Indiana Family and Social Services Administration

Bureau of Rehabilitation Services

Employment Services Model Evaluation - Findings Report

November 2018

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I.   PURPOSE

The overall purpose of this effort is to provide the Indiana Bureau of Rehabilitation Services (BRS) an examination and analysis of the state's Vocational Rehabilitation (VR) Employment Services Model (ESM). Specifically, BRS seeks to understand whether ESM, implemented on July 1, 2015, is having a positive impact on service delivery and if it is achieving key programmatic goals.

This report is one installment in a series of program evaluation reports to be produced bi-annually by Public Consulting Group in partnership with BRS. Each report will analyze elements of ESM and address programmatic questions such as:

- What elements of service delivery lead to positive employment outcomes?
- Are there differences across certain populations that can be identified in order to better inform policy and practice?
- Are services being individualized to best suit the needs and strengths of each participant?

The purpose of these reports is to measure and analyze a broad range of VR statistics, including hourly wages, weekly hours worked, and successful case closure rate, among others. Also included in this analysis is baseline information related to the Results-Based Funding (RBF) model, ESM's predecessor. Although few conclusions can be drawn at this time due to the fact that ESM is still in its infancy, the data results presented in the following sections provide BRS with a foundation of knowledge on which to build upon in the coming months and years.

II.   BACKGROUND

As of 2010, nearly 19% of Americans live with a disability[1]. At 7.4%, individuals with disabilities have disproportionately high rates of unemployment relative to their peers without disabilities[2]. In addition, earned wages are 37% less on average, and in some states, even more, with the pay gap widening as educational attainment increases[3]. The differences in earned income impact not only individuals, but their families which often must support them, as well as the state and federal government that provides support in the form of various benefit programs. Workers with disabilities are more likely to be employed part-time, and largely in the service industries, as well as transportation and production. Individuals with disabilities are likelier to face persistent poverty compared to those without disabilities. Individuals with a disability often face barriers to employment, including mismatches between skill and their job, discrimination, and lack of job readiness. As of October 2018, approximately 21.5% of the workforce are individuals with disabilities[4].

The goal of Vocational Rehabilitation (VR) services is to assist individuals with disabilities in gaining meaningful employment. VR programs are funded by federal dollars as well as state dollars through the Rehabilitation Act of 1973, as amended by the Workforce Innovation and Opportunity Act (WIOA). VR works directly with individuals with physical or mental impairments to address the challenges they may face in the modern workplace, through authorizing a wide range of services and supports[5]. These services include job coaching, vocational assessment, training, assessing worksite accommodations, assistive technology, among other services. State VR programs also assist in job placement of individuals with disabilities by developing relationships with local businesses.

The passage of WIOA introduced new requirements to how services are offered and how success is measured in VR services administration and programming. In an effort to create accountability to job seekers and tax payers, WIOA emphasizes performance measures and stresses that agencies make data informed decisions. WIOA creates common performance measures, requires the establishment of primary indicators on attaining skills and credentials, and establishes annual reporting measures[6].

With this context in mind, Indiana BRS is taking the lead in using programmatic data in order to drive policy and promote positive employment outcomes for individuals with disabilities. The recently implemented **Employment Services Model (ESM)**, described in the following section, was designed based on an in-depth analysis of participant needs and service delivery gaps. Moving forward, BRS will further leverage data and information to improve services and programs.

TRANSITION TO EMPLOYMENT SERVICES MODEL

To understand the full impact that ESM is intended to achieve, it is important to briefly outline the evolution of the Indiana VR program.

Beginning in 2006, BRS shifted away from hourly-units of service to a structured milestone-based system, known as the Results-Based Funding model (RBF). The idea was simple and rooted in the ever-changing VR landscape: tie vendor reimbursements to specific "milestones", or participant accomplishments, to promote comprehensive and effective service delivery. This in turn would lead to positive employment outcomes for individuals with a disability.

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[1] https://www.census.gov/newsroom/releases/archives/miscellaneous/cb12-134.html

[2] https://www.dol.gov/odep/

[3] http://www.air.org/news/press-release/those-disabilities-earn-37-less-average-gap-even-wider-some-states

[4] https://www.dol.gov/odep/

[5] https://www2.ed.gov/policy/speced/reg/narrative.html

[6] http://www2.ed.gov/about/offices/list/osers/rsa/wioa-meetings-on-final-regs.html

Additionally, BRS separated the RBF model into two tiers: one intended for individuals with high needs and multiple barriers to employment (Tier 1), and one intended for individuals that would require less intensive services than those in Tier 1 (Tier 2).

While the implementation of the RBF model was a positive step for Indiana's VR program, it did not entirely accomplish BRS' service delivery goals. An analysis performed by BRS revealed that vendors were spending less time with participants during the initial intake stages. This upfront work allows vendors to identify participant strengths, skillsets, barriers to employment, and career goals, and thus lead to positive employment outcomes. RBF provided financial incentive to reach employment quickly and sometimes prematurely close the participant's case, without providing the needed job stability for individuals, particularly those with the most significant disabilities. The RBF model was successful in increasing accountability for employment outcomes and resulted in increased outcomes, however the RBF model did not emphasize the importance of the quality of employment outcomes in terms of hours worked, wages, and employer-offered benefits.

In July 2015, BRS implemented a new service delivery model for its VR program known as the Employment Services Model (ESM). Commonly referred to as a "hybrid service model" because it contains elements of both the RBF model and hourly units of service, ESM intends to find the balance between service structure and vendor flexibility, as well as emphasis on both achievements of outcomes and individualized, high quality services. Furthermore, ESM eliminates the "one size fits all" approach that unintentionally resulted from the milestone-based service structure by allowing vendors to tailor their service hours to each individual participant, based on the unique needs of each individual. Most importantly, the ESM strives to provide a participant-centric approach to employment service delivery.

Overall, the purpose of ESM is to:

- Inject flexibility into the service structure;
- Eliminate barriers for individuals with the most significant disabilities to receive appropriate services and supports; and
- Ensure that employment plans are tailored to the unique needs of each participant served.[7]

The goal of ESM is to re-emphasize the work at the start of the participant's journey to employment, referred to as the "Discovery" phase. There are several Discovery services that vendors can leverage to better serve their participants, including Situational Assessment, Work Experiences, and Job Shadowing. Another important goal is to increase access to supported employment services for individuals with the most significant disabilities. Over the coming months and years, BRS will analyze the impact of ESM to better inform future policy and practice.

ANALYSIS FRAMEWORK

For clarity, the components outlined below frame the following analysis:

- Participants are designated as "RBF" or "ESM" based on date of earliest authorization. Participants whose earliest authorization occurs between July 1, 2006 and June 30, 2015 received the RBF designation. Participants whose earliest authorization occurs July 1, 2015 received the ESM designation.

- All results are reported based on the number of cases rather than the unique number of participants. This is a more accurate representation of the RBF model because it captures participants that have had multiple cases with BRS with different determination attributes. For example, a participant might have a severity
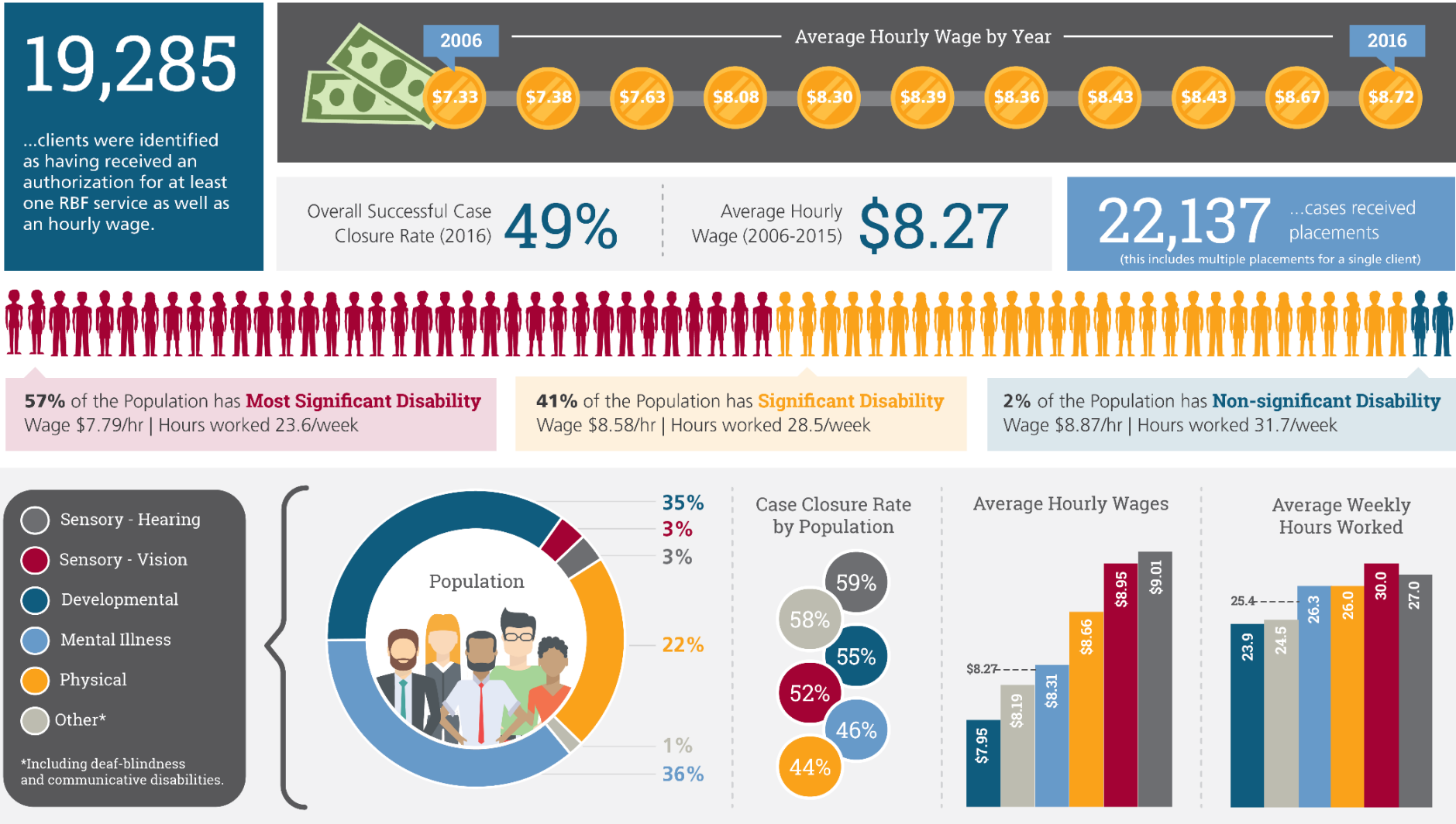
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[7] BRS "Indiana Vocational Rehabilitation Services Manual of Employment Services"http://www.in.gov/fssa/files/VR_Manual_of_Employment_Services_June_2015_FINAL.pdf

determination of "non-significant disability" for one case, while another case for the same participant might reflect a severity determination of "significant disability".

- In some cases, a participant might receive multiple job placements before case closure. To ensure accuracy, only the most recent hourly wages and weekly hours received by a participant are included.

- Population distributions are categorized based on the primary impairment identified by the VR counselor. The primary impairment categories are as follows: Sensory-Vision, Sensory–Hearing, Physical, Developmental, Mental Illness, and Other. The "Other" category includes individuals who are deaf-blind or with communication barriers.

- Severity determination distributions are based on determinations required for federal reporting purposes. The severity determination categories are as follows:

  o **Non-Significant Disability (NSD)**: Participant has a physical or mental impairment that results in a substantial impediment to employment.

  o **Significant Disability (SD)**: Participant has a severe physical or mental impairment that will substantially limit one or two functional capacities (communication, interpersonal skills, mobility, self-care, self-direction, work skills, and work tolerance) in terms of employment outcome and who can be expected to require multiple VR services over an extended period.

  o **Most Significant Disability (MSD)**: Participant has a severe physical or mental impairment that substantially limits three or more functional capacities and who can be expected to require multiple VR services over an extended period.

- Case closure rates are determined using three different case closure codes. Each code is associated with a specific reason for case closure. Cases can be closed for a variety of reasons, including a participant leaving the program before completion. The case closure categories are as follows:

  o **Case Closure – IPE Not Implemented:** Participant receives an Individualized Plan for Employment (IPE) but leaves the system prior to receiving VR services.

  o **Case Closure – Not Rehabilitated:** Participant receives a comprehensive Individualized Plan for Employment but leaves the system prior to achieving employment placement and stabilization.

  o **Successful Case Closure:** Participant is successfully placed in competitive, integrated employment, has achieved stabilization, and has retained employment for at least 90 days.

- Outliers greater than two standard deviations from the mean were removed from the average hourly wage and average weekly hours worked analyses.

III.   RESULTS-BASED FUNDING MODEL

The following infographic summarizes the data results for participants served under the RBF model. Participants that received their first service authorization after July 1, 2006 and before June 30, 2015 are included in these results.

19,285

...clients were identified as having received an authorization for at least one RBF service as well as an hourly wage.

Average Hourly Wage by Year

2006

| $7.33 | $7.38 | $7.63 | $8.08 | $8.30 | $8.39 | $8.36 | $8.43 | $8.43 | $8.67 | $8.72 |

2016

Overall Successful Case Closure Rate (2016) **49%**

Average Hourly Wage (2006-2015) **$8.27**

22,137 ...cases received placements
(this includes multiple placements for a single client)

57% of the Population has **Most Significant Disability**
Wage $7.79/hr | Hours worked 23.6/week

41% of the Population has **Significant Disability**
Wage $8.58/hr | Hours worked 28.5/week

2% of the Population has **Non-significant Disability**
Wage $8.87/hr | Hours worked 31.7/week

Sensory - Hearing
Sensory - Vision
Developmental
Mental Illness
Physical
Other*

*Including deaf-blindness and communicative disabilities.

Population

35%
3%
3%
22%
1%
36%

Case Closure Rate by Population

59%
58%
55%
52%
46%
44%

Average Hourly Wages

$8.27

$7.95
$8.19
$8.31
$8.66
$8.95
$9.01

Average Weekly Hours Worked

25.4

23.9
24.5
26.3
26.0
30.0
27.0

The infographic in Figure 1 summarizes outcomes from the ten years in which participants received service authorizations under the RBF Model, beginning in July 2006 through June 30, 2015, and parts of 2016 during the transition into the new ESM model. The information is disaggregated in detail in the paragraphs below.

POPULATION DISTRIBUTION

An identified total of 36,670 cases received at least one RBF authorization from 2006 - 2015. Most participants are those with a Mental Illness, and the second largest category are those with a Developmental disability. The least number of participants are those with a Sensory-Hearing or Sensory-Vision impairment, and participants that have a disability that is categorized as Other. The population is further broken down by severity of disability, showing most of the participants had a disability categorized as most significant, while the least number of participants had a disability that is categorized as not significant.

AVERAGE HOURLY WAGES AND WEEKLY HOURS WORKED

The infographic captures the average hourly wage a participant receives upon achieving employment placement. In some cases, participants may receive either multiple placements within the same case or with another case. This could be due to a variety of reasons, including that the original placement did not meet their desired employment goals or match their skillset. Participants that experience this path to stabilization are also captured in this metric. The population with the highest average wage is Sensory-Hearing, and the population with the lowest average hourly wage is Developmental.

The infographic also captures the average weekly hours worked upon achieving employment placement for RBF participants. The participants with a Sensory-Hearing disability had the highest average weekly hours worked, while participants with a Developmental disability had the lowest. Average hourly wages and weekly hours worked are further broken down by severity of participant disability.

LENGTH OF TIME FROM FIRST AUTHORIZATION TO EMPLOYMENT PLACEMENT

An additional metric analyzed in the RBF model data and not included in the infographic measures number of weeks of time between a participant's first authorization for an RBF service to the time they achieved employment placement. As most participants receive multiple service authorizations during their cases, the date of the earliest authorization was used. The query identified 22,137 cases that achieved placement with at least one RBF service authorization. The overall average length of time from the first authorization date to successful placement is 38.3 weeks. The population with the shortest number of weeks to placement is Mental Illness and the population with the longest number of weeks to placement is Sensory-Vision.

SUCCESSFUL CASE CLOSURE RATE

The successful case closure rate metrics measures the number of cases in the RBF model that received an employment placement and 90-day stabilization. The case closure rates reflect the proportion of closed cases that received "Successful Case Closure" designation compared to the other non-successful case closure designations. Participants with a Sensory-Hearing disability had the highest successful case closure rate, while those with Physical disabilities had the lowest.

Overall RBF trends show outcomes that are similar to those in the ESM model, explored further later in the report, with participants identified as not having a significant disability achieving the highest average hourly wages and weekly hours worked, but only represent less than 5% of the population. Those identified as having the most significant disabilities, which represents over half of the population, achieved the lowest employment outcomes.

IV.   EMPLOYMENT SERVICES MODEL

On July 1, 2015 BRS fully implemented the Employment Services Model. The following data results are for individuals that received their first service authorization on or after the date of July 1, 2015. Therefore, any unique cases that have an authorization that is on or before June 30, 2015, are not included in the data used to perform the analysis in this section.

POPULATION DISTRIBUTION

Figure 1 displays the distribution of participants by primary impairment. There are 10,102 unique participant cases served under ESM. Most participants are individuals with a Developmental disability, followed by participants with a Mental Illness. The least number of participant cases are of those with disabilities categorized as Other and those with a Sensory-Hearing disability. This trend continues to be similar to what the data has shown in the past few reports.

Figure 2 displays participant population by Severity of Disability. The largest number of participant cases are from participants with the most significant disabilities. The least number of unique cases are of participants with a disability categorized as not significant, which continues to be similar to what we have seen in past reports.
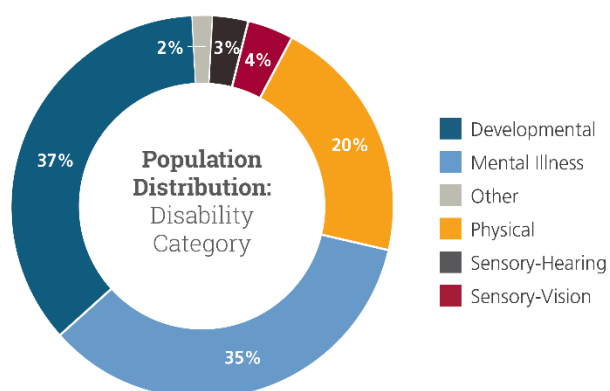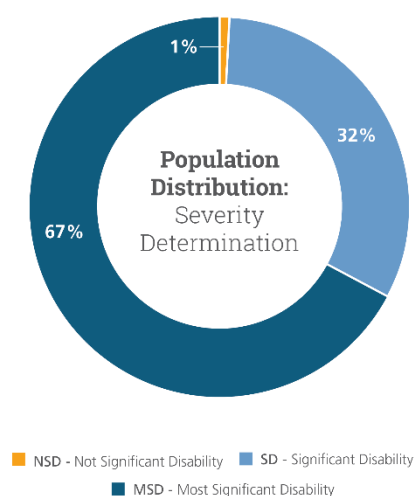

FIGURE 1

FIGURE 2

HOURLY WAGES

Figure 3 on the following page displays the average hourly wages by population, across the participant population. 3,963 participants were identified as receiving an hourly wage. The participants with the highest average hourly wages at $9.77 were those participants with a Sensory-Vision disability, which is the same as the last report. Participants with a Sensory-Hearing disability followed closely after at $9.71, a slight increase of $0.04 from the previous report. The participants with the smallest average hourly wages are those with disabilities categorized as Developmental at $8.99, which represents an increase of $.06 from the previous report. Those with a disability identified as Other had the second lowest wages at $9.01, which represents an increase of $.12 from the previous report. The overall average for average hourly wage across all individuals is $9.37, which increased by $.04 since the last report.

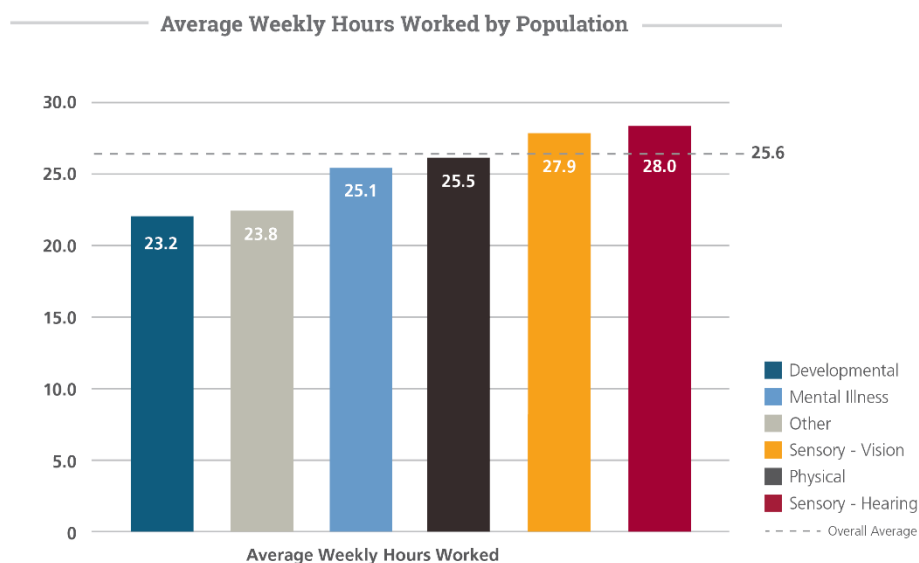FIGURE 3
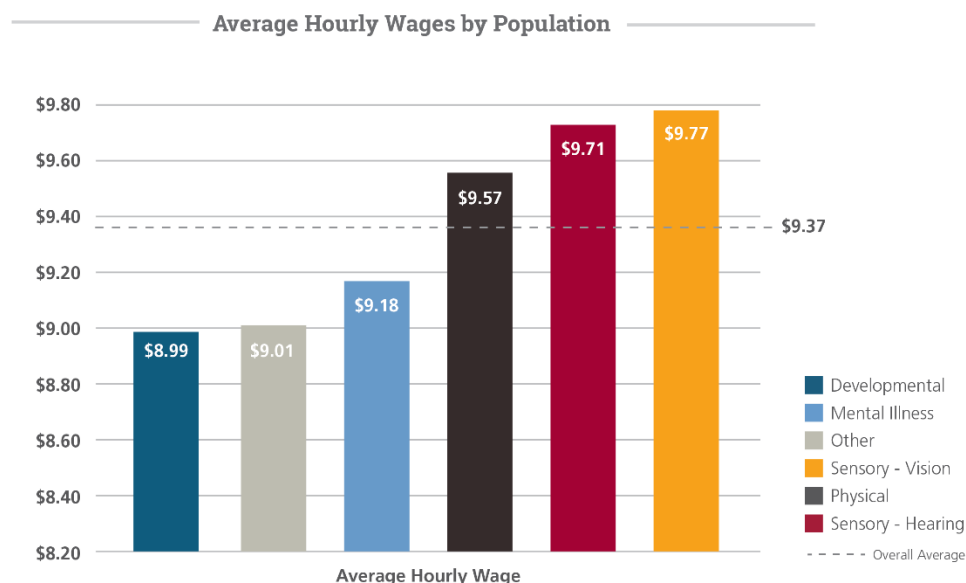
Average hourly wages are further categorized by severity of disability, as seen in **Figure 4** below. Participants with the most significant disabilities achieved the lowest wages on average, at $8.94, which is a slight increase from the last report. Participants with significant disabilities achieved the highest average hourly wages at $9.65, which again, is a slight increase from the last report. Those individuals with a non-significant disability also saw a slight increase compared to the last report.

Severity of Disability	Average Hourly Wages
Significant Disability	$ 9.65
Non-Significant Disability	$ 9.62
Most Significant Disability	$ 8.94

FIGURE 4

WEEKLY HOURS WORKED

Figure 5 displays the average weekly hours worked by population. 3,901 unique cases received weekly hours worked. The overall average of weekly hours worked across populations is 25.6, changing minimally from the last report. The population with the highest hours on average is Sensory-Hearing and Sensory-Vision, at 28.0 and 27.9 respectively. Participants with Other disabilities or Developmental disabilities had the lowest hours, at 23.8 and 23.2 respectively, which is consistent with past reports.

Average Weekly Hours Worked by Population

FIGURE 5

LENGTH OF TIME FROM FIRST AUTHORIZATION TO EMPLOYMENT PLACEMENT

Figure 6 displays, by disability, the average number of weeks from a participant's first authorization to the date of employment placement. The length in time overall increased by 3.4 weeks for all populations since the last report, with those individuals identified as having "Other" disabilities seeing the highest increase in weeks, from 36.5 to 46.3. The population identified with having "Other" disabilities also had the longest average length in time from authorization to employment placement. The population with the least length in time is Sensory - Hearing at 34 weeks. The overall increase in weeks was noted in the last report as well, and may have positive implications, as it could indicate increased focus on working with participants through methods such as Discovery, which was a key goal BRS hoped to accomplish with the Employment Service Model.

FIGURE 6

Length in Time
First Authorization to Placement (Weeks)
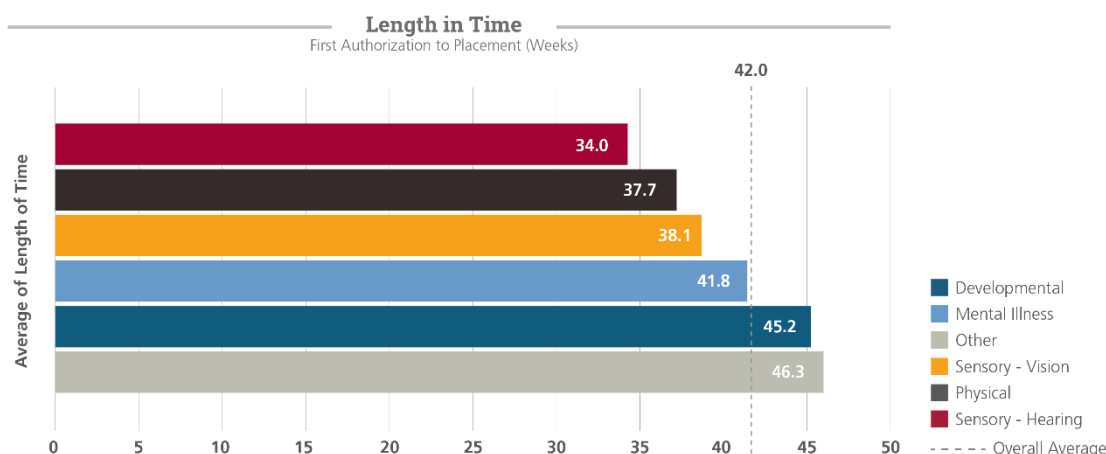
SUCCESSFUL CASE CLOSURE RATE

Figure 7 displays the rate of the number of cases that received both an employment placement and 90-day stabilization. The case closure rates reflect the proportion of closed cases that received a "Successful Case Closure" designation, compared to other case closure designations. 6,749 unique cases received a case closure code. Participants identified as having "Other" disabilities had the highest successful case closure rate, with an increase of 4% from the last report. The rates for those individuals with Sensory – Vision dropped 3%, making that category the lowest during this report period. Overall, the metrics continue to be similar to the past few reports. The average for all categories remained steady at 42%.

Case Closure Rate by Population

	Physical	38%
	Mental Illness	37%
	Sensory - Vision	36%
	Other	48%
	Developmental	46%
	Sensory - Hearing	45%
	Overall Average	**42%**

DISCOVERY HOURS COMPARISON

Figure 8 below represents the average number of hours ESM participants spend in the discovery phase by population. The population with the highest number of discovery service hours are those categorized as Other. This is similar to the last four reports. The Other category increased by 2.0 hours. Physical had the least time spent in Discovery, at 22.1 hours, which represents an increase of 2.9 hours since the last report. Sensory-Hearing and Physical tend to have the lowest time spent in discovery, as is seen in the past few reports. Since the February 2017 report, the average time spent in Discovery has increased steadily from 21.1 hours to 25.1 hours, which represents a 19% increase overall. This may provide additional indication that the average length of time from first authorization to placement (Figure 6) is increasing due to increased utilization of Discovery.
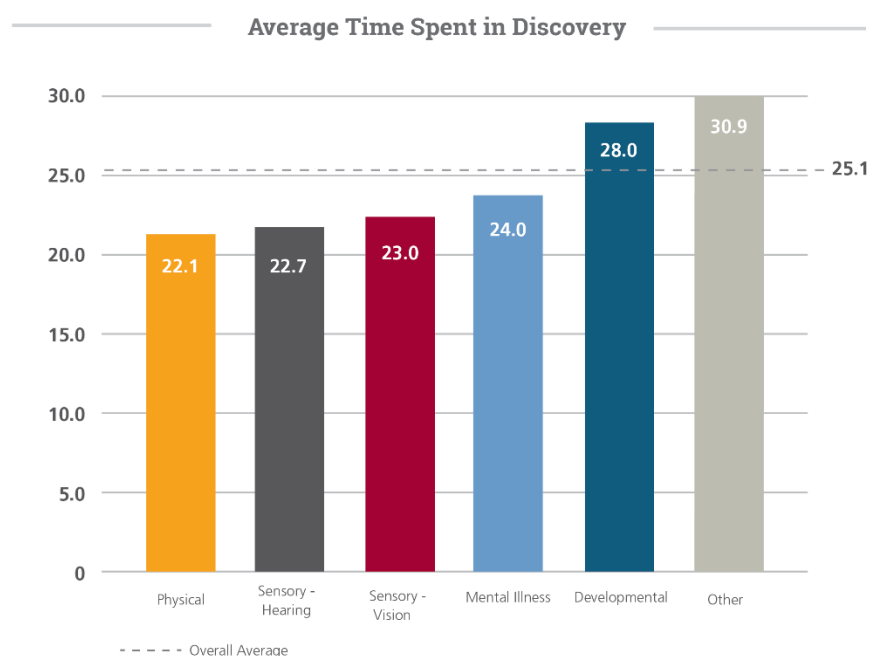
FIGURE 8

Average Time Spent in Discovery

Physical	Sensory - Hearing	Sensory - Vision	Mental Illness	Developmental	Other
22.1	22.7	23.0	24.0	28.0	30.9

Overall Average: 25.1

FIGURE 9

Average Wage vs. Discovery Time
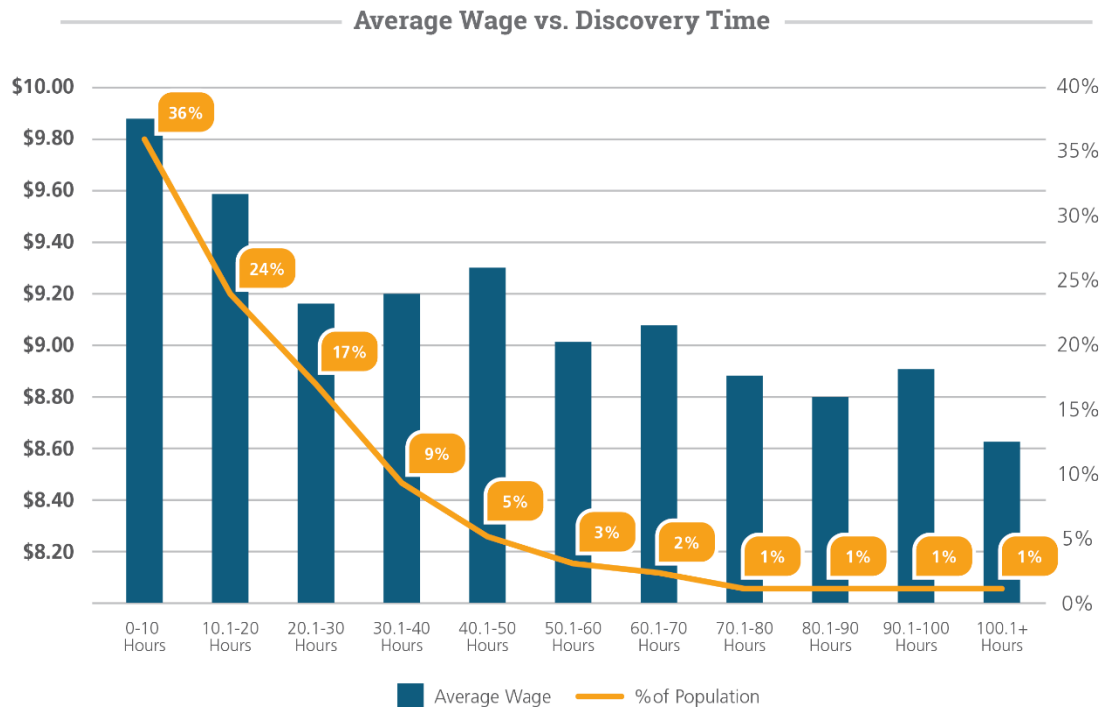
Figure 9 above represents the average wage in comparison to the average number of hours spent in Discovery based on increments of 10 hours. Individuals who spend between 0 and 20 hours in Discovery secure the highest wages. One explanation for this is that these individuals may not require as much assistance in job-seeking, and in turn, spend less time in Discovery. They may be functioning at a higher level and are therefore able to secure jobs that pay them better wages. The group of individuals who received 40.1-50 hours of Discovery time appear to have an increase in wages. This may indicate that 40.1-50 hours of Discovery time is ideal for individuals, and any time spent after that may not be as effective.

INDUSTRY PLACEMENT

Industry Placement by Job Function

BRS uses O*NET federal job codes to designate a participant's employment placement. These job codes correspond to a "Job Family" category. A Job Family is composed of different occupations that require similar skills and expertise. In Other words, a Job Family is grouped by job functions. Categorizing participant employment placements by job functions allows for an easy analysis across multiple industries. For the sake of clarity, any reference to "category" in the remainder of this section will refer directly to the Job Families found in O*NET.

#	Job Family by Function	Percentage of BRS Placements
1	Production	24.7%
2	Office and Administrative Support	15.8%
3	Food Preparation and Serving Related	15.7%
4	Transportation and Material Moving	11.0%
5	Building and Grounds Cleaning and Maintenance	9.9%
6	Personal Care and Service	5.5%
7	Sales and Related	5.5%
8	Healthcare Support	2.1%
9	Community and Social Service	1.5%
10	Installation, Maintenance, and Repair	1.3%

FIGURE 10

The table above displays the industry placements as a percentage of the total participant placements. 3,973 unique cases were identified with a federal job code, which correlates to a Job Family Categorization based on their employment placement. The categories with the largest percentage of participant placements in ESM are as follows:

- **Production**
- **Office and Administrative Support**
- **Food Preparation and Serving Related**

These findings are consistent with our previous reports, with the top ten job placement categories remaining unchanged.

In 2017, the estimated number of employment opportunities for Production-related jobs occupations in Indiana was 373,540. Similarly, the number of employment opportunities for Office and Administrative Support was 419,830, and 279,700 for Food Preparation and Serving jobs[8].

Since July 1, 2015, 983 participants have been placed in occupations designated in the "Production" category. Many of these participants achieved the job title of "Helpers-Production Workers". Production workers perform activities such as supplying or holding materials or tools, cleaning work area or equipment, examining products for quality assurance, and starting equipment[9]. The skills required are minimal, although some occupations may require knowledge of mechanical concepts (maintenance, machines, tools), or some technology. Educational requirements for occupations in this Job Family typically require a high school diploma [10]. Nationally, the average wage for Production Worker occupations is $18.30 hourly, and in the state of Indiana, the average is slightly lower at $17.97. The ESM data reflected an average wage of $9.39 for this

Production
Office & Administrative Support
Food Preparation & Serving Related.

[8] OES Dashboard
[9] Details Report for: Helpers- Production Workers
[10] Summary Report for: Helpers-Production Workers

category. Projected growth (2014-2024) for Production Worker occupations is expected to see a 4% decline nationally, but is expected to increase in the state of Indiana by 8%.[11]

The second largest Job Family, with 629 participant placements, is "Office and Administrative Support". An example of a job title received by a participant is "Office and Administrative Support Workers, All Other". Other participants in this job category find employment in occupations such as Stock Clerks, Customer Service Representatives, Receptionists and Information Clerks, and Hotel, Motel, and Resort Desk Clerks. The skills required for these jobs include clerical and administrative duties, and often require moderate on-the-job training[12]. Educational expectations are high school diploma, though some college education is required for certain job titles. The average wage nationally is $18.24, and $16.74 in the state of Indiana[13]. The ESM data reflected an average wage of $9.91 for this category. Projected growth for Office and Administrative Support occupations is expected to be at 7% nationally and 8% in Indiana[14].

The third largest category that participants were placed in is "Food Preparation and Serving Related" Job Family, with 624 participant placements. Most participants received a "Food Server, Non-restaurant" job title. Activities that are typically performed under this Job Family include serving food to individuals outside of a restaurant environment, such as hotels and residential care facilities, and often have occupations such as "Dietary Assistant", "Food Service Worker" and "Room Service Server". [15] The skills required include active listening, speaking, service orientation and monitoring/assessing to make improvements or take corrective action[16]. The educational requirements to obtain a job in this category include less than high school diploma to some college[17]. The average wage nationally for occupations in this Job Family is $11.88 hourly, and $10.33 in Indiana[18]. The ESM data reflected an average wage of $8.56 for this category. Furthermore, career growth is expected to be at 13% nationally, and 16% in Indiana between 2014 and 2024. [19]

Figure 11 on the following page displays two data points, the top 10 Job Family Placements, which represents the Job Families with the highest participant placements, and the average weekly hours worked for each Job Family. Food Preparation and Serving Related, our third highest Job Family, had the lowest weekly hours worked on average, at 19.5, which is similar to the last report. The highest weekly hours worked was for participants that were placed in jobs categorized in Installation, Maintenance, and Repair, at 34.0 weekly hours worked. However, only 1.3% of participants found a job placement in this Job Family. Production, our highest Job Family, decreased slightly from 25.7 hours to 25.6 weekly hours worked. The second highest Job Family, Office and Administrative Support, has an average of 25.1 hours per week. Overall, industry placement data remains largely unchanged from the last report.

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[11] Salary Finder: Production Workers, All Other
[12] U.S. Department of Labor
[13] Salary Finder: Office and Administrative Support Workers, All Other
[14] Occupational Profile: Office and Administrative Support Workers, All Other
[15] Summary Report for: Food Servers, Non-restaurant
[16] Skills Summary
[17] Summary Report for: Food Servers, Non-restaurant
[18] Salary Finder
[19] Occupation Profile

Consumers in Top 10 Job Family Placements & Average Weekly Hours Worked

FIGURE 11

SUPPORTED EMPLOYMENT

Overall Data July 2016 through September 2018							Highlights

Average Hours Per Utilization by Popuation, per Month

Population	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18
Developmental	25.4	36.2	31.7	34.1	27.6	31.6
Mental Illness	24.5	26.1	28.8	27.9	30.1	31.2
Other	160.5	60.0	26.3	22.1	-	20.0
Physical	29.4	33.9	24.9	28.5	24.5	29.2
Sensory - Hearing	7.6	13.2	15.0	20.0	24.0	25.3
Sensory - Vision	-	24.0	36.9	14.3	32.2	25.0
TOTAL	26.8	33.1	29.9	30.6	28.3	30.8

Total SE Utilized Per Unique Case by Month

Legend: Hours/Case — Count of Unique Cases

Average Supported Employment Hours Utilized per Month by Population

Sensory - Hearing 17.6	Mental Illness 23.3	Sensory - Vision 23.9	Other 24.3	Developmental 26.3	Physical 29.7

24.2

Average Age of Hours/Month

Supported Employment Utilization by Population

- Developmental — 58%
- Mental Illness — 29%
- Physical — 8%
- Other* — 2%
- Sensory - Vision — 1%
- Sensory - Hearing — 1%

Highlights

1.8 months of Supported Employment services is the average length of time per case.

Physical and Developmental had the highest hours utilized per month.

The overall number of unique cases utilizing Supported Employment continues to increase.

58% of individuals who received Supported Employment had a primary impairment of Developmental disability.
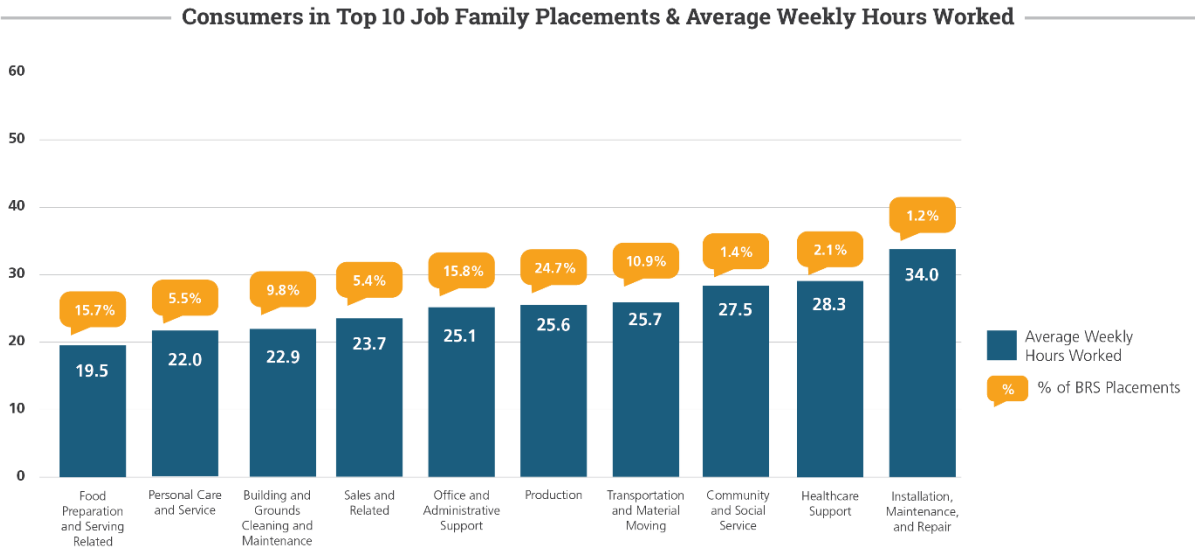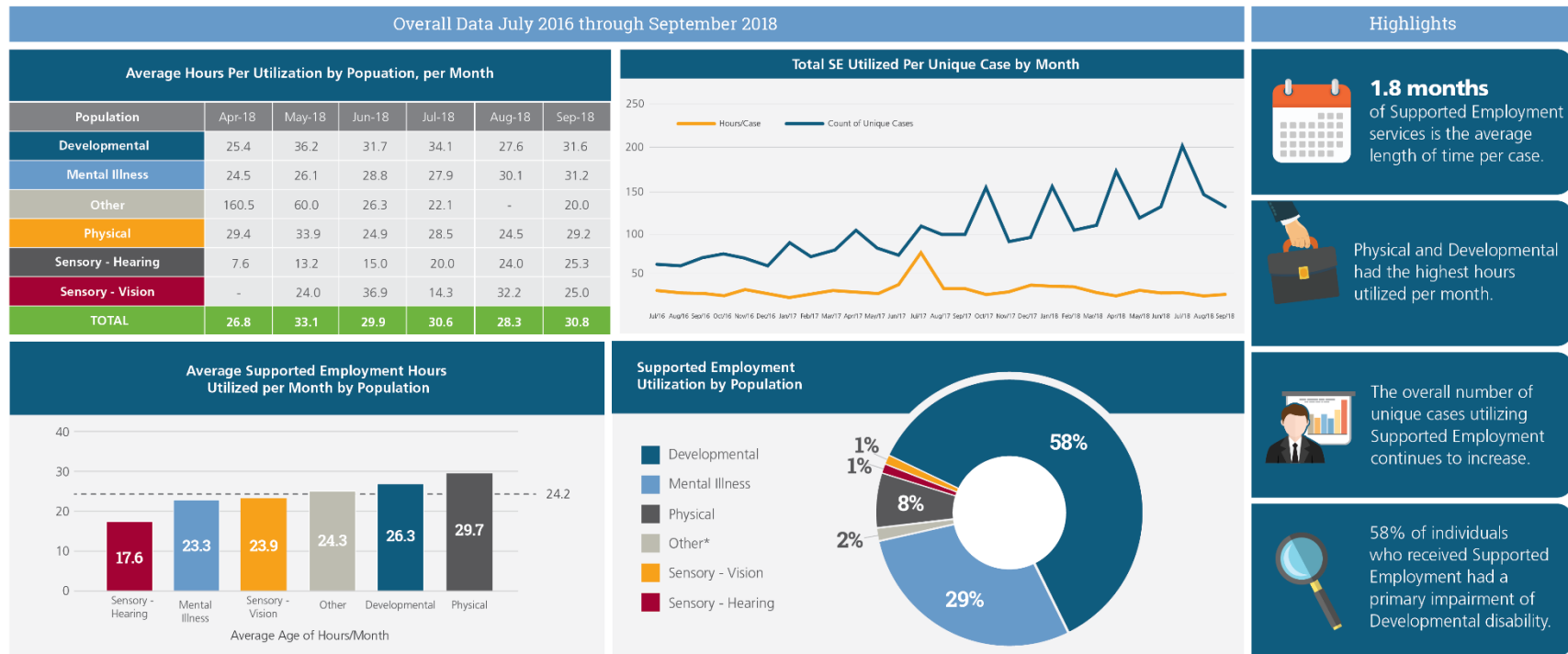
Utilization Dashboard

Supported Employment is a support service intended to support individuals with most significant disabilities achieve employment stabilization. Supported Employment is authorized for participants with the most significant disabilities and is authorized on an hourly basis to offer additional support in order to reach stabilization and job retention[20]. Many of these participants have either had past employment opportunities interrupted by their disability, or traditional employment has not occurred at all.

In recent years, there was nothing in place to deter vendors from quickly closing a case after placement in order to receive the final milestone payments. The new ESM helps limit the desire to close a case quickly by providing financial support to vendors serving individuals with the highest needs that might need longer to stabilize at their place of employment.

Supported Employment authorizations are compensated on an hourly basis, in order to ensure that employment is stable and meets the needs of participants. This hourly service gives participants adequate support in their employment journey, and also incentivizes counselors to work with participants as long as they need. This service allows participants to receive support after achieving employment placement, for up to 24 months. Supported Employment services may be provided on-site or off-site, or a combination[21], and are expected to "fade", or lessen, as participants work towards stabilization.

Even while BRS continues to allocate funds specifically for Supported Employment, the service has been underutilized. VR counselors have been encouraged to routinely authorize Supported Employment as soon as a participant with a most significant disability obtains employment. In addition, BRS has provided multiple training opportunities for vendors, through webinars and various other methods, to encourage the use of Supported Employment.

The dashboard on the preceding page shows an overall positive trend in the use of supported employment activities. The average length of time utilizing supported employment per case remained the same, and average hours per month decreased from 25.2 to 24.2, however the average length of time Supported Employment is utilized increased from 1.6 months to 1.8 months since the last report. The number of unique cases receiving supported employment continues to increase. The following paragraphs explore trends in the utilization of Supported Employment services, through the period beginning in July 2016 through September 2018.
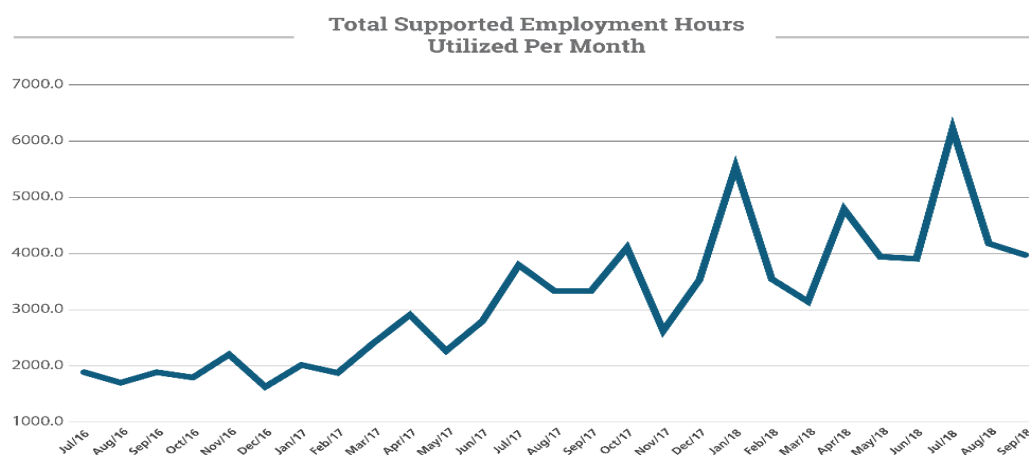
Supported Employment Hours Authorized Per Unique Case

FIGURE 12

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[20] http://www.in.gov/fssa/files/VRS-Manual%20of%20Employment%20Services%20Revised%20September%202016.pdf
[21] http://www.in.gov/fssa/files/ES_Round_2_training.pdf

Figure 12 above displays the total number of Supported Employment hour utilizations by month. As noted in the previous report, the month with the least number of supported employment hours utilized is December 2016. The months with the highest supported employment utilization are July 2018, followed by January 2018. While there continue to be fluctuations between months, there is a clear trend of increasing utilization of Supported Employment services. BRS expects Supported Employment hours to increase as it continues to work with vendors on leveraging this service, which is reflected in the data on participant utilization.

Figure 13 below shows the Supported Employment utilized per unique case by month, as well as the overall number of cases utilizing the service. August 2016 and December 2016 had the least number of cases receiving supported employment services, each at 61 unique cases. July 2018 had the highest, at 203 unique cases. October 2016 and January 2017 had the lowest hours per case at 24.6 and 22.8 hours respectively. July 2017 and June 2017 had the highest hours per case at 75.3 and 37.9 hours, followed by December 2017 at 37.2 hours per case.

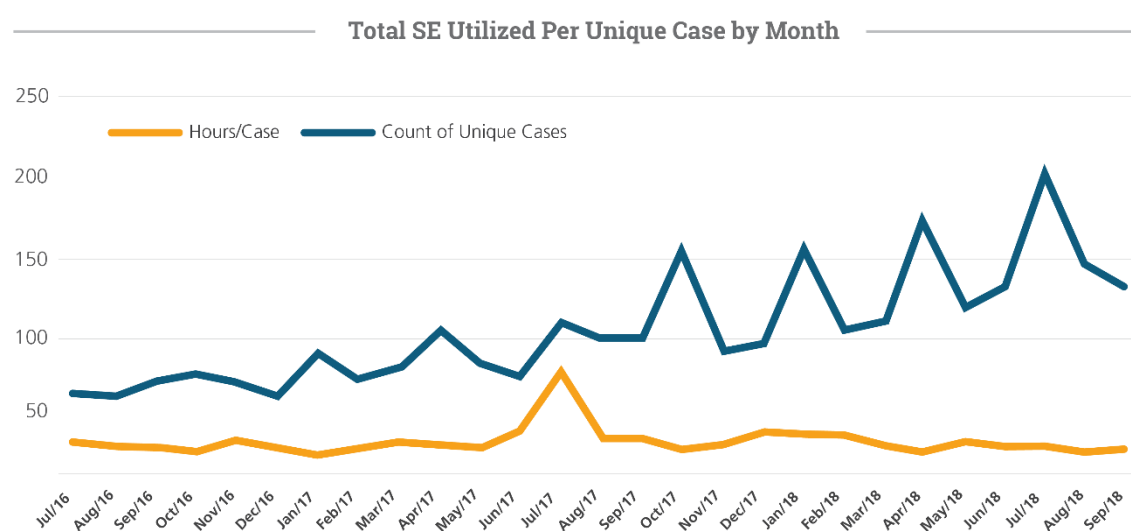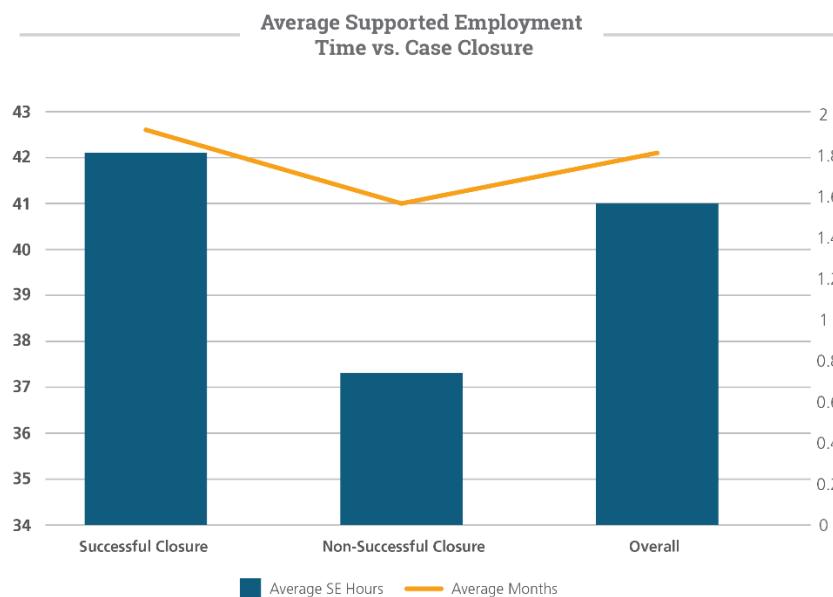**Total Supported Employment Utilizations by Population**

FIGURE 13

Figure 14 on the following page displays the average utilization of Supported Employment services per month by population. There were 1,589 unique cases that utilized Supported Employment hours over the 27-month period we examined. The overall average number of Supported Employment hours utilized per case is 24.2, which is 1.0 hours lower than the average hours per case from the last report. It is important to note that we are analyzing a much larger data set in this report, however, and likely a more diverse group of participants with more variance in their level of needed supports. Also, the number of unique cases utilizing Supported Employment continues to grow, as do the number of hours overall utilized for Supported Employment. If the number of cases utilizing this service grows quicker than the overall number of Supported Employment hours, then it is expected we will see a lower average for each case. Participants with a Physical disability received the highest number of supported employment hours on average per month, at 29.7, compared to the last report which found these participants with an average of 31.0 hours. Participants with a Sensory-Hearing disability received the lowest Supported Employment hours per month, at 17.6 hours, compared to 17.3 hours in the last report. Participants with a Sensory-Vision had an increase in hours from 20.1 to 23.9.

Average Supported Employment Hours Utilized per Month by Population
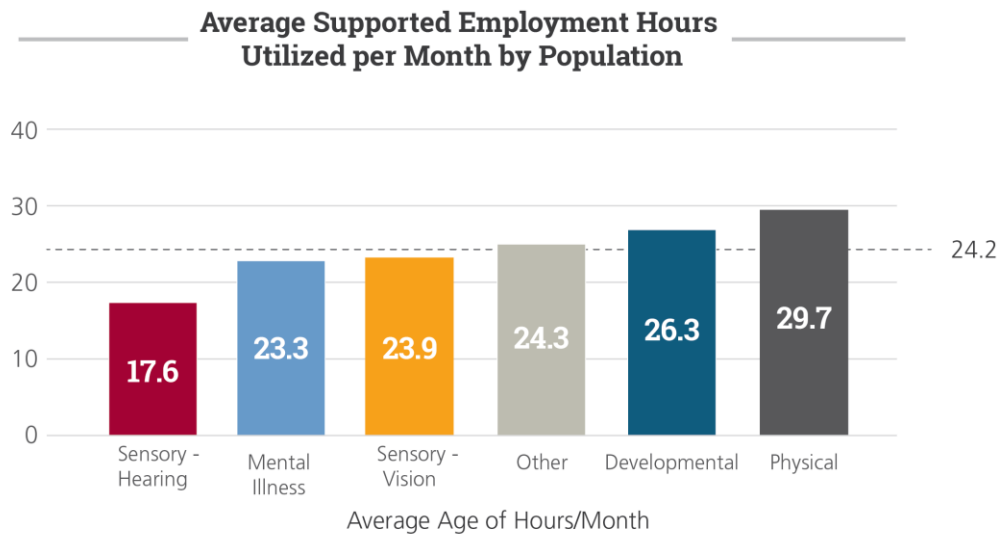
FIGURE 14

Supported Employment Time and Successful Case Closure

Figure 15 compares the average number of hours and months spent in Supported Employment for cases that were closed and identified as being successful or non-successful. Since this graph is only looking at cases that received Supported Employment Hours, it is assumed that each of these cases did have job placement. Successfully closed cases utilize 4.8 more hours of Supported Employment on average when compared to closed cases that are identified as non-successful. This represents a 12.8% difference in the number of hours. Successfully closed cases also spend 21.2% more time in months in Supported Employment when compared to unsuccessfully closed cases.

Average Supported Employment Time vs. Case Closure

FIGURE 15

Total Supported Employment Hours Utilized by Area

The heat map on the following page illustrates the Supported Employment hours by area. Indiana has 22 regional VR offices across four distinct regions. The data analyzes Supported Employment hours utilized in each respective area, in the 6-month period. The data included in the map includes the following, per Area:

- Total number of Supported Employment hours utilized
- Average hours per case
- Percentage of unique cases in the Area, in relation to the overall BRS cases

The hours per case and hours overall varied across areas. It is important to consider factors such as the number of unique cases in the Area when analyzing the data. Area 4 had the highest total number of Supported Employment hours utilized at 9,341.5. Area 18 continues to have the highest average hours per case at 136.9, which represents approximately 16 more hours compared to the last report, but only 1.8% of total cases received Supported Employment services. The area with the least number of hours per case continues to be Area 9 at 22.1 hours per case, with 3.8% of total cases receiving Supported Employment. Ten areas averaged more than 50 hours of supported employment utilization per case. Compared to the data in the last report, Area 4 remained with the highest number of total utilized Supported Employment hours and cases utilizing them. The average hours per case increased in most areas, which supports the trend of overall Supported Employment hours increasing.

1
67.7 | 4.9%

3
44.7 | 5.8%

4
59.1 | 10.4%

5
64.5 | 8.9%

7
& 8
36.5 | 2.8%
31.6| 0.8%

10
73.2 | 2.4%

9
22.1 | 3.8%

11
63.7 |1.6%

6
28.2 | 8.4%

13
& 14
40.9 | 6.8%
44.6 | 6.8%

15
& 16

17
39.0 | 2.0%

23
74.2 | 6.2%

60.1 | 5.0%
45.4 | 5.1%

21
68.6 | 5.6%

22
46.1 | 2.0%

18
136.9 |1.8%

25
82.5 | 2.7%

19
34.8 | 2.0%

20
38.3 | 4.3%

High

Sum of Total
SE Hours

Low

Area

Average Hours
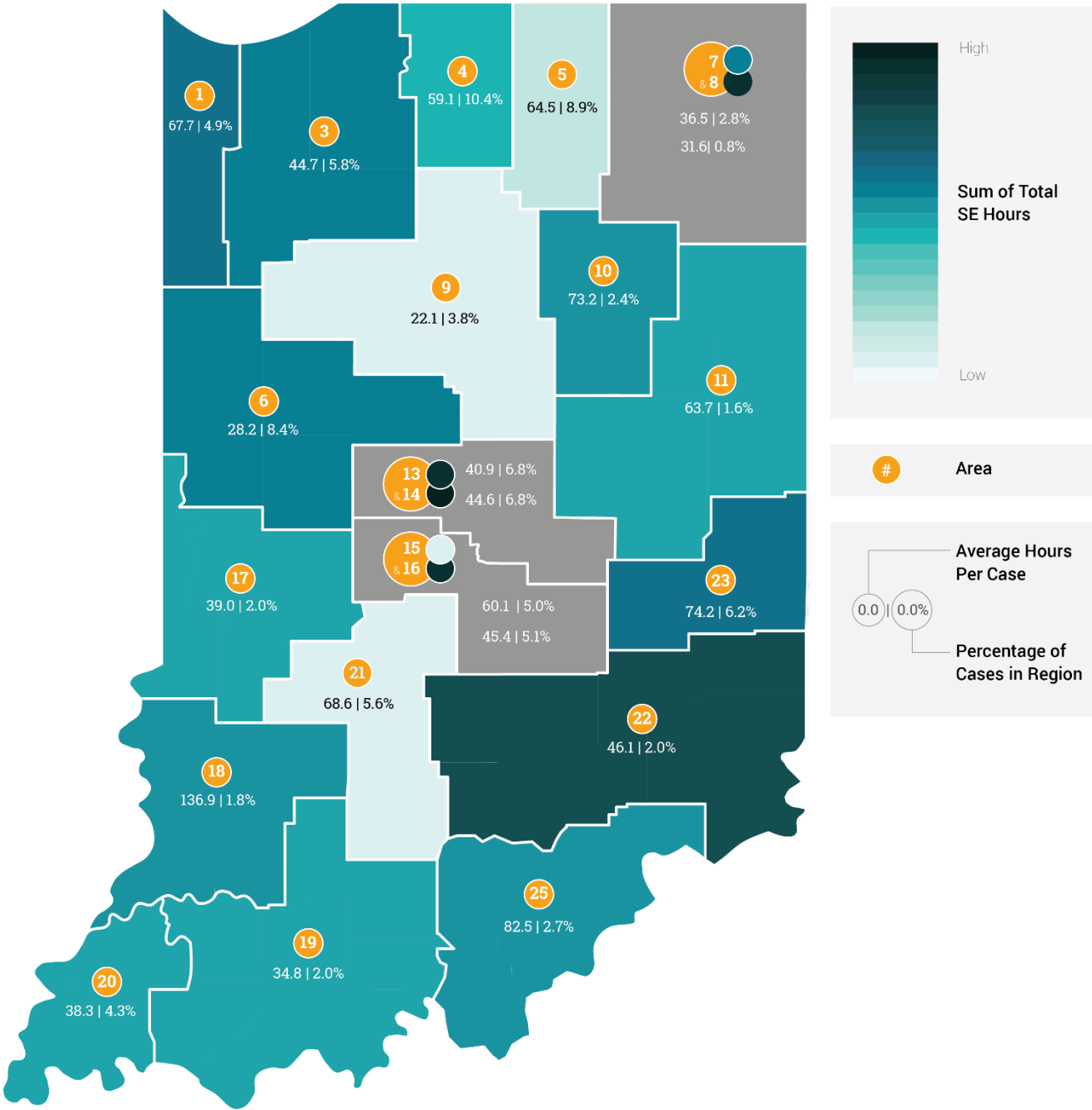Per Case

0.0 | 0.0%

Percentage of
Cases in Region

FIGURE 16

VENDOR ANALYSIS

This section is an analysis of the six vendors in each population with the most claims for Milestone 1, as a measure of vendor activity, in the past six months (beginning April 1, 2018). Therefore, these are the six most active vendors from each population category. This high-level analysis examines participant outcomes for the entire vendor population as well as the top six vendors individually. For the purposes of this report, we replaced actual vendor names with generic titles such as "Vendor A", "Vendor B", etc.

City

High Level Analysis: City

Average Hourly Wage
$9.20 dollars

Average Weekly Hours Worked
21.6 hours

Average Length in Time (weeks)
48.2 weeks

Six Vendors with Highest Number of Claims for Milestone 1 Achievement

Vendor A
Hourly Wage: $8.77
Weekly Hours Worked: 17.1
Length in Time: 52.3
60 unique cases
5% 2% 2% 13% 43% 35%
SD 8% | MSD 92%

Vendor B
Hourly Wage: $8.87
Weekly Hours Worked: 24.5
Length in Time: 48.6
59 unique cases
7% 14% 46% 34%
SD 25% | MSD 75%

Vendor C
Hourly Wage: $8.96
Weekly Hours Worked: 21.0
Length in Time: 47.1
53 unique cases
4% 9% 17% 43% 26%
NSD 1% | SD 8% | MSD 91%

Vendor D
Hourly Wage: $9.17
Weekly Hours Worked: 19.1
Length in Time: 38.8
33 unique cases
3% 15% 36% 45%
SD 6% | MSD 94%

Vendor E
Hourly Wage: $9.86
Weekly Hours Worked: 18.6
Length in Time: 46.8
30 unique cases
10% 13% 23% 53%
SD 30% | MSD 70%

Vendor F
Hourly Wage: $9.33
Weekly Hours Worked: 22.0
Length in Time: 59.2
30 unique cases
3% 10% 20% 67%
SD 43% | MSD 57%

MSD Most Significant Disability
SD Significant Disability
NSD Not Significant Disability

Developmental
Mental Illness
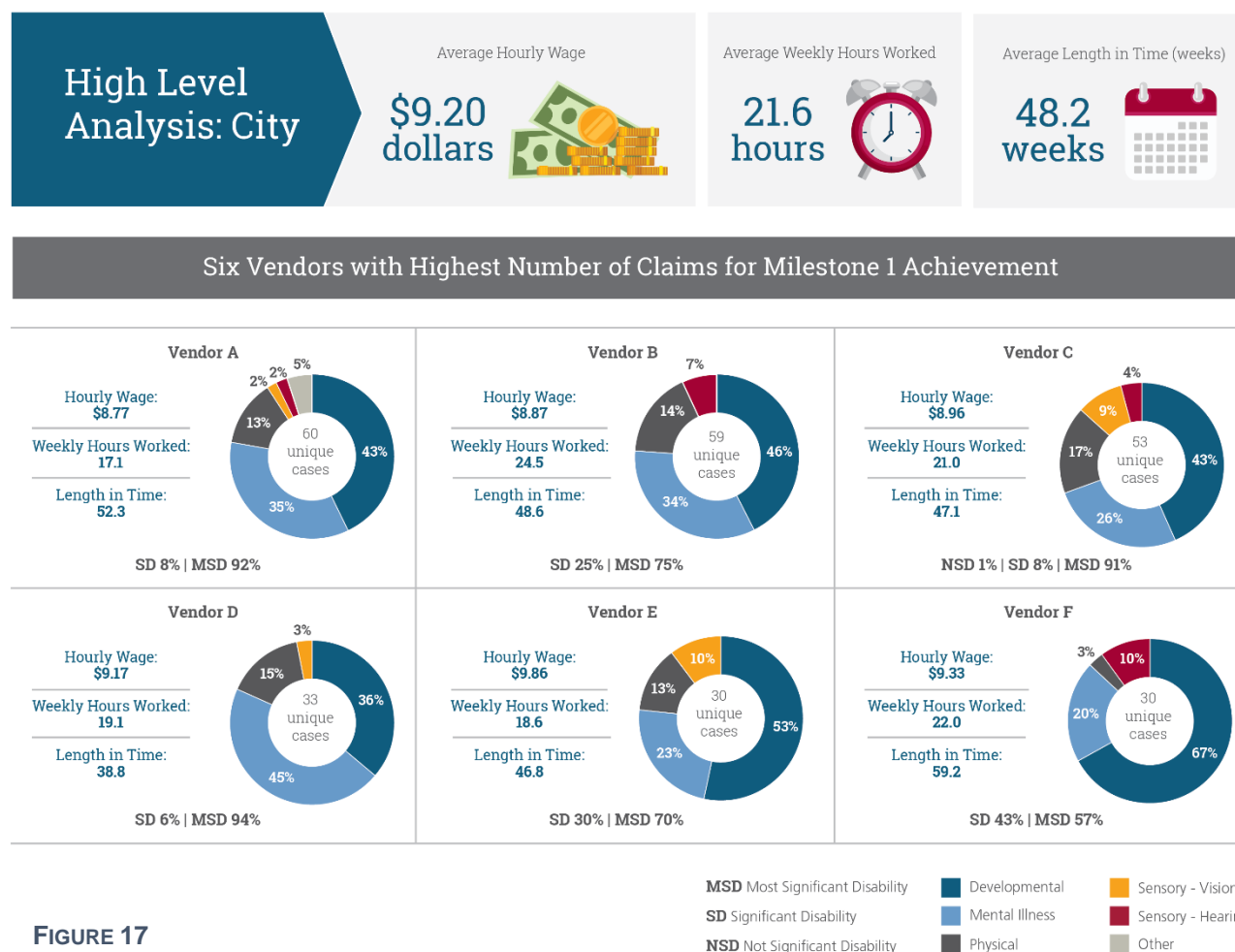Physical

Sensory - Vision
Sensory - Hearing
Other

FIGURE 17

The graphic above displays data for vendors in counties with an overall population of over 100,000 people. Participants in this category have an average wage of $9.20 and average weekly hours worked of 21.6. The length in time from the first authorization to status 22 (stabilization on the job) on average is 48.2 weeks. Vendors in this category had the most cases, and the longest length in time compared to the other two area categories. This could be due to the fact that vendors in areas with a higher population density had more staff and resources, and it is likely that these cities also had more vendors in general to offer services to participants, which would lead to more time spent with participants engaging in various Discovery and Supported Employment activities.

Figure 18 below represents the average number of hours ESM participants spend in the Discovery phase by population. This graphic is similar to Figure 8 above, but it specifically looks at the cases that were grouped in to the 'City' population. The population with the highest number of Discovery service hours are those categorized as Other, which mirrors the entire ESM population. Sensory – Vision had the least time spent in Discovery, at 16.2 hours. The overall average of time spent in Discovery for this group was 2.2 hours less than the 25.1 hours for the entire ESM population.
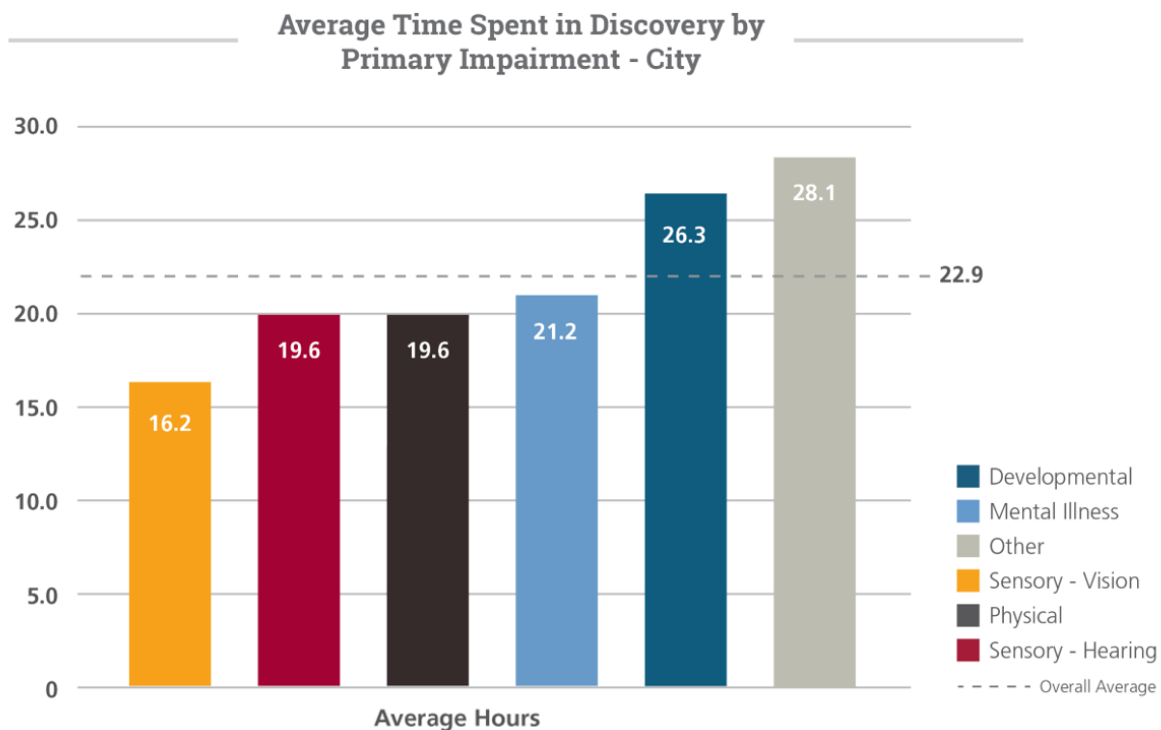
Average Time Spent in Discovery by Primary Impairment - City

Sensory - Vision	16.2
Sensory - Hearing	19.6
Physical	19.6
Mental Illness	21.2
Developmental	26.3
Other	28.1
Overall Average	22.9

Average Hours

FIGURE 18

Figure 19 below displays the total number of Supported Employment hour utilizations by month. This graphic is similar to Figure 12 above, but it specifically looks at the cases that were grouped in to the 'City' population. While there are large fluctuations between months, there is a clear trend of increasing utilization of Supported Employment services. BRS expects Supported Employment hours to increase as it continues to work with vendors on leveraging this service, which is reflected in the data on participant utilization.
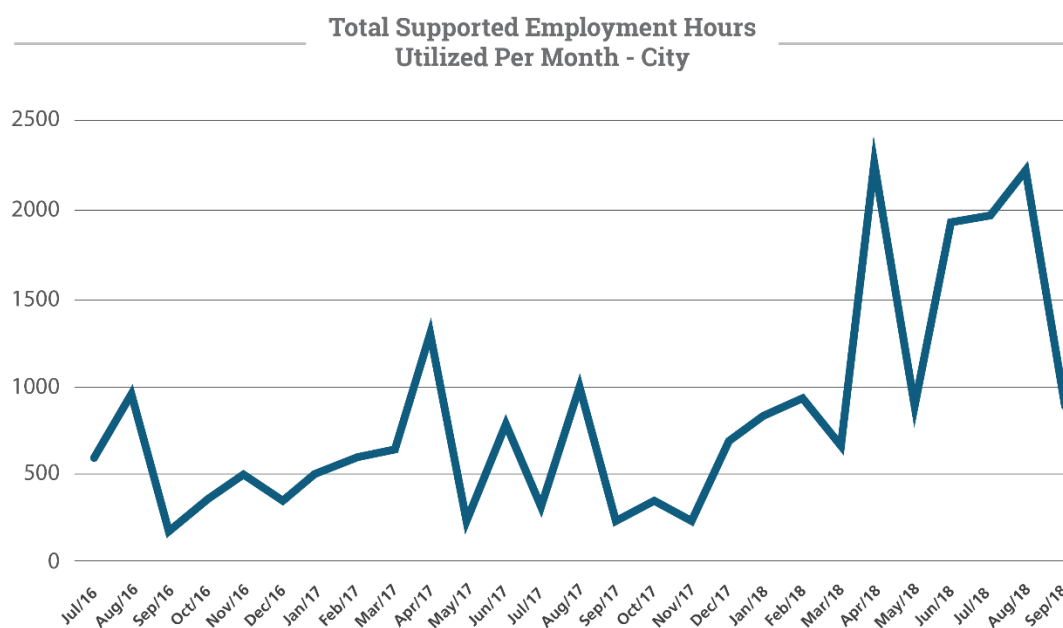
FIGURE 19

Figure 20 displays the rate of the number of cases that received both an employment placement and 90-day stabilization. The case closure rates reflect the proportion of closed cases that received a "Successful Case Closure" designation, compared to other case closure designations. This graphic is similar to Figure 7 above, but it specifically looks at the cases that were grouped in to the 'City' population. Participants identified as having "Other" disabilities had the highest successful case closure rate at 51%, which is similar to the overall population. The overall average at 41% is also similar to the overall population.

Case Closure Rate by Population - City

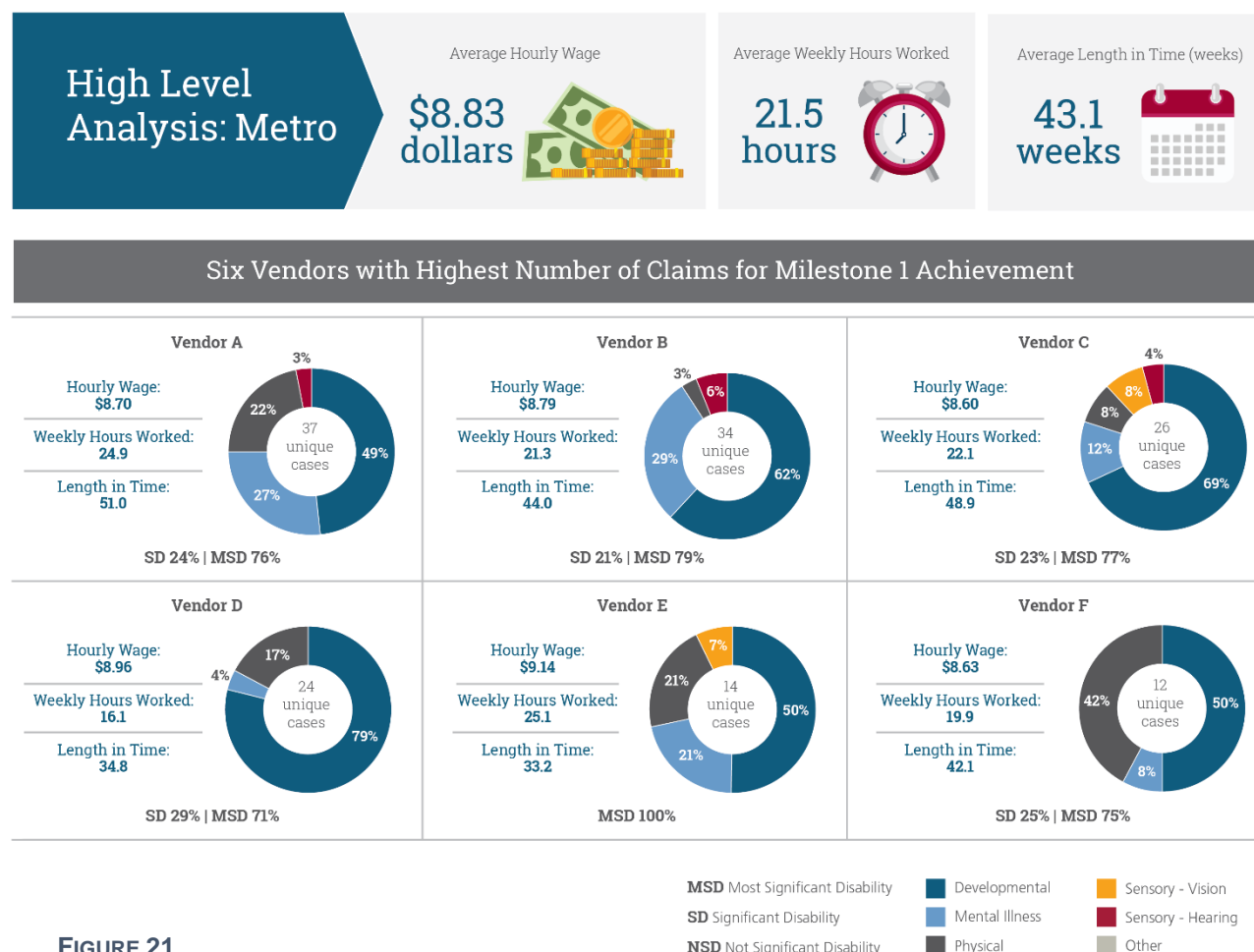|		
	Physical	35%
	Mental Illness	35%
	Sensory - Vision	36%
	Other	51%
	Developmental	43%
	Sensory - Hearing	44%
	Overall Average	**41%**

FIGURE 20

Metro

FIGURE 21

The above graphic displays data for vendors in areas categorized as "Metro"- which are areas that have an overall population that falls between 82,000 and 35,000. Participants in this category have an average wage of $8.83 and average weekly hours worked of 21.5. The length in time from the first authorization to status 22 on average is 43.1 weeks. These areas had the least hourly wages and the least average weekly hours worked when compared to the other geographic regions.

Figure 22 below represents the average number of hours ESM participants spend in the Discovery phase by population. This graphic is similar to Figure 8 above, but it specifically looks at the cases that were grouped in to the 'Metro' population. The population with the highest number of Discovery service hours are those categorized as Other, which mirrors the entire ESM population. Sensory – Vision had the least time spent in Discovery, at 16.1 hours. The overall average of time spent in Discovery for this group was almost identical to the entire ESM population at 25.2 hours.
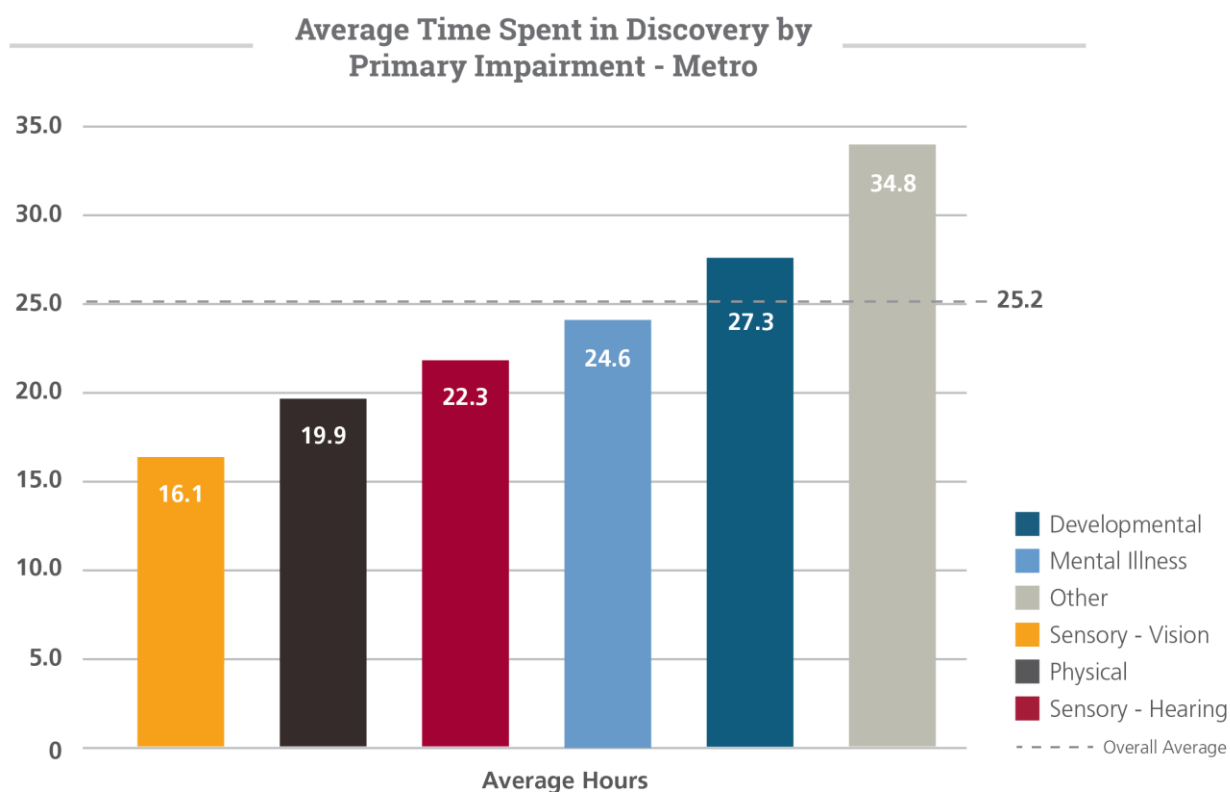
Average Time Spent in Discovery by Primary Impairment - Metro

Average Hours

Legend:
- Developmental
- Mental Illness
- Other
- Sensory - Vision
- Physical
- Sensory - Hearing
- Overall Average

Values: 16.1, 19.9, 22.3, 24.6, 27.3, 34.8, Overall Average 25.2

FIGURE 22

Figure 23 below displays the total number of Supported Employment hour utilizations by month. This graphic is similar to Figure 12 above, but it specifically looks at the cases that were grouped in to the 'Metro' population. While there are fluctuations between months, there is a clear trend of increasing utilization of Supported Employment services. BRS expects Supported Employment hours to increase as it continues to work with vendors on leveraging this service, which is reflected in the data on participant utilization.
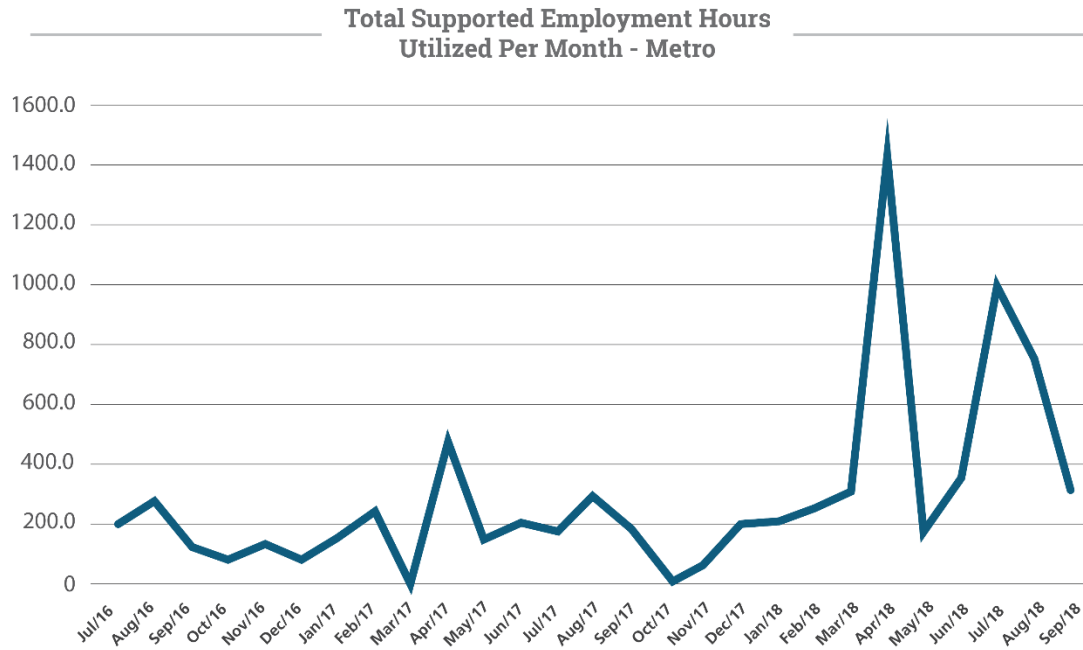
**Total Supported Employment Hours
Utilized Per Month - Metro**
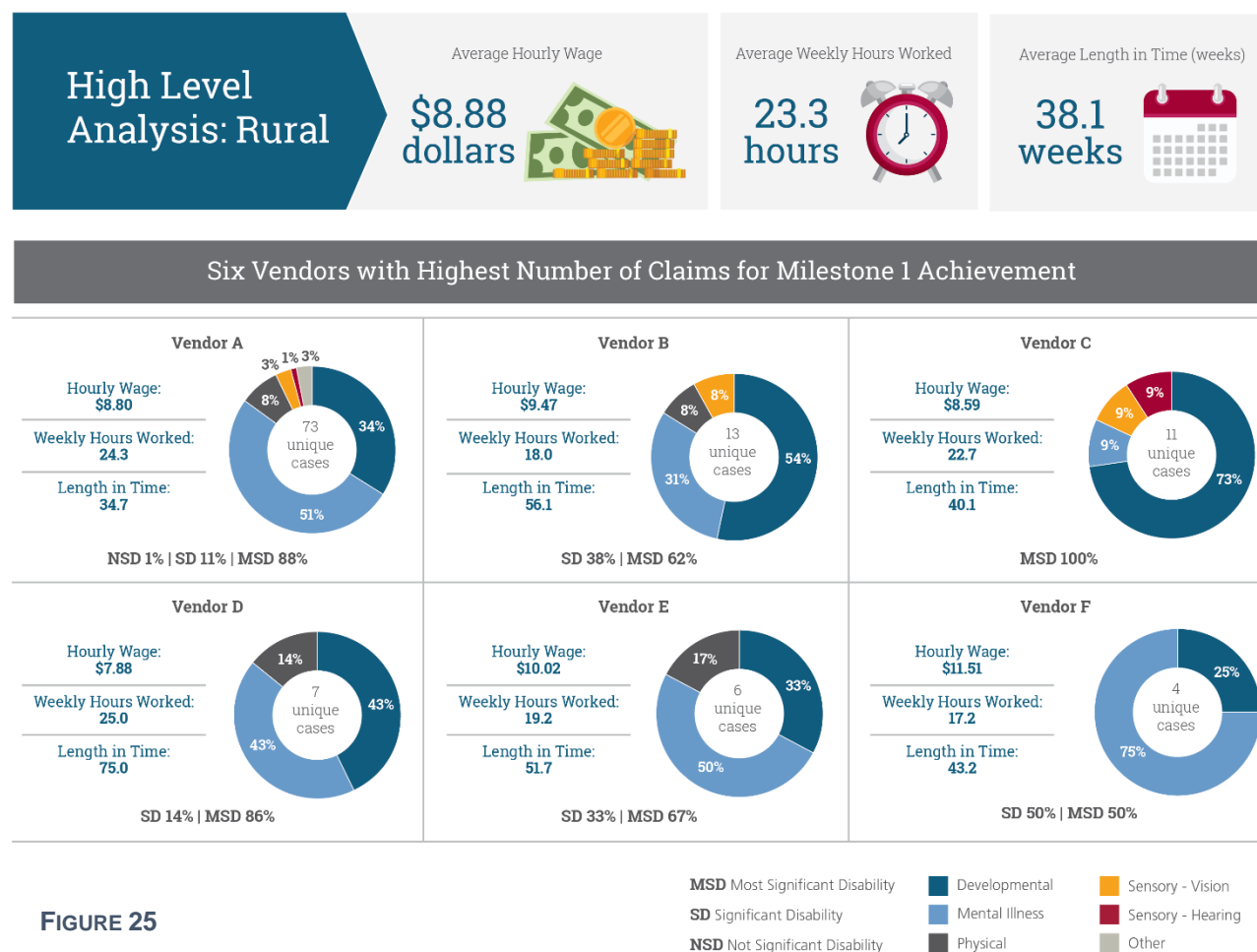

FIGURE 23

Figure 24 displays the rate of the number of cases that received both an employment placement and 90-day stabilization. The case closure rates reflect the proportion of closed cases that received a "Successful Case Closure" designation, compared to other case closure designations. This graphic is similar to Figure 7 above, but it specifically looks at the cases that were grouped in to the 'Metro' population. Participants identified as having "Other" disabilities had the highest successful case closure rate at 50%, which is similar to the overall population. The overall average at 44% is also similar to the overall population.

Case Closure Rate by Population – Metro

	Physical	38%
	Mental Illness	37%
	Sensory - Vision	43%
	Other	50%
	Developmental	48%
	Sensory - Hearing	46%
	Overall Average	**44%**

FIGURE 24

Rural

High Level Analysis: Rural

Average Hourly Wage	Average Weekly Hours Worked	Average Length in Time (weeks)
$8.88 dollars	**23.3** hours	**38.1** weeks

Six Vendors with Highest Number of Claims for Milestone 1 Achievement

Vendor A
Hourly Wage: $8.80
Weekly Hours Worked: 24.3
Length in Time: 34.7
73 unique cases — 34%, 51%, 8%, 3%, 1%, 3%
NSD 1% | SD 11% | MSD 88%

Vendor B
Hourly Wage: $9.47
Weekly Hours Worked: 18.0
Length in Time: 56.1
13 unique cases — 54%, 31%, 8%, 8%
SD 38% | MSD 62%

Vendor C
Hourly Wage: $8.59
Weekly Hours Worked: 22.7
Length in Time: 40.1
11 unique cases — 73%, 9%, 9%, 9%
MSD 100%

Vendor D
Hourly Wage: $7.88
Weekly Hours Worked: 25.0
Length in Time: 75.0
7 unique cases — 43%, 43%, 14%
SD 14% | MSD 86%

Vendor E
Hourly Wage: $10.02
Weekly Hours Worked: 19.2
Length in Time: 51.7
6 unique cases — 33%, 50%, 17%
SD 33% | MSD 67%

Vendor F
Hourly Wage: $11.51
Weekly Hours Worked: 17.2
Length in Time: 43.2
4 unique cases — 25%, 75%
SD 50% | MSD 50%

MSD Most Significant Disability
SD Significant Disability
NSD Not Significant Disability

- Developmental
- Mental Illness
- Physical
- Sensory - Vision
- Sensory - Hearing
- Other

FIGURE 25

The above graphic displays data for vendors in areas categorized as "Rural"- which are areas that have an overall population that is under 35,000. Participants in this category have an average wage of $8.88 and average weekly hours worked of 23.3. The length in time from the first authorization to status 22 on average is 38.1 weeks. Participants in rural areas had the highest average weekly hours worked. In the last report, participant outcomes in rural areas were very similar to those in cities, specifically the average wages and average weekly hours worked. While average weekly hours worked is still similar, the average wages now differ by $.32 per hour. The similarities could be attributed to a smaller overall population, which allows vendors to spend more time with participants in various activities. Quality being higher due to smaller caseload is likely a contributing factor to these positive outcomes.

Figure 26 below represents the average number of hours ESM participants spend in the Discovery phase by population. This graphic is similar to Figure 8 above, but it specifically looks at the cases that were grouped in to the 'Rural' population. The population with the highest number of Discovery service hours are those categorized as Sensory - Vision, which is the opposite of the entire ESM population. Other had the least time spent in Discovery, at 12.7 hours, which again, is the opposite of the entire ESM population. The overall average of time spent in Discovery for this group was much lower, at 18.2 hours. This is almost 7 hours less.
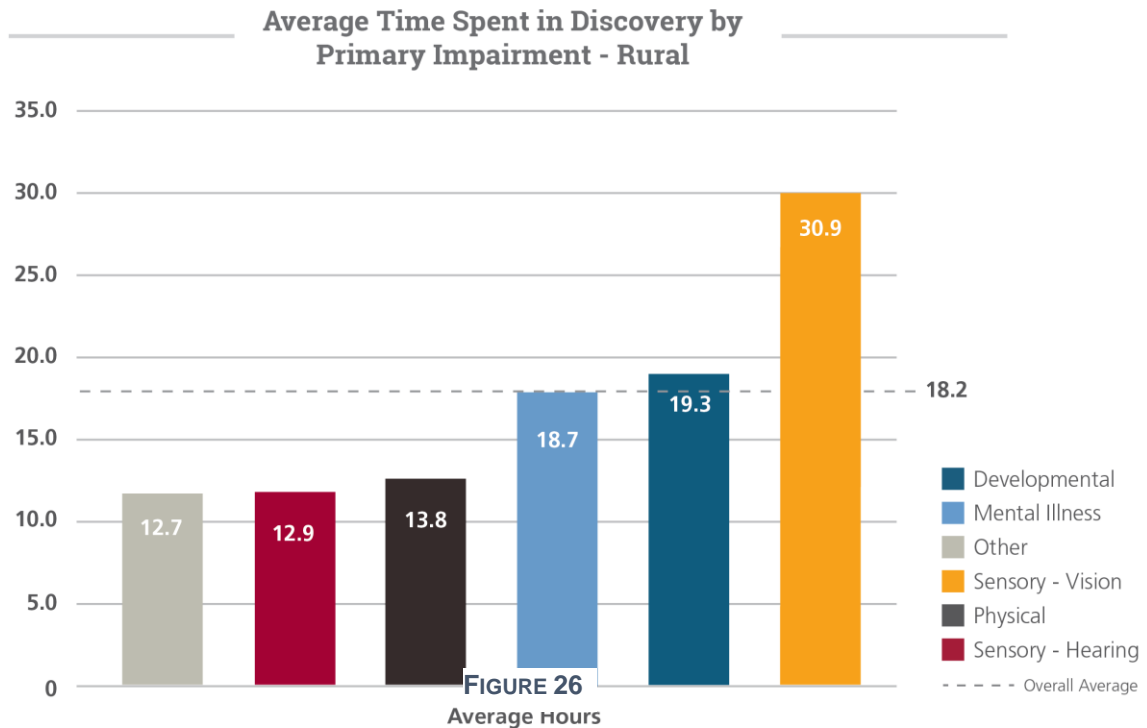
Average Time Spent in Discovery by Primary Impairment - Rural

FIGURE 26
Average Hours

Legend:
- Developmental
- Mental Illness
- Other
- Sensory - Vision
- Physical
- Sensory - Hearing
- Overall Average

Figure 27 below displays the total number of Supported Employment hour utilizations by month. This graphic is similar to Figure 12 above, but it specifically looks at the cases that were grouped in to the 'Rural' population. Like the other groups, there are fluctuations between months, but there does not appear to be a clear trend of increasing utilization of Supported Employment services. It may be beneficial to continue working with the providers within the 'Rural' category and educating them on utilizing Supported Employment Hours.
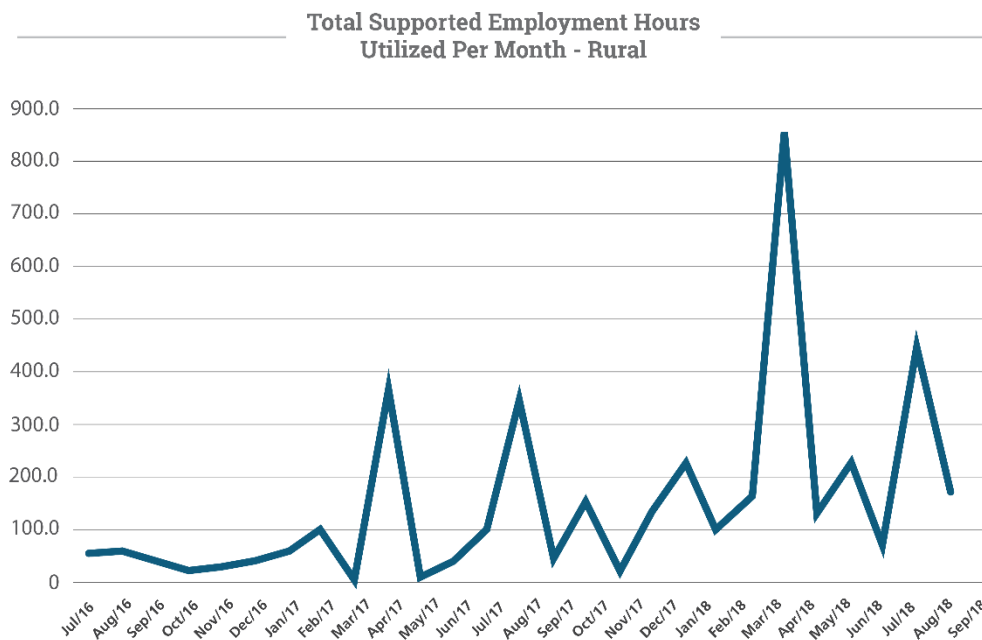
Total Supported Employment Hours Utilized Per Month - Rural

FIGURE 27

Figure 28 displays the rate of the number of cases that received both an employment placement and 90-day stabilization. The case closure rates reflect the proportion of closed cases that received a "Successful Case Closure" designation, compared to other case closure designations. This graphic is similar to Figure 7 above, but it specifically looks at the cases that were grouped in to the 'Rural' population. Participants identified as having Sensory - Hearing disabilities had the highest successful case closure rate at 57%, which differs from the overall population where "Other" has the highest successful closure rate. The overall average at 48% is marginally higher than the overall population.

Case Closure Rate by Population – Rural

	Physical	51%
	Mental Illness	45%
	Sensory - Vision	33%
	Other	43%
	Developmental	56%
	Sensory - Hearing	57%
	Overall Average	**48%**

FIGURE 28

ORDER OF SELECTION

On August 1, 2017, Indiana BRS implemented an "order of selection", a federally-sanctioned process that must be implemented when a state VR agency does not have sufficient resources to serve all eligible individuals. Under an order of selection, VR is federally required to give participants with most significant disabilities priority in receiving VR services, including employment services. The impact on employment services and outcomes is unknown, however this will be evaluated as applicable in future reports. It should be noted that the majority of participants that receive employment services are those with a most significant disability currently, and this population is expected to increase over time. BRS continues to encourage VR employment service providers to work with participants for as long as they need to achieve stable employment, through services such as supported employment, and to provide appropriate and comprehensive discovery activities.

V.   KEY OBSERVATIONS

As VR services continue to be authorized under ESM, the data set has grown and is revealing broader trends and patterns. Key observations will drive future analyses and reveal questions for further consideration.

- **Observation 1: The use of Supported Employment is showing clear and steady increases each month. This is indicative of a strong trend of vendors providing support services to VR participants.**

    As noted in the previous report, the utilization of Supported Employment hours is increasing. This increase is not just in the number of hours being utilized, but also in the number of cases receiving the services. Vendors are providing more Supported Employment services to participants, across disability populations, intended to improve employment outcomes. This is a very positive trend, and this report continues to see this increased use of Supported Employment services.

- **Observation 2: Participant outcomes amongst vendors in different geographic areas of Indiana display some similarities, including mostly serving participants with significant and most significant disabilities, but some differences are emerging.**

    While past reports have revealed that vendors in rural areas and cities have similar participant outcomes, this report began to see some significant differences. This report added more data points to the vendor analysis, and it revealed that participants in 'City' populations and 'Rural' populations have different outcomes based on the types of disabilities. Participants in 'City' populations and 'Metro' populations have similar outcomes, which can be attributed to many different reasons. The vendor analysis will continue to be examined to determine explanations in future reports.

- **Observation 3: ESM outcomes continue to steadily improve.**

    Past reports have identified that outcomes for ESM participants have improved, with the highest current ESM wages over $1.00 higher than the average overall RBF hourly wages. Participants are receiving better employment outcomes, and spending more time between their first authorization and employment placement. This trend could be tied to the increase in Supported Employment utilization, as well as the steady increase in Discovery hours, which was one of the goals ESM had hoped to achieve. This report shows that utilization of Supported Employment and Discovery hours has continued to increase. The February 2017 report showed an average of 21.1 Discovery hours being utilized. Each subsequent report has shown an increase in the average amount of Discovery Hours, and this report has shown that the average has risen to 25.1 hours. This represents an increase of 19%.

VI.   FUTURE ANALYSES

This report is one installment in a series of program evaluation reports to be produced every six months by Public Consulting Group in partnership with BRS. As each report builds off its predecessor, BRS will identify areas for further exploration. Based on the key observations to date, the following areas should be considered for future analyses:

- **Trend Analysis:** ESM has been active for over three years, and we now have enough data to begin analyzing trends. In the coming reports, we will focus on the changes in participant outcomes since the start of ESM. Although we have done analysis on the changes from report to report, we will look at trends over a longer period of time, which is important in measuring the impact of ESM on participant outcomes.

- **Further Vendor Analysis:** The analysis of participant outcomes by vendor in this report revealed valuable information and many questions about employment services, especially outcomes in rural areas and cities. This report added data points for Discovery time, Supported Employment, and successful case closure rates. Future reports will begin to analyze other important factors in order to see if correlations are present between the increased supports and improved outcomes.

- **ESM Length of Time:** PCG will look at the data to determine the average length of time that participants are spending in the ESM. This data will be based on Service ID codes. Looking at this data may help to identify whether participants are remaining in the VR system longer before closure and provide documentation on total participants actively receiving ESM. This data will help to further analyze whether more time being spent with participants is leading to more positive outcomes for participants and providers both.

- **Opportunities with new VR Case Management system**: BRS is working to implement a new VR case management system. This brings opportunity to analyze additional data elements such as employment retention up to one year after VR case closure, and identify contributing factors that lead to improved employment retention such as utilization of supported employment services.

APPENDIX A – CITATIONS

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