**RFP#24-74659: VISIT System Implementation and M&O**

**Attachment L (Scope of Work)**

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**Appendix**

1. Functional Requirements Document

# INTRODUCTION

## Introduction

In accordance with Indiana statute, including IC 5-22-9, the Indiana Department of Administration (IDOA), acting on behalf of the Indiana Department of Health (IDOH) requests the services of a qualified vendor (“the Contractor”) to design, develop, and implement (DDI) a Vaccination, Immunization, Scheduling, Inventory, Testing and Claims (VISIT) system and provide maintenance and operations services post system go-live.

This Scope of Work will be updated based on new information from the winning Respondent’s proposal and discussions with the winning Respondent.

## Scope Overview

The VISIT system will allow public users to schedule vaccinations and medical testing; allow providers to manage related scheduling, inventorying, and patient health information; and follow strict security protocols to ensure the safety and security of Hoosiers’ private and sensitive health information. These services are vital for individuals and families to be able to track and schedule required immunizations for school, work, and travel and to address health matters through an easy-to-use process that connects seamlessly to the data stored in the system and inputted by providers. Providers also represent a vital user role that requires up-to-date scheduling information and inventory status of immunization and testing materials. Providers’ ability to use this system to conduct billing and submit claims is also important and requires seamless connection between data sources. Beyond general health information security concerns, several modules within IDOH’s testing and immunization profile, including those for HIV and STDs, require heightened and specific security considerations.

Other high-level elements of the system are provided below:

* Be public facing application for users to schedule vaccinations and testing offered by IDOH, Local Health Departments, and other approved designations.
* Be a proven solution transferred from the Contractor’s successful implementation from another client or commercial-off-the-shelf (COTS) solution.
* Serve as an electronic medical record (EMR) like system for documenting the service provided to patients. However, the system will not serve as the system of record. The Laboratory Information Management System (LIMS), CHIRP, and LDF are systems of record, while VISIT will integrate with these and other systems to exchange data.
* Allow providers to be able to submit claims for services, monitor claims, and reflect insurance reimbursement to accounts.
* Be adaptable and quickly scalable to handle any future outbreaks.
* Track inventory of tests and immunizations.
* The Contractor shall implement the solution as a cloud Software as a Service (SaaS) solution, although some integration/interfacing may be necessary with on-premise and/or other cloud systems. The Contractor shall be responsible for all aspects of the cloud offering.

Additional details on expected or planned functional requirements will be highlighted in this document and in Appendix 1 - Functional Requirements Document.

The Contractor shall design, develop, and implement the new VISIT system following the contract effective date of July 1, 2023 and adhere to the following timelines:

|  |  |
| --- | --- |
| **Statewide Training and Data Upload Begins**  By October 1, 2023 | * An instance of VISIT is available in a training environment for providers, LHDs, other State users to begin training.   + All testing, including User Acceptance Testing (UAT), must be completed.   + All Blocker, Critical, High, and Medium Defects must be resolved.   + All functionalities must be fully implemented**.** * Latest date for providers, LHDs, and State users to begin submitting site information, inventory information, and other necessary information to prepare for full system go live. The State prefers the data upload activity to begin sooner in order to maximize the amount of time to upload the data into the system. |
| **Statewide Implementation**  By November 1, 2023 | System goes live statewide and all Blocker, Critical, High, and Medium Defects must be resolved |

**Note:** If the Respondent includes a pilot implementation as part of their proposed approach, please note:

* Any pilot must preserve the Statewide Training and Data Upload Begins and the Statewide Implementation deadlines and requirements described above.
* Maintenance and Operations (M&O) services are needed to cover the period between the Pilot Implementation and Statewide Implementation.

In the Technical Proposal and Cost Proposal, there will be instructions regarding how to include details of a pilot implementation.

Please note this contract will use separate pricing for Design, Development, and Implementation (DDI) costs and M&O costs. The State reserves the right to remove M&O and Enhancements services from the scope of the Contract at any time before and during the M&O period with thirty (30) days’ notice to the Contractor.

## Development of VISIT Requirements

The high-level functional requirements document on which this scope of work is based was developed by a third party and incorporates feedback from a wide variety of stakeholders and IDOH working groups. A more detailed functional requirements document is currently being developed and will be provided to the Contractor before the Contract effective date.

## Minimum Requirements

Respondents must propose a proven transfer or COTS solution that the Contractor implemented in at least one organization in the last five (5) years and is currently in use by that organization (government organizations are preferred). The Contractor must also have implemented a proposed cloud-based solution of similar size and scope in at least one organization in the last five (5) years. Though not mandatory, it is preferred that the Respondent have public sector experience, particularly supporting other state governments with vaccination, scheduling, and claims processing solutions.

# Current Systems and Processes

## Current System

Please refer to contract # 43775 at the State’s active contract search site (<https://secure.in.gov/apps/idoa/contractsearch/>) for details on the current system and vendor.

## Historical Volumes

## 

The estimated volumes in the last six months of 2022 are provided below for informational purposes. Volumes may change and VISIT is expected to be able to handle volume changes:

* Approximately 260,000 completed vaccination appointments by LHDs (through the current system, Vaccines for Children (VFC) appointments and fully insured through other private systems).
* Approximately 2,550 completed flu shots
* Approximately 38,000 completed testing appointments
* Approximately 115,000 claims created
* Approximately 175 active providers with approximately 280 active sites, though it is expected that aside from times of a surge, the number may be closer to 150 active providers

# VISIT System High Level Functional Requirements

Please refer to Appendix 1 - Functional Requirements Document for detailed requirements, functionalities, and user abilities for the VISIT system.

## Public Facing Application Requirements

**Patient Registration**

VISIT shall provide the capability to facilitate patient registration in multiple ways:

* Self-registration: A public user can access the application and register themselves.
* Family registration: Immediate family members can register dependents.
* Help desk registration: A help desk representative can register on behalf of a caller.
* Walk-in/Clinic registration: If a patient arrives at a clinic without an appointment, a Clinic User can schedule a walk-in appointment for the patient.
* Private event registration: An organization hosting an event can register a group of individuals (such as a company registering employees and beneficiaries only).

**Public Self Registration**

* Create patient account – A public user can create a patient account that will allow them to access their appointments, test results and immunization history. The account will be linked to their Access Indiana account. A public user may choose to register as a guest without creating a patient account.
* Select desired services – By selecting desired services, a registrant will be able to answer questions about eligibility to ensure they are eligible for the desired services
* Answer eligibility questions – Eligibility questions will ensure the appropriate services are offered and selectable to the registrant
* Select eligible services - There are several services that could be provided at different locations. Allowing the user to select the services before searching for availability will narrow the search results to only the locations where the desired services are available.
* Enter search criteria - Searching for locations for service was one of the biggest issues IDOH received feedback about the current system. This is the area that many of the IDOH personnel feel can improve the user experience, a quick win for building confidence in the system and positively influencing the user experience.
* View search results - Viewing the search results will allow the user to see where services are available for the selected services.
* Select Appointment Slot(s) - A public user needs to be able to see the appointment slots available to schedule appointments for each patient they need to register.
* Enter patient registration information - Entering the patient registration information will gather information required for the provider to communicate with the patient through email, text, phone, or mail. The information will also allow the provider to collect insurance information to process insurance claims and billing. The public user will be able to provide patient demographic information.
* Receive appointment confirmation - The public user will receive an appointment confirmation that will serve as a reminder of the appointment and will allow the public user to confirm, cancel or reschedule the appointment.

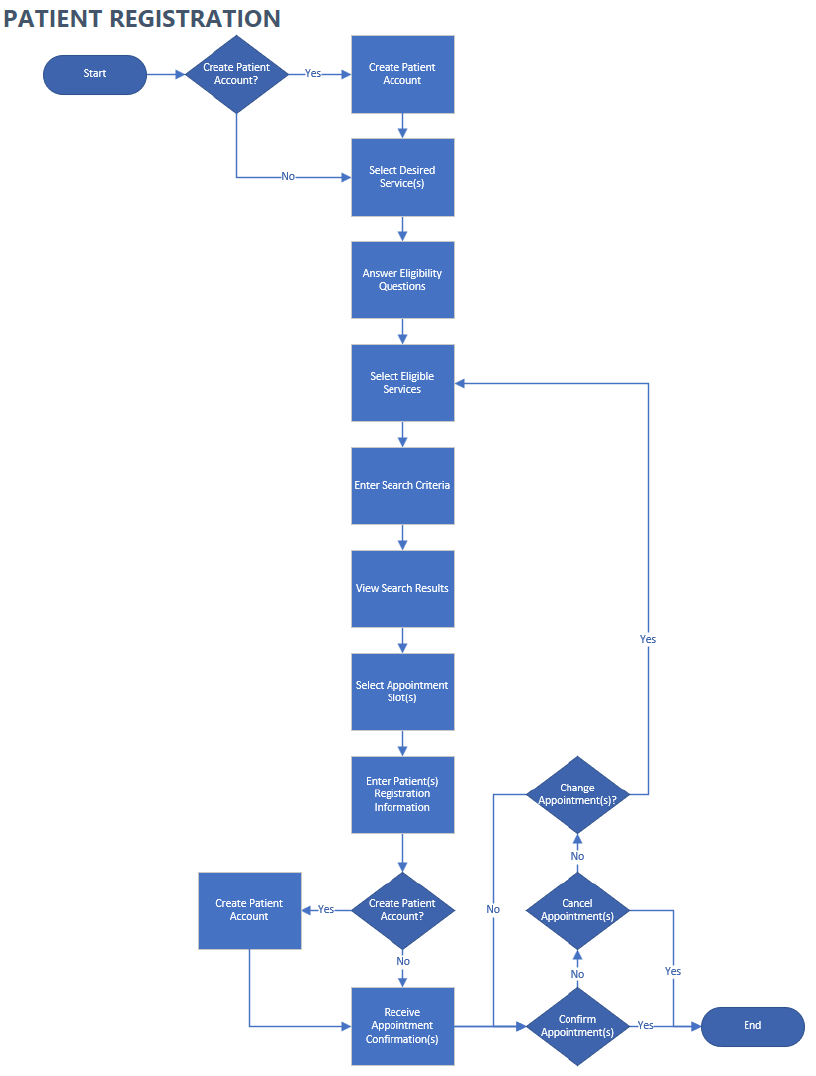
**Help Desk Registration:** This type of registration would function similarly to the public registration process. The help desk agent would search the application for available services and locations and then enter the patient information provided during a phone call.

**Walk-in Registration:** This type of registration would function similarly to the help desk registration process. The clinic user should not need to search the application to find a location, they would use the clinic location and then enter the patient information while the patient was present.

**Private Event Registration**: A private event registration would be used when a service offering is only available to a select group of people. The types of events could be a through a school, employer, residential facility, etc.

Please refer to Appendix 1 - Functional Requirements Document for detailed functional requirements, functionalities, and user abilities regarding Patient Registration. Please refer to the figure below for a diagram of the Patient Registration Process Flow.

**Patient Registration Process Flow**



## Provider Facing Application Requirements

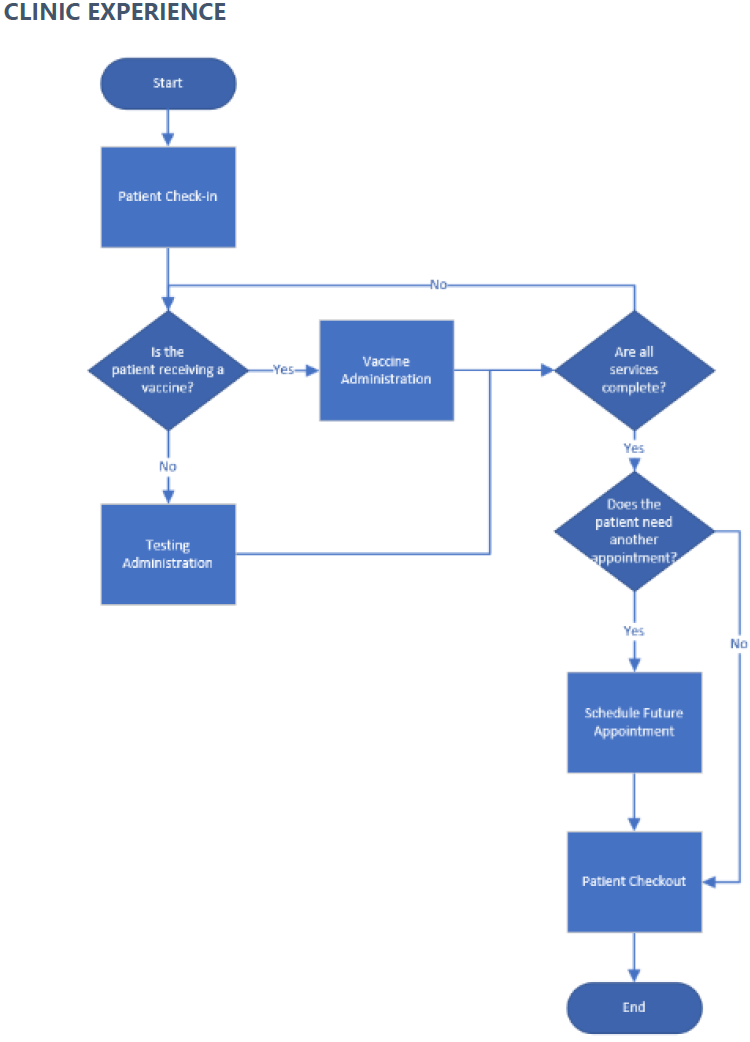
**Clinic Experience**

The clinic experience pertains to how the internal user will utilize the system when interacting with the patient.

* Patient Check-in: When a public user arrives at the clinic location, they will be asked to check-in with clinic staff. The check-in process will allow the clinic to confirm the patient demographics.
* Vaccine administration: The vaccine administration process will be used by a vaccine administrator to document the detailed vaccine information that was administered to the patient.
* Testing administration: The testing administration process will be used by a testing administrator to document the detailed test information that was administered to the patient. There could be tests that are collected and processed within the clinic and tests that would be sent to a testing lab.
* Schedule Future Appointments: Scheduling of future appointments will allow the clinic user to assist the patient in scheduling any additional or follow up appointments necessary. This will be a simple task for the clinic user as all information regarding the patient is already in the system and can be utilized to create additional appointments for the patient.
* Patient Checkout: The checkout process will provide the patient with a post visit summary, indicating the services the patient received during the visit, via printed copy, text or email as indicated by the user in the registration.

Please refer to Appendix 1 - Functional Requirements Document for detailed functional requirements, functionalities, and user abilities regarding Clinic Experience. Please refer to the figure below for a diagram of the Clinic Experience Process Flow.

**Clinic Experience Process Flow**



**Clinic Management**

Clinics must be able to update settings within the VISIT application to make them specific to that clinic. A clinic administrator should be able to adjust settings such as clinic operating hours or the number of appointments available due to staffing availability at the clinic. The clinic administrator would also be able to add users, such as clinic users, vaccine administrators, and testing administrators to the application for their specific clinic.

Scheduling management is key to creating appointments. The operating hours and appointment capacity at each

clinic will be maintained by the local clinic. Periodically a clinic would need to cancel appointments. The application must allow the clinic to cancel appointments due to unforeseen circumstances, at which point the application will notify the patients of the cancellations and allow the patient to reschedule. If a patient fails to attend their scheduled appointment, a clinic administrator must be able to cancel the appointment at the end of the business day and notify the patient.

Please refer to Appendix 1 - Functional Requirements Document for detailed functional requirements, functionalities, and user abilities regarding Clinic Management.

**Billing**

Billing of the services will include submitting the claims to a clearinghouse to be filed with the insurance companies and receiving the payment from the insurance companies. If a claim is rejected by the clearinghouse or insurance company, or if a claim is denied by the insurance company, it will be reviewed, reworked, and resubmitted to the clearinghouse. When payment notification is received, the payment information will be posted to the claims and any differences will be reconciled by the Billing Agents. The VISIT application must have the following functionalities related to billing:

* Receive Completed Service(s): Once the services are complete, the appointment is available for billing. The system should support the full billing lifecycle.
* Review Claim Detail: Reviewing the claim detail will allow the billing team to view the claim for completeness prior to transmitting the claim for submission to the clearinghouse. The Claims Agent will review the encounters to prepare them for transmission to the clearinghouse.
* Prepare to Transmit: Once a claim is reviewed by a Claims Agent and changed the status to indicate that it is ready to be transmitted, the claim must be transmitted to the clearinghouse to be filed with insurance companies.
* Review Rejection: A claim can be rejected by the clearinghouse or the insurance company. IDOH will be notified electronically from the clearinghouse. The Claims Agent would review a claim that is rejected and work to complete/correct it for resubmission.
* Review Denied Claim: If a claim is denied by the insurance company, the Claims Agent would follow up on the claim to work to get it processed.
* Receive Payment Notification: The insurance company would provide payment, electronically. IDOH will be notified electronically when the payment is made.
* Post Payment: When the payment file is received or retrieved from the insurance company, the payments need to be posted against the claims.

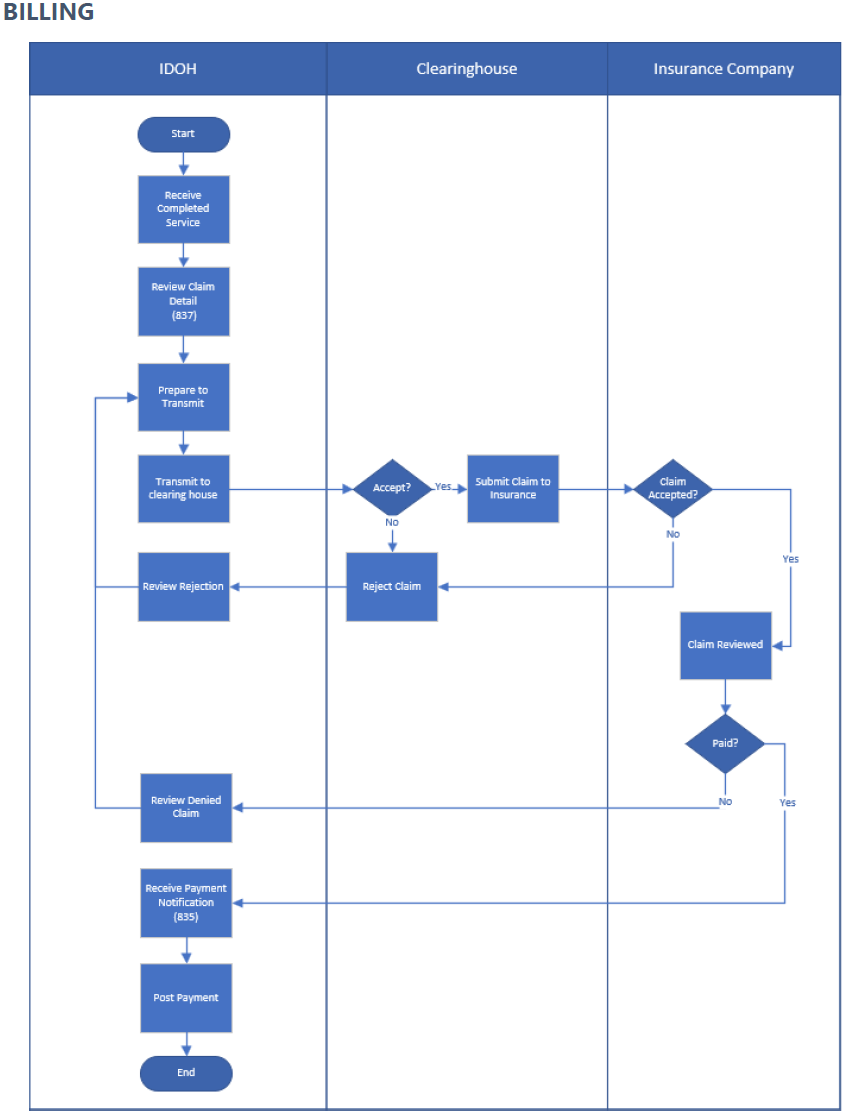
The clearinghouse will be determined during the design portion of the scope of work. The VISIT system must meet the following requirements:

* Be able to send 837 files
* Receive payment notifications (835)
* Accept Electronic Remittance Advice (ERA)
* Follow ANSI-X12 protocol
* Adhere to future Federal guidelines to submit claims

**NOTE:**

* If your organization provides a clearinghouse service, please include that information in your response to question 4.7 of Attachment F - Technical Proposal and in Table 4 of the Other tab in Attachment D - Cost Proposal. The State may choose to use the awarded Respondent’s clearinghouse services for VISIT’s billing. Please refer to Appendix 1 - Functional Requirements Document for detailed functional requirements, functionalities, and user abilities regarding Billing. Please refer to the figure below for a diagram of the Billing Process Flow.
* This system is not intended to accept payment from individuals (at the time of service or afterwards).

**Billing Process Flow**



## General Application Requirements

**Security Management**

Role-based permissions provide a method of controlling access to a system based on the roles of the user. The access is the permission the user has to perform tasks. Roles define the required functions of a user position. With role-based permissions, an administrator is able to configure a number of components that create a definition of who has access to which aspects of the system. An individual user could have multiple roles assigned to their permissions. The VISIT application will have at least the following roles:

|  |  |
| --- | --- |
| **Role** | **Access Needs of the Role** |
| Public User | Access the web interface to create, change, or update appointments and retrieve their own records. Access Indiana accounts will be required to access the system. |
| Clinic User | Access to schedule or reschedule appointments, check patients in for appointments. |
| Help Desk Agent | Access required to assist public users with scheduling appointments. |
| Vaccine Administrator | Access to patient information needed to verify patient identity, confirm consent, and accurately document vaccine administration. |
| Testing Administrator | Access to patient information needed to verify patient identity, confirm consent, and accurately document test administration. |
| Clinic Administrator | Access required to manage clinic operating hours, enter and update number and timing of available appointments. Ability to add or remove patients, clinic users, vaccine administrators, and testing administrators. Access to select test results for communication with patients. |
| Clams Agent | Access to claims files. |
| Claims Administrator | Access to reporting and dashboarding tools for all claims related activities. Ability to update claims data and manage all components of the billing process. |
| System Administrator | Access to all aspects of the VISIT application |
| Reporting Administrator | Access to all relevant data needed to generate reports. |

**Audit Capabilities**

The system should have the capability to track back-end access for audit capabilities. This will allow IDOH to track who accesses or changes information for security tracking purposes.

**Mobile Application Access**

The system should have an interface for a mobile application available in Apple’s App Store and Google’s Google Play. This will allow users to use an app on their phone, rather than a browser.

**Billing Document Repository**

The system should have the ability to receive and store scanned documents. This will allow for scanned copies of paper documents to be stored electronically for research and retention. The scanned documents should be accessible from the claims section of the VISIT application.

**Eligibility Management**

Eligibility management plays a vital role in the application. It will determine which services a patient is eligible to receive. The eligibility questions will be configurable and maintained by the System Administrator to reduce the amount of support required from a developer to make updates to the application. Please refer to Appendix 1 - Functional Requirements Document for specific functionalities required for eligibility management.

**Configuration Management**

The ability to utilize configuration management in the application is critical to a successful tool. The tool must

have configurable items to allow IDOH to quickly make updates to accommodate events without being delayed

by required programming changes. The system should have well configured models, meaning that system administrators can implement simple changes through configuration management. Please refer to Appendix 1 - Functional Requirements Document for specific functionalities required for configuration management.

**Interface Management**

There are existing systems with which the VISIT application will be required to interface. The current list of such interfaces is provided in Section 4.3 below.

**Inventory Management**

IDOH has inventory systems in place for HIV/STD and Immunizations. The system will be able to integrate with the existing inventory systems and will be the inventory system for any participating programs that do not have an inventory system. When a test or vaccine is administered (if the configuration for that service linked it to inventory), the clinic user will document the item and the inventory will be updated accordingly in this system and other systems, as necessary. Please refer to Appendix 1 - Functional Requirements Document for detailed inventory management requirements for the VISIT system.

**Reporting Management**

The VISIT system should be capable of generating several types of standard and non-standard reports. Please refer to Appendix 1 - Functional Requirements Document for general overall reporting needs/requirements for the VISIT system. Please see below several categories of report with specific report needs.

* Standard Reporting: The system should have a set of standard reports available to users. This will allow a user to monitor operations through standardized reporting and allow public users to received post visit summaries and documentation.
* Immunizations – These reports would be available to both IDOH and individual clinics. The clinic report would only show information for the specific clinic and any clinics associated with the parent clinic. Report types include the following: Inventory, Doses Administered, Doses Wasted, Number of Appointments Available, Number of Appointments Scheduled, Scheduled Appointments Completed, and Appointments not Checked Out. For details on these reports please refer to Appendix 1 - Functional Requirements Document.
* Testing – These reports would be available to both IDOH and individual clinics. The clinic report would only show information for the specific clinic and any clinics associated with the parent clinic. Report types include the following: Inventory, Tests Administered, Tests Wasted, Number of Appointments Available, Number of Appointments Scheduled, Scheduled Appointments Completed, Appointments not Checked Out. For details on these reports please refer to Appendix 1 - Functional Requirements Document.
* Billing - Report types include the following: Accounts Receivable, Rejections, Denials, Adjustments, and Workflow. For details on these report categories and specific reports included under each, please refer to Appendix 1 - Functional Requirements Document.
* Operational Reporting - reports of this type may be used in clinics and with patients for a variety of purposes. Reports will include the following: Post Visit Summary, Certification/Documentation, and Testing Label.
* Dashboards - Dashboards provide visual representation of performance, the ability to identify trends, and provide insight to make informed decisions. IDOH needs the ability to define dashboards, dependent on the information needs for each public health event. Dashboards could include:
  + Maps
  + Infection Rates
  + Vaccine Rates
  + Test Rates/Results
  + Billing
    - Billing Agent metrics/performance
    - Rates of billing rejection/acceptance/denied
    - Outstanding insurance payments
* Ad Hoc Reporting - IDOH needs to be able to analyze data that may not be part of a standardized report. Ad hoc reporting will enable IDOH to quickly find answers to unique queries. The access to ad hoc reporting would be restricted and not accessible by everyone with access to the system.

* Alerts and Notifications - The VISIT system must be able to send and receive a variety of notifications to multiple user roles regarding appointments and billing. For detailed alert and notification requirements for the VISIT system please refer to Appendix 1 - Functional Requirements Document.

* Files - The VISIT system must allow users to upload and/or attach files to patient records. The system should be able to handle a broad range of file types and formats (PDF, Word, and JPEG, etc.) and not limit the number of documents that can be uploaded. VISIT billing functionalities must include the ability to receive Electronic Remittance Advice (ERA) files from insurance companies. In explaining file capabilities, describe patient-level or system level maximum requirements along with file types managed by the system. Finalized documents must be maintained and organized in a manner that supports document versioning and a direct search of agreed-upon metadata to support usability and data retention policies.

# VISIT System High Level Technical Requirements

## General Technical Requirements

The following are general technical requirements for VISIT:

* The Contractor’s solution will be a proven transfer solution or commercial-off-the-shelf (COTS) solution with minimal configuration and customization to meet system requirements.
* The Contractor shall implement the solution as a cloud Software as a Service (SaaS) solution, although some integration/interfacing may be necessary with on-premise and/or other cloud systems.
* IDOH prefers that the VISIT system be hosted in a third party cloud solution (e.g., AWS), Gov Cloud FedRamp (Federal Risk and Authorization Management Program) with a Medium security level. The Contractor shall be responsible for all aspects of the cloud offering. If the Contractor’s cloud solution is utilized, there shall be a direct connection to the State on-premise IDOH systems (LIMS, CHIRP and LDF for data exchange). The State (e.g., the IDOH Data and Analytics team) shall have direct access to their raw VISIT data to connect to and extract data through an API or other interface for reporting and other needs The Contractor must adhere to additional Terms and Conditions related to Cloud-based systems. Depending on the Contractor’s proposed System, the Contractor will be required to agree to one or more of the following sets of Additional Terms and Conditions (Attachments X1-X3):
  + IOT Additional Terms and Conditions - Infrastructure as a Service Engagements (IaaS)
  + IOT Additional Terms and Conditions - Platform as a Service Engagements (PaaS)
  + IOT Additional Terms and Conditions - Software as a Service Engagements (SaaS)
* The cost proposal template includes an option for the State to host the solution. The decision of where to host the solution will be determined during project kickoff.
* Be reasonably future proof and will allow rapid adaptation in potential future public health crises.
* Support a variety of users, including Hoosiers interested in getting a vaccine, vaccine recipients, IDOH staff, local health departments, and providers and vaccine administrators among others. The total number of users cannot be estimated at this time, but the VISIT system must be able to handle all users.
* The system will be designed with User Interface (UI) and User Experience (UX) principles in mind.
* Be able to interface and integrate as needed with the current partners listed in section 4.3 “Major Interface Partners” below. The VISIT system should also allow for future integrations and the development of interfaces with new partners as requested by the State.
* Be able to integrate/interface using standard interfaces/methods to other IDOH/stakeholder systems (on-prem/cloud). Note:
  + IDOH prefers to leverage Mulesoft; however if the solution does not support Mulesoft, the State is willing to consider alternatives.
  + IOT Data Exchange and IOT Security recommends that secure data transfer efforts should be focused on utilizing MuleSoft / GoAnywhere (option dependent upon complexity of file transfer) or OneDrive for IDOH to facilitate secure file transfer needs.
* Be easily configurable with minimal development intervention.
* Be scalable to accommodate public health events that require testing or immunization.

* Electronic Signatures: The system must allow patients, providers, and parents/guardians to provide electronic signatures on certain documents, in addition to being able to review and print documents electronically through a secure platform.
* Include Standard Operating Procedures (SOPs) in the system to assist users.

## Security Requirements Standards

* Information Security
  + The Contractor and VISIT will comply with all applicable privacy and security requirements, including in any mobile/tablet applications:
    - Federal:
      * Health Insurance Portability and Accountability Act (HIPAA)
      * Federal Risk and Authorization Management Program (FedRAMP Moderate)
      * National Institute of Standards and Technology (NIST)
      * The Federal Information Processing Standard (FIPS) Publication 140-2 (FIPS PUB 140-2)
    - State: IOT Security Policies (available here: <https://www.in.gov/iot_credential/information-security-framework/>). A link to the instructions for accessing the Information Security Framework through submission of a Non-Disclosure Agreement can be found here: https://www.in.gov/information-security-framework/
    - All requirements of Clause 12 (Confidentiality of State Information) of the boilerplate contract (Attachment B)
  + The Contractor shall perform and ensure that the VISIT system passes application security and vulnerability tests.
  + The Contractor shall maintain information on changes to confidential records and/or data fields, including identification of the responsible system user and date and time of the change.
  + The Contractor shall provide capability to log user access to restricted data, events and associated data.
  + The Contractor shall provide automatic timeout and logoff of users based on minutes of inactivity as specified by IDOH.
  + The Contractor shall meet all requirements for Indiana Office of Technology security protocols. Please see this link for more information and on how to access the Information Security Framework (ISF): <https://www.in.gov/iot/policies-procedures-and-standards/>). As the instructions indicate, Respondents will need to complete the Nondisclosure Agreement available on the webpage and return the completed document to IOT via email to [IOTISFRequests@iot.IN.gov](mailto:IOTISFRequests@iot.IN.gov). Details of what to include on your request can be found on the webpage.
  + The Contractor must understand the importance of ensuring the security of confidential information and shall deploy multiple strategies to ensure that PHI and confidential information stays protected. See the aforementioned IOT Information Security Framework and Attachments B1, B2, and B3 for additional information.
  + The Contractor will execute a HIPAA Business Associate Agreement (BAA) with the State Microsoft to ensure HIPAA privacy and security rule compliance. See Attachment P.
  + Because of the security measures in place, information transmitted through the Contractor’s secure web portal will remain secure whether the user is connected directly through an Ethernet connection, supported web browser (e.g., Microsoft Internet Explorer), or wirelessly from any location.
  + The Contractor shall require Hypertext Transfer Protocol Secure (HTTPS) with 256-bit encryption for Data in Motion and web-based user authentication (i.e., username and password). User registration and authorization will be managed by the Contractor and require contact and affiliation verification for approval.
* Partitioning in Multi-Tenant System
  + The Contractor will protect data by showing the minimum data required. When an approved user accesses a data row, they only see the data that their user role allows.
  + Use the combination of closely managed and verified user registration to grant user roles and row level partitioning based on each user’s verified credentials to ensure that each individual user can access only data for which that user has verified permission/ authorization to view.
* Data Integrity
  + 100% of data must be available with no loss of data.
  + 100% of data converted must be accurate and error-free
  + Ensure protection from data loss or destruction through or rigorous IT security and redundancy measures.
  + Maintain all operations data in a secure platform, which will provide automated, geographically dispersed disaster recovery within the United States.
  + The Contractor’s primary data and servers will be hosted in a secure datacenter and will be replicated throughout the day within the primary datacenter and to a secondary datacenter in the U.S. If a primary data or server failure occurs, the Contractor will be able to recover in the primary or secondary data center depending on which datacenter can provide the required data and server services.
* Development, Compliance, and Diagnostic Tools. Use network, application, and data event logs to audit data accessed and updated by users. The application will be implemented, secured, and audited.

## Major Interface Partners

There are existing systems that VISIT will be required to interface. The Contractor’s solution shall have the flexibility to integrate with other systems and to allow for various interfacing options downstream (leverage Mulesoft, HL7, etc.). VISIT should support standard APIs and means of extracting data. Possible platforms include Azure Data Factory and MuleSoft. Note:

* IDOH prefers to leverage Mulesoft; however if the solution does not support Mulesoft, the State is willing to consider alternatives.
* IOT Data Exchange and IOT Security recommends that secure data transfer efforts should be focused on utilizing MuleSoft / GoAnywhere (option dependent upon complexity of file transfer) or OneDrive for IDOH to facilitate secure file transfer needs.

The current list of interfaces include:

* Access Indiana – Access Indiana is a portal that allows citizens to use one login and one password (single sign-on) to access multiple services from the State of Indiana
* CHIRP - Children & Hoosier Immunization Registry Program (CHIRP) is a secure web-based application that is administered by the Indiana State Health Department and provides a database for immunizations.
* Careware – Careware is a (Health Resources & Services Administration) HRSA-supported software can be used to manage HIV/AIDS care service data and submit the Ryan White HIV/AIDS Program Services Report (RSR).
* Lead Data Flow (LDF) database – LDF is a system that receives all blood lead results reported to IDOH and provides information for federal reporting.
* LimsNet - LimsNet is the IDOH Lab’s web-based submission system that allows sample submitters to enter data electronically rather than on paper forms and receive lab results electronically and in real time.
* NEDSS Base System (NBS) - NBS is an electronic disease reporting and case management platform supported by the Centers for Disease Control and Prevention.
* Outreach Supplies - Outreach Supplies is a state funded supply warehouse to supply funded agencies with HIV/STD/HEP testing and educational materials. This system currently keeps track of inventory and allows agencies to reorder supplies as necessary.
* Insurance clearinghouses and insurance companies for billing and claims
* CDC’s Vaccine Tracking System (VTrckS)
* Vaccine Adverse Event Reporting System (VAERS - national early warning system to detect possible safety problems with vaccines)

The above interfacing should:

* Ensure all systems that provide information to or need information from the IDOH system have the appropriate APIs to support the uni- or bi-directional exchange of information (depending on State needs)
* Meet the VISIT requirements for interfaces
* Eliminate duplicate data creation
* Include data validation to ensure the quality of the data provided

## Multi-Platform Capabilities

The patient facing functionality (e.g., self-scheduling), registration, vaccine administration, and provider administration features (as described in Appendix 1 - Functional Requirements Document) shall be accessible through computer internet browser and on mobile and tablet devices running on either Android or iOS.

The system shall be mobile friendly. The Contractor shall develop two types of mobile applications for VISIT - Mobile Web Applications (MWAs) and Resident Mobile Applications (RMAs).

* MWAs: These applications, also known as Mobile Thin Client Applications, execute within the confines of a mobile device browser.
* RMAs: These applications, also known as Mobile Apps or Mobile Thick Client Applications, live on the device and are accessed through icons on the device home screen. These apps are installed through an application store, such as Google Play or Apple’s App Store. Apps are developed specifically for one platform and can take full advantage of all the device features.

## Multi-Tier Functionality and User Roles

Due to differing requirements at a variety of levels for users both internal and external to the State, the system must provide role-based features and functionality unique to each set of users found at each level. The VISIT system shall support both Role Based Access Control (RBAC) and Attribute Based Access Control (ABAC). The defined roles must account for various user types, including those listed below and their associated functionality requirements. Please see Section 3.3 for the user types.

The defined roles must account for various permissions and allow for the development of additional users. The platform must use IDOH defined roles to provide the basic authentication (Access Indiana) and first layer of access to the system. Once accessed, additional access may be required for authorized users that can be managed by the administrator (e.g., administrator(s) for IDOH, administrator for an LHD, etc.) . Each defined role must have visible functionality consistent with the role and must have defined workflows for approval cycles involving each role. Please note that as reports are defined, they should be identified as to what role or user should have access.

# Design, Development, And Implementation (DDI)

The Contractor shall follow industry standard agile or hybrid agile Systems Development Life Cycle (SDLC) process to implement VISIT as well as to implement any fixes and enhancements. Deliverables shall be on time, on budget, and meet the user-defined request.

This agile/hybrid agile methodology shall break the project into smaller work efforts to realize the following goals:

* Building of stakeholder support for VISIT
* Detection of dependencies, risks, and/or issues as early as possible to make course corrections.
* Early detection of missing, incomplete, or inaccurate requirements
* Early detection of flaws and vulnerabilities
* Adherence to approved project schedule deadlines

The Contractor is responsible for organizing and maintaining all artifacts within IDOH’s application lifecycle management (ALM), Microsoft Project Web Server, DevOps. The Contractor is also responsible for configurations of build and deployment components within the ALM.

Listed in each subsections below are the required SDLC deliverables (IDOH may choose to waive a required deliverable for the system DDI or for specific post go-live Enhancements). Deliverable documents must be kept updated throughout the Contract term and the Contractor is responsible for organizing and maintaining these artifacts within Microsoft Project Web Server, DevOps.

**Project Kick Off**

Within the first week of the project, the Contractor will conduct a project kickoff. The items to cover include but are not limited to:

* Review and confirmation the Detailed Project Schedule and Project Organization Chart
* Information necessary for the Contractor to complete the rest of the Project Management Plan, which must be delivered within two (2) weeks after the Contract begins (see Section 11.1 of this document)
* Prepare for Requirements Validation activities.

## Requirements Validation and Management

Requirements Validation

IDOH is currently developing detailed functional and technical requirements and will provide those to the Contractor at the start of the Contract. During Requirements Validation, the Contractor will validate IDOH’s requirements and determine how the requirements are met in the Contractor’s solution. This includes but is not limited to the following responsibilities:

1. Review relevant existing artifacts (e.g., documentation, forms, reports, etc.).
2. Meet with the necessary staff from the program areas, OTC, and ODA
3. Update/add requirements as needed
4. Create process flows, and user stories
5. Conduct a demonstration of their system showing how it supports IDOH business processes and needs. Perform a gap analysis against the Contractor’s solution, identify gaps, and define customization options and processes.
6. Based on the results of the review, IDOH, in conjunction with the Contractor, shall make decisions on how the gaps will be addressed.

Requirements Management

The Contractor shall manage and update the requirements documents throughout the term of the Contract. The Contractor must track and maintain a record of changes to requirements and/or development artifacts for the historical record and certification traceability.

Deliverables

* Gap Analysis Report identifying system configuration and development needs
* Detailed Functional and Technical Requirements
* Requirements Traceability Matrix
* Process Flows
* User Stories
* Glossary of terms and acronyms to accompany requirements documents

## Design

The Contractor shall be responsible for the following activities:

1. Lead architecture, design, and development discussions. Factor in user interface (UI) and user experience (UX) considerations for each user type into the design process and outputs, particularly with respect to the entry portal and the business processes that drive the system.
2. Organize and conduct design sessions with subject matter experts to develop the detailed system design.
3. Provide input and conform to the direction of State IT standards.
4. Facilitate design sessions required to support system development and interfaces.
5. Develop the overall System Architecture Design suite, comprised of the following components, which must receive IDOH approval:
   * Architectural System Design
   * Interface design
   * Database design that includes creation/maintenance of a logical data model, data definition/dictionary, data sharing standards, and data security standards
6. Develop forms and reports design according to stakeholder requirements.
7. Develop detailed functional design, including business rules documentation.
8. Develop the technical environment specifications for the System, including all necessary hardware, software, and tools requested or required to implement the System
9. Develop the System Security Plan, ensuring all IDOH and State of Indiana security requirements are incorporated

Sign-off must be obtained from designated approvers prior to commencement of development/configuration.

Deliverables

* System Architecture Design suite
* Forms and Reports design
* Functional Design (including Business Rules Documentation)
* Technical Environment Specifications
* System Security Plan

## Development

The Contractor’s development approach must incorporate appropriate government and industry best practices and be in accordance with the approved standards. The Contractor shall be responsible for the following activities:

1. Apply consistent development standards including coding, database, and field naming conventions, in alignment with industry standards.
2. Perform necessary configuration, development, and testing required to implement the functional and technical design. See Section 5.5 for Data Conversion and Migration and Section 5.4 for Testing for additional information on the requirements for these activities.
3. Maintain the product backlog
4. Provide and implement application lifecycle management processes to manage requirements through the entire application lifecycle.
5. Conduct regular demos of functionality throughout development to ensure IDOH visibility and approval

Deliverables

* Configuration Management Plan
* Configuration documents
* System documentation including, but not limited to:
  + A graphical depiction of the overall architecture
  + A description of the overall application architecture including primary components/modules, navigational structure, etc.
  + A logical and graphical depiction of all process and data element information and their relationships, including an indication of processes that are event or time-dependent
  + A logical depiction of the physical layout and storage of databases, tables, and records
  + Detailed data storage and data access specifications
  + Detailed layouts of menus, windows, reports, and forms
  + A description of architectural components that provide generic system functions in support of the application, such as printing, batch, error handling, security, etc.
  + Detailed hardware and software specifications
  + A graphical depiction of the linkage of batch programs into a physical control process that represents an executable sequence for production
  + Program specifications, including a graphical depiction of the functional organization of each program

## 

## Testing

The Contractor shall be responsible for the following activities:

1. Develop a Master Test Plan that must be approved by IDOH before testing activities can begin. The Master Test Plan covers the approach and methodology for all aspects of testing and must include:
   * Definition of test philosophy (including objectives, required levels or types of testing, and basic strategy)
   * Strategy for maintaining testing environments to facilitate all testing cycles and any testing needs identified
   * Strategy for assisting the State in conducting “what if” analysis testing
   * Strategy to be used for creating and populating the test database(s) and maintaining the files during iterative testing
   * Strategy for collaboration and sharing of test cases with the State and its designees to support applicable testing cycles
   * Explanation of how the testing will satisfy specific objectives and demonstrate that the requirements are met
   * Identification of the design modules that will undergo control or data flow analysis
   * Explanation of how each phase of the testing is determined to be complete, including how the formal reports/debriefings will be conducted and methods for tracking pass-fail test results
   * The testing facilities, environment, and specific testing tools to be used
   * Processes and procedures that will be used for releasing and reviewing testing results
   * Identification of the following for each testing cycle: facilities/tools to be used, staff/resources, method for review of test case and procedures, configuration management, procedures for releasing test results, test data refreshes, planned testing environment, acceptance criteria that determine whether a phase of testing has been completed (including criteria such as number and types (severity) of defects). Note: IDOH plans to use simulated patient data and available provider site data in testing.
2. Manage the following test cycles, tracking progress and producing progress and quality reports: Construction and unit test, system test, performance test, regression test, integration test, interface test, security test, system end-to-end test, conversion test, Operational Readiness Review (ORR), pilot implementation test (if a pilot is included), and implementation test.
3. Support UAT when requested. UAT may be conducted with representatives of all end user groups.
4. Develop test scripts covering all functionality for each testing cycle in collaboration with IDOH. Assist IDOH in developing UAT test scripts when requested.
5. Support the testing environment including, but not limited to, creating the test datasets, creating de-identified test data sets, and resetting the test data to support the re-running of test scripts.
6. Provide defect management tool(s) and procedures for tracking, managing, and reporting system defects during testing. Please see Section 5.7 for additional information on Defect Management.
7. Automate testing where possible. Utilize automated testing tools to increase test execution speed and accuracy within the testing phases.
8. Train IDOH staff involved in testing on the system and test procedures.
9. Run validation and testing software against externally facing Internet applications to help identify potential security issues and repair any deficiencies found during this testing.
10. Refine, update, and make available all test documents, procedures, and scripts throughout development and through full system acceptance to reflect the current requirements.

Deliverables

* Master Test Plan
* Test Scripts
* Test Data Sets
* Testing Results Report for each test stage
* UAT Training Sessions
* Updated Requirements Traceability Matrix to show test cases/scripts pointing back to requirements

## Data Conversion and Migration

The data that needs to be converted and migrated into VISIT will be clarified during the project kickoff. Some scheduling, vaccination, and billing related data will need to be converted and migrated to ensure continuity, though IDOH is willing to consider a phased approach so that not all data is required for go-live. IDOH will work with the incumbent vendor and the Contractor to facilitate data conversion and migration discussions.

The Contractor shall be responsible for the following activities:

1. Examine the data from the existing sources to identify data challenges early in the project for the data conversion/migration effort and compile a list of defined rules to be built to address challenges.
2. Develop a Data Conversion and Migration Plan to describe the conversion and migration strategy and data migration testing strategy. Also included should be a list of the legacy data to be included in the migration and legacy data that can be archived. IDOH and the Contractor will work to define an archival data strategy for archiving historical data that is no longer needed, following State records management rules.
3. Provide a data dictionary, data models, data flow models, process models, and other related planning and design documents to the State in a timely manner prior to data conversion/migration validation.
4. Develop scripts to convert high volume data objects automatically.
5. Provide tools to minimize the manual effort required.
6. Lead data conversion and migration activities including developing a schedule for all data mapping and conversion activities involving State resources.
   1. Coordinate all automated and manual data loads during data conversion
   2. Based on the data migration plan and all accompanying data documents, migrate cleansed/converted legacy data to a test environment for demonstrations, system and unit testing, and UAT.
      1. Perform data conversion testing according to the approved Data Conversion and Migration Plan and provide tools or guidance to help data conversion by identifying common error conditions (e.g., duplicate records) and minimizing manual effort during the data conversion and migration process by automating where possible the corrective action process (e.g., merging duplicate records).
      2. Validate test data for accuracy and functionality according to the approved Data Conversion and Migration Plan.
         1. Ensure there are no duplicate records.
         2. If there is a period of operation where data will be maintained in both systems, synchronize the data.
      3. Support the review and approval of data conversion testing results.
   3. Complete mock conversions with 100% successful/zero defects or agreement to address defects after implementation
   4. If using a pilot approach to system implementation, conduct data conversion and migration for the pilot site(s) immediately prior to implementation of the Pilot Implementation to ensure that current data is in use by VISIT. Similarly, conduct a full data conversion and migration statewide immediately prior to full Statewide Implementation. Any data synchronization will need to be planned for and addressed by the Contractor.
   5. Develop audit trails and logs to ensure that all data has been correctly migrated and, when appropriate, that the correct synchronization has been achieved.
   6. To the degree necessary to meet the Contractor’s needs and to meet requirements of this Contract scope, the Contractor shall establish, maintain, implement and manage software tools to include but not be limited to Source Data Extraction and Transformation, Data Cleansing, Data Load, Data Refresh, Data Access, Security Enforcement, Version Control/Configuration Management, Backup and Recovery, Disaster Recovery, Performance Monitoring, Database Management, Platform, Data Modeling, and Metadata Modelling.

Deliverables

* Data Conversion and Migration Plan and Schedule (within 30 calendar days of contract start)
* Data documents (data dictionary, data models, data flow models, process models)
* Conversion scripts
* Conversion and migration audit trails and logs
* Full data conversion results approved from IDOH

## Implementation

The Contractor shall be responsible for the following activities:

1. Develop the Implementation Plan including identifying the scope, participants, timeline, risks and mitigation strategies, and the Go/No-Go checklists.
2. Conduct a pre-implementation readiness assessment and deliver a report on the findings.
3. Resolve all Blocker, Critical, High, and Medium defects (as identified by IDOH) prior to go-live (see Section 5.7 for Defect Management responsibilities)
4. Execute Disaster Recovery drill
5. Conduct a walkthrough of Pilot Implementation (if a pilot is included) and Statewide Implementation activities with the Implementation Team
6. Address and fix all findings and work with IDOH to gain formal written acceptance before each implementation
7. Develop the Release Plan, which shall also include both pre-production and production releases. It shall include, but is not limited to, the following processes and activities:
   * Establishment and implementation of plans and procedures for the Release Management function
   * Rollout Planning – Plan for and schedule rollout of new services or sites, if applicable
   * Release Planning – Plan for, coordinate, and schedule releases of new versions of the software, data, procedures, and training
   * Rollout Management – Deliver services to new sites or existing sites, if applicable
   * Release Control – Monitor the release process and adhere to release schedules
   * Migration Control – Coordinate the promotion of new releases from development to test to production
   * Release Testing – Coordinate the actual testing of releases/updates
   * Software and Data Distribution – Verify delivery of the correct versions of the software, data, or configuration releases to all locations, regardless of hardware type
8. Execute OCM and Training activities (see Section 6)
9. Finalize M&O processes and train M&O staff (e.g., help desk staff) and be ready to provide support at go-live (see Section 8 for M&O responsibilities)
10. Roll out the Pilot Implementation (if a pilot is included) and Statewide Implementations according to the approved plan and without any disruptions to the normal operations.
11. If a Pilot Implementation is included, document the lessons learned from Pilot Implementation and incorporate lessons into Statewide Implementation.
12. Update all documentation including all training content to ensure they are up to date and reflect latest system and process changes.
13. Develop and deliver an Operations Manual. Plans for the following services must be included in this Deliverable: system administration and operations; helpdesk and incident/problem management; root cause analysis; system monitoring; user account management; security administration; database administration; break-fix; change and release management; configuration management; standards and processes to describe the Contractor’s approach to any concurrent development code streams needed; performance management; capacity planning and management; technology refresh and replenishment services; disaster recovery services; data retention and archiving; and escalation procedures.

Deliverables

* Implementation Plan (within 45 calendar days of contract start)
* Go-Live checklist
* Pre-implementation Readiness Assessment Report
* Release Plan
* Operations Manual
* Update of all system documentation

## Defect Management

Defect management requirements are highlighted in this section, but the full details of defect management will be developed in the Defect Management Plan, which will be finalized with the Contractor upon project initiation. At a minimum, the Contractor must fulfill the following responsibilities, regardless of approach:

1. Develop a Defect Management Plan in conjunction with IDOH
2. Categorize defect by severity level in the Contractor’s defect management tool. IDOH will approve the severity level of each defect. The severity level designation of each defect is ultimately IDOH’s decision.

|  |  |
| --- | --- |
| **Severity Level** | **Description** |
| **Blocker** | An item or action that prevents further testing and no work around is possible, is considered a blocking defect. |
| **Critical** | A major functional piece is broken, an issue that affects several areas, a security issue that jeopardizes system and user data, or an issue that jeopardizes data integrity is considered a critical defect. |
| **High** | A defect that does not function as expected/designed or causes other functionalities to fail to meet the requirements is considered a high defect (acceptable workaround is not available). |
| **Medium** | A defect that affects minor functionality or non-critical data (acceptable workaround is normally available) |
| **Low** | A defect that does not affect functionality or data. It does not impact productivity or efficiency |

1. Resolve defects according to the timelines stated in the Performance Standards (Section 14):
2. Log defects in a well written manner and minimize the need for clarifications. Where possible, the tester should include screenshots of the error, videos of the test process that resulted in the subject defect, or similar information that will allow the State to assess the defect and the Contractor to design and develop a complete fix.
3. For the defects where any clarification is required, the tester and/or SMEs (from State and/or the Contractor) will discuss in daily standups. IDOH will be kept informed on defect status through dashboards within the defect management tool.
4. For defects identified during unit testing, fix the defect during the current sprint they are found.

Deliverables

* Defect Management Plan
* Defects log

# OCM And Training

## Organizational Change Management (OCM)

## 

The OCM activities require disciplined planning, coordination, and communication in order to deliver an efficient and successful implementation and user acceptance. The Contractor’s responsibilities include, but are not limited to:

1. Develop and maintain the Organizational Change Management Plan, including a Stakeholder Communication Plan and an Organizational Transition Plan.
2. The Organizational Transition Plan must consider any role/job transition requirements needed as a result of the implementation of VISIT.
3. Provide onsite or virtual OCM staff, as necessary, in conjunction with the Implementation Support team(s) to support any required role/job transition activities.

Deliverables

* Organizational Change Management Plan

## Training

The purpose of the training activities is to ensure IDOH program managers and trainers begin to receive training on VISIT and the associated business processes by the Statewide Training and Data Upload Begins date referenced in Section 1 of this Scope of Work. The training must be complete in time for the IDOH program managers and trainers to then conduct training for remaining IDOH staff.

Training Plan

During the first month of the contract term, the Contractor shall develop a comprehensive Training Plan for each group that shall be receiving training prior to system implementation. The Contractor shall develop the training courses and materials and deliver training according to the Training Plan. During early outreach to representatives of each end user party, input related to the User Experience (UX) must be solicited and factored into the Training Plan. Content includes, but is not limited to, the following elements for each trainee group:

1. Description of proposed training methodology, resources, software, equipment, and activities to support the various phases of the training (analysis, design, development, implementation and evaluation);
2. Definition of user roles;
3. Identification and development of appropriate curriculum and delivery models;
4. Description of training assessment that shall include a remediation plan for addressing training that did not meet expectations and associated materials.
5. Building and maintaining the training environment(s) (“sandbox environment”); and
6. Creation of user profiles and log-in credentials as requested by the State to allow IDOH program managers, trainers, and other end users appropriate access to the training environment and materials.

Training Execution

The Contractor shall produce all required training materials to address training needs. This may include, but is not limited to, train-the-trainer, instructor-led classroom training, computer-based training, workshops, quick reference guides, recorded virtual trainings for on-demand playback, and training manuals. The Contractor shall equip the IDOH program managers and trainers with the tools to conduct their own training (computer-based training, quick reference guides, training manuals, etc.) The training materials will cover all of the system functions as appropriate for each trainee group. All training materials must be provided by the Contractor in electronic format for review and feedback. Training will not begin without IDOH approval of materials. Training materials will include:

1. Course outlines and content
2. Trainee materials to be used during the training course(s)
3. Training Manual (to be used by the trainers)
4. Description of each system function/module/feature
5. Description of the data elements and their range of values and business rules
6. Description of system workflows and “Day-in-the-Life” scenarios such as use cases
7. Tips and key references for navigating the system
8. Use of ad hoc reporting tools and features

The Contractor shall ensure that all procedures, training environment hardware and software configurations, classroom setup requirements, and content reflect the most current information for the training activities. All training approaches and materials must factor in UX based on the findings from outreach to representatives of each trainee group. The Contractor shall also coordinate with the State to ensure that materials are ready in advance of training. Training materials must be stored in an IDOH-designated online location.

Training During M&O

The Contractor shall keep all training materials updated to reflect the latest System and all process-related changes. The Contractor shall conduct refresher training in a centralized location based on a schedule determined by IDOH. This may align with a major system release(s) to familiarize users with system changes. The Contractor’s computer-based training, quick reference guides, and training manuals shall be detailed and user-friendly enough to sufficiently help new users learn to use the System if there are no Contractor-led training sessions immediately available.

Deliverables

* Training Plan
* Training courses and materials; this includes tools for IDOH program managers and trainers to conduct their own training (computer-based training, quick reference guides, training manuals, etc.)
* Training delivered according to the Training Plan

# Disaster Recovery and Business Continuity

The Contractor shall be responsible for developing and maintaining a Disaster Recovery Plan (DRP) and Business Continuity Plan (BCP) for VISIT thirty (30) days after the commencement of services under this Contract.

* The BCP must provide adequate backup and recovery for all operations, both manual and automated, including all functions required to meet the backup and recovery standards: Recovery Time Objective (RTO) and Recovery Point Objective (RPO).
* The DRP must present actions taken before, during, and after a disruptive event as well as procedures required to respond to an emergency, providing back-up operations during a disaster. The DRP should outline how to respond to an emergency or other occurrence (e.g., fire, vandalism, system failure, and natural disaster) that damages systems that contain electronic protected health information. The DRP shall address what to do if a computer system and/or the data files are violated, lost, damaged, or inaccessible. The disaster backup and recovery plan shall adhere to all HIPAA requirements.

After the Disaster Recovery Plan and Business Continuity Plan’s approval, the Contractor is required to comply with and maintain them. The Contractor shall update these plans (or support IDOH and IOT), as applicable, based on the evolution of data, infrastructure/architecture, and tools. In case of a disaster, the Contractor shall carry out responsibilities assigned to the Contractor in the plan both prior to and during a disaster. This may include, but is not limited to, the following activities:

* Support annual testing including, but not limited to:
  + Plan and schedule business continuity and disaster recovery testing of the system;
  + Recover the system and bring it back online;
  + Recover data and storage according to Recovery Time Objective (RTO) requirements; and
  + Assist with/resolve remediation of recovery issues.
* Participate in post testing activities and help develop reports certifying the achievement of RTO and RPO objectives as well as readiness of the disaster recovery system to support business operations.
* Identify appropriate resources to support disaster recovery/business continuity planning, testing, and execution.
* Perform Contractor-specific tasks outlined in the Disaster Recovery/Business Continuity Plans within the agreed-upon timeline.
* Be available for contact and maintain a call tree to ensure the State can contact the Contractor and resources required to work on the recovery.
* Refresh each system environment to support the recreation of the environments and to support diagnostics and problem resolution as necessary.
* Provide specifics on recovery of business processes and system recovery procedures whose topics include, but are not limited to:
  + Steps required to recover the application;
  + Order of recovery steps; and
  + Verification processes.

Note, in the event of a natural disaster, the Contractor must be operational within two (2) calendar days after the event.

Deliverables

* Disaster Recovery Plan (DRP) and Business Continuity Plan (BCP)
* Complete activities per DRP and BCP, including annual testing

# Maintenance And Operations

Ninety (90) days prior system implementation, the Contractor shall provide an M&O Plan for IDOH review. If a Pilot Implementation is used, the Contractor must begin M&O services after the Pilot Implementation. In the first six (6) months of M&O, the Contractor shall provide Stabilization M&O services. After six (6) months, the Contractor switch to providing Steady State M&O services, which is expected to need less resources with the reduction in issues, defects, and help desk tickets.

**General Systems Support.** The Contractor shall:

* Develop, execute, and manage processes and procedures required to provide technical and functional support for VISIT
* Address all questions and reported problems related to the technical and functional operation of VISIT
* Perform defect resolution of all defects discovered (see Defect Resolution Timeliness for Code in Production Environment performance standard in Section 14.2 of this document.)
  + Beyond the categorization in 14.2, there is an additional category called “Emergency Defects” for defects that must be corrected as soon as possible, including the Contractor staff working outside the normal hours of operations if needed.
* Make routine maintenance changes in the ordinary course of the Contractor’s provision of services defined within the scope of its Contract (such as changes to operating procedures, schedules, equipment configurations) at no additional cost to the State
* Provide release notes to the State ahead of any scheduled enhancement/release.
* Coordinate all maintenance windows with the State to minimize any impact on operations.
* Communicate anything that might impact system downtime to the State at least 24 hours before the performance of that activity.
* Contractor must support the State with any ad-hoc report or query development requests.

**Infrastructure Management.** The Contractor shall:

* Maintain the infrastructure architecture and tool set for all applicable non-production and production users
* Support current and forecasted licensure in non-production and production environments
* Ensure necessary licensure agreements are maintained with applicable parties
* Plan and execute tasks required to ensure VISIT components stay relevant and usable. This support includes resolution of functional issues, application of patches, preventative maintenance, planning/execution of upgrades, and regular performance monitoring and performance reporting
* Communicate to the State any available information on product roadmaps, planned upgrades, and enhancements, and seek State input when necessary at least on an annual basis

**Application Monitoring.** The Contractor must monitor all VISIT components to ensure that they are available per State requirements and in alignment with meeting and exceeding applicable performance standards (Section 14). This monitoring includes troubleshooting, security incident management, and Helpdesk Support (see Section 8). Additionally, the Contractor must provide recommendations on architecture or software/hardware adjustments that could be made to minimize operational risk on a semiannual basis.

**Incident Management.** The Contractor shall properly plan and conduct services to minimize the occurrence of incidents and/or problems with VISIT components. If incidents and/or problems arise, the Contractor shall work with IDOH to resolve issues in a timely manner. The Contractor shall have a clear escalation procedure through the appropriate chain of command to ensure that the production issue is getting the appropriate attention to meet the level of urgency.

**Access Management:** Assist in the definition of user roles and security configurations, specifically the creation of new roles and monitoring of user access rights in relation to internal requirements. Manage unique logon IDs and security profiles for users authorized by IDOH, including other contractors, to have access to the System.

**Training:** Provide regularly scheduled training sessions for new State users and refresher training for existing users when needed. See Section 6.2 for more information.

**Business Continuity and Disaster Recovery:** The Contractor is required to comply with and maintain the approved Business Continuity Plan (BCP) and Disaster Recovery Plans (DRP) and support IDOH and IOT in updating these plans, as applicable, based on the evolution of data, infrastructure/architecture, and tools. See Section 7 for more information.

**Help Desk:** The Contractor shall establish and maintain a help desk. Be available 24/7 during the initial month of the roll out and subsequently reduced to 7:00 a.m. to 6:00 p.m. (ET), seven (7) days a week. to assist end users to address questions and concerns. The Contractor must support the intake, triage, and resolution, as applicable, for all helpdesk tickets:

* Tier 1 tickets are questions easily addressed by the Contractor team. Examples include password resets and other user access issues and basic program or status inquiries. Tier 1 tickets must be resolved in one (1) business day.
* Tier 2 tickets are issues that require more technical and/or program knowledge. These may require some follow-up/intervention to resolve. Tier 2 tickets must be resolved within three (3) business days.
* Tier 3 tickets are issues that require extensive technical and/or program knowledge and may lead to a system change. Before a Tier 2 ticket may be escalated to Tier 3, IDOH must be notified and grant escalation approval. Tier 3 tickets must be resolved within seven (7) business days unless IDOH approves an extension.

Please see Section 14.2 for the Defect Resolution Timeliness requirements during M&O.

The Contractor is responsible for tracking and documenting all phone contacts. Whenever possible, the contact must be associated with the case number in reference and identify the following:

* The caller’s first and last name
* Caller phone number
* Call type
* Outcome of the call
* Description of call and information provided

The Contractor shall be responsible for responding to inquiries at the time of the call. In the event additional research is required to resolve the caller’s issue, the call will be left “open.” The Contractor’s staff shall be responsible for conducting research as necessary, returning the phone call, and closing the inquiry within the timelines specified above. The Contractor shall use a phone system, which allows easy monitoring of performance standards identified by IDOH, with the ability to produce reports on these performances on demand. The Contractor shall maintain a contact management solution to capture and store service requests in a contact management/issue tracking tool throughout the lifecycle of that request, including but not limited to phone calls and written requests from all users throughout the lifecycle of that request.

Staffing must be sufficient to field all calls by a live person, resolve all helpdesk phone calls, and meet call center metrics in accordance with performance standards (see Section 14). The Contractor shall resolve all helpdesk phone calls and meet call center metrics in accordance with the stated performance standards.

The Contractor must inform and receive written approval from the State for any anticipated closures of the Helpdesk. This includes standard State and Federal holiday closures.

**Surge Support:** The Contractor shall provide surge support if requested in the event of an extreme increase in appointments, testing, and help desk inquiries.

Deliverables

* M&O Plan
* Release notes (ahead of any scheduled enhancement/release)
* Information on product roadmaps, planned upgrades, and enhancements. (Seek State input when necessary, at least on an annual basis)
* Recommendations on architecture or software/hardware adjustments that could be made to minimize operational risk (semiannual)
* Training sessions for new State users (per M&O Plan)
* Refresher training for existing users (when needed)
* Updated materials per contract regularly to ensure accuracy and incorporation of newest information (e.g., DRP/BCP, training materials)
* Help Desk set up complete (prior to M&O)

# Staffing

## General Staffing Requirements

* The Contractor shall provide qualified staff as needed to complete DDI, M&O, and Enhancement projects and meet contractual performance standards. If the Contractor needs to adjust the number and mix of resources over time to successfully complete the contractual scope of services, the Contractor cannot increase costs to the State.
* During the Contract term, IDOH reserves the right to require replacement of any Contractor or subcontractor employee found unacceptable to IDOH. Reasons for unacceptability include, but are not limited to, the inability of the individual to carry out work assignments or unsatisfactory job performance as determined by IDOH. The individual must be removed within two (2) weeks of the request for removal, or sooner if requested by IDOH, and be replaced within thirty (30) calendar days after the position is vacant, unless a longer period is approved by IDOH.
* Additionally, as a part of the staffing responsibilities, the Contractor shall:
  + Identify and immediately dismiss any employee with a background unacceptable to IDOH.
  + Identify, report, and resolve performance issues for its entire project staff including but not limited to employees and subcontractors.
  + Ensure all Contractor project staff shall work locally from within the continental United States, unless otherwise approved by the State.
* Contractor staff shall attend meetings or events on-site at IDOH as needed for activities such as training at no additional cost to the State. The State will provide designated office space for the Contractor’s staff on days when on-site work takes place.
* The Contractor must ensure data security and PHI and HIPAA protection by carefully guarding access to IDOH’s offices.

## Vital Positions

The term “Vital Position,” for purposes of this RFP, means Contractor personnel deemed by the State as being both instrumental and essential to the Contractor’s satisfactory performance of all requirements contained in the Contract.  All Vital Positions must fulfill the responsibilities and have the required skills as described below, unless otherwise approved by the State.

|  |  |  |
| --- | --- | --- |
| **Role** | **Responsibilities** | **Required Skills** |
| Executive Lead | * Directs project oversight * Liaises with IDOH and various other State stakeholders * Responsible for ensuring adequate and qualified staffing to execute the scope of work * Addresses escalated issues | * A minimum of ten (10) years of experience in managing and/or leading large-scale IT system projects * At least three (3) years of years of experience with the solution proposed by the Contractor or with a system of similar size and capabilities * Applicable experience with the proposed solution preferred |
| Project Manager | * Coordinates overall DDI project tasks * Serves as the single point of contact between the Contractor and the State for all communications on all system related issues * Ensures performance standards are sustained, and deliverables are submitted on time * Full-time dedicated to the Contract during the DDI phase and during Stabilization M&O; responsible for coordinating activities relevant to success of Stabilization M&O responsibilities * Be onsite Tuesday - Thursday, from the start of the contract until the system is ready for wide scale training, during the first week of Statewide Implementation (and the Pilot Implementation if the Contractor is proposing a Pilot) at which point IDOH is willing to reduce onsite requirements. | * A minimum of seven (7) years of experience in managing and/or leading large-scale IT system projects * At least three (3) years of years of experience with the solution proposed by the Contractor or with a system of similar size and capabilities * At least five (5) years of experience with system DDI, maintenance, and operations * Applicable experience with the proposed solution preferred * Project management certification preferred * Strong written and communication skills |
| Account Manager | * Oversees and is responsible for coordinating activities relevant to success of Steady-State M&O responsibilities | * At least two (2) years of account management experience for government clients * At least three (3) years of experience with the solution proposed by the Contractor or with a system of similar size and capabilities * Applicable experience with the proposed solution preferred * Strong written and communication skills |
| M&O Manager | * Oversees day-to-day M&O responsibilities * Tracks performance standards to ensure that established metrics are achieved * Full-time dedicated to the Contract during the M&O portion of the Contract period * Available onsite during M&O with three (3) business days advance notice | * At least two (2) years of management experience for M&O activities * At least three (3) years of experience with the solution proposed by the Contractor or with a system of similar size and capabilities * Applicable experience with the proposed solution preferred * Project management certification preferred * Strong written and communication skills |
| Lead Architect | * Drives the solution architecture and mapping of required functionality to minimize the need for custom development * Leads the architectural design and documentation at a technical reference model level as well as at a system or subsystem level * Leads application and data modeling, building block design, applications and role design, systems integration, etc. * Ensures system alignment with the technical requirements and goals * Oversees development technical procedures and documentation * Available from the start of the Contract to system go-live * Available onsite with three (3) business days advance notice | * At least three (3) years of experience developing web applications * At least three (3) years of experience managing systems architecture and systems development projects * At least three (3) years of years of experience with the solution proposed by the Contractor or with a system of similar size and capabilities * Applicable experience with the proposed solution preferred |
| Implementation Lead | * Oversees system implementation * Tracks performance standards to ensure that established metrics are achieved * Manages escalated issues * Full-time dedicated to the Contract and onsite presence during implementation planning activities and implementation execution * Available onsite with three (3) business days advance notice | * At least three (3) years of years of experience with the solution proposed by the Contractor or with a system of similar size and capabilities * At least two (2) years of experience managing the implementation of web applications (preferred experience having implemented the proposed solution for another client) |
| Database Administrator | * Designs manages and maintains the VISIT system database * Evaluates and optimizes database configurations and access * Available onsite with three (3) business days advance notice | * At least two (2) year of experience in database administration * At least three (3) years of experience developing systems using the relational database proposed by the Contractor |
| Data Migration Lead | * Develops the Data Conversion and Migration Plan and results reports * Leads all data conversion, migration, synchronization, and cleanup related duties associated with the VISIT system * Works with the State to develop the archival strategy | * At least five (5) years of experience in large system data conversion and migration |
| OCM Lead | * Develops OCM Plan * Leads execution of the OCM Plan activities | * At least three (3) years of experience leading OCM efforts in large scale system implementation projects * Strong written and communication skills * Strong communications skills |
| Training Lead | * Develops the change management and training program for the new VISIT system * Develops and create training videos, eLearning modules * Develops testing and evaluation tools/methods * Establishes communication, training and documentation guidelines * Serves as a learning and development expert collaborating with stakeholders to better understand their needs * Available onsite with three (3) business days advance notice * Onsite presence during training delivery | * At least three (3) years of experience involved developing course outlines, materials, and organizing, conducting classes to support the implementation of the new business processes and systems * At least two (2) year of experience in large system training * At least three (3) years of years of experience with the solution proposed by the Contractor or with a system of similar size and capabilities * Applicable experience with the proposed solution preferred |
| Testing Lead | * Leads all testing activities including planning, documentation, and execution * Ensures the Master Test Plan and processes are coordinated with all stakeholders * Ensures documentation and resolution of issues discovered during the testing process * Serves as the point of contact for UAT issues * Ensures compliance with all State and Federal testing requirements for the proposed system * Full-time dedicated to the Contract during system testing efforts * Available onsite with three (3) business days advance notice | * At least five (5) years of experience as a testing lead for projects similar in size and complexity to the proposed project * Minimum of three (3) years of experience conducting various test phases and leading teams through complex system test scenarios |
| Release Manager | * Works with the State to develop the release strategy. * Develops and tracks the Release Plan and results reports for post Statewide Implementation releases. * Leads and supports all planned post Statewide Implementation releases. | * At least three (3) years of years of experience with the solution proposed by the Contractor or with a system of similar size and capabilities * At least two (2) years of release management experience (preferred experience having implemented the proposed solution for another client) |

## Subcontractors

The Contractor shall be fully responsible for managing all subcontractors used to execute the services of the Contract. The subcontractor(s)’s compliance with all requirements, terms, and conditions shall be the responsibility of the Contractor.

## Hardware, Software, Accessories, and Peripherals

The Contractor shall supply all hardware, software, accessories, and peripherals for their staff (including any subcontractor staff) that will be necessary to complete the requirements of the Contract. The Contractor should provide the necessary workstations, firewalls, switches and routers to connect to the State’s trusted network from their facility. The Contractor is responsible for ensuring use and management of all hardware, software, accessories, and peripherals is compliant with IOT policies, IDOH policies, and any other applicable Indiana policies. The Contractor shall not invoice the State for these costs. The only exceptions will be Virtual Private Network (VPN) access to the State network. This expense will be covered by the State. The Contractor shall manage network infrastructure at the site and support the site’s network connecting to the State’s VPN. Host access will be based upon access-lists in the VPN appliance maintained by the State.

The Contractor is free to provision, manage, and control any device at the site, but within IOT and IDOH policies. See Clause 12 of the Contract for all the confidentiality, security, and privacy of personal information requirements to which the Contractor must adhere.

## Credentials and Background Checks

The Contractor must use State of Indiana-issued credentials to conduct VISIT support cited in the Contract. The State-issued email is used for correspondence with the State and with its VISIT partners (e.g., interface partners, other agency users, and other related entities). Further, the State-issued ID supported via the IOT-maintained Microsoft Azure AD LDAP is used for access to the State network and all systems owned by the State. To ensure that State credentials remain active, users will be required to complete State-issued regular trainings (e.g., security). The training portal will be made available to users following the issuance of State credentials. The Contractor must provide accurate and timely user information to receive State credentials. It may take several days for the user to receive their credentials. Contractor resources cannot be staffed on any activities relating to this contract until they have met the background check requirement, unless specifically exempted by the State.

The Contractor will be required to complete all necessary background checks according to State and federal policies and guidelines.

The Contractor is fully responsible for the conduct of its employees and its subcontractor's employees. If there is any need for intervention by IDOH or other State personnel because of behavior, security breaches, or general misconduct, the Contractor shall immediately remove the employee from the contract work and replace this employee on a permanent basis. Further occurrences may result in the termination of the contract.

# Enhancements

The Contractor shall provide system enhancement services throughout the Contract term. To ensure that services to end users are not interrupted by changes to VISIT, the Contractor shall ensure that VISIT end users are not adversely impacted by any enhancement efforts. For each Enhancement, the Contractor shall follow the Change Request process outlined in Section 11.4.

## Enhancements Pool

The Contractor shall provide a capped Enhancements Pool of 10,000 hours a year. The State is not required to use fully the hours and dollars allocated for the Enhancements Pool for each contract year. Changes that are needed to fix an Enhancement after it is implemented and that are brought to the Contractor during the Software Warranty period will not count towards the Enhancements Pool. If the State utilizes less than 10,000 hours of Enhancements work in a given contract year, there will be no impact to staffing on M&O work or to assigned Vital Positions.

Enhancement pricing will either follow the fixed fee deliverables-based approach or the time and materials-based approach based on Contractual hourly rates. The State will determine the method to use for each Enhancement through the CR process. Regardless of the pricing approach, all enhancements will be charged to the Enhancements Pool and will decrease the capped Enhancements Pool hours. If services are provided in exchange for fixed or not-to-exceed compensation, the Contractor is solely responsible for any costs in excess of the specified compensation.

## Right to Contract with Other Service Providers

Notwithstanding any other provision of this Contract, the State retains the right to contract with one or more other service providers for Enhancements or components of an Enhancement.

# Project Management

The following subsections identify the Project Management expectations for the Contractor.

## Project Management Plan

The Contractor must develop an overall Project Management Plan (PMP) that addresses the approach to and execution of the Contractor’s duties. The PMP must be delivered within two (2) weeks after the Contract begins. The PMP shall be developed according to industry standards and best practices including the Project Management Institute’s (PMI) latest Project Management Body of Knowledge (PMBOK). Once the PMP is approved by IDOH, the Contractor shall maintain and modify the approved PMP throughout the project by updating it to reflect the evolving schedule, priorities, and resources (i.e., it is a living document). At a minimum, the PMP shall include:

* Detailed Project Schedule - The Contractor shall develop an initial Project Schedule that is attainable based on the requirements and their prior experience. Once requirements validation concludes, the Contractor will update the Project Schedule as needed and be held accountable to the agreed upon schedule. The overall “Statewide Training and Data Upload Begins” and “Statewide Implementation” dates cannot be delayed beyond what is stated in Section 1 of this Scope of Work.
* Project Organization Chart and Staffing Plan. This includes all M&O Team members by name, position, location, and whether the personnel are Contractor or subcontractor employees.
* Quality Management Plan
* Change Management Plan
* Risk/Issue Management Plan

## Status Reporting and Meetings

Weekly Status Updates**:** The Contractor shall meet with IDOH weekly to review Weekly Status Reports and project updates, including issues, risks, with risk mitigation strategies, and issues logs.

Ad Hoc Meetings:The Contractor shall attend any ad hoc meetings requested by the State.  If on-site attendance is necessary, the State will provide three (3) business days’ advance notice. If presentation material is necessary, the Contractor shall develop the materials.

In addition, the Contractor shall develop ad hoc reports at the request of the State. Deadlines for ad hoc reports shall be determined by the State according to a scale of urgency.

* Type 1: 24 business hours turnaround time
* Type 2: Two (2) business days turnaround time
* Type 3: Five (5) business days turnaround time

## Deliverables Management

The Contractor is expected to ensure all deliverables are submitted on time, complete, error-free, and meet the requirements for the defined deliverable. Any rejected deliverables will require attentive correction. Deliverable drafts may require additional drafts prior to the review cycle to ensure content is meeting IDOH’s needs. Each deliverable submitted to the State for review and approval will have a formal transmittal letter from the Contractor. The State retains formal and final authority to accept and approve the Contractor’s deliverables.

The deliverable management process is detailed below:

* **Develop Deliverable Expectations Document (DED) Review** – The Contractor shall create the DED to define expectations and content for each deliverable. Note: The State may choose to waive the requirement for a DED and DED review for any specific deliverable.
* **Develop Draft Deliverable** - The Contractor shall create the draft deliverable after approval of the DED (including any applicable review criteria).
* **Submit Deliverable** - The Contractor shall submit the deliverable by the approved deadline. The deliverable will comply with agreed upon standards and include the content described in the DED. The State’s review period will vary with the type, complexity, and volume of the deliverable. The Contractor must include adequate estimates for IDOH’s review, comment, and any Contractor re-work time in the Project Schedule. By submitting the deliverable, the Contractor certifies that it meets all Contract requirements.
* **Review Deliverable** - IDOH will conduct deliverable review(s) and document the feedback gathered. The Contractor must then correct and resubmit the deliverable within agreed timeframes that will vary with the type, complexity, and volume of the deliverable. Rejection of a deliverable by the State does not provide permission for delays in delivering subsequent deliverables unless approved by IDOH.

## Change Request Process

The Contractor shall use the following State-approved change management process unless otherwise waived by the State. This process will apply for DDI, M&O, and Enhancements.

* IDOH shall issue a Change Request (CR) that the Contractor shall perform.
* Within ten (10) calendar days (or a period as the Contractor and IDOH may mutually agree) following receipt of a CR, the Contractor shall prepare and deliver to IDOH a written Change Impact Analysis. It must include the following, at a minimum:
  + Description of the proposed scope
  + Schedule
  + Justification of the CR
  + What release the CR is part of
  + Staffing plan (organization chart, staff names and position) and forecasted hours and cost breakdown by position
  + Applicable performance standards
  + Security impacts and how they will be addressed
  + A list of work products or deliverables that the Contractor will submit
  + Any other CR-specific requirements requested by the State
* IDOH will review the CR and either approve or disapprove it.
* The Change Impact Analysis will be modified until the State provides approval. Upon approval, the Change Impact Analysis shall be deemed an approved CR. The Contractor shall not begin work on any CR prior to receiving this State approval.
* Attachment O is the State’s standard resource usage template. The Contractor may be asked to complete this document for certain Change Requests.

# Software Warranty

The Contractor represents and expressly warrants all services and Deliverables provided under this Contract to be free of Defects, properly functioning, and compliant with the terms of the Contract at no additional cost to the State. A Defect is defined as any deviation from approved system specifications and requirements, including without limitation failure of System code to perform substantially as described in design documents.

The warranty shall extend to six (6) months following the completion of the statewide implementation. The Contractor agrees to provide corrections for any Defects, discovered and/or reported by either the Contractor, State, or a State contractor during the six (6) month warranty period.

For each Enhancement, the warranty shall extend to six (6) months following the release of the Enhancement into production.

The Contractor further warrants that application software and all materials delivered to the State under this Contract will not infringe any patent, copyright, trade secret or other proprietary right of any third party.

# Turnover

IDOH seeks to ensure that program stakeholders experience no adverse impact from the transfer of scope to either the State or to the successor contractor(s) when the Contract is complete or terminated early.  The Contractor shall develop and oversee the successful implementation of the Turnover Plan. The Turnover Plan is expected to take three (3) months and shall be broken up into the four (4) phases listed below. The timing of the phases may vary at IDOH’s discretion. The Contractor shall not reduce operational staffing levels during the turnover period without prior approval by IDOH. The Contractor shall not in any way restrict or prevent Contractor staff from accepting employment with the State or any successor VISIT contractor(s).

|  |  |
| --- | --- |
| **Phase** | **Tasks** |
| Phase 1 | * Develop a Turnover Plan covering the possible turnover of the solution or operational activities to either the State or the successor contractor(s).   + The Turnover Plan must be a comprehensive document detailing the proposed schedule and activities associated with the turnover tasks.   + The requirements in the remainder of this table do not limit or restrict the State's ability to require additional information from the Contractor or modify the turnover schedule as necessary. |
| Phase 2 | * Begin training State staff or successor contractor(s) staff, in the operations and procedures performed by Contractor staff.   + Begin shadowing and training activities for the State and successor contractor(s) |
| Phase 3 | * Complete shadowing and training activities for the State and successor contractor(s) * Transfer the following information to the State or its agent on a medium acceptable to the State:   + A copy of the VISIT solution and database(s): * All SDLC artifacts and documentation created, maintained, and updated throughout the Contract term on State-designated repository * Internal logs and procedures used during the contract to ensure compliance with operational requirements * Other documentation including, but not limited to, user, provider, and operations manuals; training materials; and documentation of any interfaces developed to support business activities between contractors * Source/object codes for software components and documentation for transfer systems and any customizations to the Contractor’s COTS software. Note: All new software functionality built on top of any COTS software will be owned by the State. * All in-progress artifacts and solution components |
| Phase 4 | * The State and/or successor contractor(s) will be responsible for promotion of releases to production, with the Contractor’s support and guidance. * Participate in reverse shadowing for the State and/or successor contractor(s) staff on all aspects of workflows, releases, and assignments as requested by the State * Be available to provide support as requested by the State. * By the end date of the Contract, the Contractor must turn over all State property to the State, and Contractor’s access to all State infrastructure and facilities will be terminated. |

# Performance Standards

## Overview

All performance standards will be reported to the State in a monthly report and shall be submitted within five (5) days of the end of each month. The Contractor shall provide full transparency to access all materials and associated work products included in this Contract if requested. When a performance target is not met, the Contractor must complete a Root Cause Analysis (RCA) and prepare a plan for remediation. After the State’s review of the remediation plan, the Contractor shall execute the plan and assess the results of the plan. The timeframes for these actions will be finalized with the State during the weekly status meetings.

## Performance Standards

| **#** | **Performance Standard** | **Threshold for Compliance (Measured Monthly)** |
| --- | --- | --- |
| 1 | Implementation Timeliness (DDI) | DDI Milestones completion completed according to the Project Schedule.   * DDI Milestone 1: Completion of Requirements Validation * DDI Milestone 2: Completion of Design and Development * DDI Milestone 3: Completion of Data Migration and Testing * DDI Milestone 4: Completion of Statewide Implementation and Training   Note, the “Statewide Training and Data Upload Begins” deadline shall be included in DDI Milestone 4. |
| 2 | UAT Defect Rate (DDI) | All UAT scripts executed, 95% of UAT test scripts passed, and no open Critical, High, and Blocker defects. |
| 3 | Defect Resolution Timeliness for defects identified during UAT (DDI). This refers to the time to correct the defect and make it available for retest. | Blocker - two (2) business days from identification |
| Critical - three (3) business days from identification |
| High – two (2) weeks from identification |
| Normal and Minor - will be determined with the State in the Master Test Plan |
| 4 | Defect Resolution Timeliness for Code in Production Environment (M&O) | Blocker - 12 hours to fix, test to IDOH’s satisfaction, and migrate to the Production environment |
| Critical - 2 business days to fix, test to IDOH’s satisfaction, and migrate to the Production environment |
| High – 5 business days to fix, test to IDOH’s satisfaction, and migrate to the Production environment |
| Normal – 15 business days to fix, test to IDOH’s satisfaction, and migrate to the Production environment |
| Minor – 25 business days to fix, test to IDOH’s satisfaction, and migrate to the Production environment |
| 5 | Production Environment Availability (M&O) | 99.9% availability, except during scheduled maintenance |
| 6 | On-line Response Times in Production Environment (M&O) | 90% of response times are less than 2 seconds and 98% of response times are less than 10 seconds.  Excludes complex reports |
| 7 | Security Incidents Reporting Timeliness (DDI and M&O) | Any security incident must be communicated to appropriate IDOH staff within one hour of discovery |
| 8 | Business Continuity and Disaster Recovery Time (M&O) | System shall be recoverable according to the RTO and RPO approved by IDOH in the Disaster Recovery Plan/Business Continuity Plan |
| 9 | Help Desk Availability (M&O) | * Answer rate (100% of calls must be answered within three (3) rings or fewer and redirected to an interactive voice response (IVR) system or audio response unit (ARU) system as an initial response to inquiries. An option must exist that allows the caller to speak directly with a live representative. Callers who hang up within 20 seconds without the call being answered will not count toward this metric. An answer is defined as a caller reaching the IVR system, ARU system, or a live representative.) * Hold time (No less than ninety-five percent (95%) of the calls are put on hold for less than two (2) minutes. “Hold time” is defined as any additional time a caller waits prior to the call being actively managed by a live representative) * Abandonment rate (not exceed five percent (5%) of calls for the month. A call is considered abandoned if the caller hangs up after 120 seconds from the end of requesting to speak with a live representative) * Resolution timeframe (as stated in Section 8) |

## Performance Withholds

DDI Performance Withholds: If the Contractor does not meet a specific DDI performance standard (standards 1, 2, and 3), 10% of the related DDI milestone fee will be withheld from the milestone invoice. The Contractor will have the opportunity to earn back withheld amounts for DDI Milestones 1, 2, and 3 by completing Statewide Implementation by November 1, 2023. Any delays in meeting this deadline will result in the Contractor permanently losing the withheld amounts. Please note there is no opportunity to gain back any withheld amount for DDI Milestone 4.

M&O Performance Withholds: During each month of M&O services, the State will withhold 10% of that month’s M&O fees. The State will evaluate M&O-related performance standards monthly for noncompliance. If two (2) or more performance standards are not reached for any given month, the performance withhold amount for that month will be at risk for forfeit unless performance standards are met in the next two (2) consecutive months.

## Corrective Action Plans

The State may require corrective action(s) when the Contractor has failed to provide the requested services in accordance with the requirements and/or SLAs of this Scope of Work. The nature of the corrective action(s) will depend upon the nature, severity and duration of the deficiency and repeated nature of the non-compliance. Severity shall be determined by the State, in its sole discretion. The written notice of corrective actions may be instituted in any sequence and include, but are not limited to, any of the following:

* Written Warning: The State may issue a written warning and solicit a response regarding the Contractor’s corrective action.
* Formal Corrective Action Plan: The State may require the Contractor to develop a formal corrective action plan to remedy the breach.  The Corrective Action Plan must be submitted under the signature of the Contractor’s chief executive and must be approved by the State. If the Corrective Action Plan is not acceptable, the State may provide suggestions and direction to bring the Contractor into compliance.

If a written warning is issued, the Contractor shall provide a written response regarding their proposed remedies within five (5) business days of the occurrence or State request.

If a formal Corrective Action Plan is requested, the Contractor shall submit, within ten (10) business days of the occurrence or State request a formal Corrective Action Plan that addresses the causes of the deficiency, the impacts and the measures being taken and/or recommended to remedy the deficiency, and whether the solution is permanent or temporary. It shall also include a schedule showing when the deficiency shall be remedied, and for when the permanent solution shall be implemented, if appropriate. Upon State’s approval of the Corrective Action Plan, the Contractor shall execute the Corrective Action Plan. The Contractor shall complete all necessary corrective measures within thirty (30) calendar days of discovery of an issue prompting a Corrective Action Plan unless an alternative schedule is agreed to by the State.

The Contractor shall seek the State’s written release from the obligations of the Corrective Action Plan upon successful completion of the Corrective Action Plan and correction of performance.

# Definitions and Abbreviations

The following acronyms, abbreviations and explanations are referenced throughout this RFP.

|  |  |
| --- | --- |
| **Acronym** | **Meaning / Explanation** |
| ALM | Application Lifecycle Management |
| BAA | Business Associate Agreement |
| BCP | Business Continuity Plan |
| CHIRP | Children & Hoosier Immunization Registry Program |
| COTS | Commercial-off-the-shelf |
| CR | Change Request |
| CR | Change Request |
| DDI | Design, Development, and Implementation |
| DDI | Design, develop, and implement |
| DED | Deliverable Expectations Document |
| DRP | Disaster Recovery Plan |
| EMR | Electronic Medical Record |
| ERA | Electronic Remittance Advice |
| ERA | Electronic Remittance Advice |
| FedRAMP | Federal Risk and Authorization Management Program |
| FIPS | Federal Information Processing Standard |
| HIPAA | Health Insurance Portability and Accountability Act |
| HTTPS | Hypertext Transfer Protocol Secure |
| IaaS | Infrastructure as a Service |
| IDOA | Indiana Department of Administration |
| IDOH | Indiana Department of Health |
| IOT | Indiana Office of Technology |
| ISF | Information Security Framework |
| LDF | Lead Data Flow (LDF) database |
| LHD | Local Health Department |
| LIMS | Laboratory Information Management System |
| M&O | Maintenance and Operations |
| MWA | Mobile Web Applications |
| NBS | NEDSS Base System |
| NEFR | Not Eligible for Rehire |
| NIST | National Institute of Standards and Technology |
| OCM | Organizational Change Management |
| ODA | Office of Data & Analytics |
| OTC | Office of Technology and Cybersecurity |
| PaaS | Platform as a Service |
| PMBOK | Project Management Body of Knowledge |
| PMI | Project Management Institute |
| PMP | Project Management Plan |
| RBAC | Role Based Access Control |
| RCA | Root Cause Analysis |
| RMA | Resident Mobile Applications |
| RPO | Recovery Point Objective |
| RTO | Recovery Time Objective |
| SaaS | Software as a Service |
| SBI | Indiana State Police Bureau of Identification |
| SDLC | Systems Development Life Cycle |
| SOP | Standard Operating Procedures |
| UAT | User Acceptance Testing |
| UI | User Interface |
| UX | User Experience |
| VAERS | Vaccine Adverse Event Reporting System |
| VISIT | Vaccination, Immunization, Scheduling, Inventory, Testing and Claims System |
| VISIT | Vaccination, Immunization, Scheduling, Inventory, Testing and Claims system |
| VPN | Virtual Private Network |