (1.25-1.27)</td>
<td>2.04 (2.02-2.06)</td>
<td>2.10 (2.08-2.12)</td>
<td>1.29 (1.27-1.31)</td>
<td>2.14 (2.12-2.16)</td>
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</table>
## Exhibit VII.15

Exhibit VII.15 displays the maximum likelihood parameter estimate (Est) regression coefficient for the negative binomial regression models for utilization outcome measures (service categories). Also displayed are the corresponding incidence rate ratios (IRR) comparing the likelihood of increased or decreased counts relative to the reference group. The outcome measure is a count indicator of the number of services that HIP members received within a year by service category. An IRR greater than 1 indicates members have a higher likelihood of receiving increased numbers of the service category relative to the reference group. The regression coefficient estimate is interpreted as follows: For a one-unit change in the predictor variable, the difference in the logs of expected counts of the response variable is expected to change by the respective regression coefficient. p-values that are less than 0.05 are statically significant in **bold** text.
### Exhibit VII.15: Parameter Estimate and Incidence Rates (IRR) Based on Negative Binomial Models for Service Utilization

<table>
<thead>
<tr>
<th>Variable</th>
<th>Preventive Care Estimate (IRR)</th>
<th>Preventive Dental/Vision Care Estimate (IRR)</th>
<th>Primary Care Estimate (IRR)</th>
<th>Specialty Care Estimate (IRR)</th>
<th>Urgent Care Estimate (IRR)</th>
<th>Emergency Department Estimate (IRR)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year (Ref = 2017)</strong></td>
<td></td>
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</tr>
<tr>
<td>2015</td>
<td>0.11 (1.11)</td>
<td>0.13 (1.14)</td>
<td>0.17 (1.19)</td>
<td>0.39 (1.47)</td>
<td>-0.3 (0.69)</td>
<td>0.04 (1.04)</td>
</tr>
<tr>
<td>2016</td>
<td>0.05 (1.05)</td>
<td>0.05 (1.05)</td>
<td>0.08 (1.09)</td>
<td>0.35 (1.42)</td>
<td>-0.01 (-)</td>
<td>0.06 (1.06)</td>
</tr>
<tr>
<td>2018</td>
<td>-0.01 (0.99)</td>
<td>0.01 (1.01)</td>
<td>0.09 (1.09)</td>
<td>0.09 (1.09)</td>
<td>-0.01 (-)</td>
<td>-0.09 (0.91)</td>
</tr>
<tr>
<td>2019</td>
<td>-0.13 (0.88)</td>
<td>-0.16 (0.86)</td>
<td>0.55 (1.74)</td>
<td>0.03 (1.03)</td>
<td>0.15 (1.16)</td>
<td>-0.16 (0.85)</td>
</tr>
<tr>
<td><strong>Age (Ref = Age 19-29)</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Age 30-39</td>
<td>0.03 (1.03)</td>
<td>-0.02 (0.98)</td>
<td>0.22 (1.25)</td>
<td>0.37 (1.44)</td>
<td>0.04 (1.04)</td>
<td>0.07 (1.07)</td>
</tr>
<tr>
<td>Age 40-49</td>
<td>0.07 (1.07)</td>
<td>-0.06 (0.95)</td>
<td>0.25 (1.29)</td>
<td>0.58 (1.78)</td>
<td>-0.21 (0.81)</td>
<td>-0.1 (0.9)</td>
</tr>
<tr>
<td>Age 50-59</td>
<td>0.09 (1.10)</td>
<td>-0.13 (0.88)</td>
<td>0.18 (1.19)</td>
<td>0.56 (1.75)</td>
<td>-0.57 (0.57)</td>
<td>-0.49 (0.61)</td>
</tr>
<tr>
<td>Age 60-65</td>
<td>0.01 (1.01)</td>
<td>-0.20 (0.82)</td>
<td>0.01 (1.01)</td>
<td>0.41 (1.51)</td>
<td>-0.98 (0.38)</td>
<td>-0.90 (0.41)</td>
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<tr>
<td><strong>Sex (Ref = Female)</strong></td>
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<tr>
<td>Male</td>
<td>-0.61 (0.54)</td>
<td>-0.33 (0.72)</td>
<td>-0.5 (0.58)</td>
<td>-0.3 (0.72)</td>
<td>-0.57 (0.57)</td>
<td>-0.14 (0.87)</td>
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<tr>
<td><strong>Race (Ref = Caucasian)</strong></td>
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</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>0.06 (1.07)</td>
<td>0.01 (-)</td>
<td>-0.0 (0.94)</td>
<td>-0.4 (0.65)</td>
<td>-0.45 (0.64)</td>
<td>-0.84 (0.43)</td>
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<td>Black</td>
<td>0.08 (1.09)</td>
<td>0.06 (1.06)</td>
<td>-0.1 (0.89)</td>
<td>-0.2 (0.77)</td>
<td>-0.75 (0.47)</td>
<td>0.13 (1.14)</td>
</tr>
<tr>
<td>Other</td>
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<td>0.06 (1.06)</td>
<td>0.16 (1.18)</td>
<td>0.25 (1.28)</td>
<td>-0.07 (0.94)</td>
<td>0.34 (1.4)</td>
</tr>
<tr>
<td><strong>Ethnicity (Ref = Not Hispanic)</strong></td>
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</tr>
<tr>
<td>Hispanic</td>
<td>-0.11 (0.9)</td>
<td>0.05 (1.06)</td>
<td>-0.24 (0.79)</td>
<td>-0.39 (0.67)</td>
<td>-0.27 (0.76)</td>
<td>-0.49 (0.61)</td>
</tr>
<tr>
<td>Nonmetro</td>
<td>-0.01 (0.99)</td>
<td>-0.0 (0.93)</td>
<td>-0.07 (0.93)</td>
<td>-0.09 (0.91)</td>
<td>-0.49 (0.61)</td>
<td>0.05 (1.05)</td>
</tr>
<tr>
<td><strong>Urban-Rural Status (Ref = Metro)</strong></td>
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<tr>
<td>Plus</td>
<td>0.58 (1.79)</td>
<td>1.64 (5.15)</td>
<td>0.71 (2.04)</td>
<td>0.69 (1.99)</td>
<td>0.74 (2.1)</td>
<td>-0.1 (0.90)</td>
</tr>
<tr>
<td>Switcher</td>
<td>0.52 (1.67)</td>
<td>1.19 (3.29)</td>
<td>0.67 (1.96)</td>
<td>0.58 (1.79)</td>
<td>0.65 (1.91)</td>
<td>0.24 (1.27)</td>
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<td><strong>HIP Category (Ref = Basic Only)</strong></td>
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<td>0.16 (1.17)</td>
<td>0.55 (1.73)</td>
<td>-0.29 (0.75)</td>
<td>0.29 (1.33)</td>
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<td>Frail</td>
<td>0.38 (1.46)</td>
<td>0.21 (1.24)</td>
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<td>0.7 (2.01)</td>
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<td>0.72 (2.05)</td>
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<td>Frail</td>
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<td>-0.01 (0.99)</td>
<td>-0.01 (0.99)</td>
<td>-0.04 (0.96)</td>
<td>0.13 (1.14)</td>
<td>0.05 (1.05)</td>
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<td>-0.2 (0.82)</td>
<td>-0.33 (0.72)</td>
<td>-0.28 (0.75)</td>
<td>-0.13 (0.88)</td>
<td>-0.33 (0.72)</td>
</tr>
<tr>
<td>Variable</td>
<td>Preventive Care Estimate (IRR)</td>
<td>Preventive Dental/Vision Care Estimate (IRR)</td>
<td>Primary Care Estimate (IRR)</td>
<td>Specialty Care Estimate (IRR)</td>
<td>Urgent Care Estimate (IRR)</td>
<td>Emergency Department Estimate (IRR)</td>
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<td>0.00 (-)</td>
<td>-0.06 (0.94)</td>
<td>-0.04 (0.96)</td>
<td>0.00 (-)</td>
<td>-0.0 (0.92)</td>
<td>-0.03 (0.97)</td>
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<td>02</td>
<td>0.04 (1.04)</td>
<td>0.01 (-)</td>
<td>0.01 (1.01)</td>
<td>0.03 (1.03)</td>
<td>0.02 (1.02)</td>
<td>-0.04 (0.97)</td>
</tr>
<tr>
<td>03</td>
<td>0.04 (1.04)</td>
<td>0.01 (1.01)</td>
<td>0.03 (1.03)</td>
<td>0.02 (1.02)</td>
<td>0.03 (1.03)</td>
<td>-0.03 (0.97)</td>
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<td>FPL (Ref = 101 - 138% FPL)</td>
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<tr>
<td>0%</td>
<td>-0.08 (0.92)</td>
<td>-0.12 (0.89)</td>
<td>-0.09 (0.92)</td>
<td>0.00 (-)</td>
<td>-0.2 (0.82)</td>
<td>0.07 (1.08)</td>
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<tr>
<td>1 - 22%</td>
<td>0.01 (-)</td>
<td>0.10 (1.11)</td>
<td>0.02 (1.02)</td>
<td>0.03 (1.03)</td>
<td>0.00 (-)</td>
<td>-0.03 (0.97)</td>
</tr>
<tr>
<td>23 - 50%</td>
<td>0.05 (1.05)</td>
<td>0.07 (1.07)</td>
<td>0.04 (1.04)</td>
<td>0.04 (1.04)</td>
<td>0.06 (1.06)</td>
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<td>51 - 75%</td>
<td>0.03 (1.04)</td>
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<td>0.06 (1.06)</td>
<td>0.02 (1.02)</td>
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<tr>
<td>76 - 100%</td>
<td>0.02 (1.02)</td>
<td>0.02 (1.02)</td>
<td>0.03 (1.03)</td>
<td>0.01 (1.01)</td>
<td>0.05 (1.06)</td>
<td>0.02 (1.02)</td>
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<tr>
<td>Income Avg Monthly Income</td>
<td>0.00 (1.00)</td>
<td>0.00 (-)</td>
<td>0.00 (1.00)</td>
<td>0.00 (1.00)</td>
<td>0.00 (-)</td>
<td>0.00 (1.00)</td>
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<tr>
<td>Rheumatoid Arthritis Y vs N</td>
<td>0.35 (1.42)</td>
<td>0.21 (1.23)</td>
<td>0.69 (1.99)</td>
<td>0.83 (2.28)</td>
<td>0.28 (1.32)</td>
<td>0.25 (1.28)</td>
</tr>
<tr>
<td>Cancer Y vs N</td>
<td>0.39 (1.48)</td>
<td>0.1 (1.1)</td>
<td>0.42 (1.53)</td>
<td>1.25 (3.48)</td>
<td>-0.1 (0.91)</td>
<td>0.32 (1.38)</td>
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<tr>
<td>Cardiovascular Disease Yes</td>
<td>0.29 (1.34)</td>
<td>-0.07 (0.93)</td>
<td>0.3 (1.35)</td>
<td>0.9 (2.45)</td>
<td>-0.04 (0.96)</td>
<td>0.68 (1.98)</td>
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<tr>
<td>COPD Y vs N</td>
<td>0.44 (1.55)</td>
<td>-0.15 (0.86)</td>
<td>0.6 (1.82)</td>
<td>0.75 (2.11)</td>
<td>0.3 (1.35)</td>
<td>0.81 (2.24)</td>
</tr>
<tr>
<td>Diabetes Y vs N</td>
<td>0.85 (2.34)</td>
<td>0.09 (1.1)</td>
<td>0.58 (1.8)</td>
<td>0.42 (1.52)</td>
<td>0.15 (1.16)</td>
<td>0.34 (1.40)</td>
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<tr>
<td>Hypertension Y vs N</td>
<td>0.76 (2.13)</td>
<td>0.16 (1.17)</td>
<td>0.74 (2.1)</td>
<td>0.63 (1.87)</td>
<td>0.34 (1.4)</td>
<td>0.42 (1.53)</td>
</tr>
<tr>
<td>Chronic Kidney Disease Y vs N</td>
<td>0.20 (1.22)</td>
<td>-0.08 (0.93)</td>
<td>-0.07 (0.93)</td>
<td>0.6 (1.82)</td>
<td>-0.25 (0.78)</td>
<td>0.14 (1.15)</td>
</tr>
</tbody>
</table>

Attachment VIII: Goal 3 Detailed Results

The tobacco exhibits display the counts and percentages by demographic characteristics in more detail. Exhibit VIII.1 shows the counts in services and members using the services to provide context on the reported data. Exhibits VIII.2 to VIII.4 contain percentages across years for year-to-year comparison to show trend and proportion.

Exhibit VIII.1: Count of Tobacco Cessation Services Used by All HIP Members by Demographic Characteristics (February 2015 – December 2020)

<table>
<thead>
<tr>
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<td>HIP Membersᵃ = 520,136</td>
<td>HIP Membersᵃ = 556,429</td>
<td>HIP Membersᵃ = 569,994</td>
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<td>HIP Membersᵃ = 629,240</td>
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<td><strong>Count of Servicesᵇ</strong></td>
<td><strong>Count of Servicesᵇ</strong></td>
<td><strong>Count of Servicesᵇ</strong></td>
<td><strong>Count of Servicesᵇ</strong></td>
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### Characteristics

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<tbody>
<tr>
<td>HIP Membersᵃ</td>
<td><strong>389,942</strong></td>
<td><strong>520,136</strong></td>
<td><strong>556,429</strong></td>
<td><strong>569,994</strong></td>
<td><strong>546,451</strong></td>
<td><strong>629,240</strong></td>
</tr>
<tr>
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<td><strong>2015</strong></td>
<td><strong>2016</strong></td>
<td><strong>2017</strong></td>
<td><strong>2018</strong></td>
<td><strong>2019</strong></td>
<td><strong>2020</strong></td>
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<tr>
<td>Members using Cessation Servicesᶜ</td>
<td><strong>27,309</strong></td>
<td><strong>66,771</strong></td>
<td><strong>95,081</strong></td>
<td><strong>99,706</strong></td>
<td><strong>114,285</strong></td>
<td><strong>110,901</strong></td>
</tr>
<tr>
<td>Count of Servicesᵇ</td>
<td><strong>2015</strong></td>
<td><strong>2016</strong></td>
<td><strong>2017</strong></td>
<td><strong>2018</strong></td>
<td><strong>2019</strong></td>
<td><strong>2020</strong></td>
</tr>
<tr>
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<td><strong>23,874</strong></td>
<td><strong>30,718</strong></td>
<td><strong>32,277</strong></td>
<td><strong>32,130</strong></td>
<td><strong>31,694</strong></td>
</tr>
<tr>
<td>Count of Servicesᵇ</td>
<td><strong>2015</strong></td>
<td><strong>2016</strong></td>
<td><strong>2017</strong></td>
<td><strong>2018</strong></td>
<td><strong>2019</strong></td>
<td><strong>2020</strong></td>
</tr>
<tr>
<td>Members using Cessation Servicesᶜ</td>
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<td><strong>11,646</strong></td>
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<td><strong>27,075</strong></td>
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<td><strong>2016</strong></td>
<td><strong>2017</strong></td>
<td><strong>2018</strong></td>
<td><strong>2019</strong></td>
<td><strong>2020</strong></td>
</tr>
<tr>
<td>Members using Cessation Servicesᶜ</td>
<td><strong>23,874</strong></td>
<td><strong>30,718</strong></td>
<td><strong>32,277</strong></td>
<td><strong>32,130</strong></td>
<td><strong>31,694</strong></td>
<td><strong>31,694</strong></td>
</tr>
<tr>
<td>Count of Servicesᵇ</td>
<td><strong>2015</strong></td>
<td><strong>2016</strong></td>
<td><strong>2017</strong></td>
<td><strong>2018</strong></td>
<td><strong>2019</strong></td>
<td><strong>2020</strong></td>
</tr>
<tr>
<td>Members using Cessation Servicesᶜ</td>
<td><strong>95,081</strong></td>
<td><strong>99,706</strong></td>
<td><strong>114,285</strong></td>
<td><strong>110,901</strong></td>
<td><strong>110,901</strong></td>
<td><strong>110,901</strong></td>
</tr>
<tr>
<td>Count of Servicesᵇ</td>
<td><strong>2015</strong></td>
<td><strong>2016</strong></td>
<td><strong>2017</strong></td>
<td><strong>2018</strong></td>
<td><strong>2019</strong></td>
<td><strong>2020</strong></td>
</tr>
<tr>
<td>Members using Cessation Servicesᶜ</td>
<td><strong>30,718</strong></td>
<td><strong>32,277</strong></td>
<td><strong>32,130</strong></td>
<td><strong>31,694</strong></td>
<td><strong>31,694</strong></td>
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<tr>
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<td><strong>2016</strong></td>
<td><strong>2017</strong></td>
<td><strong>2018</strong></td>
<td><strong>2019</strong></td>
<td><strong>2020</strong></td>
</tr>
<tr>
<td>Members using Cessation Servicesᶜ</td>
<td><strong>32,277</strong></td>
<td><strong>32,130</strong></td>
<td><strong>31,694</strong></td>
<td><strong>31,694</strong></td>
<td><strong>31,694</strong></td>
<td><strong>31,694</strong></td>
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<td>Count of Servicesᵇ</td>
<td><strong>2015</strong></td>
<td><strong>2016</strong></td>
<td><strong>2017</strong></td>
<td><strong>2018</strong></td>
<td><strong>2019</strong></td>
<td><strong>2020</strong></td>
</tr>
<tr>
<td>Members using Cessation Servicesᶜ</td>
<td><strong>99,706</strong></td>
<td><strong>114,285</strong></td>
<td><strong>110,901</strong></td>
<td><strong>110,901</strong></td>
<td><strong>110,901</strong></td>
<td><strong>110,901</strong></td>
</tr>
<tr>
<td>Count of Servicesᵇ</td>
<td><strong>2015</strong></td>
<td><strong>2016</strong></td>
<td><strong>2017</strong></td>
<td><strong>2018</strong></td>
<td><strong>2019</strong></td>
<td><strong>2020</strong></td>
</tr>
<tr>
<td>Members using Cessation Servicesᶜ</td>
<td><strong>114,285</strong></td>
<td><strong>110,901</strong></td>
<td><strong>110,901</strong></td>
<td><strong>110,901</strong></td>
<td><strong>110,901</strong></td>
<td><strong>110,901</strong></td>
</tr>
<tr>
<td>Count of Servicesᵇ</td>
<td><strong>2015</strong></td>
<td><strong>2016</strong></td>
<td><strong>2017</strong></td>
<td><strong>2018</strong></td>
<td><strong>2019</strong></td>
<td><strong>2020</strong></td>
</tr>
<tr>
<td>Members using Cessation Servicesᶜ</td>
<td><strong>110,901</strong></td>
<td><strong>110,901</strong></td>
<td><strong>110,901</strong></td>
<td><strong>110,901</strong></td>
<td><strong>110,901</strong></td>
<td><strong>110,901</strong></td>
</tr>
</tbody>
</table>

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**a** Total number of unique HIP members enrolled at any point in the calendar year, for any amount of time.

**b** Count of services is equivalent to the appearance of a service in a claim, or a claim for a medication fill, and represents instances of counseling visits, initial medication fills, or medication refills. This is the total number of each service utilized during the calendar year, including multiple services utilized per member.

**c** Among members who utilized each service, this is the average number of times they used the service during the calendar year. This provides an indication of the frequency of use over time of each service.


Note: “Other” category for age was removed since the age of analysis is 19-64.
### Exhibit VIII.2: Percentage of Tobacco Cessation Services Used by All HIP Members by Demographic Characteristics (February 2015 – December 2020)

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>HIP Members</th>
<th>HIP Members</th>
<th>HIP Members</th>
<th>HIP Members</th>
<th>HIP Members</th>
<th>HIP Members</th>
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<tbody>
<tr>
<td></td>
<td>389,942</td>
<td>520,136</td>
<td>556,429</td>
<td>569,994</td>
<td>546,451</td>
<td>629,240</td>
</tr>
<tr>
<td>All</td>
<td>Overall</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age 19-29</td>
<td>0.5%</td>
<td>0.7%</td>
<td>0.9%</td>
<td>0.9%</td>
<td>0.9%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Age 30-39</td>
<td>1.0%</td>
<td>1.4%</td>
<td>1.6%</td>
<td>1.7%</td>
<td>1.7%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Age 40-49</td>
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<td>1.3%</td>
<td>1.6%</td>
<td>1.6%</td>
<td>1.6%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Age 50-59</td>
<td>0.9%</td>
<td>1.3%</td>
<td>1.5%</td>
<td>1.5%</td>
<td>1.5%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Age 60-64</td>
<td>0.2%</td>
<td>0.3%</td>
<td>0.4%</td>
<td>0.5%</td>
<td>0.5%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Sex</td>
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<td></td>
<td></td>
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<tr>
<td>Female</td>
<td>2.5%</td>
<td>3.4%</td>
<td>3.9%</td>
<td>3.9%</td>
<td>4.0%</td>
<td>3.3%</td>
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<tr>
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<td>1.7%</td>
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<td>2.2%</td>
<td>2.1%</td>
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<tr>
<td>Race</td>
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<tr>
<td>Asian or Pacific Islander</td>
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<td>0.0%</td>
<td>0.0%</td>
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<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
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<td>0.6%</td>
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<tr>
<td>Caucasian</td>
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<td>4.5%</td>
<td>4.6%</td>
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<td>5.0%</td>
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<td>4.5%</td>
<td>4.6%</td>
<td>4.8%</td>
<td>4.2%</td>
</tr>
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<td>1.4%</td>
<td>1.4%</td>
<td>1.2%</td>
</tr>
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<td>3.9%</td>
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<td>1.4%</td>
<td>0.6%</td>
</tr>
</tbody>
</table>

Source: MCE encounter data February 2015 – December 2020, Monthly Enrollment data provided by the State.
### Exhibit VIII.3: Percentage of All HIP Members with Known Tobacco Information and Percentage of HIP Members with Known Tobacco Information who Use Tobacco, by Demographic Characteristics (February 2015 – December 2020)

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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HIP Members&lt;sup&gt;a&lt;/sup&gt;</td>
<td>389,942</td>
<td>520,136</td>
<td>556,429</td>
<td>569,994</td>
<td>546,451</td>
<td>629,240</td>
</tr>
<tr>
<td><strong>All</strong></td>
<td>Overall</td>
<td>33.8%</td>
<td>34.8%</td>
<td>35.0%</td>
<td>35.0%</td>
<td>36.7%</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age 19-29</td>
<td>14.6%</td>
<td>30.4%</td>
<td>14.5%</td>
<td>29.7%</td>
<td>14.7%</td>
<td>28.2%</td>
</tr>
<tr>
<td>Age 30-39</td>
<td>10.2%</td>
<td>38.2%</td>
<td>10.5%</td>
<td>38.7%</td>
<td>10.9%</td>
<td>38.2%</td>
</tr>
<tr>
<td>Age 40-49</td>
<td>5.5%</td>
<td>39.3%</td>
<td>5.9%</td>
<td>39.6%</td>
<td>6.3%</td>
<td>39.6%</td>
</tr>
<tr>
<td>Age 50-59</td>
<td>3.1%</td>
<td>37.6%</td>
<td>3.4%</td>
<td>39.2%</td>
<td>3.9%</td>
<td>38.8%</td>
</tr>
<tr>
<td>Age 60-64</td>
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<td>28.9%</td>
<td>0.9%</td>
<td>29.4%</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>8.9%</td>
<td>32.4%</td>
<td>10.5%</td>
<td>31.9%</td>
<td>11.7%</td>
<td>31.0%</td>
</tr>
<tr>
<td>Male</td>
<td>24.9%</td>
<td>41.6%</td>
<td>24.5%</td>
<td>42.1%</td>
<td>25.0%</td>
<td>41.4%</td>
</tr>
<tr>
<td>Other or Unknown</td>
<td>0.0%</td>
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<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>0.6%</td>
<td>8.7%</td>
<td>0.7%</td>
<td>10.0%</td>
<td>0.8%</td>
<td>10.3%</td>
</tr>
<tr>
<td>Black</td>
<td>7.7%</td>
<td>22.7%</td>
<td>7.9%</td>
<td>23.3%</td>
<td>8.1%</td>
<td>22.9%</td>
</tr>
<tr>
<td>Caucasian</td>
<td>21.7%</td>
<td>40.6%</td>
<td>22.5%</td>
<td>40.6%</td>
<td>23.5%</td>
<td>39.8%</td>
</tr>
<tr>
<td>Other or Unknown</td>
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## Healthy Indiana Plan Summative Evaluation Report

Lewin Group – 6/30/2022  
Final for CMS Review  

### Characteristics

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<td>HIP Members(^a) = 520,136</td>
<td>HIP Members(^a) = 556,429</td>
<td>HIP Members(^a) = 569,994</td>
<td>HIP Members(^a) = 546,451</td>
<td>HIP Members(^a) = 629,240</td>
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<td>% of All Members with Known Tobacco Information(^b)</td>
<td>% of Members with Known Tobacco who Use Tobacco(^c)</td>
<td>% of Members with Known Tobacco Information(^b)</td>
<td>% of Members with Known Tobacco who Use Tobacco(^c)</td>
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\(^a\) Total number of unique HIP members enrolled at any point in the calendar year, for any amount of time  
\(^b\) The percentage of unique HIP members who answered the tobacco usage question on their Medicaid enrollment application.  
\(^c\) Among members who answered the tobacco usage question on their Medicaid enrollment application, this is the percentage of members who answered “Yes” for tobacco use.

Source: Data for member self-reported use of tobacco was collected by the State from new applications (new HIP members or members switching MCEs) during enrollment. The subset of members with available tobacco information (used or did not use tobacco) is not based on a random sample of members. *Due to COVID-19 PHE, HIP suspended policies related to tobacco surcharge. MCEs continued collecting information on tobacco use. Monthly Enrollment data provided by the State.

Note: “Other” category for age was removed since the age of analysis is 19-64.
### Exhibit VIII.4: Percentage of All HIP Members with Known Tobacco Use Information who Use Tobacco, by Demographic Characteristics (February 2015 – December 2020)

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<td>0.3%</td>
<td>0.4%</td>
<td>0.5%</td>
<td>0.2%</td>
</tr>
</tbody>
</table>

\(^{a}\) Total number of unique HIP members enrolled at any point in the calendar year, for any amount of time

\(^{b}\) Among members who answered the tobacco usage question on their Medicaid enrollment application, this is the percentage of members who answered “Yes” for tobacco use

Source: Data for member self-reported use of tobacco was collected by the State from new applications (new HIP members or members switching MCEs) during enrollment. The subset of members with available tobacco information (used or did not use tobacco) is not based on a random sample of members.

*Due to COVID-19 PHE, HIP suspended policies related to tobacco surcharge. MCEs continued collecting information on tobacco use. Monthly Enrollment data provided by the State.
### Exhibit VIII.5: Proportion of HIP Members who Use Tobacco Cessation Services Among Members with Known Tobacco Use Information by Demographic Characteristics (February 2015 – December 2020)

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<th>Known Tobacco Information Members&lt;sup&gt;a&lt;/sup&gt; = 131,859</th>
<th>Known Tobacco Information Members&lt;sup&gt;b&lt;/sup&gt; = 181,904</th>
<th>Known Tobacco Information Members&lt;sup&gt;c&lt;/sup&gt; = 204,227</th>
<th>Known Tobacco Information Members&lt;sup&gt;d&lt;/sup&gt; = 261,984</th>
<th>Known Tobacco Information Members&lt;sup&gt;e&lt;/sup&gt; = 287,560</th>
<th>Known Tobacco Information Members&lt;sup&gt;f&lt;/sup&gt; = 326,420</th>
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</thead>
<tbody>
<tr>
<td>% of HIP Members Using Tobacco Cessation Among Members with Known Tobacco Information</td>
<td>% of HIP Members Using Tobacco Cessation Among Members with Known Tobacco Information</td>
<td>% of HIP Members Using Tobacco Cessation Among Members with Known Tobacco Information</td>
<td>% of HIP Members Using Tobacco Cessation Among Members with Known Tobacco Information</td>
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<td>% of HIP Members Using Tobacco Cessation Among Members with Known Tobacco Information</td>
<td>% of HIP Members Using Tobacco Cessation Among Members with Known Tobacco Information</td>
</tr>
<tr>
<td>All</td>
<td>Overall</td>
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<td>5.0%</td>
<td>6.0%</td>
<td>5.9%</td>
<td>6.3%</td>
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<tr>
<td>Age 19-29</td>
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<td>2.9%</td>
<td>3.1%</td>
<td>2.9%</td>
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## Known Tobacco Information Members

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<th>Known Tobacco Information Members&lt;sup&gt;a&lt;/sup&gt; = 181,904</th>
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<td>% of HIP Members Using Tobacco Cessation Among Members with Known Tobacco Information</td>
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<td>3.9%</td>
<td>5.2%</td>
<td>6.7%</td>
<td>6.3%</td>
<td>6.3%</td>
<td>4.6%</td>
</tr>
</tbody>
</table>

<sup>a</sup> Among members who answered the tobacco usage question on their Medicaid enrollment application, this is the number of members who answered “Yes” for tobacco use.

Source: MCE encounter data February 2015 – December 2020. Data for member self-reported use of tobacco was collected by the State from new applications (new HIP members or members switching MCEs) during enrollment. The subset of members with available tobacco information (used or did not use tobacco) is not based on a random sample of members.

*Due to COVID-19 PHE, HIP suspended policies related to tobacco surcharge. MCEs continued collecting information on tobacco use, Monthly Enrollment data provided by the State.*
Attachment IX: Goal 4 Analytic Details

Statistical Methodology

Goal 4 analyses used multivariate regressions to study the association between measures of interest and selected sociodemographic. The purpose of these regressions was to provide an initial overview of selected sociodemographic factors that had (and may have) impact on outcome measures of interest. In this section the approach to developing the models is summarized as well as key observations.

The three outcome measures of interest for Goal 4 Hypothesis 2 Research Question 2.2 were:

- Probability of disenrollment with nonpayment
- Probability of moving to HIP Basic from HIP Plus
- Probability of moving to HIP Plus from HIP Basic

Individual multivariate logistic regressions with selected beneficiary and demographic characteristics as explanatory factors were estimated. This approach controls for beneficiary, geographic, and time (program year) differences. The summary statistics presented in this report and Goal 4’s regression models both used HIP monthly enrollment data. The discussion below outlines the identification of the dependent variable for each model, construction of the analytical data, and model development and results.

Probability of Disenrollment with Nonpayment – Dependent Variable

Members can have multiple disenrollments and multiple reasons for disenrollment. Based on analyses of member disenrollment (see Section F, Goal 4, Exhibit F.4.3), the proportion of members having nonpayment as a reason for disenrollment was comparatively low at 1.4% in 2018 (and highest at 2.2% in 2016) in comparison to the overall disenrollment rate (32.4% for 2018, 25.5% for 2017, and 23.4% for 2016) which includes additional reasons for disenrollment. From the perspective of studying disenrollment due to nonpayment, members can have three possible disenrollment outcomes:

- Disenrollment with nonpayment as a reason
- Disenrollment but nonpayment is not a reason (other reasons)
- No disenrollment

A multinomial logistic model was used to study the relationship between member probability to disenroll with nonpayment as a reason and associated sociodemographic characteristics. The outcome variable for this model is a categorical variable with three types of disenrollment (as outlined above) as possible values and the explanatory factors were the available sociodemographic characteristics (discussed later in the Analytical Data Development subsection).

Probability of Moving to HIP Plus from HIP Basic, Probability of Moving to HIP Basic from HIP Plus – Dependent Variables

Based on analyses of member enrollment data (see Exhibit IX.2), members may move from HIP Plus to HIP Basic and from HIP Basic to HIP Plus during a calendar year. Members can also continue to stay with the same plan or disenroll. A regression-based approach was used to study whether members before and after the implementation of the payment tier policy in 2018 had a higher or lower propensity to change benefit plans adjusting for potential variabilities due to multiple sociodemographic factors.
purposes of understanding factors that may impact member movement between benefit plans, was conceptualized that:

- Members having HIP Basic may have two possible outcomes – moves to HIP Plus or does not
- Members having HIP Plus may have two possible outcomes – moves to HIP Basic or does not

Multivariate logistic models were developed to estimate the impact of sociodemographic factors on each of the movements – HIP Basic to HIP Plus and HIP Plus to HIP Basic.

**Analytical Data for Model Estimation**

Member demographics available in the state administrative enrollment data (age, sex, race, income, household size, marital status, geography) were used as explanatory factors. We also included the county level unemployment rate as a potential indicator. Calendar year of enrollment was used as factor to control for program year variation.

A longitudinal dataset at the member/year level was constructed to capture information on member enrollment and disenrollment using state administrative data from February 2015 through December 2020.

We identified the member population based on criteria defined for Goal 4 (see Exhibit F.4.1).

The member/year data captures a calendar year perspective of members’ outcome measures of interest and sociodemographic characteristics including HIP plan membership. For this analysis, monthly level member enrollment data was aggregated to the calendar year level. A member was identified as HIP Plus (ever_Plus) if the member was fully enrolled in either Regular Plus (RP) or State Plus (SP) at any point in the calendar year. Similarly, a member was identified as HIP Basic (ever_Basic) if the member was fully enrolled in either Regular Basic (RB) or State Basic (SB) benefit plan at any point in the calendar year. Members who moved between HIP Plus and HIP Basic (HIP Switchers) were identified both as ever_Plus and ever_Basic. If a member had at least one move from HIP Basic to HIP Plus, the member was identified as “HIP Basic to HIP Plus” and similarly if a member had at least one move from HIP Plus to HIP Basic, the member was identified as “HIP Plus to HIP Basic”.

Members can have multiple disenrollments and multiple reasons for disenrollment. Disenrollment reason flags captured the information for all disenrollment reasons a member had in the year. A member can have multiple income and federal poverty level (FPL) changes over time (see Section F, Goal 4 subsection Identification of FPL for more details). For member/year data we identified FPL and other characteristics (like age, sex, race, geography, marital status) based on available information in the first month the member was enrolled in the calendar year. A member identified as medically frail (based on medically frail flag) for at least one month was identified as being medically frail in the year-level aggregation.

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32 Use of member/month level data was aimed at capturing the more granular monthly member characteristics and benefit plan. This data is based on the state administrative monthly enrollment and disenrollment data. We based values for member characteristics on the available information in the data for each month. For instances with missing data for a month, where possible, we imputed with the ‘last known’ value prior to the month. The benefit plan information reflected the benefit plan the member was enrolled in for the month. We identified member movement from HIP Basic to HIP Plus or HIP Plus to HIP Basic based on the benefit plan for consecutive months. The data included an indicator to identify disenrollment for the month when the member disenrolled from a plan as well as the associated disenrollment reason code.
Model Development

Explanatory variables (sociodemographic characteristics) were included as main effects (with selected interaction effects identified as statistically significant (p-value < 0.05)) in the model estimation process. PROC LOGISTIC procedure available in SAS was used to estimate the models. We considered both backward and forward stepwise method for selecting the significant variables.

The following models were developed for Goal 4 Hypothesis 2 Research Question 2.2:

- **Model 1**: Probability of disenrollment with nonpayment as reason
  \[
  \log \left( \frac{\text{Prob(Disenrollment nonpayment as reason)}}{\text{Prob(not disenrolled)}} \right) = f(\text{sociodemographic characteristics})
  \]
  \[
  \log \left( \frac{\text{Prob(Disenrollment other reasons)}}{\text{Prob(not disenrolled)}} \right) = g(\text{sociodemographic characteristics})
  \]
  where \( f() \) and \( g() \) are linear combination of sociodemographic factors.\(^{33}\) We used all HIP Plus member data to estimate the model.\(^{34}\)

- **Model 2**: Probability of moving from HIP Basic to HIP Plus
  \[
  \log \left( \frac{\text{Prob(Move to Plus)}}{1-\text{Prob(Move to Plus)}} \right) = f_1(\text{sociodemographic characteristics})
  \]
  where \( f_1() \) near combination of sociodemographic factors. For model estimation, we restricted the data to the HIP Basic member population.

- **Model 3**: Probability of moving from HIP Plus to HIP Basic
  \[
  \log \left( \frac{\text{Prob(Move to Basic)}}{1-\text{Prob(Move to Basic)}} \right) = f_2(\text{sociodemographic characteristics})
  \]
  where \( f_2() \) is a linear combination of sociodemographic factors. For model estimation, we restricted the data to the HIP Plus member population.

---

\(^{33}\) For example, \( f(\text{age, sex}) = \alpha + \beta_1 \text{ age} + \beta_2 \text{ sex} \).

\(^{34}\) We eliminated data points with missing values during the estimation process.
Goal 4 HIP Member Population Sociodemographic Statistics Compared to Overall HIP Population

The Goal 4 HIP member population was identified using member monthly enrollment status. Exclusions (as discussed in Section F, Goal 4 subsection Definition of HIP Member Population Used for Goal 4 Analyses) were applied at the member month level. Members having HIP Plus or HIP Basic coverage at any time in the calendar year were included in the Goal 4 HIP member population for the relevant months. Thereby, members having identified exclusion criteria (e.g., receive Transitional Medical Assistance [TMA], are pregnant) were not included in Goal 4 HIP member population for that month. Some examples include:

- **Example 1:** A member enrolled in HIP Plus from January to July of 2018 who is pregnant during the months of June and July is included in the Goal 4 analytic cohort with coverage months of January to May.
- **Example 2:** A member having HIP coverage from January to March 2018 and receiving TMA is not included in Goal 4 analytic cohort.
- **Example 3:** A member enrolled in HIP Basic from March thru June and then enrolled in HIP Plus starting in July and identified as pregnant in July was considered a Goal 4 HIP member receiving HIP Basic coverage only.

Exhibit IX.1 shows a comparison of the Goal 4 HIP member cohort size across time in comparison to the overall HIP population. Between 2015 – 2018, the Goal 4 HIP member cohort included approximately 97% of the HIP member population. For 2019, Goal 4 HIP member cohort included 96% of the overall HIP population. Since the focus of the Goal 4 analyses is to evaluate the impact of Personal Wellness and Responsibility (POWER) Account payment change on member understanding and compliance with payment, many of the analytics are based on Goal 4 HIP Plus member population (see Section F, Exhibit F.4.1). This subset of members has payment obligations and can be subject to disenrollment (greater than 100% FPL and not identified as medically frail or residing in a domestic violence shelter or in a state-declared disaster area) or reduced benefits. This cohort of members has been indicated in tables below as “Plus Only and Switcher” as it includes members who had either only HIP Plus benefits or had HIP Plus benefits for at least one month in the calendar year irrespective of other coverage. Exhibit IX.1 shows a comparison of this “Plus Only and Switcher” population relative to the overall HIP and Goal 4 restriction. On average, between 2015 – 2018, HIP Plus Only and Switcher member population was 6.8% larger than Goal 4 Plus Only and Switcher while for 2019 it was 10.4% larger. Due to the nuanced definition of Goal 4 HIP member identification, it should be noted that some members identified in the overall HIP Plus Only and Switcher cohort might be identified as receiving Basic Only coverage for Goal 4 (for Example 3 discussed earlier in this section). In 2020, the Goal 4 HIP population included 94% of the HIP member population and the HIP Plus Only and Switcher member population was 10.9% larger than Goal 4 Plus Only and Switcher population.
Exhibit IX.1: Comparison of Goal 4 Member Population to Overall HIP Population

<table>
<thead>
<tr>
<th>Year</th>
<th>HIP Population</th>
<th>Goal 4 HIP Population</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Overall</td>
<td>Plus Only and Switcher</td>
</tr>
<tr>
<td>2015</td>
<td>389,942</td>
<td>277,790</td>
</tr>
<tr>
<td>2016</td>
<td>520,136</td>
<td>368,667</td>
</tr>
<tr>
<td>2017</td>
<td>556,429</td>
<td>392,979</td>
</tr>
<tr>
<td>2018</td>
<td>569,994</td>
<td>428,196</td>
</tr>
<tr>
<td>2019</td>
<td>546,451</td>
<td>432,972</td>
</tr>
<tr>
<td>2020</td>
<td>629,240</td>
<td>512,070</td>
</tr>
</tbody>
</table>


The Goal 4 HIP member definition does not include those who are pregnant (based on enrollment code or pregnancy indicator), medically frail based on member enrollment code, Native American, conditionally enrolled, or members receiving TMA. Exhibit IX.2 is a comprehensive distribution summary of the Goal 4 HIP member population by selected socio-demographic characteristics for a selected year (2019). 23,206 HIP members were not identified as Goal 4 HIP members. Of these members, 22,496 (96.9%) were Female. Analyzing by income level, approximately 6% of members having income greater than 23% FPL were not included in theGoal 4 HIP population in comparison to about 3% of members having income less than or equal to 22% FPL. The difference in Plus Only and Switcher population was larger compared to the overall difference (40,728 compared to 23,206). This is primarily because of Switchers in the HIP population who were identified as having only HIP Basic coverage after applying the Goal 4 exclusion logic at member month level (see Example 3 at the beginning of this section).

Exhibit IX.2: Comparison of Goal 4 Member Demographics to Overall HIP Population (2019)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Overall</td>
<td>Plus Only and Switchers</td>
<td>Overall</td>
</tr>
<tr>
<td>All</td>
<td>546,451</td>
<td>432,972</td>
<td>523,245</td>
</tr>
<tr>
<td>FPL&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0%-22% FPL</td>
<td>312,896</td>
<td>232,165</td>
<td>304,755</td>
</tr>
<tr>
<td>23%-50% FPL</td>
<td>35,307</td>
<td>28,835</td>
<td>33,575</td>
</tr>
<tr>
<td>51%-75% FPL</td>
<td>49,756</td>
<td>40,434</td>
<td>47,317</td>
</tr>
<tr>
<td>76%-100% FPL</td>
<td>61,052</td>
<td>49,657</td>
<td>58,136</td>
</tr>
<tr>
<td>101%-138% FPL</td>
<td>80,913</td>
<td>75,629</td>
<td>77,520</td>
</tr>
<tr>
<td>&gt; 138% FPL</td>
<td>6,527</td>
<td>6,252</td>
<td>1,942</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>346,466</td>
<td>286,377</td>
<td>323,970</td>
</tr>
<tr>
<td>Male</td>
<td>199,985</td>
<td>146,595</td>
<td>199,275</td>
</tr>
</tbody>
</table>

<sup>a</sup> FPL is based on the FPL observed in first month of enrollment in the calendar year (see Section F, Goal 4 subsection Identification of FPL for details)

**Analytic Tables by Federal Poverty Level (2015 – 2020)**

The section contains detailed results by FPL in support of the results presented for Goal 4.

**Exhibit IX.3: Disenrollment Reasons for HIP Plus Members by FPL (February 2015 – December 2020)**

Note: Analyses use the **Goal 4** definition of Healthy Indiana Plan (HIP) member categories, as described in **Section F, Exhibit F.4.1**

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Payment Tier</th>
<th>All Goal 4 HIP Plus Members&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Goal 4 HIP Plus Members Disenrolled&lt;sup&gt;b&lt;/sup&gt;</th>
<th>Goal 4 HIP Plus Members Disenrolled Due to Nonpayment</th>
<th>Goal 4 HIP Plus Members Disenrolled Due to Income</th>
<th>Goal 4 HIP Plus Members Disenrolled Due to Pregnancy&lt;sup&gt;c&lt;/sup&gt;</th>
<th>Goal 4 HIP Plus Members Disenrolled Due to Other Administrative Reasons&lt;sup&gt;d&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feb 2015 - Dec 2015</td>
<td>0%-22% FPL</td>
<td>149,485</td>
<td>20,788</td>
<td>13.9%</td>
<td>891</td>
<td>0.6%</td>
<td>8,862</td>
</tr>
<tr>
<td></td>
<td>23%-50% FPL</td>
<td>19,550</td>
<td>2,316</td>
<td>11.8%</td>
<td>36</td>
<td>0.2%</td>
<td>999</td>
</tr>
<tr>
<td></td>
<td>51%-75% FPL</td>
<td>26,925</td>
<td>3,287</td>
<td>12.2%</td>
<td>65</td>
<td>0.2%</td>
<td>1,613</td>
</tr>
<tr>
<td></td>
<td>76%-100% FPL</td>
<td>30,162</td>
<td>3,872</td>
<td>12.8%</td>
<td>126</td>
<td>0.4%</td>
<td>1,958</td>
</tr>
<tr>
<td></td>
<td>101%-138% FPL</td>
<td>34,552</td>
<td>4,612</td>
<td>13.3%</td>
<td>1,028</td>
<td>3.0%</td>
<td>1,955</td>
</tr>
<tr>
<td></td>
<td>&gt; 138% FPL</td>
<td>4,647</td>
<td>884</td>
<td>19.0%</td>
<td>20</td>
<td>0.4%</td>
<td>842</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>265,321</strong></td>
<td><strong>35,759</strong></td>
<td><strong>13.5%</strong></td>
<td><strong>2,166</strong></td>
<td><strong>0.8%</strong></td>
<td><strong>16,229</strong></td>
</tr>
<tr>
<td>Jan 2016 - Dec 2016</td>
<td>0%-22% FPL</td>
<td>192,257</td>
<td>44,577</td>
<td>23.2%</td>
<td>3,091</td>
<td>1.6%</td>
<td>14,398</td>
</tr>
<tr>
<td></td>
<td>23%-50% FPL</td>
<td>23,431</td>
<td>4,215</td>
<td>18.0%</td>
<td>133</td>
<td>0.6%</td>
<td>1,251</td>
</tr>
<tr>
<td></td>
<td>51%-75% FPL</td>
<td>32,983</td>
<td>6,141</td>
<td>18.6%</td>
<td>272</td>
<td>0.8%</td>
<td>2,065</td>
</tr>
<tr>
<td></td>
<td>76%-100% FPL</td>
<td>38,690</td>
<td>7,950</td>
<td>20.5%</td>
<td>509</td>
<td>1.3%</td>
<td>3,021</td>
</tr>
<tr>
<td></td>
<td>101%-138% FPL</td>
<td>54,728</td>
<td>14,812</td>
<td>27.1%</td>
<td>3,676</td>
<td>6.7%</td>
<td>5,944</td>
</tr>
<tr>
<td></td>
<td>&gt; 138% FPL</td>
<td>4,521</td>
<td>3,286</td>
<td>72.7%</td>
<td>69</td>
<td>1.5%</td>
<td>3,096</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>346,610</strong></td>
<td><strong>80,981</strong></td>
<td><strong>23.4%</strong></td>
<td><strong>7,750</strong></td>
<td><strong>2.2%</strong></td>
<td><strong>29,775</strong></td>
</tr>
<tr>
<td>Time Period</td>
<td>Payment Tier</td>
<td>All Goal 4 HIP Plus Members</td>
<td>Goal 4 HIP Plus Members Disenrolled&lt;sup&gt;a&lt;/sup&gt;</td>
<td>Goal 4 HIP Plus Members Disenrolled Due to Nonpayment</td>
<td>Goal 4 HIP Plus Members Disenrolled Due to Income</td>
<td>Goal 4 HIP Plus Members Disenrolled Due to Pregnancy&lt;sup&gt;c&lt;/sup&gt;</td>
<td>Goal 4 HIP Plus Members Disenrolled Due to Other Administrative Reasons&lt;sup&gt;d&lt;/sup&gt;</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------</td>
<td>-----------------------------</td>
<td>-----------------------------------------------</td>
<td>-----------------------------------------------</td>
<td>-----------------------------------------------</td>
<td>-----------------------------------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>Jan 2017 - Dec 2017</td>
<td>0%-22% FPL</td>
<td>196,888</td>
<td>48,687</td>
<td>24.7%</td>
<td>936</td>
<td>0.5%</td>
<td>14,494</td>
</tr>
<tr>
<td></td>
<td>23%-50% FPL</td>
<td>26,070</td>
<td>5,374</td>
<td>20.6%</td>
<td>230</td>
<td>0.9%</td>
<td>1,819</td>
</tr>
<tr>
<td></td>
<td>51%-75% FPL</td>
<td>36,527</td>
<td>7,851</td>
<td>21.5%</td>
<td>426</td>
<td>1.2%</td>
<td>2,850</td>
</tr>
<tr>
<td></td>
<td>76%-100% FPL</td>
<td>43,501</td>
<td>10,335</td>
<td>23.8%</td>
<td>700</td>
<td>1.6%</td>
<td>4,372</td>
</tr>
<tr>
<td></td>
<td>101%-138% FPL</td>
<td>65,167</td>
<td>21,412</td>
<td>32.9%</td>
<td>4,502</td>
<td>6.9%</td>
<td>9,846</td>
</tr>
<tr>
<td></td>
<td>&gt; 138% FPL</td>
<td>1,715</td>
<td>562</td>
<td>32.8%</td>
<td>65</td>
<td>3.8%</td>
<td>338</td>
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<tr>
<td>Total</td>
<td>369,868</td>
<td>94,221</td>
<td>25.5%</td>
<td>6,859</td>
<td>1.9%</td>
<td>33,719</td>
<td>9.1%</td>
</tr>
<tr>
<td>Jan 2018 - Dec 2018</td>
<td>0%-22% FPL</td>
<td>192,263</td>
<td>59,023</td>
<td>30.7%</td>
<td>522</td>
<td>0.3%</td>
<td>22,609</td>
</tr>
<tr>
<td></td>
<td>23%-50% FPL</td>
<td>30,882</td>
<td>9,245</td>
<td>29.9%</td>
<td>154</td>
<td>0.5%</td>
<td>3,492</td>
</tr>
<tr>
<td></td>
<td>51%-75% FPL</td>
<td>42,581</td>
<td>13,087</td>
<td>30.7%</td>
<td>331</td>
<td>0.8%</td>
<td>5,087</td>
</tr>
<tr>
<td></td>
<td>76%-100% FPL</td>
<td>50,487</td>
<td>16,282</td>
<td>32.2%</td>
<td>633</td>
<td>1.3%</td>
<td>6,863</td>
</tr>
<tr>
<td></td>
<td>101%-138% FPL</td>
<td>73,828</td>
<td>28,760</td>
<td>39.0%</td>
<td>3,793</td>
<td>5.1%</td>
<td>13,300</td>
</tr>
<tr>
<td></td>
<td>&gt; 138% FPL</td>
<td>2,276</td>
<td>893</td>
<td>39.2%</td>
<td>71</td>
<td>3.1%</td>
<td>522</td>
</tr>
<tr>
<td>Total</td>
<td>392,317</td>
<td>127,290</td>
<td>32.4%</td>
<td>5,504</td>
<td>1.4%</td>
<td>51,873</td>
<td>13.2%</td>
</tr>
<tr>
<td>Jan 2019 - Dec 2019</td>
<td>0%-22% FPL</td>
<td>212,444</td>
<td>59,512</td>
<td>28.0%</td>
<td>907</td>
<td>0.4%</td>
<td>24,771</td>
</tr>
<tr>
<td></td>
<td>23%-50% FPL</td>
<td>26,063</td>
<td>7,200</td>
<td>27.6%</td>
<td>202</td>
<td>0.8%</td>
<td>2,710</td>
</tr>
<tr>
<td></td>
<td>51%-75% FPL</td>
<td>36,591</td>
<td>10,151</td>
<td>27.7%</td>
<td>318</td>
<td>0.9%</td>
<td>3,963</td>
</tr>
<tr>
<td></td>
<td>76%-100% FPL</td>
<td>45,211</td>
<td>13,412</td>
<td>29.7%</td>
<td>671</td>
<td>1.5%</td>
<td>5,692</td>
</tr>
<tr>
<td></td>
<td>101%-138% FPL</td>
<td>70,419</td>
<td>25,571</td>
<td>36.3%</td>
<td>3,524</td>
<td>5.0%</td>
<td>12,119</td>
</tr>
<tr>
<td></td>
<td>&gt; 138% FPL</td>
<td>1,516</td>
<td>592</td>
<td>39.1%</td>
<td>57</td>
<td>3.8%</td>
<td>338</td>
</tr>
<tr>
<td>Total</td>
<td>392,244</td>
<td>116,438</td>
<td>29.7%</td>
<td>5,679</td>
<td>1.4%</td>
<td>49,593</td>
<td>12.6%</td>
</tr>
<tr>
<td>Time Period</td>
<td>Payment Tier</td>
<td>All Goal 4 HIP Plus Members</td>
<td>Goal 4 HIP Plus Members Disenrolled due to Nonpayment</td>
<td>Goal 4 HIP Plus Members Disenrolled Due to Income</td>
<td>Goal 4 HIP Plus Members Disenrolled Due to Pregnancy</td>
<td>Goal 4 HIP Plus Members Disenrolled Due to Other Administrative Reasons</td>
<td></td>
</tr>
<tr>
<td>-------------------</td>
<td>--------------</td>
<td>----------------------------</td>
<td>------------------------------------------------------</td>
<td>---------------------------------------------------</td>
<td>-------------------------------------------------------</td>
<td>---------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Jan 2020 - Dec 2020</td>
<td>0%-22% FPL</td>
<td>253,009</td>
<td>18,672</td>
<td>87</td>
<td>4,704</td>
<td>720</td>
<td>12,629</td>
</tr>
<tr>
<td></td>
<td>23%-50% FPL</td>
<td>29,603</td>
<td>1,977</td>
<td>18</td>
<td>509</td>
<td>32</td>
<td>1,374</td>
</tr>
<tr>
<td></td>
<td>51%-75% FPL</td>
<td>41,806</td>
<td>2,892</td>
<td>17</td>
<td>790</td>
<td>45</td>
<td>1,974</td>
</tr>
<tr>
<td></td>
<td>76%-100% FPL</td>
<td>51,084</td>
<td>3,752</td>
<td>33</td>
<td>1,122</td>
<td>20</td>
<td>2,461</td>
</tr>
<tr>
<td></td>
<td>101%-138% FPL</td>
<td>83,104</td>
<td>6,304</td>
<td>285</td>
<td>2,280</td>
<td>29</td>
<td>3,514</td>
</tr>
<tr>
<td></td>
<td>&gt; 138% FPL</td>
<td>2,969</td>
<td>191</td>
<td>7</td>
<td>107</td>
<td>-</td>
<td>71</td>
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<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>461,575</strong></td>
<td><strong>33,788</strong></td>
<td><strong>447</strong></td>
<td><strong>9,512</strong></td>
<td><strong>846</strong></td>
<td><strong>22,023</strong></td>
</tr>
</tbody>
</table>


- Represents HIP Plus members having at least one month of HIP Plus coverage in the calendar year regardless of other enrollment status (this is not the same as “HIP Plus Only”).
- Unique count of members having disenrollment in the calendar year. Members can have multiple reasons for disenrollment. Additionally, members can have multiple disenrollments in a year. Adding counts of members for different reasons for disenrollment is not recommended to obtain the number of disenrollments.
- These members enroll in other Medicaid when disenrolled from HIP. Less than 1% of the members with disenrollment reason “Disability or Pregnancy” have HIP enrollment aid category of HIP Plus Copay (PC) or Pregnant (MA) in the same calendar year. The majority of the HIP Plus members with a PC or MA enrollment status do not have disenrollment. Approximately 8% of the members with this disenrollment reason reenroll within next month and 25% reenroll within the same calendar year with Regular or State Basic or Plus benefit plan.
- Includes disenrollment codes 006 – Moved out of state, 007 – Did not submit paperwork for redetermination, 008 – Failure to verify information, and 009 – Other (e.g., “deceased,” “incarcerated,” etc.).

Exhibit IX.4: Movement between Member Benefit Plan, by FPL (February 2015 – December 2020)

Note: Analyses use the Goal 4 definition of HIP member categories, as described in Section F, Exhibit F.4.1

<table>
<thead>
<tr>
<th>Time Period</th>
<th>FPL F</th>
<th>Goal 4 HIP Plus</th>
<th>Goal 4 HIP Basic</th>
<th>Moved From HIP Basic to HIP Plus</th>
<th>Moved From HIP Plus to HIP Basic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Number</td>
<td>Percent of HIP Basic</td>
<td>Number</td>
<td>Percent of HIP Plus</td>
</tr>
<tr>
<td>2015</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0%-22% FPL</td>
<td>149,485</td>
<td>130,819</td>
<td>19.5%</td>
<td>7,281</td>
<td>4.9%</td>
</tr>
<tr>
<td>23%-50% FPL</td>
<td>19,550</td>
<td>7,213</td>
<td>2.4%</td>
<td>2,226</td>
<td>11.4%</td>
</tr>
<tr>
<td>51%-75% FPL</td>
<td>26,925</td>
<td>9,437</td>
<td>2.4%</td>
<td>2,952</td>
<td>11.0%</td>
</tr>
<tr>
<td>76%-100% FPL</td>
<td>30,162</td>
<td>9,433</td>
<td>2.2%</td>
<td>2,782</td>
<td>9.2%</td>
</tr>
<tr>
<td>101%-138% FPL</td>
<td>34,552</td>
<td>3,456</td>
<td>1.6%</td>
<td>315</td>
<td>0.9%</td>
</tr>
<tr>
<td>&gt; 138% FPL</td>
<td>4,647</td>
<td>717</td>
<td>0.4%</td>
<td>6</td>
<td>0.1%</td>
</tr>
<tr>
<td>Total</td>
<td>265,321</td>
<td>161,075</td>
<td>26,148</td>
<td>15,562</td>
<td>5.9%</td>
</tr>
<tr>
<td>2016</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0%-22% FPL</td>
<td>192,257</td>
<td>135,842</td>
<td>9.4%</td>
<td>8,866</td>
<td>4.6%</td>
</tr>
<tr>
<td>23%-50% FPL</td>
<td>23,431</td>
<td>14,258</td>
<td>12.5%</td>
<td>3,097</td>
<td>13.2%</td>
</tr>
<tr>
<td>51%-75% FPL</td>
<td>32,983</td>
<td>19,758</td>
<td>12.3%</td>
<td>4,823</td>
<td>14.6%</td>
</tr>
<tr>
<td>76%-100% FPL</td>
<td>38,690</td>
<td>21,234</td>
<td>11.5%</td>
<td>5,380</td>
<td>13.9%</td>
</tr>
<tr>
<td>101%-138% FPL</td>
<td>54,728</td>
<td>8,317</td>
<td>17.5%</td>
<td>692</td>
<td>1.3%</td>
</tr>
<tr>
<td>&gt; 138% FPL</td>
<td>4,521</td>
<td>1,049</td>
<td>7.9%</td>
<td>94</td>
<td>2.1%</td>
</tr>
<tr>
<td>Total</td>
<td>346,610</td>
<td>200,458</td>
<td>20,977</td>
<td>22,952</td>
<td>6.6%</td>
</tr>
<tr>
<td>2017</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0%-22% FPL</td>
<td>196,888</td>
<td>145,322</td>
<td>12.4%</td>
<td>15,603</td>
<td>7.9%</td>
</tr>
<tr>
<td>23%-50% FPL</td>
<td>26,070</td>
<td>18,513</td>
<td>15.7%</td>
<td>3,060</td>
<td>11.7%</td>
</tr>
<tr>
<td>51%-75% FPL</td>
<td>36,527</td>
<td>25,951</td>
<td>14.8%</td>
<td>4,214</td>
<td>11.5%</td>
</tr>
<tr>
<td>76%-100% FPL</td>
<td>43,501</td>
<td>27,922</td>
<td>14.3%</td>
<td>4,402</td>
<td>10.1%</td>
</tr>
<tr>
<td>101%-138% FPL</td>
<td>65,167</td>
<td>12,766</td>
<td>16.9%</td>
<td>1,472</td>
<td>2.3%</td>
</tr>
<tr>
<td>&gt; 138% FPL</td>
<td>1,715</td>
<td>777</td>
<td>10.7%</td>
<td>66</td>
<td>3.8%</td>
</tr>
<tr>
<td>Total</td>
<td>369,868</td>
<td>231,251</td>
<td>31,055</td>
<td>28,817</td>
<td>7.8%</td>
</tr>
<tr>
<td>2018</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0%-22% FPL</td>
<td>192,263</td>
<td>132,182</td>
<td>17.7%</td>
<td>11,613</td>
<td>6.0%</td>
</tr>
<tr>
<td>23%-50% FPL</td>
<td>30,882</td>
<td>18,200</td>
<td>26.4%</td>
<td>2,839</td>
<td>9.2%</td>
</tr>
<tr>
<td>51%-75% FPL</td>
<td>42,581</td>
<td>25,145</td>
<td>24.9%</td>
<td>3,999</td>
<td>9.4%</td>
</tr>
<tr>
<td>76%-100% FPL</td>
<td>50,487</td>
<td>28,388</td>
<td>22.6%</td>
<td>4,416</td>
<td>8.7%</td>
</tr>
<tr>
<td>101%-138% FPL</td>
<td>73,828</td>
<td>14,752</td>
<td>20.9%</td>
<td>1,927</td>
<td>2.6%</td>
</tr>
<tr>
<td>&gt; 138% FPL</td>
<td>2,276</td>
<td>1,028</td>
<td>24.1%</td>
<td>124</td>
<td>5.4%</td>
</tr>
<tr>
<td>Total</td>
<td>392,317</td>
<td>219,695</td>
<td>44,229</td>
<td>24,918</td>
<td>6.4%</td>
</tr>
</tbody>
</table>
### Table 1: Membership Population by FPL and Plan Type

<table>
<thead>
<tr>
<th>Time Period</th>
<th>FPL F</th>
<th>Goal 4 HIP Plus&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Goal 4 HIP Basic&lt;sup&gt;b&lt;/sup&gt;</th>
<th>Moved From HIP Basic to HIP Plus&lt;sup&gt;c&lt;/sup&gt;</th>
<th>Moved From HIP Plus to HIP Basic&lt;sup&gt;c&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Number</td>
<td>Number</td>
<td>Number</td>
<td>Number</td>
</tr>
<tr>
<td></td>
<td>Percent of HIP Basic</td>
<td>Percent of HIP Plus</td>
<td>Percent of HIP Basic</td>
<td>Percent of HIP Plus</td>
<td>Percent of HIP Plus</td>
</tr>
<tr>
<td>2019</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0%-22% FPL</td>
<td>212,444</td>
<td>128,831</td>
<td>17,234</td>
<td>13.4%</td>
<td>9.4%</td>
</tr>
<tr>
<td>23%-50% FPL</td>
<td>26,063</td>
<td>12,397</td>
<td>2,187</td>
<td>17.6%</td>
<td>11.4%</td>
</tr>
<tr>
<td>51%-75% FPL</td>
<td>36,591</td>
<td>17,777</td>
<td>3,133</td>
<td>17.6%</td>
<td>11.9%</td>
</tr>
<tr>
<td>76%-100% FPL</td>
<td>45,211</td>
<td>20,798</td>
<td>3,548</td>
<td>17.1%</td>
<td>10.4%</td>
</tr>
<tr>
<td>101%-138% FPL</td>
<td>70,419</td>
<td>11,453</td>
<td>2,192</td>
<td>19.1%</td>
<td>3.0%</td>
</tr>
<tr>
<td>&gt; 138% FPL</td>
<td>1,516</td>
<td>531</td>
<td>60</td>
<td>11.3%</td>
<td>3.0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>392,244</strong></td>
<td><strong>191,787</strong></td>
<td><strong>28,354</strong></td>
<td><strong>14.8%</strong></td>
<td><strong>8.7%</strong></td>
</tr>
<tr>
<td>2020</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0%-22% FPL</td>
<td>253,009</td>
<td>101,037</td>
<td>6,802</td>
<td>6.7%</td>
<td>0.9%</td>
</tr>
<tr>
<td>23%-50% FPL</td>
<td>29,603</td>
<td>8,346</td>
<td>817</td>
<td>9.8%</td>
<td>0.5%</td>
</tr>
<tr>
<td>51%-75% FPL</td>
<td>41,806</td>
<td>11,475</td>
<td>1,166</td>
<td>10.2%</td>
<td>0.5%</td>
</tr>
<tr>
<td>76%-100% FPL</td>
<td>51,084</td>
<td>13,644</td>
<td>1,267</td>
<td>9.3%</td>
<td>0.4%</td>
</tr>
<tr>
<td>101%-138% FPL</td>
<td>83,104</td>
<td>7,235</td>
<td>801</td>
<td>11.1%</td>
<td>0.1%</td>
</tr>
<tr>
<td>&gt; 138% FPL</td>
<td>2,969</td>
<td>545</td>
<td>30</td>
<td>5.5%</td>
<td>0.0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>461,575</strong></td>
<td><strong>142,282</strong></td>
<td><strong>10,883</strong></td>
<td><strong>7.6%</strong></td>
<td><strong>0.6%</strong></td>
</tr>
</tbody>
</table>

<sup>a</sup> FPL is based on the FPL observed in first month of enrollment in the calendar year (see Section F, Goal 4 subsection Identification of FPL for details).

<sup>b</sup> HIP Plus represents members having at least one month HIP Plus in the calendar year regardless of other enrollment status and HIP Basic represents members having at least one month HIP Plus in the calendar year regardless of other enrollment status (this is not the same as “HIP Plus Only” or “HIP Basic Only”). There are some members who are included in both HIP Plus and HIP Basic totals as they have switched between the benefit plans. As such, adding the two columns to get the total HIP membership population is not recommended.

<sup>c</sup> Members can switch plans multiple times in a calendar year. There are a few members with more than two switches between HIP Basic and HIP Plus. Counts reported are unique member counts for each direction of the move between coverage plans and is not the count of the number of moves (for members with multiple plan changes).

### Exhibit IX.5: HIP Plus Members Disenrollment Rate by Not Receiving / Receiving Rollover (January 2017 – December 2020)

*Note: Analyses use the **Goal 4** definition of HIP member categories, as described in **Section F, Exhibit F.4.1***

<table>
<thead>
<tr>
<th>Time Period&lt;sup&gt;a,b&lt;/sup&gt;</th>
<th>Received Rollover</th>
<th>FPL&lt;sup&gt;c&lt;/sup&gt;</th>
<th>All Goal 4 HIP Plus Members&lt;sup&gt;d&lt;/sup&gt;</th>
<th>Goal 4 HIP Plus Members Disenrolled Due to Nonpayment</th>
<th>Goal 4 HIP Plus Members Disenrolled Due to Income</th>
<th>Goal 4 HIP Plus Members Disenrolled Due to Pregnancy&lt;sup&gt;f&lt;/sup&gt;</th>
<th>Goal 4 HIP Plus Members Disenrolled Due to Other Administrative Reasons&lt;sup&gt;g&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Count</td>
<td>Percent</td>
<td>Count</td>
<td>Percent</td>
<td>Count</td>
</tr>
<tr>
<td><strong>Jan 2017 - Dec 2017</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>0%-22% FPL</td>
<td>58,765</td>
<td>10,748</td>
<td>18.3%</td>
<td>248</td>
<td>0.4%</td>
<td>3,331</td>
</tr>
<tr>
<td></td>
<td>23%-50% FPL</td>
<td>9,761</td>
<td>1,499</td>
<td>15.4%</td>
<td>57</td>
<td>0.6%</td>
<td>542</td>
</tr>
<tr>
<td></td>
<td>51%-75% FPL</td>
<td>13,737</td>
<td>2,158</td>
<td>15.7%</td>
<td>113</td>
<td>0.8%</td>
<td>826</td>
</tr>
<tr>
<td></td>
<td>76%-100% FPL</td>
<td>15,979</td>
<td>2,912</td>
<td>18.2%</td>
<td>198</td>
<td>1.2%</td>
<td>1,273</td>
</tr>
<tr>
<td></td>
<td>101%-138% FPL</td>
<td>21,071</td>
<td>5,585</td>
<td>26.5%</td>
<td>1,200</td>
<td>5.7%</td>
<td>2,767</td>
</tr>
<tr>
<td></td>
<td>&gt; 138% FPL</td>
<td>472</td>
<td>159</td>
<td>33.7%</td>
<td>21</td>
<td>4.4%</td>
<td>98</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td>119,785</td>
<td>23,061</td>
<td>19.3%</td>
<td>1,837</td>
<td>1.5%</td>
</tr>
<tr>
<td><strong>No</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0%-22% FPL</td>
<td>138,123</td>
<td>37,939</td>
<td>27.5%</td>
<td>688</td>
<td>0.5%</td>
<td>11,163</td>
</tr>
<tr>
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<td>23%-50% FPL</td>
<td>16,309</td>
<td>3,875</td>
<td>23.8%</td>
<td>173</td>
<td>1.1%</td>
<td>1,277</td>
</tr>
<tr>
<td></td>
<td>51%-75% FPL</td>
<td>22,790</td>
<td>5,693</td>
<td>25.0%</td>
<td>313</td>
<td>1.4%</td>
<td>2,024</td>
</tr>
<tr>
<td></td>
<td>76%-100% FPL</td>
<td>27,522</td>
<td>7,423</td>
<td>27.0%</td>
<td>502</td>
<td>1.8%</td>
<td>3,099</td>
</tr>
<tr>
<td></td>
<td>101%-138% FPL</td>
<td>44,096</td>
<td>15,827</td>
<td>35.9%</td>
<td>3,302</td>
<td>7.5%</td>
<td>7,079</td>
</tr>
<tr>
<td></td>
<td>&gt; 138% FPL</td>
<td>1,243</td>
<td>403</td>
<td>32.4%</td>
<td>44</td>
<td>3.5%</td>
<td>240</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td>250,083</td>
<td>71,160</td>
<td>28.5%</td>
<td>5,022</td>
<td>2.0%</td>
</tr>
</tbody>
</table>
## Time Period and Rollover

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Received Rollover</th>
<th>FPL&lt;sup&gt;c&lt;/sup&gt;</th>
<th>All Goal 4 HIP Plus Members&lt;sup&gt;d&lt;/sup&gt;</th>
<th>Goal 4 HIP Plus Members Disenrolled&lt;sup&gt;e&lt;/sup&gt; Due to Nonpayment</th>
<th>Goal 4 HIP Plus Members Disenrolled Due to Income</th>
<th>Goal 4 HIP Plus Members Disenrolled Due to Pregnancy&lt;sup&gt;f&lt;/sup&gt;</th>
<th>Goal 4 HIP Plus Members Disenrolled Due to Other Administrative Reasons&lt;sup&gt;g&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 2018 - Dec 2018</td>
<td>Yes</td>
<td>0%-22% FPL</td>
<td>73,079</td>
<td>25,595</td>
<td>35.0%</td>
<td>227</td>
<td>0.3%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>23%-50% FPL</td>
<td>14,363</td>
<td>4,706</td>
<td>32.8%</td>
<td>73</td>
<td>0.5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>51%-75% FPL</td>
<td>19,929</td>
<td>6,752</td>
<td>33.9%</td>
<td>148</td>
<td>0.7%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>76%-100% FPL</td>
<td>23,756</td>
<td>8,532</td>
<td>35.9%</td>
<td>242</td>
<td>1.0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>101%-138% FPL</td>
<td>33,709</td>
<td>14,778</td>
<td>43.8%</td>
<td>1,494</td>
<td>4.4%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt; 138% FPL</td>
<td>896</td>
<td>402</td>
<td>44.9%</td>
<td>28</td>
<td>3.1%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>165,732</td>
<td>60,765</td>
<td>36.7%</td>
<td>2,212</td>
<td>1.3%</td>
<td>24,344</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>0%-22% FPL</td>
<td>119,184</td>
<td>33,428</td>
<td>28.0%</td>
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<td>23%-50% FPL</td>
<td>16,519</td>
<td>4,539</td>
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<td>81</td>
<td>0.5%</td>
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<tr>
<td></td>
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<td>51%-75% FPL</td>
<td>22,652</td>
<td>6,335</td>
<td>28.0%</td>
<td>183</td>
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<tr>
<td></td>
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<td>76%-100% FPL</td>
<td>26,731</td>
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<td>29.0%</td>
<td>391</td>
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<td>101%-138% FPL</td>
<td>40,119</td>
<td>13,982</td>
<td>34.9%</td>
<td>2,299</td>
<td>5.7%</td>
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<tr>
<td></td>
<td></td>
<td>&gt; 138% FPL</td>
<td>1,380</td>
<td>491</td>
<td>35.6%</td>
<td>43</td>
<td>3.1%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>226,585</td>
<td>66,525</td>
<td>29.4%</td>
<td>3,292</td>
<td>1.5%</td>
<td>27,529</td>
</tr>
<tr>
<td>Time Period</td>
<td>Received Rollover</td>
<td>FPL</td>
<td>All Goal 4 HIP Plus Members</td>
<td>Goal 4 HIP Plus Members Disenrolled Due to Nonpayment</td>
<td>Goal 4 HIP Plus Members Disenrolled Due to Income</td>
<td>Goal 4 HIP Plus Members Disenrolled Due to Pregnancy</td>
<td>Goal 4 HIP Plus Members Disenrolled Due to Other Administrative Reasons</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------</td>
<td>-----</td>
<td>-----------------------------</td>
<td>--------------------------------------------------</td>
<td>-----------------------------------------------</td>
<td>-----------------------------------------------</td>
<td>---------------------------------------------------------------------</td>
</tr>
<tr>
<td>Jan 2019 - Dec 2019</td>
<td>Yes</td>
<td>0%-22% FPL</td>
<td>67,466</td>
<td>22,219 [32.9%]</td>
<td>362 [0.5%]</td>
<td>8,944 [13.3%]</td>
<td>420 [0.6%]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>23%-50% FPL</td>
<td>10,738</td>
<td>3,468 [32.3%]</td>
<td>77 [0.7%]</td>
<td>1,220 [11.4%]</td>
<td>29 [0.3%]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>51%-75% FPL</td>
<td>15,198</td>
<td>4,896 [32.2%]</td>
<td>130 [0.9%]</td>
<td>1,833 [12.1%]</td>
<td>18 [0.1%]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>76%-100% FPL</td>
<td>18,378</td>
<td>6,338 [34.5%]</td>
<td>255 [1.4%]</td>
<td>2,605 [14.2%]</td>
<td>18 [0.1%]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>101%-138% FPL</td>
<td>28,438</td>
<td>12,070 [42.4%]</td>
<td>1,338 [4.7%]</td>
<td>5,819 [20.5%]</td>
<td>28 [0.1%]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt; 138% FPL</td>
<td>611</td>
<td>276 [45.2%]</td>
<td>25 [4.1%]</td>
<td>155 [25.4%]</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>140,829</td>
<td>49,267 [35.0%]</td>
<td>2,187 [1.6%]</td>
<td>20,576 [14.6%]</td>
<td>513 [0.4%]</td>
<td>26,365 [18.7%]</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>0%-22% FPL</td>
<td>144,978</td>
<td>37,293 [25.7%]</td>
<td>545 [0.4%]</td>
<td>15,827 [10.9%]</td>
<td>2,108 [1.5%]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>23%-50% FPL</td>
<td>15,325</td>
<td>3,732 [24.4%]</td>
<td>125 [0.8%]</td>
<td>1,490 [9.7%]</td>
<td>97 [0.6%]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>51%-75% FPL</td>
<td>21,393</td>
<td>5,255 [24.6%]</td>
<td>188 [0.9%]</td>
<td>2,130 [10.0%]</td>
<td>101 [0.5%]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>76%-100% FPL</td>
<td>26,833</td>
<td>7,074 [26.4%]</td>
<td>416 [1.6%]</td>
<td>3,087 [11.5%]</td>
<td>83 [0.3%]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>101%-138% FPL</td>
<td>41,981</td>
<td>13,501 [32.2%]</td>
<td>2,186 [5.2%]</td>
<td>6,300 [15.0%]</td>
<td>79 [0.2%]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt; 138% FPL</td>
<td>905</td>
<td>316 [34.9%]</td>
<td>32 [3.5%]</td>
<td>183 [20.2%]</td>
<td>3 [0.3%]</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>251,415</td>
<td>67,171 [26.7%]</td>
<td>3,492 [1.4%]</td>
<td>29,017 [11.5%]</td>
<td>2,471 [1.0%]</td>
<td>32,687 [13.0%]</td>
</tr>
</tbody>
</table>
### Time Period

<table>
<thead>
<tr>
<th>Received Rollover</th>
<th>FPLc</th>
<th>All Goal 4 HIP Plus Membersd</th>
<th>Goal 4 HIP Plus Members Disenrollede</th>
<th>Goal 4 HIP Plus Members Disenrolled Due to Nonpayment</th>
<th>Goal 4 HIP Plus Members Disenrolled Due to Income</th>
<th>Goal 4 HIP Plus Members Disenrolled Due to Pregnancyf</th>
<th>Goal 4 HIP Plus Members Disenrolled Due to Other Administrative Reasonsg</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Jan 2020 - Dec 2020</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>0%-22% FPL</td>
<td>69,311</td>
<td>7,418</td>
<td>43</td>
<td>2,331</td>
<td>123</td>
<td>4,702</td>
</tr>
<tr>
<td></td>
<td>23%-50% FPL</td>
<td>10,348</td>
<td>996</td>
<td>7</td>
<td>283</td>
<td>6</td>
<td>682</td>
</tr>
<tr>
<td></td>
<td>51%-75% FPL</td>
<td>14,599</td>
<td>1,409</td>
<td>9</td>
<td>438</td>
<td>4</td>
<td>925</td>
</tr>
<tr>
<td></td>
<td>76%-100% FPL</td>
<td>18,293</td>
<td>1,855</td>
<td>22</td>
<td>630</td>
<td>5</td>
<td>1,147</td>
</tr>
<tr>
<td></td>
<td>101%-138% FPL</td>
<td>28,390</td>
<td>3,223</td>
<td>202</td>
<td>1,283</td>
<td>8</td>
<td>1,646</td>
</tr>
<tr>
<td></td>
<td>&gt; 138% FPL</td>
<td>520</td>
<td>90</td>
<td>5</td>
<td>59</td>
<td>-</td>
<td>28</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>141,461</td>
<td>14,991</td>
<td>288</td>
<td>5,024</td>
<td>146</td>
<td>9,130</td>
</tr>
<tr>
<td>No</td>
<td>0%-22% FPL</td>
<td>183,698</td>
<td>11,254</td>
<td>44</td>
<td>2,373</td>
<td>597</td>
<td>7,927</td>
</tr>
<tr>
<td></td>
<td>23%-50% FPL</td>
<td>19,255</td>
<td>981</td>
<td>11</td>
<td>226</td>
<td>26</td>
<td>692</td>
</tr>
<tr>
<td></td>
<td>51%-75% FPL</td>
<td>27,207</td>
<td>1,483</td>
<td>8</td>
<td>352</td>
<td>41</td>
<td>1,049</td>
</tr>
<tr>
<td></td>
<td>76%-100% FPL</td>
<td>32,791</td>
<td>1,897</td>
<td>11</td>
<td>492</td>
<td>15</td>
<td>1,314</td>
</tr>
<tr>
<td></td>
<td>101%-138% FPL</td>
<td>54,714</td>
<td>3,081</td>
<td>83</td>
<td>997</td>
<td>21</td>
<td>1,868</td>
</tr>
<tr>
<td></td>
<td>&gt; 138% FPL</td>
<td>2,449</td>
<td>101</td>
<td>2</td>
<td>48</td>
<td>-</td>
<td>43</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>320,114</td>
<td>18,797</td>
<td>159</td>
<td>4,488</td>
<td>700</td>
<td>12,893</td>
</tr>
</tbody>
</table>

a “Received rollover” column includes members that earned rollover benefit in prior year and were enrolled in current year. For purposes of this report, we identified any member having earned rollover in calendar year 2016 and having enrollment in 2017 as receiving rollover in 2017. Likewise, we identified any member having earned rollover in 2017 and enrolled in 2018 as receiving rollover in 2018.

b Rollover estimates between 2017 and 2018 should not be compared due to a change in the definition of the member benefit period. Starting in 2018, the State made all member benefit periods equal to the calendar year. Prior to 2017, members enrolling multiple times within a year had multiple POWER Accounts and the State applied rollover based on the individual member benefit period (based on the dates the member enrolled).

c FPL is based on the FPL observed in first month of enrollment in the calendar year (see Section F, Goal 4 subsection Identification of FPL for details)

d Represents members having at least one month HIP Plus benefit in the calendar year regardless of other enrollment status (this is not the same as “HIP Plus Only”).

e Unique count of members having disenrollment in the calendar year. Members can have multiple reasons for disenrollment. Additionally, members can have multiple disenrollments in a year. Adding counts of members for different reasons for disenrollment is not recommended to obtain the number of disenrollments.
Less than 1% of the members with disenrollment reason “Disability or Pregnancy” have HIP enrollment aid category of HIP Plus Copay (PC) or Pregnant (MA) in the same calendar year. The majority of the HIP Plus members with PC or MA enrollment status do not have disenrollment. Approximately 8% of the members with this disenrollment reason reenroll within next month and 25% reenroll within the same calendar year with Regular or State Basic or Plus benefit plan.

Includes disenrollment codes 006 – Moved out of state, 007 – Did not submit paperwork for redetermination, 008 – Failure to verify information, and 009 – Other (e.g., “deceased,” “incarcerated,” etc.).

Source: HIP enrollment data files, February 2016 through December 2020
Disenrollment Rate Observations

Models listed in the Model Development section were explored using both of the analytical data (see Analytical data for model estimation). The results presented in this report are based of models estimated using member/year analytical data. Two primary reasons for the choice are:

- There was no difference in findings, that is, factors affecting the outcome measures of interest between models using member/month and member/year data. Observational analysis on monthly disenrollment trend indicates that disenrollment was generally low in the initial months of a calendar year and slightly higher from July to October. However, there were no other obvious trends by month (see the Disenrollment Trends section below). Similarly, disenrollment due to nonpayment was sporadic across months.

- The POWER Account payment policy change – the primary focus of the Goal 4 analyses – was implemented starting from January 1, 2018. There was no gradual monthly phase-in for this policy change. While a statistical model using monthly data might capture the impact of time taken to develop an understanding of the policy, this would require additional analysis and testing and is not necessary to address the research questions included in the evaluation plan.

All sociodemographic variables considered for these analyses were identified to have impact on the outcome for both disenrollment and Basic to Plus movement – irrespective of the model selection technique. For Plus to Basic movement, results presented in this report are based of model estimated using backward selection technique (better model fit compared to other techniques). Exhibit IX.6a, Exhibit IX.6b, Exhibit IX.7a, Exhibit IX.7b, Exhibit IX.8a, and Exhibit IX.8b display the parameter estimates for the three models and likelihood of each of the selected factor’s impact on the outcome.

The benefit year, age, race, frailty status, and income (represented as percentage of FPL) were identified as significant factors (p-value <= 0.01) for all the models. This study shows that there are significant differences in the outcome measures by year (controlling for other sociodemographic characteristics). While members in 2018 and 2019 have higher odds of disenrollment, they have lower odds of disenrollment due to nonpayment compared to 2017 (see Exhibit IX.6a). Black members appear to have higher odds of disenrolling compared to non-Hispanic White members, and members ages 30 years or older appear less likely to disenroll due to nonpayment compared to members ages 29 years or younger. Members were less likely to transition from HIP Plus to HIP Basic in 2018, but more likely to switch to HIP Basic in 2019. HIP Basic members had higher odds of transitioning to HIP Plus in both 2018 and 2019, compared to 2017.

Although the models provide some insight into potential factors that can affect member outcome (disenrollment due to nonpayment, movement between benefit plans), since the POWER Account Contribution payment tiers were implemented in 2018, these models provide evidence of the impact in the post-intervention period through December 2019. Data corresponding to year 2020 was not included due to the potential confounding impact of the COVID-19 pandemic.

As discussed in Section F Goal 4, some members can have multiple years of HIP membership. Membership can change across time and members can have gaps in coverage (example, an individual may have HIP coverage in 2015 and 2018, but not 2016 and 2017). Any assumptions of correlation in model estimation to account for similarity in member behavior across time for members having multiple years of HIP coverage would require additional testing.
### Exhibit IX.6a: Estimated Logistic Model for Probability to Disenroll with Nonpayment or Other Reason - Main Effects

<table>
<thead>
<tr>
<th>Main Effects: Factors (and Levels)</th>
<th>Nonpayment As Reason</th>
<th>Other Reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Odds Ratio</td>
<td>Estimate</td>
</tr>
<tr>
<td>Year (Ref: 2017)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>0.38</td>
<td>-0.97</td>
</tr>
<tr>
<td>2016</td>
<td>1.17</td>
<td>0.16</td>
</tr>
<tr>
<td>2018</td>
<td>0.83</td>
<td>-0.19</td>
</tr>
<tr>
<td>2019</td>
<td>0.82</td>
<td>-0.20</td>
</tr>
<tr>
<td>HIP Member Category (Ref: Plus Only)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Switcher</td>
<td>1.10</td>
<td>0.09</td>
</tr>
<tr>
<td>Region (Ref: Metro)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonmetro (2,500 - 19,999)</td>
<td>0.96</td>
<td>-0.04</td>
</tr>
<tr>
<td>Nonmetro (20,000 or more)</td>
<td>1.03</td>
<td>0.03</td>
</tr>
<tr>
<td>Nonmetro (Rural, less than 2,500)</td>
<td>0.93</td>
<td>-0.07</td>
</tr>
<tr>
<td>Sex (Ref: Male)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>1.09</td>
<td>0.09</td>
</tr>
<tr>
<td>Age Category (Ref: Age 19-29)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age 30-39</td>
<td>0.99</td>
<td>-0.01</td>
</tr>
<tr>
<td>Age 40-49</td>
<td>0.82</td>
<td>-0.20</td>
</tr>
<tr>
<td>Age 50-59</td>
<td>0.50</td>
<td>-0.70</td>
</tr>
<tr>
<td>Age 60-66</td>
<td>0.30</td>
<td>-1.21</td>
</tr>
<tr>
<td>Race Category (Ref: Non-Hispanic White)</td>
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<td></td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>0.80</td>
<td>-0.23</td>
</tr>
<tr>
<td>Black</td>
<td>1.41</td>
<td>0.34</td>
</tr>
<tr>
<td>Other</td>
<td>0.82</td>
<td>-0.20</td>
</tr>
<tr>
<td>Marital Status (Ref: Single)</td>
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<td></td>
</tr>
<tr>
<td>Married</td>
<td>1.09</td>
<td>0.08</td>
</tr>
<tr>
<td>Other</td>
<td>1.13</td>
<td>0.12</td>
</tr>
<tr>
<td>Frail Indicator (Ref: Not Frail)</td>
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<td></td>
</tr>
<tr>
<td>Frail</td>
<td>0.28</td>
<td>-1.27</td>
</tr>
<tr>
<td>% Federal Poverty Level (%) (Ref: 0%-22% FPL)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23%-50% FPL</td>
<td>0.70</td>
<td>-0.36</td>
</tr>
<tr>
<td>51%-75% FPL</td>
<td>0.92</td>
<td>-0.08</td>
</tr>
<tr>
<td>76%-100% FPL</td>
<td>1.61</td>
<td>0.48</td>
</tr>
<tr>
<td>101%-138 FPL</td>
<td>8.40</td>
<td>2.13</td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>1.01</td>
<td>0.01</td>
</tr>
</tbody>
</table>


Note: Reference outcome measure for this multinomial logit model is members not disenrolled. Stepwise selection was used to include variables in the logistic models. All effects were significant at a p-value of less than 0.01. The p-value corresponds to the probability of a Chi-Square value greater than the Score Chi-Square Test for each effect. The joint tests for an effect is the test that all parameters associated with that effect are zero, at a significance level of a p-value less than 0.01. Although members are only eligible for the HIP program until age 64, the analysis includes some members who are 65 or 66.
### Exhibit IX.6b: Estimated Logistic Model for Probability to Disenroll with Nonpayment or Other Reason - Interaction Effects

<table>
<thead>
<tr>
<th>Interaction Terms: % Federal Poverty Level Category X Race or X Frail Indicator</th>
<th>Nonpayment As Reason</th>
<th>Other Reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Odds Ratio</td>
<td>Estimate</td>
</tr>
<tr>
<td>0%-22% FPL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category or Indicator</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>0.80</td>
<td>-0.23</td>
</tr>
<tr>
<td>Black</td>
<td>1.41</td>
<td>0.34</td>
</tr>
<tr>
<td>Other</td>
<td>0.82</td>
<td>-0.20</td>
</tr>
<tr>
<td>23%-50% FPL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>0.66</td>
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</tr>
<tr>
<td>Black</td>
<td>1.99</td>
<td>0.69</td>
</tr>
<tr>
<td>Other</td>
<td>0.91</td>
<td>-0.10</td>
</tr>
<tr>
<td>51%-75% FPL</td>
<td></td>
<td></td>
</tr>
<tr>
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<tr>
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<tr>
<td>Asian or Pacific Islander</td>
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<td>-0.87</td>
</tr>
<tr>
<td>Black</td>
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</tr>
<tr>
<td>Other</td>
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<td>-0.12</td>
</tr>
<tr>
<td>101%-138 FPL</td>
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<td></td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
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<td>Other</td>
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<tr>
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<tr>
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<td>-1.58</td>
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</table>

### Exhibit IX.7a: Estimated Logit Model for Probability to Move from HIP Plus to HIP Basic – Main Effects

<table>
<thead>
<tr>
<th>Main Effects: Factors (and Levels)</th>
<th>HIP Plus to Basic</th>
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</thead>
<tbody>
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<td>Odds Ratio</td>
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<td></td>
</tr>
<tr>
<td>2015</td>
<td>0.66</td>
</tr>
<tr>
<td>2016</td>
<td>0.79</td>
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<tr>
<td>2018</td>
<td>0.77</td>
</tr>
<tr>
<td>2019</td>
<td>1.11</td>
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</tr>
<tr>
<td>Age 30-39</td>
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</tr>
<tr>
<td>Age 50-59</td>
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<tr>
<td>Age 60-66</td>
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<td><strong>Race Category (Ref: Non-Hispanic White)</strong></td>
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</tr>
<tr>
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</tr>
<tr>
<td><strong>Marital Status (Ref: Single)</strong></td>
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<tr>
<td>Married</td>
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</tr>
<tr>
<td>Other</td>
<td>1.11</td>
</tr>
<tr>
<td><strong>Frail Indicator (Ref: Not Frail)</strong></td>
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<tr>
<td>Frail</td>
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<tr>
<td><strong>% Federal Poverty Level (%) (Ref: 0%-22% FPL)</strong></td>
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<td>23%-50% FPL</td>
<td>1.91</td>
</tr>
<tr>
<td>51%-75% FPL</td>
<td>2.06</td>
</tr>
<tr>
<td>76%-100% FPL</td>
<td>1.87</td>
</tr>
<tr>
<td>101%-138 FPL</td>
<td>0.27</td>
</tr>
<tr>
<td><strong>Unemployment Rate</strong></td>
<td>1.06</td>
</tr>
</tbody>
</table>


Note: Although members are only eligible for the HIP program until age 64, the analysis includes some members who are 65 or 66.
Exhibit IX.7b: Estimated Logit Model for Probability to Move from HIP Plus to HIP Basic – Interaction Effects

<table>
<thead>
<tr>
<th>Interaction Terms: % Federal Poverty Level Category X Race or X Frail Indicator</th>
<th>HIP Plus to Basic</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Federal Poverty Level</td>
<td>Category or Indicator</td>
</tr>
<tr>
<td>0%-22% FPL</td>
<td>Asian or Pacific Islander</td>
</tr>
<tr>
<td>0%-22% FPL</td>
<td>Black</td>
</tr>
<tr>
<td>0%-22% FPL</td>
<td>Other</td>
</tr>
<tr>
<td>23%-50% FPL</td>
<td>Asian or Pacific Islander</td>
</tr>
<tr>
<td>23%-50% FPL</td>
<td>Black</td>
</tr>
<tr>
<td>23%-50% FPL</td>
<td>Other</td>
</tr>
<tr>
<td>51%-75% FPL</td>
<td>Asian or Pacific Islander</td>
</tr>
<tr>
<td>51%-75% FPL</td>
<td>Black</td>
</tr>
<tr>
<td>51%-75% FPL</td>
<td>Other</td>
</tr>
<tr>
<td>76%-100% FPL</td>
<td>Asian or Pacific Islander</td>
</tr>
<tr>
<td>76%-100% FPL</td>
<td>Black</td>
</tr>
<tr>
<td>76%-100% FPL</td>
<td>Other</td>
</tr>
<tr>
<td>101%-138 FPL</td>
<td>Asian or Pacific Islander</td>
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<tr>
<td>101%-138 FPL</td>
<td>Black</td>
</tr>
<tr>
<td>101%-138 FPL</td>
<td>Other</td>
</tr>
<tr>
<td>0%-22% FPL</td>
<td>Frail</td>
</tr>
<tr>
<td>23%-50% FPL</td>
<td>Frail</td>
</tr>
<tr>
<td>51%-75% FPL</td>
<td>Frail</td>
</tr>
<tr>
<td>76%-100% FPL</td>
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</tr>
<tr>
<td>101%-138 FPL</td>
<td>Frail</td>
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**Exhibit IX.8a: Estimated Logit Model for Probability to Move from HIP Basic to HIP Plus – Main Effects**

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<thead>
<tr>
<th>Main Effects: Factors (and Levels)</th>
<th>HIP Basic to Plus</th>
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<td>Odds Ratio</td>
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<td></td>
</tr>
<tr>
<td>2015</td>
<td>1.20</td>
</tr>
<tr>
<td>2016</td>
<td>0.72</td>
</tr>
<tr>
<td>2018</td>
<td>1.65</td>
</tr>
<tr>
<td>2019</td>
<td>1.11</td>
</tr>
<tr>
<td><strong>Region (Ref: Metro)</strong></td>
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<tr>
<td>Nonmetro (2,500 - 19,999)</td>
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<td>Nonmetro (20,000 or more)</td>
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<tr>
<td>Nonmetro (Rural, less than 2,500)</td>
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<td><strong>Sex (Ref: Male)</strong></td>
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<tr>
<td>Female</td>
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<td>Age 30-39</td>
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<tr>
<td>Age 40-49</td>
<td>1.47</td>
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<tr>
<td>Age 50-59</td>
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<td>Age 60-66</td>
<td>1.82</td>
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<tr>
<td><strong>Unemployment Rate</strong></td>
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</table>


Note: Although members are only eligible for the HIP program until age 64, the analysis includes some members who are 65 or 66.
Exhibit IX.8b: Estimated Logit Model for Probability to Move from HIP Basic to HIP Plus – Interaction Effects

<table>
<thead>
<tr>
<th>% Federal Poverty Level</th>
<th>Category or Indicator</th>
<th>Odds Ratio</th>
<th>Estimate</th>
<th>Standard Error</th>
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<tr>
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<td>-0.20</td>
<td>0.01</td>
</tr>
<tr>
<td>0%-22% FPL</td>
<td>Other</td>
<td>1.12</td>
<td>0.11</td>
<td>0.01</td>
</tr>
<tr>
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<td>0.11</td>
<td>0.03</td>
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<td>0.02</td>
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<td>-0.05</td>
<td>0.02</td>
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<td>-0.21</td>
<td>0.03</td>
</tr>
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<tr>
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<td>0.50</td>
<td>0.02</td>
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<td>Frail</td>
<td>1.50</td>
<td>0.41</td>
<td>0.03</td>
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</tbody>
</table>

Disenrollment Trends

The majority of the Goal 4 analyses are based on summarized yearly results since the objective of the goal is to evaluate impact of change in POWER Account Contribution which was implemented from beginning of 2018 and would likely affect member behavior within the calendar year of coverage. This section provides a granular look on disenrollment trends (overall and due to nonpayment) for the Goal 4 HIP member population across each month in the six years – three years prior to POWER Account Contribution change (2015 – 2017) and three years post (2018-2020). As previously noted, the State suspended all cost-sharing during the COVID-19 public health emergency (PHE) and thereby also suspended disenrollment due to nonpayment of POWER Account Contribution. Consequently, evaluation analyses focused on the demonstration period prior to 2020 (2018 – 2019). Data from 2015 – 2017 provides HIP member enrollment and disenrollment trend prior to change to tiered structure for POWER Account Contribution payments (2018 – 2020 Demonstration waiver). Findings for 2020 are included as observations in tables and graphs but should not be used to draw conclusions for Goal 4 research questions, thus narrative specific to 2020 is not included in this section.

The purpose of this analysis is to develop a holistic understanding of disenrollment across time (and disenrollment due to nonpayment of POWER Account Contribution) – both at yearly (presented in Section J. Goal 4) and monthly levels. Benefit plan assignment can change from month to month based on changes in member income and other factors, resulting in the possibility of multiple disenrollments in a calendar year. Therefore, comparing monthly disenrollment counts and trends to summarized yearly counts and trends is not recommended. Summarized yearly counts of members presented in the report are unique member counts (irrespective of number of disenrollment or coverage month). Summarized monthly counts of members presented in section J. Goal 4 are not unique member counts as members may have multiple disenrollments.

Member income and medically frail status are key considerations when evaluating disenrollment trends related to nonpayment. For example, members with income greater than 100% FPL (HIP Plus or HIP Basic members changing categories to HIP Plus due to income increase above 100% FPL) and not identified as medically frail or residing in a domestic violence shelter or state-declared disaster area are subject to disenrollment and lock-out for nonpayment of POWER Account Contribution; HIP members with income greater than 100% FPL and identified as medically frail or residing in a domestic violence shelter or state-declared disaster area are not subject to disenrollment due to nonpayment of POWER Account Contribution. HIP Plus members with income less than 100% FPL are allowed to transition to HIP Basic if they do not make the required HIP Plus payments. In this section, we present the discussion on monthly disenrollment by these selected member sociodemographic characteristics.

Based on discussions with the State, there are applicants who are eligible to receive HIP Plus benefits based on all other criteria for initial eligibility but, were denied since payment of initial POWER Account Contribution is a requirement for applicants with income over 100% FPL. These could be members trying to re-enroll after disenrollment or serving a lockout period for noncompliance with demonstration policies or new applicants. Records for these individuals were not provided in the administrative data used for this evaluation given the evaluation’s focus on the impact of HIP on member utilization, access to care, and compliance or understanding of program policies. The State plans to start capturing data on this cohort of potential HIP members through the new measures implemented as part of the Centers for Medicare & Medicaid Services (CMS) Quarterly monitoring reports. The State will start reporting this data for 2021 and onwards following the finalization of monitoring the protocol. This report does not include disenrollment for this cohort of potential members. Measure 2 for Goal 4, Hypothesis 1, Research Question 1.2 identifies HIP members who never became Goal 4 HIP Plus member in the
calendar year due to not paying POWER Account Contribution. The majority of these members received HIP Basic coverage.

The results presented in this section leverage known information from monthly enrollment data. We calculated the disenrollment rate for month ‘t’ as the number of disenrollments reported in disenrollment data for month ‘t+1’ divided by number of members enrolled in month ‘t’. This is because members enrolled in month ‘t’ who got disenrolled end of the month were reported in the disenrollment data in month ‘t+1’. There are nuances in how monthly income is tracked and reported in the data, as discussed in Section F. Goal 4 subsection Identification of FPL. As a result, any results presented at the monthly level need to be used and interpreted with caution. We present the results in this in the following order:

1. Discussion of disenrollment (overall and due to nonpayment) by known monthly member income and medical frail status
2. Disenrollment due to nonpayment for members potentially subject to disenrollment (i.e., restricted to member population having income over 100% FPL and not medically frail)
3. Discussion of disenrollment (overall and due to nonpayment) by variety of sociodemographic characteristics including age, sex, race, and geography of residence

Monthly Income
Generally, the income level in the Goal 4 HIP member population has increased over time (see Exhibit IX.9 below and Exhibit F.4.6), specifically:

- The proportion of Goal 4 HIP Basic members enrolled with income 0% of FPL decreased from February 2015 (93%) to April 2018 (57%). From March 2018 to the end of 2019, the proportion of Goal 4 HIP Basic members with income 0% FPL was stable at approximately 65%.
- The proportion of Goal 4 HIP Plus members enrolled with income 0% of FPL did not substantially change from February 2015 (43%) to December 2019 (49%).
- The proportion of Goal 4 HIP Basic members having income 1% to 100% of FPL rose from February 2015 (6%) to December 2017 (39%) at which point the proportion began decreasing to 29% in December 2019. For Goal 4 HIP Plus, the proportion of members having income 1% to 100% of FPL stayed consistent from 2015 – 2019.
- Both Goal 4 HIP Basic and Plus had consistent proportions of members with income greater than 100% FPL from 2015 – 2019.

COVID-19 PHE (2020): Part of the increase in 2020 for Plus members having incomes of 0% FPL may be due to a change in the enrollment processes during the PHE where state accepted self-attestation of income on the application, so individuals did not have to verify income. If members failed to verify income, they were not subject to disenrollment. Hence this increased proportion of enrollment could represent a difference in data collection polices.
Exhibit IX.9: Enrollment Trend by Monthly Income Level and Benefit Plan (February 2015 – December 2020)

Note: Analyses use the Goal 4 definition of HIP member categories, as described in Section F, Exhibit F.4.1


Exhibits IX.10a and IX.10b show the number and rate of monthly disenrollments (all reasons) by income level and benefit plan. Overall observations include:

- The majority of the disenrollments were among members with income at 0% FPL (both HIP Basic and HIP Plus).
- All proportions of member incomes by FPL increased steadily from 2015 to the end of 2017 before starting to decline in 2019.
- For 2016 and 2017, the total number of disenrollments was highest in February in comparison to all other months in the calendar year. Based on discussions with the State, since HIP 2.0 was implemented in February 2015, the higher number of disenrollments in February 2016 and 2017 could be an artifact of 12-month eligibility renewal. Thereby, the disenrollment rates for January 2016 and 2017 are higher compared to other months in the year (see above discussion regarding calculation of disenrollment rates).
- Across the four-year time span, the disenrollment rate was higher for HIP Basic members compared to HIP Plus members. For both HIP Basic and HIP Plus, members having income above 100% FPL had a higher rate of disenrollment than members under 100% FPL.
Exhibit IX.10a: Disenrollment Count by Monthly Income Level and Benefit Plan (February 2015 – December 2020)

Note: Analyses use the Goal 4 definition of HIP member categories, as described in Section F, Exhibit F.4.1


Exhibit IX.10b: Disenrollment Rate by Monthly Income Level and Benefit Plan (February 2015 – December 2020)

Note: Analyses use the Goal 4 definition of HIP member categories, as described in Section F, Exhibit F.4.1

Disenrollment due to nonpayment represented a relatively small proportion of overall disenrollment (refer Exhibit F.4.4a and Exhibit F.4.9 for a summary by year). Exhibit IX.11a and Exhibit IX.11b shows the number and rate of disenrollment by monthly income and benefit plan. Overall observations include:

- The number of disenrollments due to nonpayment varied by month and income level.
- In 2015 and 2016 (and first two months of 2017), the majority of members disenrolled due to nonpayment had income at 0% FPL (Basic and Plus). Since March 2017, most of the disenrollments due to nonpayment were associated with members having income greater than 100% of FPL (Basic and Plus).
- There were small number of members with income less than 100% FPL who had disenrollment due to nonpayment between March 2017 and December 2019.
- The rate of disenrollment for HIP Plus members having income above 100% represented between 0% and 2% of the member population. Disenrollment for HIP Basic members having income above 100% varied significantly ranging between 0% and 18% of the member population. Although the rate of disenrollment for HIP Basic members with income above 100% seems high, this is a very small member cohort with an average of 300 members per month as seen in Exhibit IX.10a. HIP Basic members over 100% of the FPL by definition have 60 days to make a payment or will face disenrollment; it is possible that these members did not understand the need to make a payment to maintain benefits or may have declined to make the payment.
- Typically, the number of disenrollments in the early months of each calendar year is relatively lower and increases from August thru December. Based on discussions with the State, the lower number of disenrollments in the early months could be due to the payment grace period (beginning in 2018) and the relatively higher number of redeterminations compared to other months. Increases in disenrollment rates in the later part of the year might be due to marketplace and employer open enrollment. Additionally, according to discussions with the State, there were timing and operational considerations between the different systems. For example, if in a particular month a managed care entity nonpayment file was loaded into the system after mid-month, individuals that did not pay in that month will not be disenrolled until the end of the month to allow for the required notification timelines. This can result in a lower nonpayment rate in the month with the file loaded after mid-month and a higher nonpayment rate in the following month. According to the State, the instances of such occurrences has decreased over the course of the HIP program.

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35 There are nuances in how monthly income is tracked and reported (data transfer between eligibility and MMIS) in historical data that resulted in null FPL values. in the data. See Section F, Goal 4 subsection Identification of FPL for details.
Exhibit IX.11a: Disenrollment Count Due to Nonpayment by Monthly Income Level and Benefit Plan (February 2015 – December 2020)

Note: Analyses use the **Goal 4** definition of HIP member categories, as described in **Section F, Exhibit F.4.1**


Exhibit IX.11b: Disenrollment Rate Due to Nonpayment by Monthly Income Level and Benefit Plan (February 2015 – December 2020)

Note: Analyses use the **Goal 4** definition of HIP member categories, as described in **Section F, Exhibit F.4.1**

Note: While the rate of disenrollment for HIP Basic members with income above 100% is the highest, the overall number is relatively low (see discussion above Exhibit IX.11.a).

Health Status – Medically Frail

HIP Plus members identified as medically frail do not get locked out or disenrolled for not making a POWER Account Contribution. Medically frail refers to a federally-required designation of members who have disabling mental disorders, including serious mental illness; chronic substance use disorders; serious or complex medical conditions; physical, intellectual or developmental disabilities that significantly impair the ability to perform one or more activities of daily living; or a disability determination based on Social Security Administration criteria. These members have a medically frail flag of Y in the monthly enrollment data. Results presented in this section use the available medically frail status in the monthly enrollment data. Since medically frail status can change across months, comparing yearly results to monthly results is not recommended.

The number of members identified as medically frail has increased across time (see Exhibit IX.12). In February 2015, about 4% of the HIP Basic member population and 11% of the HIP Plus member population was identified as medically frail. This proportion increased to an average of 27% of HIP Basic members and 34% of HIP Plus members in December 2019. The growth in number of members identified as medically frail is notable especially among HIP Plus members.

Exhibit IX.12: Enrollment Trend by Medically Frail and Benefit Plan (February 2015 – December 2020) 

Note: Analyses use the Goal 4 definition of HIP member categories, as described in Section F, Exhibit F.4.1

Exhibits IX.13a, IX.13b, IX.14a, and IX.14b show the disenrollment count and rate by medically frail status and benefit plan:

- The majority of the disenrollments are among members not identified as medically frail (for both Basic and Plus) with an increasing trend from February 2015 – May 2018 and a decreasing trend starting in June 2018. Although the number of disenrollments among HIP Plus members are relatively larger than HIP Basic, the proportion of members that disenrolled among HIP Plus members is smaller than the proportion of HIP Basic members.
Among HIP Plus members, the disenrollment rate is similar between medically frail and not medically frail members while among HIP Basic members, the disenrollment rate is slightly higher among not medically frail members.

Almost all disenrollment due to nonpayment are among not medically frail members. There is a small number of disenrollments due to nonpayment among members identified as medically frail. According to the State, a medically frail individual can be disenrolled for nonpayment if nonpayments coincide with the loss of medically frail status in the same month. Based on available data, it is not known if such a situation was the reason for the disenrollment due to nonpayment among medically frail members.

Exhibit IX.13a: Disenrollment Count by Medically Frail and Benefit Plan (February 2015 – December 2020)

Note: Analyses use the Goal 4 definition of HIP member categories, as described in Section F, Exhibit F.4.1

Note: The Monthly Income section provides additional context for the higher disenrollment counts in February of each year.
Exhibit IX.13b: Disenrollment Rate by Medically Frail and Benefit Plan (February 2015 – December 2020)

*Note: Analyses use the Goal 4 definition of HIP member categories, as described in Section F, Exhibit F.4.1*


Note: The Monthly Income section provides additional context for the higher disenrollment rates in January of each year.

Exhibit IX.14a: Disenrollment Count Due to Nonpayment by Medically Frail and Benefit Plan (February 2015 – December 2020)

*Note: Analyses use the Goal 4 definition of HIP member categories, as described in Section F, Exhibit F.4.1*

Exhibit IX.14b: Disenrollment Rate Due to Nonpayment Among Members Not Medically Frail by Benefit Plan (February 2015 – December 2020)

Note: Analyses use the Goal 4 definition of HIP member categories, as described in Section F, Exhibit F.4.1


Note: Since number of disenrollment due to nonpayment for Frail population was very small (on average less than 0.3% of the member population), this exhibit does not include lines associated with the medically frail population.

Disenrollment among Members who Could be Disenrolled for Nonpayment of POWER Account Contribution

Based on HIP policy, as discussed in Section F. Goal 4, disenrollment due to nonpayment of POWER Account Contribution primarily affects benefit coverage for members with income above 100% FPL and not identified as medically frail. As discussed in the Monthly Income and Health Status – Medically Frail sections, monthly disenrollment due to nonpayment is highly variable – irrespective of benefit plan, income level or medically frail status (refer subsections Monthly Income and Health Status – Medically Frail above). In this section, we provide an exposition of a nuanced metric for disenrollment rate due to nonpayment – proportion of members having disenrollment among members who could be disenrolled for nonpayment.

The disenrollment rate for these analyses was calculated as follows:

1. Numerator: Number of HIP members having disenrollment due to nonpayment in month ‘t+1’ (members enrolled in month ‘t’ who disenroll after the month are reported in disenrollment data in month ‘t+1’).
2. Denominator: Enrolled HIP members in month ‘t’ having income more than 100% FPL and not having a medically frail indicator. This cohort of members can be considered as members who can be disenrolled for nonpayment of POWER Account Contribution. This member cohort can potentially include (but not known based on available data) some members who are residing in
a domestic violence shelter or in a state-declared disaster area and hence not subject to disenrollment.\textsuperscript{36}

3. Rate: Disenrollment rate for month ‘t’ is numerator based on month ‘t+1’ divided by denominator based on month ‘t’

\textbf{Exhibit IX.15} shows the disenrollment rate due to nonpayment for overall program and for HIP Basic and HIP Plus members. Overall observations include:

- **Overall HIP:** The monthly disenrollment rate is variable, ranging from 0\% to 5\%, with no clear increasing or decreasing trend.

- **HIP Basic members:** The disenrollment rate is highly variable across months ranging from 0\% to 31\% between 2016 and 2019. Although this member population represents a relatively small cohort of members (on average 4,600 members each month as illustrated in \textbf{Exhibit IX.9}), the number of disenrollments in comparison to HIP Plus members are not small (e.g., for 2015-2019, the average number of disenrollments in a month for HIP Basic members was 393 in comparison to 503 for HIP Plus). The majority of disenrollments among HIP Basic members were for members with income greater than 100\% FPL (see \textbf{Exhibit IX.11a}); it is possible that these are members who had increase in income and needed to make the POWER Account payment to maintain coverage.

- **HIP Plus members:** The disenrollment rate varied across months ranging between 0\% and 3.5\%. The average number of disenrollments among HIP Plus members by month saw a decline from 2016 (711 members per month, on average) to 2019 (462 members per month, on average).

This disenrollment due to nonpayment trend in perspective of members who could have been disenrolled is similar to the trends observed for the Goal 4 HIP population analyzing by income and medical frail status (discussed above).

\textsuperscript{36} It is a requirement that members report change of address within 10 days of the date the change occurred. Precautions can be taken in the case of victims of domestic violence. If prior to effective date of disenrollment a member reports to the Division of Family Resources (DFR) that they meet those criteria and should not have been subject to disenrollment, DFR will reinstate coverage. DFR is required to give advance notice of adverse action so, depending on the time of the month the authorizing action was taken, members have anywhere from 1 – 5 weeks to let DFR know of that change.
Other Sociodemographic Characteristics

This section presents an overview of monthly enrollment and disenrollment trends for Goal 4 HIP members by selected sociodemographic characteristics. Comparison of monthly results to summarized yearly results discussed in the report is not recommended as members can have different months of coverage and multiple disenrollments within a particular year.

Sex

Trends in the proportion of Female to Male individuals were similar for enrollment and disenrollment. Female members account for 76% of enrollees in February 2015 to 61% of enrollees in December 2019 (see Exhibit IX.16). Female members accounted for 57% – 69% of individuals disenrolled in the Goal 4 HIP population between 2015 – 2019 (see Exhibit IX.17a). Although the Female members accounted for higher number of disenrollees, the disenrollment rate among Female members was lower compared to Male for both HIP Plus and HIP Basic (see Exhibit IX.17b). The proportion of members disenrolled for nonpayment between Male and Female was highly variable across months (see Exhibit IX.18a), while disenrollment rate due to nonpayment was slightly higher among Female members compared to Male (see Exhibit IX.18b) among both HIP Basic and HIP Plus.
Exhibit IX.16: Enrollment Count by Sex and Benefit Plan (February 2015 – December 2020)
Note: Analyses use the Goal 4 definition of HIP member categories, as described in Section F, Exhibit F.4.1


Exhibit IX.17a: Disenrollment Count by Sex and Benefit Plan (February 2015 – December 2020)
Note: Analyses use the Goal 4 definition of HIP member categories, as described in Section F, Exhibit F.4.1

Note: The Monthly Income section provides context for the higher disenrollment counts in February of each year.
Exhibit IX.17b: Disenrollment Rate by Sex and Benefit Plan (February 2015 – December 2020)

Note: Analyses use the Goal 4 definition of HIP member categories, as described in Section F, Exhibit F.4.1

Note: The Monthly Income section provides additional context for the higher disenrollment rates in January of each year.

Exhibit IX.18a: Disenrollment Count Due to Nonpayment by Sex and Benefit Plan (February 2015 – December 2020)

Note: Analyses use the Goal 4 definition of HIP member categories, as described in Section F, Exhibit F.4.1

**Exhibit IX.18b: Disenrollment Rate Due to Nonpayment by Sex and Benefit Plan (February 2015 – December 2020)**

*Note: Analyses use the Goal 4 definition of HIP member categories, as described in Section F, Exhibit F.4.1*

Age Group

The proportion of individuals enrolled that were ages 60 – 66 increased slightly from year to year, from approximately 5% throughout 2015 to approximately 7% throughout 2019. The proportion of members below age 40 declined steadily from approximately 59% throughout 2015 to approximately 55% throughout 2019 (see Exhibit IX.19a, Exhibit IX.19b). Overall observations on member disenrollment include:

- The proportion of members disenrolled by age group varied from month to month, with approximately 54% to 67% of disenrolled members below age 40, 29% to 39% of disenrolled members were members between ages 40 – 59, and 4% to 8% of disenrolled members were ages 60 – 66 (see Exhibit IX.20a, Exhibit IX.20b for counts by HIP Basic and HIP Plus).
- The disenrollment rate was slightly higher among members ages 19 – 29 in comparison to other ages for both HIP Basic and HIP Plus members (see Exhibit IX.20c, Exhibit IX.20d).
- The proportion of members disenrolled for nonpayment by age group was similar, with 50% to 87% of members disenrolled for nonpayment below age 40, 13% to 46% of members disenrolled for nonpayment ages 40 – 59, and 0% to 8% of disenrolled for nonpayment members ages 60 – 66. Disenrollment rate due to nonpayment for Plus members (although very small ranging between 0% and 0.8%) were lowest for members ages 60 and above and highest among members ages 19 – 29 (see Exhibit IX.21a, Exhibit IX.21b).

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37 Although members are only eligible for the HIP program until age 64, the analysis includes some members who are 65 or 66.
COVID-19 PHE (2020): members age 60 and above can still age out to other Medicaid programs even with COVID-19 rules in effect. This may be a reason why these members were the highest disenrollment group in 2020.

The discrete shifts in the proportion of individuals enrolled at each age group at the beginning and end of each year that are apparent in the following exhibits are artifactual as age was computed as the individual’s age at the end of the year.

Exhibit IX.19a: Enrollment Count by Age Group for HIP Basic Members (February 2015 – December 2020)

Note: Analyses use the Goal 4 definition of HIP member categories, as described in Section F, Exhibit F.4.1

Exhibit IX.19b: Enrollment Count by Age Group for HIP Plus Members (February 2015 – December 2020)

Note: Analyses use the **Goal 4** definition of HIP member categories, as described in **Section F, Exhibit F.4.1**


Exhibit IX.20a: Disenrollment Count by Age Group for HIP Basic Members (February 2015 – December 2020)

Note: Analyses use the **Goal 4** definition of HIP member categories, as described in **Section F, Exhibit F.4.1**


Note: The Monthly Income section provides context for the higher disenrollment counts in February of each year.
Exhibit IX.20b: Disenrollment Count by Age Group for HIP Plus Members (February 2015 – December 2020)

Note: Analyses use the Goal 4 definition of HIP member categories, as described in Section F, Exhibit F.4.1

Note: The Monthly Income section provides context for the higher disenrollment counts in February of each year.

Exhibit IX.20c: Disenrollment Rate by Age Group for HIP Basic Members (February 2015 – December 2020)

Note: Analyses use the Goal 4 definition of HIP member categories, as described in Section F, Exhibit F.4.1

Note: The Monthly Income section provides additional context for the higher disenrollment rates in January of each year.
Exhibit IX.20d: Disenrollment Rate by Age Group for HIP Plus Members (February 2015 – December 2020)

Note: Analyses use the Goal 4 definition of HIP member categories, as described in Section F, Exhibit F.4.1


Exhibit IX.21a: Disenrollment Rate Due to Nonpayment by Age Group for HIP Basic Members (February 2015 – December 2020)

Note: Analyses use the Goal 4 definition of HIP member categories, as described in Section F, Exhibit F.4.1

**Race**

The distribution of members in Goal 4 by race did not change across time with 68% of members reporting as Caucasian, 17% of members reporting as Black, 2% of members reporting at Asian or Pacific Islander, and 13% reporting all other race (or not available) from February 2015 through December 2019. However, the proportion varied between Basic and Plus (see Exhibit IX.22a, Exhibit IX.22b for distribution specifically by HIP Basic and HIP Plus member: approximately 25% of Basic members were Black compared to 14% of Plus members.

The proportion of disenrolled members was similar to the proportion enrolled for all races and was fairly constant from month to month. (see Exhibit IX.23a, Exhibit IX.23b for disenrollment by HIP Basic and HIP Plus). Specifically:

- The proportion of disenrolled members who were Caucasian ranged from 61%-68%, Black ranged from 18% to 23%, Asian or Pacific Islander ranged from 2%-3%, and all other race (or not available) ranged from 11% to 13%.

Since 2015, Black Plus members have had slightly higher disenrollment rates in comparison to other Plus members (see Exhibit IX.23c, Exhibit IX.23d). The gap in disenrollment rates among Black Plus members compared to other races was the largest in 2019. Meanwhile, the disenrollment rates among Black Basic members were more aligned with the disenrollment rates among other races.
The disenrollment rates among Basic members were higher than Plus members for 2015 – 2019. The disenrollment rates for nonpayment were highest among members who were Asian or Pacific Islander for HIP Basic from 2015 – 2019. The disenrollment rates for nonpayment among all races saw a declining trend starting mid-2016. The disenrollment rates for nonpayment were highest among members who were Black for HIP Plus from 2015 – 2019. The proportion of members who disenrolled due to nonpayment varied each month with no visible trends across years (see Exhibit IX.24a, Exhibit IX.24b).

**Exhibit IX.22a: Enrollment Count by Race for HIP Basic Members (February 2015 – December 2020)**

*Note: Analyses use the Goal 4 definition of HIP member categories, as described in Section F, Exhibit F.4.1*

![Enrollment Count by Race for HIP Basic Members](image)


**Exhibit IX.22b: Enrollment Count by Race for HIP Plus Members (February 2015 – December 2020)**

*Note: Analyses use the Goal 4 definition of HIP member categories, as described in Section F, Exhibit F.4.1*

![Enrollment Count by Race for HIP Plus Members](image)

**Exhibit IX.23a: Disenrollment Count by Race for HIP Basic Members (February 2015 – December 2020)**

*Note: Analyses use the Goal 4 definition of HIP member categories, as described in Section F, Exhibit F.4.1*


Note: The Monthly Income section provides context for the higher disenrollment counts in February of each year.

**Exhibit IX.23b: Disenrollment Count by Race for HIP Plus Members (February 2015 – December 2020)**

*Note: Analyses use the Goal 4 definition of HIP member categories, as described in Section F, Exhibit F.4.1 Source: HIP monthly enrollment files, February 2015 – December 2020.*
Exhibit IX.23c: Disenrollment Rate by Race for HIP Basic Members (February 2015 – December 2020)

Note: Analyses use the Goal 4 definition of HIP member categories, as described in Section F, Exhibit F.4.1

Note: The Monthly Income section provides additional context for the higher disenrollment rates in January of each year.

Exhibit IX.23d: Disenrollment Rate by Race for HIP Plus Members (February 2015 – December 2020)

Note: Analyses use the Goal 4 definition of HIP member categories, as described in Section F, Exhibit F.4.1

Exhibit IX.24a: Disenrollment Rate Due to Nonpayment by Race for HIP Basic Members (February 2015 – December 2020)

Note: Analyses use the Goal 4 definition of HIP member categories, as described in Section F, Exhibit F.4.1


Exhibit IX.24b: Disenrollment Rate Due to Nonpayment by Race for HIP Plus Members (February 2015 – December 2020)

Note: Analyses use the Goal 4 definition of HIP member categories, as described in Section F, Exhibit F.4.1


**Geography of Residence**

The proportion of Goal 4 HIP members enrolled by geography of residence was very similar from month to month across time (2015 – 2019), with approximately 78% of members living in metro areas, approximately 7% of members living in nonmetro areas with 20,000 or more residents, approximately 14% living in nonmetro areas with 2,500 – 19,999 residents, and approximately 1% of members living in rural areas with less than 2,500 residents (see Exhibit IX.25a, Exhibit IX.25b shows distributions by HIP Basic and HIP Plus). The distribution by region for disenrolled members were similar to the enrollment distribution across time (see Exhibit IX.26a, Exhibit IX.26b). The proportion of members disenrolled due to nonpayment living in metro areas range from 71% – 85%, the proportion living in nonmetro areas with 20,000 or more residents ranged from 4% – 11%, the proportion living in nonmetro areas with 2,500 – 19,999 residents ranged from 7% – 17%, and the proportion living in rural areas with less than 2,500 residents ranged from 0% – 2%. The disenrollment rates (overall and due to nonpayment) were slightly higher for HIP Basic compared to HIP Plus members, with disenrollment rates overall declining for all members starting in 2018 (see Exhibit IX.26c, Exhibit IX.26d, and Exhibit IX.27a, Exhibit IX.27b).

**Exhibit IX.25a: Enrollment Count by Region for HIP Basic Members (February 2015 – December 2020)**

*Note: Analyses use the Goal 4 definition of HIP member categories, as described in Section F, Exhibit F.4.1*

Exhibit IX.25b: Enrollment Count by Region for HIP Plus Members (February 2015 – December 2020)

Note: Analyses use the Goal 4 definition of HIP member categories, as described in Section F, Exhibit F.4.1


Exhibit IX.26a: Disenrollment Count by Region for HIP Basic Members (February 2015 – December 2020)

Note: Analyses use the Goal 4 definition of HIP member categories, as described in Section F, Exhibit F.4.1

Note: The Monthly Income section provides context for the higher disenrollment counts in February of each year.
Exhibit IX.26b: Disenrollment Count by Region for HIP Plus Members (February 2015 – December 2020)

Note: Analyses use the Goal 4 definition of HIP member categories, as described in Section F, Exhibit F.4.1


Exhibit IX.26c: Disenrollment Rate by Region for HIP Basic Members (February 2015 – December 2020)

Note: Analyses use the Goal 4 definition of HIP member categories, as described in Section F, Exhibit F.4.1

Note: The Monthly Income section provides additional context for the higher disenrollment rates in January of each year.
Exhibit IX.26d: Disenrollment Rate by Region for HIP Plus Members (February 2015 – December 2020)

Note: Analyses use the Goal 4 definition of HIP member categories, as described in Section F, Exhibit F.4.1


Exhibit IX.27a: Disenrollment Rate Due to Nonpayment by Region for HIP Basic Members (February 2015 – December 2020)

Note: Analyses use the Goal 4 definition of HIP member categories, as described in Section F, Exhibit F.4.1

Exhibit IX.27b: Disenrollment Rate Due to Nonpayment by Region for HIP Plus Members (February 2015 – December 2020)

*Note: Analyses use the Goal 4 definition of HIP member categories, as described in Section F, Exhibit F.4.1*


**Medicaid Enrollment Rate Using American Community Survey Data**

Exhibit IX.28 shows the estimated parameters of the Linear Interrupted-Time-Series (ITS) model of Medicaid enrollment rates in Indiana using American Community Survey (ACS) data. The model controls for population demographics and income. The primary focus of the model was to examine the change in Medicaid enrollment rates in 2018 and after relative to 2016-2017 period across income tiers.
Exhibit IX.28: Linear ITS Regression Model of Medicaid Enrollment Rates in Indiana (ACS 2016-2019)

<table>
<thead>
<tr>
<th>Covariates</th>
<th>Linear Model</th>
<th>Coef.</th>
<th>Std. Err.</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post (YR&gt;2017)* FPL &lt;23%</td>
<td>0.037</td>
<td>0.009</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Post (YR&gt;2017)* FPL 23-50%</td>
<td>-0.009</td>
<td>0.017</td>
<td>0.607</td>
<td></td>
</tr>
<tr>
<td>Post (YR&gt;2017)* FPL 51-75%</td>
<td>0.045</td>
<td>0.016</td>
<td>0.005</td>
<td></td>
</tr>
<tr>
<td>Post (YR&gt;2017)* FPL 76-100%</td>
<td>-0.007</td>
<td>0.014</td>
<td>0.630</td>
<td></td>
</tr>
<tr>
<td>Post (YR&gt;2017)* FPL 101-138%</td>
<td>0.040</td>
<td>0.011</td>
<td>0.000</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>POWER Account Income Tier (Ref: FPL &lt;23%)</th>
<th>Coef.</th>
<th>Std. Err.</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>FPL 23-50%</td>
<td>0.060</td>
<td>0.013</td>
<td>0.000</td>
</tr>
<tr>
<td>FPL 51-75%</td>
<td>0.094</td>
<td>0.013</td>
<td>0.000</td>
</tr>
<tr>
<td>FPL 76-100%</td>
<td>0.045</td>
<td>0.012</td>
<td>0.000</td>
</tr>
<tr>
<td>FPL 101-138%</td>
<td>-0.039</td>
<td>0.010</td>
<td>0.000</td>
</tr>
</tbody>
</table>

| Age                                        | 0.005 | 0.000     | 0.000   |
| Male                                       | -0.115| 0.006     | 0.000   |

<table>
<thead>
<tr>
<th>Race_cat (Ref: Non-Hispanic-White)</th>
<th>Coef.</th>
<th>Std. Err.</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Hispanic Black</td>
<td>0.073</td>
<td>0.008</td>
<td>0.000</td>
</tr>
<tr>
<td>Non-Hispanic Other</td>
<td>-0.035</td>
<td>0.011</td>
<td>0.001</td>
</tr>
<tr>
<td>Hispanic</td>
<td>-0.092</td>
<td>0.009</td>
<td>0.000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Educ_cat (Ref: Less than High School)</th>
<th>Coef.</th>
<th>Std. Err.</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School Graduate</td>
<td>-0.092</td>
<td>0.008</td>
<td>0.000</td>
</tr>
<tr>
<td>College Graduate</td>
<td>-0.212</td>
<td>0.011</td>
<td>0.000</td>
</tr>
</tbody>
</table>

| Intercept                                  | 0.289 | 0.012     | 0.000   |
| Observations                               | 28,000|           |         |

Source: American Community Survey data 2016-2019. The effects in bold are the ones of primary interest in the context of the study of the change in Medicaid enrollment rates during 2018-2019 period relative to the rates in 2016-2017 period for each income tier.

Note: The sample is restricted to Medicaid eligible population ages 19 – 64 in Indiana. Medicaid eligible population is defined as those with FPL of less than 139%, no Medicare coverage, and no supplemental security income.
### Exhibit IX.29: Impact of Rollover on Continuous Months of Enrollment (Negative Binomial Model)

<table>
<thead>
<tr>
<th>Factors (and Levels)</th>
<th>Continuous Months Enrollment</th>
<th>Incidence Rate Ratio (IRR)</th>
<th>Estimate</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rollover (Ref: No Rollover)</td>
<td>Rollover Applied</td>
<td>1.24</td>
<td>0.21</td>
<td>0.00</td>
</tr>
<tr>
<td>Year (Ref: 2017)</td>
<td>2018</td>
<td>0.92</td>
<td>-0.09</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>2019</td>
<td>0.94</td>
<td>-0.06</td>
<td>0.00</td>
</tr>
<tr>
<td>HIP Member Category (Ref: Plus Only)</td>
<td>Basic</td>
<td>0.87</td>
<td>-0.14</td>
<td>0.14</td>
</tr>
<tr>
<td></td>
<td>Switcher</td>
<td>1.17</td>
<td>0.16</td>
<td>0.00</td>
</tr>
<tr>
<td>Region (Ref: Nonmetro)</td>
<td>Metro</td>
<td>1.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Sex (Ref: Male)</td>
<td>Female</td>
<td>1.05</td>
<td>0.05</td>
<td>0.00</td>
</tr>
<tr>
<td>Age Category (Ref: Age 19-29)</td>
<td>Age 30-39</td>
<td>1.06</td>
<td>0.06</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Age 40-49</td>
<td>1.09</td>
<td>0.08</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Age 50-59</td>
<td>1.10</td>
<td>0.09</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Age 60-66</td>
<td>1.07</td>
<td>0.07</td>
<td>0.00</td>
</tr>
<tr>
<td>Race Category (Ref: Non-Hispanic White)</td>
<td>Asian or Pacific Islander</td>
<td>1.03</td>
<td>0.03</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Black</td>
<td>0.96</td>
<td>-0.04</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>1.01</td>
<td>0.01</td>
<td>0.00</td>
</tr>
<tr>
<td>Marital Status (Ref: Not Married)</td>
<td>Married</td>
<td>1.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Frail Indicator (Ref: Not Frail)</td>
<td>Frail</td>
<td>1.18</td>
<td>0.16</td>
<td>0.00</td>
</tr>
<tr>
<td>% Federal Poverty Level (%) (Ref: 0%-22% FPL)</td>
<td>23%-50% FPL</td>
<td>1.05</td>
<td>0.05</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>51%-75% FPL</td>
<td>1.04</td>
<td>0.04</td>
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### Exhibit IX.30: Impact of Rollover on Disenrollment (Logistic Regression Model)

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Attachment X: Healthy Indiana Plan Evaluation FSSA Key Informant Interview Questions

[NAME] conducted separate 45 – 60-minute interviews with Family and Social Services Administration (FSSA) officials and tailored the sample question list based on role.

**Sample Question List**

- Thinking back to the beginning of 2018, what aspects of the HIP have been the most effective, and why?
- Thinking back to the beginning of 2018, what have been the main challenges related to HIP? How is FSSA addressing those challenges?
- What themes has FSSA noted when reviewing information on HIP member satisfaction?
- What are the main components of FSSA’s communication strategy regarding the HIP program and policies?
- How does FSSA involve/coordinate with the managed care entities (MCEs) regarding HIP-related communications?
- What are the key strategies used to support member understanding of Personal Wellness and Responsibility (POWER) Account payment requirements and rollover?
- How has the implementation of the tiered POWER Account payment structure affected MCEs operations/processes, if at all?
- What are the main challenges for successful HIP implementation and monitoring going forward? How are those different from today?
- To what extent has FSSA developed strategies to re-engage members who do not meet Gateway to Work reporting requirements and have eligibility suspended, particularly as the reporting requirements are fully phased-in?
- What new initiatives or programs in Indiana does FSSA anticipate will impact the HIP eligible population and their participation in HIP or other insurance options (e.g., Bridge program)?
- What would you like to improve about HIP?
- Is there anything else you would like to add?
Attachment XI: Healthy Indiana Plan Evaluation Managed Care Entity Interviews: General and Tobacco Cessation

Managed Care Entity Interview: General

The questions below are for the general managed care entity (MCE) interviews. [NAME] met with the four MCEs separately for 30 – 45-minute interviews. Tobacco questions were omitted as the [NAME] will conduct separate tobacco specific interviews with the MCEs. The questions were sent to each MCE before the call so they could identify the appropriate staff to attend. MCE interviewees were asked to think about current and future challenges/successes for the HIP as they responded to these questions.

Overall

1. What has been your organization’s overall experience with HIP?
2. What do you see as the key successes for your organization related to implementation and administration of HIP?
3. What do you see as the main short- and long-term challenge for your organization related to successful implementation and administration of HIP?

Gateway to Work

4. Overall, what is your organization’s strategy for implementing and administering the Gateway to Work program?
5. What have been the greatest successes and challenges related to Gateway to Work?
6. Please describe your member reporting process for Gateway to Work, including how you address member reporting burden.
7. Please describe the strategies your organization uses to support member understanding of the Gateway to Work program.

Personal Wellness and Responsibility (POWER) Account

8. Overall, what is your organization’s strategy for collecting member POWER Account Contributions?
9. What have been the greatest successes and challenges related to collecting member POWER Account Contributions?
10. Overall, what is your organization’s strategy for implementing and administering POWER Accounts, including rollover policies?
11. What have been the greatest successes and challenges related to POWER Accounts, including rollover?
12. Please describe the strategies your organization uses to support member understanding of POWER Accounts, including contributions and rollover.
Member Satisfaction

13. What areas are members most satisfied with? Least satisfied? (e.g., related to access, perceived barriers, cost, communication and transition between plans)

14. Do you have any special or unique initiatives to support member satisfaction/address areas of concern (beyond what is contractually required)?

15. How is HIP impacting member health?

Closing Thoughts

16. What would you improve about HIP?

17. Is there anything else you would like to add?

Managed Care Entity Interview: Tobacco Cessation

The questions below are for the tobacco cessation MCE interviews. [NAME] met with the four MCEs separately for 30 – 45-minute interviews. The questions were sent to each MCE before the call so they could identify the appropriate staff to attend. MCE interviewees were asked to think about current and future challenges/successes for HIP as they responded to these questions.

Overall

1. What is your role at [MCE]?

2. How does your plan identify tobacco users? How often is this information collected?

3. What percent of your HIP 2.0 members have you identified as tobacco users?

Cessation Services/Initiatives through MCE

4. [What changes has [MCE] made to tobacco cessation coverage, services, or other initiatives as a result of the Medicaid HIP renewal that was effective in January 2018?]
   a. Explain scope and timing (start date, implementation period, etc.)

5. How has [MCE] communicated changes in cessation coverage, services, or other initiatives to members?
   a. What is the general awareness of members regarding tobacco cessation coverage, services, and other initiatives?
   b. Are there any specific activities that [MCE] has done to promote, support, or encourage use of tobacco cessation services?

6. How are you tracking the use of, or participation in, these services and initiatives?
   a. What, if any, data are collected for these purposes?
   b. Have there been changes to physician billing for these services?
   c. Have you seen changes in the utilization of tobacco cessation services as a result of the Medicaid HIP renewal?
   d. What do you think are the reasons members do not use tobacco cessation services?

7. What challenges have you experienced in implementing changes to tobacco cessation coverage, services, or initiatives relevant to the HIP renewal?
   a. Successes?
   b. Any future plans?
Tobacco Premium Surcharge

8. In addition to communication regarding tobacco cessation services/initiatives, how has [MCE] communicated information to members about the tobacco premium surcharge?
   a. What is the general awareness and understanding by members regarding the tobacco premium surcharge?

9. Other than changes to cessation services, how has [MCE] been affected by the premium surcharge for tobacco users?
   a. Were any new processes required?

10. What are some challenges or successes that you’ve experienced in implementing changes related to the tobacco premium surcharge?
    a. Any future plans?
Attachment XII: Healthy Indiana Plan Evaluation Provider Interviews: Administrators, Eligibility, and Practitioners

Healthy Indiana Plan Provider Interview: Administrators

DESCRIPTION: This key informant interview guide applies to administrative staff for providers that serve HIP members.

Introduction and Overview of Purpose

Hello, my name is [NAME] calling from [NAME] on behalf of the Healthy Indiana Plan, also known as HIP. May I please speak with [INSERT NAME FROM SAMPLE]?

[OBTAIN CORRECT RESPONDENT; REINTRODUCE IF NECESSARY]

You should have received an email from the Indiana Family and Social Services Administration informing you or your practice about this provider interview.

Again, my name is [NAME]. I am from [NAME] and am working with [NAME] to conduct this interview. [NAME] was hired by the Indiana Family and Social Services Administration to perform a federally required independent evaluation of the HIP program. The purpose of this interview is to talk with you about your experiences with HIP and your understanding of member satisfaction with HIP.

You have been invited because your [hospital/organization/practice] provides services to HIP members.

Over the next 20 to 30 minutes, I will ask you about your role, satisfaction of HIP members you work with, and overall thoughts on HIP. We are having several other interviews like this one in Indiana. Hearing about your experience will help us better evaluate the program. The information from our evaluation will help Indiana assess HIP and identify potential changes to improve the care that HIP members receive. Your participation is voluntary, and your responses will remain confidential.

Your responses to our questions will be combined with responses from conversations we are having with other administrators. As a result, neither you nor any other person we are speaking with will be identifiable from your answers. Your combined responses will be used to write an interim evaluation report, available for public comment at the end of 2019. [NAME] will conduct additional interviews as part of the development of a final evaluation report due in 2022, which will also be available for public comment. You may choose not to answer any question, and you may choose, at any time, to stop the conversation for any reason.

What questions do you have before we continue? [Interviewer: pause for questions]

[If have questions, refer to the frequent questions document or read from it then ask again]

Can we begin? [Interviewer: pause for confirmation]

[If consent] I’d like to begin by thanking you for taking time out of your day to meet with me about HIP. I appreciate it.

[If do NOT consent] Thank you for taking time today, have a great day.
Participant Information

Q1. What is your role in the practice?
   [Confirm role is administrator]
   Do you also provide direct care services?
   Enter text here:

Q2. Your organization/practice may only participate with certain plans. Which of the following Indiana programs does your practice/organization participate in?
   - HOOSIER HEALTHWISE (HHW)
   - HEALTHY INDIANA PLAN (HIP) → IF THIS OPTION OR “NOT SURE BUT ACCEPT MEDICAID” OR “TRADITIONAL MEDICAID” NOT SELECTED, GO TO CLOSE
   - HOOSIER CARE CONNECT (HCC)
   - FEE-FOR-SERVICE (TRADITIONAL MEDICAID)
   - NOT SURE BUT ACCEPT MEDICAID
   - OTHER (SPECIFY)
   Enter text here:

Q3. What is your practice setting?
   - SOLO/ INDIVIDUAL PRACTICE
   - SINGLE-SPECIALTY GROUP (THIS CAN BE EITHER PRIMARY CARE OR SPECIALISTS)
   - MULTI-SPECIALTY GROUP (THIS CAN INCLUDE BOTH PRIMARY CARE AND SPECIALISTS)
   - ACUTE CARE HOSPITAL OR PHYSICIAN HOSPITAL ORGANIZATION (PHO)
   - REHABILITATION FACILITY
   - AMBULATORY SURGICAL CENTER (ASC)
   - FEDERALLY QUALIFIED HEALTH CENTER (FQHC)
   - RURAL HEALTH CENTER (RHC)
   - OUTPATIENT MENTAL HEALTH CLINIC
   - COMMUNITY MENTAL HEALTH CENTER (CMHC)
   - OTHER (SPECIFY)
   Enter text here:

Q4. How long has your practice/organization provided services to HIP members?
   [If do not provide immediate response, probe for range]
   - SINCE 2008 [For Interviewer: HIP 1.0, HIP 2.0, and Current HIP]
   - SINCE 2015 [For Interviewer: HIP 2.0 and Current HIP]
   - FROM 2018 TO PRESENT [For Interviewer: Current HIP only]
   - OTHER (SPECIFY)
   Enter text here:
Member Satisfaction with HIP

The next set of questions will ask about your understanding of member satisfaction with the Healthy Indiana Plan.

Q5. Please describe feedback you have heard from members about what areas of HIP they are most satisfied with.

Enter text here:

Q6. Please describe feedback you have heard from members about what areas of HIP they are least satisfied with.

Enter text here:

Q7. On a scale from very satisfied to very dissatisfied, how satisfied do you think members are with HIP?

[ ] VERY SATISFIED
[ ] SOMEWHAT SATISFIED
[ ] SOMEWHAT DISSATISFIED
[ ] VERY DISSATISFIED
[ ] DON’T KNOW
[ ] REFUSED
[ ] OTHER (SPECIFY)

Enter text here:

Q8. What kind of feedback, if any, have you received from members or via staff at your organization regarding HIP members’ ability to understand and make monthly HIP payments or copayments?

[If context is needed: Some HIP members are required to make monthly payments (based on income and tobacco use status, also known as Personal Wellness and Responsibility (POWER) Account Contributions) to maintain enrollment in the HIP program. Some HIP members must make copayments for certain services.

If more context is needed:

HIP members with family incomes over 100 percent of the federal poverty level (FPL) must pay a fixed monthly contribution (also known as POWER Account Contribution) which varies from $1 to $30 based on their family income and tobacco user status. If they (or in some cases their employer or non-profit organization) do not make these payments, their HIP coverage is closed. These members receive the “HIP Plus” benefit package.

HIP members with family incomes less than 100 percent of the FPL are not required to make monthly payments but do pay copayments for certain services. These members receive the “HIP Basic” benefit package.]

Enter text here:
Q9. What kind of feedback, if any, have you received from members or via staff at your organization regarding HIP members’ ability to understand and comply with HIP Gateway to Work requirements?

[If context is needed: Gateway to Work connects HIP members with ways to look for work, train for jobs, finish school, and volunteer. Some HIP members are required to participate in Gateway to Work activities to keep HIP benefits, other members may be exempt. The number of activity hours required for Gateway to Work began at zero in January 2019 to allow members time to learn about the program, and increases incrementally from 20 hours per month in July 2019 to 80 hours per month in July 2020.]

Enter text here:

Provider Perspective

The next set of questions will ask about overall HIP impact, member ability to pay copayments, and uncompensated care.

Q10. To what extent are you able to obtain the necessary information/approvals for HIP service delivery?

☐ ALWAYS
☐ MOST OF THE TIME
☐ NOT VERY OFTEN
☐ NEVER
☐ DON’T KNOW
☐ REFUSED
☐ OTHER (SPECIFY)

Enter text here:

Q11. Are you charging copayments to HIP members?

☐ YES
☐ NO
☐ SOMETIMES
☐ DON’T KNOW
☐ REFUSED

Q12. Do you pursue collections on unpaid copays?

☐ YES
☐ NO
☐ SOMETIMES
☐ DON’T KNOW
☐ REFUSED
Q13. For those HIP members who are required to pay copayments, what percent of them are making their copayments to you? Would you say it is... (READ LIST)

- LESS THAN 25 PERCENT
- 25 TO 49 PERCENT
- 50 TO 74 PERCENT
- 75 TO 99 PERCENT
- 100 PERCENT
- DON’T KNOW
- REFUSED

Q14. Have you seen a decline in the number of requests for charity care cases for your organization since 2018?

- YES – IT DECREASED
- NO – IT INCREASED
- NO – IT STAYED THE SAME
- DON’T KNOW

Q15. Are there any aspects of the HIP program that you think work especially well? If so, please describe. [Note: Listen for how it affects health status or health care in Indiana]

Enter text here:

Q16. Have you encountered any challenges with the HIP program? If so, please describe. [Note: Listen for claims payment and prior authorization issues, relationship with MCEs]

Enter text here:

Q17. What would you improve about HIP?

Enter text here:

Q18. Thank you again for taking the time to meet today, is there anything else you would like to add?

Enter text here:

CLOSE: On behalf of the Healthy Indiana Plan, we thank you for participating in this survey. Your answers will help improve the program. If you have any questions about HIP, please call 1-877-438-4479.
Healthy Indiana Plan Provider Interview: Eligibility

**DESCRIPTION:** This key informant interview guide applies to staff determining eligibility for HIP.

**Introduction and Overview of Purpose**

Hello, my name is [NAME] calling from [NAME] on behalf of the Healthy Indiana Plan, also known as HIP. May I please speak with [INSERT NAME FROM SAMPLE]?

[OBTAIN CORRECT RESPONDENT; REINTRODUCE IF NECESSARY]

You should have received an email from the Indiana Family and Social Services Administration informing you or your [practice/organization] about this provider interview.

Again, my name is [NAME]. I am from [NAME] and am working with [NAME] to conduct this interview. [NAME] was hired by the Indiana Family and Social Services Administration to perform a federally required independent evaluation of the HIP program. The purpose of this interview is to talk with you about your experiences with HIP and your understanding of member satisfaction with HIP.

You have been contacted for this interview because you help individuals become eligible for HIP.

Over the next 20 to 30 minutes, I will ask you about your role, satisfaction of HIP members you work with, and overall thoughts on HIP. We are having several other interviews like this one in Indiana. Hearing about your experience will help us better evaluate the program. The information from our evaluation will help Indiana assess HIP and identify potential changes to improve the care that HIP members receive. Your participation is voluntary, and your responses will remain confidential.

Your responses to our questions will be combined with responses from other conversations we are having with other eligibility staff. As a result, neither you nor any other person we are speaking with will be identifiable from your answers. Your combined responses will be used to write an interim evaluation report, available for public comment at the end of 2019. [NAME] will conduct additional interviews as part of the development of a final evaluation report due in 2022, which will also be available for public comment. You may choose not to answer any question, and you may choose, at any time, to stop the conversation for any reason.

**What questions do you have before we continue?** [Interviewer: pause for questions]

[If have questions, refer to the frequent questions document or read from it then ask again]

**Can we begin?** [Interviewer: pause for confirmation]

[If consent] I’d like to begin by thanking you for taking time out of your day to meet with me about HIP. I appreciate it.

[If do NOT consent] Thank you for taking time today, have a great day.
Participant Information

Q1. What is your role in the [practice/organization]?
[confirm that individual being interviewed determines eligibility and is part of application organization or is a certified navigator]

Enter text here:

Q2. What setting are you located in?
[Inquire if in a provider setting (e.g., hospital or clinic), or not, ask to specify]

Enter text here:

Gateway to Work Requirement

First, we’ll ask a few questions about Gateway to Work, then Personal Wellness and Responsibility (POWER) Account Contributions, the eligibility process, and we’ll end with general thoughts about HIP. Let’s start with the community engagement requirements.

[If context is needed: Gateway to Work connects HIP members with ways to look for work, train for jobs, finish school, and volunteer. Some HIP members are required to participate in Gateway to Work activities to keep HIP benefits, other members may be exempt. The number of activity hours required for Gateway to Work began at zero in January 2019 to allow members time to learn about the program, and increases incrementally from 20 hours per month in July 2019 to 80 hours per month in July 2020.]

Q3. What is your understanding of the Gateway to Work Program requirements?

Enter text here:

Q4. What feedback have you received from members regarding HIP members’ ability to understand and comply with Gateway to Work requirements?

Enter text here:

POWER Account Contributions

The next question will ask about POWER Account Contributions.

[If context is needed: Some HIP members are required to make monthly payments (based on income and tobacco use status, also known as POWER Account Contributions) to maintain enrollment in the HIP program. Some HIP members must make copayments for certain services.

If additional context is needed:
• HIP members with family incomes over 100 percent of the federal poverty level (FPL) must pay a fixed monthly contribution (also known as POWER Account Contribution) which varies from $1 to $30 based on their family income and tobacco user status. If they (or in some cases their employer or non-profit organization) do not make these payments, their HIP coverage is closed. These members receive the “HIP Plus” benefit package.

• HIP members with family incomes less than 100 percent of the FPL are not required to make monthly payments but do pay copayments for certain services. These members receive the “HIP Basic” benefit package.]

Q5. Please share feedback that individuals applying for HIP have given in regards to the POWER Account Contributions (e.g., overall amount, ability to understand how to make the contributions, ability to make payments).

Enter text here:
Eligibility

The next set of questions will ask about eligibility.

Q6. Are you a qualified Presumptive Eligibility provider?
   - YES  → GO TO Q7
   - NO  → SKIP TO Q11

Q7. If you are a qualified Presumptive Eligibility provider, which of the following types of Presumptive Eligibility processes do you conduct?
   - PRESUMPTIVE ELIGIBILITY FOR PREGNANT WOMEN ONLY
   - HOSPITAL
   - REGULAR
   - DON'T KNOW
   - REFUSED

Q8. Thinking about the Presumptive Eligibility process, how would you rate the overall effectiveness of the Presumptive Eligibility process at eliminating gaps in health care coverage?
   - VERY EFFECTIVE
   - EFFECTIVE
   - NOT THAT EFFECTIVE
   - NOT EFFECTIVE AT ALL
   - DON'T KNOW
   - REFUSED

Q9. Do you track how many people who signed up for Presumptive Eligibility coverage went on to complete an application?
   - YES
   - NO
   If yes, describe.
   Enter text here:

Q10. What would you say is the success rate of your Presumptive Eligibility members getting full HIP coverage?
   - LESS THAN 25 PERCENT
   - 25 TO 49 PERCENT
   - 50 TO 74 PERCENT
   - 75 TO 99 PERCENT
   - 100 PERCENT
   - DON'T KNOW
   - REFUSED
Q11. Thinking about the Fast Track process, how would you rate the overall effectiveness of the Fast Track process at eliminating gaps in health care coverage?

- VERY EFFECTIVE
- EFFECTIVE
- NOT THAT EFFECTIVE
- NOT EFFECTIVE AT ALL
- DON’T KNOW
- REFUSED

Q12. What would you say is the success rate of members that pay Fast Track getting full HIP coverage?

- LESS THAN 25 PERCENT
- 25 TO 49 PERCENT
- 50 TO 74 PERCENT
- 75 TO 99 PERCENT
- 100 PERCENT
- DON’T KNOW
- REFUSED

Q13. Does your organization make fast track payments on behalf of applicants?

- YES
- SOMETIMES
- NO
- REFUSED

If “yes” or “sometimes,” describe the process for making payments.

Enter text here:

General Thoughts on HIP

The next set of questions will ask about your understanding of member satisfaction and overall effectiveness with the Healthy Indiana Plan eligibility process. Please think about your experience in 2018 and 2019 when responding.

Q14. Based on your experience enrolling individuals in HIP coverage, please describe feedback you have heard from people about their experience enrolling.

[Inquire about what areas enrollees are most and least satisfied with.]

Enter text here:
Q15. How would you rate the overall effectiveness of the HIP eligibility process?

☐ VERY EFFECTIVE
☐ EFFECTIVE
☐ NOT THAT EFFECTIVE
☐ NOT EFFECTIVE AT ALL
☐ DON’T KNOW
☐ REFUSED

Q16. If you rated the overall effectiveness less than “very effective,” please describe challenges or barriers to effective enrollment that you have observed.

Enter text here:

Q17. Are there any aspects of the HIP enrollment process that you think work well? If so, please describe.

Enter text here:

Q18. What would you improve about HIP?

Enter text here:

Q19. Thank you again for taking the time to meet today, is there anything else you would like to add?

Enter text here:

CLOSE: On behalf of the Healthy Indiana Plan we thank you for participating in this survey. Your answers will help improve the program. If you have any questions about HIP, please call 1-877-438-4479.
Healthy Indiana Plan Provider Interview: Practitioner

DESCRIPTION: This key informant interview guide applies to HIP physicians or other health care practitioners, including those that offer tobacco cessation services.

Introduction and Overview of Purpose – For Health Care Practitioners That May or May Not Offer Tobacco Cessation Services

Hello, my name is [NAME] calling from [NAME] on behalf of the Healthy Indiana Plan, also known as HIP. May I please speak with [INSERT NAME FROM SAMPLE]?

[OBTAIN CORRECT RESPONDENT; REINTRODUCE IF NECESSARY]

You should have received an email from the Indiana Family and Social Services Administration informing you or your practice about this provider interview.

Again, my name is [NAME]. I am from [NAME] and am working with [NAME] to conduct this interview. [NAME] was hired by the Indiana Family and Social Services Administration to perform a federally required independent evaluation of the HIP program. The purpose of this interview is to talk with you about your experiences with HIP and your understanding of member satisfaction with HIP.

[If provider has delivered tobacco cessation services per the spreadsheet provided]
You have been invited because you have provided services to HIP members, including tobacco cessation services.

[If provider has NOT delivered tobacco cessation services per the spreadsheet provided] You have been invited because you have provided services to HIP members.

Over the next 20 to 30 minutes, I will ask you about your role, satisfaction of HIP members you work with, and overall thoughts on HIP. We are having several other interviews like this one in Indiana. Hearing about your experience will help us better evaluate the program. The information from our evaluation will help Indiana assess HIP and identify potential changes to improve the care that HIP members receive. Your participation is voluntary, and your responses will remain confidential.

Your responses to our questions will be combined with responses from conversations we are having with other providers. As a result, neither you nor any other person we are speaking with will be identifiable from your answers. Your combined responses will be used to write an interim evaluation report, available for public comment at the end of 2019. [NAME] will conduct additional interviews as part of the development of a final evaluation report due in 2022, which will also be available for public comment. You may choose not to answer any question, and you may choose, at any time, to stop the conversation for any reason.

What questions do you have before we continue? [Interviewer: pause for questions]

[If have questions, refer to the frequent questions document or read from it then ask again]

Can we begin? [Interviewer: pause for confirmation]

[If consent] I’d like to begin by thanking you for taking time out of your day to meet with me about HIP. I appreciate it.

[If do NOT consent] Thank you for taking time today, have a great day.
Participant Information

Q1. **What is your role in the practice?** [Likely options if needed prompt, can select more than one.]

Enter text here:

- OFFICE MANAGER/PRACTICE ADMINISTRATOR
- CLINICIAN (ASK FOR SPECIALTY)
  - FAMILY MEDICINE
  - INTERNAL MEDICINE
  - OBSTETRICS/GYNECOLOGY
  - SURGEON
  - PSYCHIATRIST
  - CARDIOLOGIST
  - DERMATOLOGIST
  - ENDOCRINOLOGIST
  - GASTROENTEROLOGIST
  - ONCOLOGIST
  - NEUROLOGIST
  - PUMONOLOGIST
  - OTOLARNYNGOLOGIST (ENT)
  - OPHTHAMOLOGIST
  - NEPHROLOGIST
  - INFECTIOUS DISEASE PHYSICIAN
  - THERAPIST (PHYSICAL, OCCUPATIONAL, SPEECH/HEARING)
  - PSYCHOLOGIST
  - SOCIAL WORKER
  - OTHER SPECIALTY (SPECIFY)

Enter text here:

Q2. **Which of the following Indiana programs do you participate in?** [Note: Provider may only participate with certain plans.]

- HOOSIER HEALTHWISE (HHW)
- HEALTHY INDIANA PLAN (HIP) → IF THIS OPTION OR "NOT SURE BUT ACCEPT MEDICAID" OR "TRADITIONAL MEDICAID" NOT SELECTED, GO TO CLOSE
- HOOSIER CARE CONNECT (HCC)
- FEE-FOR-SERVICE (TRADITIONAL MEDICAID)
- NOT SURE BUT ACCEPT MEDICAID
- OTHER (SPECIFY)

Enter text here:
Q3. **What is your practice setting?**
   - SOLO/ INDIVIDUAL PRACTICE
   - SINGLE-SPECIALTY GROUP (THIS CAN BE EITHER PRIMARY CARE OR SPECIALISTS)
   - MULTI-SPECIALTY GROUP (THIS CAN INCLUDE BOTH PRIMARY CARE AND SPECIALISTS)
   - ACUTE CARE HOSPITAL OR PHYSICIAN HOSPITAL ORGANIZATION (PHO)
   - REHABILITATION FACILITY
   - AMBULATORY SURGICAL CENTER (ASC)
   - FEDERALLY QUALIFIED HEALTH CENTER (FQHC)
   - RURAL HEALTH CENTER (RHC)
   - OUTPATIENT MENTAL HEALTH CLINIC
   - COMMUNITY MENTAL HEALTH CENTER (CMHC)
   - OTHER (SPECIFY)

   Enter text here:

Q4. **How long has your practice provided services to HIP members?**
   [If do not provide immediate response, probe for range]
   - SINCE 2008 [For Interviewer: HIP 1.0, HIP 2.0, and Current HIP]
   - SINCE 2015 [For Interviewer: HIP 2.0 and Current HIP]
   - SINCE 2018 [For Interviewer: Current HIP only]
   - OTHER (SPECIFY)

   Enter text here:

**Member Satisfaction with HIP**

The next set of questions will ask about your understanding of member satisfaction with the Healthy Indiana Plan.

Q5. **Please describe feedback you have heard from members about what areas of HIP they are most satisfied with.**

   Enter text here:

Q6. **Please describe feedback you have heard from members about what areas of HIP they are least satisfied with.**

   Enter text here:
Q7. On a scale from very satisfied to very dissatisfied, how satisfied do you think members are with HIP?

☐ VERY SATISFIED
☐ SOMEWHAT SATISFIED
☐ SOMEWHAT DISSATISFIED
☐ VERY DISSATISFIED
☐ DON’T KNOW
☐ REFUSED
☐ OTHER (SPECIFY)

Enter text here:

Q8. What kind of feedback, if any, have you received from members or via staff at your organization regarding HIP members’ ability to understand and make monthly HIP payments or copayments?

[If context is needed: Some HIP members are required to make monthly payments (based on income and tobacco use status, also known as POWER Account Contributions) to maintain enrollment in the HIP program. Some HIP members must make copayments for certain services. If additional context is needed:

- HIP members with family incomes over 100 percent of the federal poverty level (FPL) must pay a fixed monthly contribution (also known as POWER Account Contribution) which varies from $1 to $30 based on their family income and tobacco user status. If they (or in some cases their employer or non-profit organization) do not make these payments, their HIP coverage is closed. These members receive the “HIP Plus” benefit package.
- HIP members with family incomes less than 100 percent of the FPL are not required to make monthly payments but do pay copayments for certain services. These members receive the “HIP Basic” benefit package.]

Enter text here:

Q9. What kind of feedback, if any, have you received from members or via staff at your organization regarding HIP members’ ability to understand and comply with HIP Gateway to Work requirements?

[If context is needed: Gateway to Work connects HIP members with ways to look for work, train for jobs, finish school, and volunteer. Some HIP members are required to participate in Gateway to Work activities to keep HIP benefits, other members may be exempt. The number of activity hours required for Gateway to Work began at zero in January 2019 to allow members time to learn about the program, and increases incrementally from 20 hours per month in July 2019 to 80 hours per month in July 2020.]

Enter text here:
Tobacco Cessation

The next set of questions will ask about tobacco cessation.

[If context is needed: Tobacco users will have to pay more for health coverage than non-tobacco users. HIP members have 12 months to stop using tobacco; HIP offers programs to help members quit smoking and provides easy access to tobacco cessation products and counseling services to help them be successful. If members do not quit, their POWER Account Contribution will be 50% higher for the next year.]

Q10. Have you provided HIP members with tobacco cessation services?
   - YES ➔ GO TO Q12
   - NO ➔ GO TO Q21
   - DON'T KNOW ➔ GO TO Q21
   - REFUSED

Q11. What tobacco cessation services have you provided to HIP members? (Select one or more)
   - COUNSELING
   - INTENSIVE COUNSELING
   - MEDICATIONS
   - OTHER (SPECIFY)
   Enter text here:

Q12. How do you approach offering tobacco cessation services to individuals identifying as tobacco users?
   [If needed: Do you offer cessation services to all individuals that identify as tobacco users or a subset? Please describe how you engage individuals in the use of tobacco cessation services or medications.]
   Enter text here:

Q13. What do you see as barriers for HIP members to engage in/start/begin tobacco cessation services?
   Enter text here:

Q14. What do you see as barriers to success for HIP members to continue to receive tobacco cessation services?
   Enter text here:
Q15. On a scale from very satisfied to very dissatisfied, how satisfied do you think that HIP members are with tobacco cessation services?

- VERY SATISFIED
- SOMEWHAT SATISFIED
- SOMEWHAT DISSATISFIED
- VERY DISSATISFIED
- DON’T KNOW
- REFUSED
- OTHER (SPECIFY)

Enter text here:

Q16. Have HIP members discussed a tobacco surcharge with you? Please describe those conversations.

Enter text here:

Q17. Have any HIP members discussed their ability to make monthly HIP payments once the tobacco surcharge is applied to these payments? Please describe those conversations.

Enter text here:

Q18. Have HIP members discussed the impact of the tobacco surcharge on attempting to quit? Please describe those conversations.

Enter text here:

Provider Perspective

The next set of questions will ask about overall HIP impact and your experience.

Q19. Are there any aspects of the HIP program that you think work especially well? If so, please describe.

Enter text here:

Q20. Have you encountered any challenges with the HIP program? If so, please describe. [Note: Listen for claims payment and prior authorization issues, relationship with MCEs]

Enter text here:

Q21. What would you improve about HIP?

Enter text here:

Q22. Thank you again for taking the time to meet today, is there anything else you would like to add?

Enter text here:

CLOSE: On behalf of the Healthy Indiana Plan we thank you for participating in this survey. Your answers will help improve the program. If you have any questions about HIP, please call 1-877-438-4479.
Attachment XIII: Healthy Indiana Plan Evaluation Member Interviews

DESCRIPTION: This key informant interview guide applies to HIP members.

Introduction and Overview of Purpose

Hello, my name is [NAME] calling from [NAME] on behalf of the Healthy Indiana Plan, also known as HIP. May I please speak with [INSERT NAME FROM SAMPLE]?

[OBTAIN CORRECT RESPONDENT; REINTRODUCE IF NECESSARY]

Again, my name is [name] from [NAME] and I am working with [NAME] to conduct this interview. Our team was hired by the Indiana Family and Social Services Administration to independently evaluate the HIP program.

IF NEEDED: You may know this program by the name of your health plan such as Anthem, CareSource, MDwise, or Managed Health Services (MHS).

Over the next 15 minutes or so, I will ask you about your experiences with the HIP program. We are having several other interviews like this one in Indiana. Your responses will be used to help evaluate and improve HIP. You may choose not to answer any question, and you may choose, at any time, to stop the conversation for any reason. Please remember that the answer that you provide today will NOT affect your benefits and all responses will remain anonymous. Your name was randomly picked from a list of all people who receive health care through HIP. Sharing your opinions will help Indiana improve HIP services for everyone.

What questions do you have before we continue? [Interviewer: pause for questions]

Can we begin? [Interviewer: pause for confirmation]

[If consent] I’d like to begin by thanking you for taking time out of your day to talk with me about HIP.

[If do NOT consent] Thank you for taking time today, have a great day.

Participant Information and Access

Q1. The State of Indiana runs an insurance program called the Healthy Indiana Plan (or HIP) for Hoosiers ages 19 to 64. Do you currently have HIP coverage, or have you had HIP coverage recently?

☐ YES ➔ CONTINUE WITH THE INTERVIEW, GO TO Q3
☐ NO ➔ GO TO Q2
☐ DON’T KNOW ➔ GO TO Q2
☐ REFUSED ➔ GO TO Q2
Q2. Sorry, but just to confirm, based on the information we have from the State, it looks like you currently have HIP coverage or recently have had HIP coverage. You may know this program by the name of your health plan such as Anthem, CareSource, MDwise, or Managed Health Services (MHS). Is this correct?

☐ YES
☐ NO → GO TO CLOSE
☐ DON’T KNOW → GO TO CLOSE
☐ REFUSED → GO TO CLOSE

Q3. Which HIP plan are or were you on?

☐ HIP BASIC
☐ HIP PLUS
☐ DON’T KNOW
☐ REFUSED

Q4. How long have you been/were you enrolled in HIP?

☐ LESS THAN 3 MONTHS
☐ 3 MONTHS TO LESS THAN 6 MONTHS
☐ 6 – 12 MONTHS
☐ MORE THAN 12 MONTHS
☐ DON’T KNOW
☐ REFUSED

Q5. Have you been able to get the health care services you need through the HIP program?

☐ YES
☐ NO
   PLEASE DESCRIBE
   Enter text here:

☐ REFUSED
Overall Awareness and Eligibility Process

The next set of questions asks about your experience signing up for HIP and overall awareness of the program.

Q6. Are you aware of the different aspects of HIP, specifically the Gateway to Work Program, Personal Wellness and Responsibility (POWER) Accounts, and tobacco cessation services and the tobacco surcharge? [Individuals identifying as HIP Basic in Q3 might not know about the tobacco surcharge.]

☐ YES, I AM AWARE OF ALL OF THEM
☐ NO, I DON’T KNOW ABOUT ANY OF THEM

I AM ONLY AWARE OF....[can select more than one answer]

☐ GATEWAY TO WORK PROGRAM
☐ POWER ACCOUNTS
☐ TOBACCO CESSATION SERVICES AND THE TOBACCO SURCHARGE
☐ REFUSED

Q7. How did you find out about the different aspects of HIP? [Can select more than one answer]

☐ HIP WEBSITE
☐ HEALTH PLAN WEBSITE
☐ HEALTH PLAN MEMBER HOTLINE
☐ THE PERSON WHO HELPED ME SIGN UP FOR HIP
☐ A HEALTH CARE PROFESSIONAL
☐ WRITTEN MATERIALS SUCH AS A MEMBER HANDBOOK
☐ FAMILY OR FRIENDS
☐ OTHER (PLEASE DESCRIBE)

Enter Text Here:

☐ NO ONE EXPLAINED HIP TO ME
☐ REFUSED

Q8. How would you rate the overall process of signing up for HIP?

☐ VERY EASY
☐ GENERALLY EASY
☐ NOT EASY AT ALL
☐ DON’T KNOW
☐ REFUSED

Q9. Please describe challenges or barriers to signing up for HIP.

Enter Text Here:

Q10. Please describe what parts of signing up for HIP worked well.

Enter Text Here:
Gateway to Work

The next set of questions asks about your experience with the Gateway to Work program.

[If context is needed: Gateway to Work is a part of the HIP. It connects HIP members like you with ways to look for work, train for jobs, finish school and volunteer. Starting in 2019, you might be required to do Gateway to Work activities to keep your HIP benefits. The Indiana Family Social and Services Administration (FSSA) will give you your Gateway to Work status. Your status will be Reporting, Reporting Met or Exempt.

If your Gateway to Work status is “Reporting,” you need to meet a required number of activity hours each month and report them. There are many things you can do to meet the requirement. Activity hours must be reported using the FSSA Benefits Portal or by calling your managed care entity also known as your health plan. Your health plan can answer questions or connect you with new activities.

At the end of the year, the state will look at all the hours you reported and determine if you met your required hours each month. You will need to meet the required monthly hours eight out of 12 months of the year to keep your HIP benefits.]

Q11.  Do you know if you are required to report Gateway to Work hours, or if you are exempt?

☐ I KNOW I AM EXEMPT    →    GO TO Q16
☐ I AM REQUIRED TO REPORT HOURS    →    GO TO Q12
☐ I DON’T HAVE TO REPORT HOURS BECAUSE I AM WORKING ENOUGH ALREADY    →    GO TO Q16 [“Reporting Met” status]
☐ DON’T KNOW    →    GO TO Q16
☐ REFUSED    →    GO TO Q16

Q12.  What, if anything, makes it difficult for you to meet these hour requirements?

Enter Text Here:

Q13.  Have you reported or do you plan to report Gateway to Work hours?

☐ YES
☐ NO
☐ DON’T KNOW    →    GO TO Q16
☐ REFUSED    →    GO TO Q16

If no, why? Enter Text Here:

Q14.  How do or will you report this information? [select all that apply]

☐ ONLINE/BENEFITS PORTAL
☐ CALLING MY HEALTH PLAN/MANAGED CARE ENTITY
☐ OTHER (PLEASE DESCRIBE)

Enter Text Here:

☐ DON’T KNOW
☐ REFUSED
Q15. What has your experience been like reporting this information?

- EXCELLENT
- VERY GOOD
- GOOD
- FAIR
- POOR

[inquire more regarding challenges and what is working well]

Enter Text Here:

Q16. Do you know what happens to your HIP coverage if you are not exempt and do not meet the reporting requirements?

- YES
  PLEASE DESCRIBE
  Enter Text Here:

- NO
- REFUSED

Q17. Can you describe how the Gateway to Work requirements have impacted you, if at all? Please describe.

Enter Text Here:

[Examples of issues that people might raise include: being connected to new resources, establishing an account on the website, hearing about more opportunities from the health plans, having increased stress due to the requirements, being worried about having continued coverage.

Inquire about future if interviewee doesn’t share anything about the past.

If context needed: The number of activity hours required for Gateway to Work begins at zero in January 2019 to allow members time to learn about the program, find activities and set up a FSSA Benefits Portal account. It then increases according to this schedule:

- January 1, 2019 – June 30, 2019 0 hours per month
- July 1, 2019 – September 30, 2019 20 hours per month
- October 1, 2019 – December 31, 2019 40 hours per month
- January 1, 2020 – June 30, 2020 60 hours per month
- July 1, 2020 – ongoing 80 hours per month
**POWER Account**

The next set of questions asks about your POWER Account experience.

**Q18. Do you have a POWER Account as part of your HIP insurance?**
- ✔️ **YES** ➔ GO TO Q19
- ✗ **NO** ➔ GO TO Q30
- ✗ **DON'T KNOW** ➔ GO TO Q30
- ✗ **REFUSED** ➔ GO TO Q30

**Q19. Do you make payments towards your HIP coverage?**
- ✔️ **YES** ➔ GO TO Q21
- ✗ **NO** ➔ GO TO Q20
- ✗ **DON'T KNOW** ➔ GO TO Q30
- ✗ **REFUSED** ➔ GO TO Q30

**Q20. Do you know that if you pay a fixed monthly amount, you can change your coverage to “HIP Plus”? This program gives you access to more services and no copayment.**
- ✔️ **YES** ➔ GO TO Q30
- ✗ **NO** ➔ GO TO Q30
- ✗ **REFUSED** ➔ GO TO Q30

**Q21. How much is your monthly payment?**

Enter Text Here:

**Q22. To your knowledge, has anyone ever helped you make your payment, like an employer or a community organization?**
- ✔️ **YES**
  - PLEASE DESCRIBE
  - Enter Text Here:
- ✗ **NO**
- ✗ **DON'T KNOW**
- ✗ **REFUSED**

**Q23. Have you had any issues making a payment?**
- ✔️ **YES**
  - PLEASE DESCRIBE [listen for issues related to payment being unaffordable, process issues or issues with MCEs being able to take the payment, late invoices]
  - Enter Text Here:
- ✗ **NO**
- ✗ **REFUSED**
Q24. Do you know what happens to your HIP coverage if you do not make a payment?

[For context: Members with incomes above the poverty level that choose not to make their POWER Account Contributions will be removed from the program and not be allowed to re-enroll for six months. This enrollment lockout will not apply if the member is medically frail or residing in a domestic violence shelter or in a state-declared disaster area. Members who have incomes below the federal poverty level who do not make their contributions will be moved to the HIP Basic plan.]

☐ YES

PLEASE DESCRIBE

Enter Text Here:

☐ NO

☐ REFUSED

Q25. Have you ever received a discount, rollover dollars, or a refund from HIP?

☐ YES

☐ NO

☐ DON’T KNOW

☐ REFUSED

Q26. Are you aware that any payments you make to the POWER Account are yours, and that if you leave the program early, any of those payments not spent on health care costs may be returned to you?

☐ YES

☐ NO

☐ DON’T KNOW

☐ REFUSED

Q27. Are you aware that if your annual health care expenses are less than $2,500 per year you may rollover your remaining payments to reduce your monthly payments for the next year?

☐ YES

PLEASE DESCRIBE

Enter Text Here:

☐ NO

☐ REFUSED

Q28. Are you aware that you could lower your monthly POWER Account payments in the future if you get preventive services now?

☐ YES

PLEASE DESCRIBE

Enter Text Here:

☐ NO

☐ REFUSED

Q29. How does having a POWER Account change how you use health care, if at all?

Enter Text Here:
**Tobacco Cessation Services**

The next set of questions asks about tobacco cessation services.

**Q30.** Do you use tobacco (for example, chewing tobacco, cigarettes, cigars, pipes, hookah, snuff, vape pens)?

- [ ] YES
- [ ] NO
- [ ] REFUSED

GO TO Q35

**Q31.** Do you know that you can get counseling and medications through HIP to help you quit?

- [ ] YES
- [ ] NO
- [ ] DON’T KNOW
- [ ] REFUSED

GO TO Q35

**Q32.** Have you used these tobacco cessation services?

- [ ] YES, WITHIN THE LAST YEAR
  
  **PLEASE DESCRIBE**
  
  **Enter Text Here:**

- [ ] YES, BUT OVER A YEAR AGO
  
  **PLEASE DESCRIBE**
  
  **Enter Text Here:**

- [ ] NO
- [ ] DON’T KNOW
- [ ] REFUSED

GO TO Q35

**Q33.** If you have used these services, how satisfied are you with them?

- [ ] VERY SATISFIED
- [ ] SOMEWHAT SATISFIED
- [ ] SOMEWHAT DISSATISFIED
- [ ] VERY DISSATISFIED
- [ ] DON’T KNOW
- [ ] REFUSED

[inquire: why or why not]

**Enter Text Here:**
Q34. Are you aware that Indiana can increase your monthly HIP payments if you continue to use tobacco products after one year? [skip this question if interviewee responds “NO” to Q18 and skipped POWER Account questions.]

[If context is needed: Tobacco users will have to pay more for health coverage than non-tobacco users. HIP Plus members have 12 months to stop using tobacco. If HIP Plus members do not quit, their POWER Account Contributions will be 50% higher for the next year.]

☐ YES
☐ NO
☐ REFUSED

Member Satisfaction With HIP

The next set of questions will ask about your satisfaction with HIP.

Q35. Thinking about your overall experience with HIP in the past six months, would you say you are:

☐ VERY SATISFIED
☐ SOMEWHAT SATISFIED
☐ SOMEWHAT DISSATISFIED
☐ VERY DISSATISFIED
☐ DON’T KNOW
☐ REFUSED — GO TO Q37

Q36. Why are you (FILL IN WITH PREVIOUS RESPONSE)? [OPEN-ENDED RESPONSE]

Enter Text Here:

DO NOT READ LIST BELOW; USE FOR CODING PURPOSES

☐ CAN’T SEE MY DOCTOR WITH HIP
☐ DISSATISFACTION WITH CHOICE OF DOCTORS IN HIP
☐ HIP DOES NOT COVER DENTAL
☐ HIP DOES NOT COVER VISION/OPTICAL
☐ HIP DOES NOT COVER PROCEDURE/ MEDICATION
☐ MANY DOCTORS DO NOT ACCEPT HIP
☐ DISSATISFIED WITH ADMINISTRATIVE ISSUE(S) OR PROCESS
☐ DISSATISFACTION WITH A PAYMENT RELATED ISSUE
☐ CAN’T AFFORD CO-PAY/ TOO HIGH
☐ CO-PAYMENT / MONTHLY/ ANNUAL PAYMENT TOO HIGH
☐ LIKE HAVING COVERAGE/ INSURANCE
☐ LIKE DOCTORS/ HOSPITALS / HEALTH CARE PROVIDERS
☐ LIKE PAYMENTS / PRICE
☐ LIKE THE PLAN/ PROVIDER
☐ LIKE SOME THINGS/ DISLIKE OTHER THINGS
☐ SOME THINGS NOT COVERED
☐ DON’T KNOW
☐ REFUSED
☐ OTHER REASON NOT LISTED ABOVE: (SPECIFY) Enter Text Here:
Q37. What would you change about the HIP program?
   Enter Text Here:

Q38. Thank you again for taking the time to meet today, is there anything else you would like to add?
   Enter Text Here:

CLOSE: On behalf of the Healthy Indiana Plan, we thank you for participating in this survey. Your answers will help improve the program. If you have any questions about HIP please call 1-877-438-4479.