

The Mississippi Department of Information Technology Services.

**Electronic Application System**

**System Requirements Specification**

**For**

**MSDH-ACAMS**

**Version 0.1**

Document Approval

**Approver(s)**

| **Name** | **Title / Department** | **Signature** | **Date** |
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History of Change

| **Revision No.** | **Date** | **Description of Change** | **Owner** |
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Acronyms & Definitions

| **Term** | **Expansion** |
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# Introduction

The introduction of the Software Requirements Specification (SRS) provides an overview of the entire SRS with purpose, scope, definitions, acronyms, abbreviations, references and overview of the SRS. The aim of this document is to gather and analyze and give an in-depth insight of the complete **MSDH-ACAMS system** by defining the problem statement in detail. Nevertheless, it also concentrates on the capabilities required by stakeholders and their needs while defining high-level product features. The detailed requirements of **MSDH-ACAMS** are provided in this document.

## Purpose

The purpose of the document is to collect and analyze all assorted ideas that have come up to define the system, its requirements with respect to consumers. Also, we shall predict and sort out how we hope this product will be used in order to gain a better understanding of the project, outline concepts that may be developed later, and document ideas that are being considered, but may be discarded as the product develops.

In short, the purpose of this SRS document is to provide a detailed overview of our software product, its parameters and goals. This document describes the project's target audience and its user interface, hardware and software requirements. It defines how our client, team and audience see the product and its functionality. Nonetheless, it helps any designer and developer to assist in software delivery lifecycle (SDLC) processes.

## Scope

Primarily the scope of the project is to manage and monitor the patient’s eligibility information, provide HIV clinical and supportive care, and produce Ryan White HIV/AIDS Service reports. The focus is to automate the case management process of Ryan White applications.

This SRS is also aimed at specifying requirements of software to be developed and customized. The standard can be used to create software requirements specifications directly or can be used as a model for defining an organization or project specific standard.

## Out Of Scope

<< This section should outline the business processes/ business areas that are not scoped for the system being developed. >>

## Assumptions And Dependencies

A number of factors that may affect the requirements specified in the SRS include:

**Assumptions:**

1. MSDH provides all the pertinent information needed by Acro Service Corporation for the Requirements Analysis and Prototyping.
2. MSDH shall review the information presented in this document to ensure its applicability to actual operations
3. It is assumed that software and cloud based computing platform – Azure computing environment, is fit for MSDH-ACAMS deployment.

**Dependencies:**

1. High Availability depends on Azure cloud environment.
2. Use of MS­SQL depends upon a Microsoft Windows operating system.

## Reference Documents

1. RFP Document - 4082amend1.pdf
2. RFP Response Document - AcroResponse\_SoMS-EHR-RFP4082\_20180628-FINAL-Redact.doc

# GENERAL SYSTEM DESCRIPTION

Acro Case Management Software (ACAMS) System is a cloud-based modular web system, offered as a Software-as-a-Service (SaaS) model which helps to streamline and coordinate the work for Healthcare Industry professionals such as Clerks, Care-Coordinators (CC), Nurses, Supervisors, Regional Coordinators, Program Managers, and Medical Directors.

ACAMS system can be easily accessed within the State and non-State offices, by authorized users, through the use of public internet via popular browser using desktops, laptops, or other handheld smart mobile devices. However, ACAMS application is secured using industry standard SSL encryption for all types of communication while using the public internet.

ACAMS is a robust web system that streamlines and coordinates the work for the Healthcare Industry. It comes bundled with a variety of features to assist Health Care Professionals.

**Core Features of ACAMS System**

1. **Secure Role-based Access**

To ensure the security and confidentiality of sensitive medical data, system administrators grant user’s access to specific modules of ACAMS. This ensures that users can only view or edit the information that is required to carry out their job functions with ease. Sensitive medical data is thus always secured.

1. **Master Patient Index**

ACAMS, based on a prescribed set of data elements, uses its Master Entity Index (MEI) engine to generate unique Master Patient Index identifiers for each patient (referred to as ‘Client’ in ACAMS). This results in unique identification of each client, eliminating the creation of duplicate clients within the system. This ensures an effective managing care coordination within and also through the other programs.

1. **Dashboard**

The Dashboard in the ACAMS System serves as the “command center” for the entire application, giving the user an overview of the entire caseload and current case status within the program based on the assigned authorization level. It also provides easy access to all relevant data in the system with a few clicks.

1. **Responsive Web Design**

ACAMS is based on Responsive Web Design (RWD) approach. This approach provides an optimal viewing experience that includes—easy reading and navigation with optimal resizing, panning, and scrolling across a wide range of devices – from desktop computers to hand held smart devices via popular commercial browsers.

1. **Document Management**

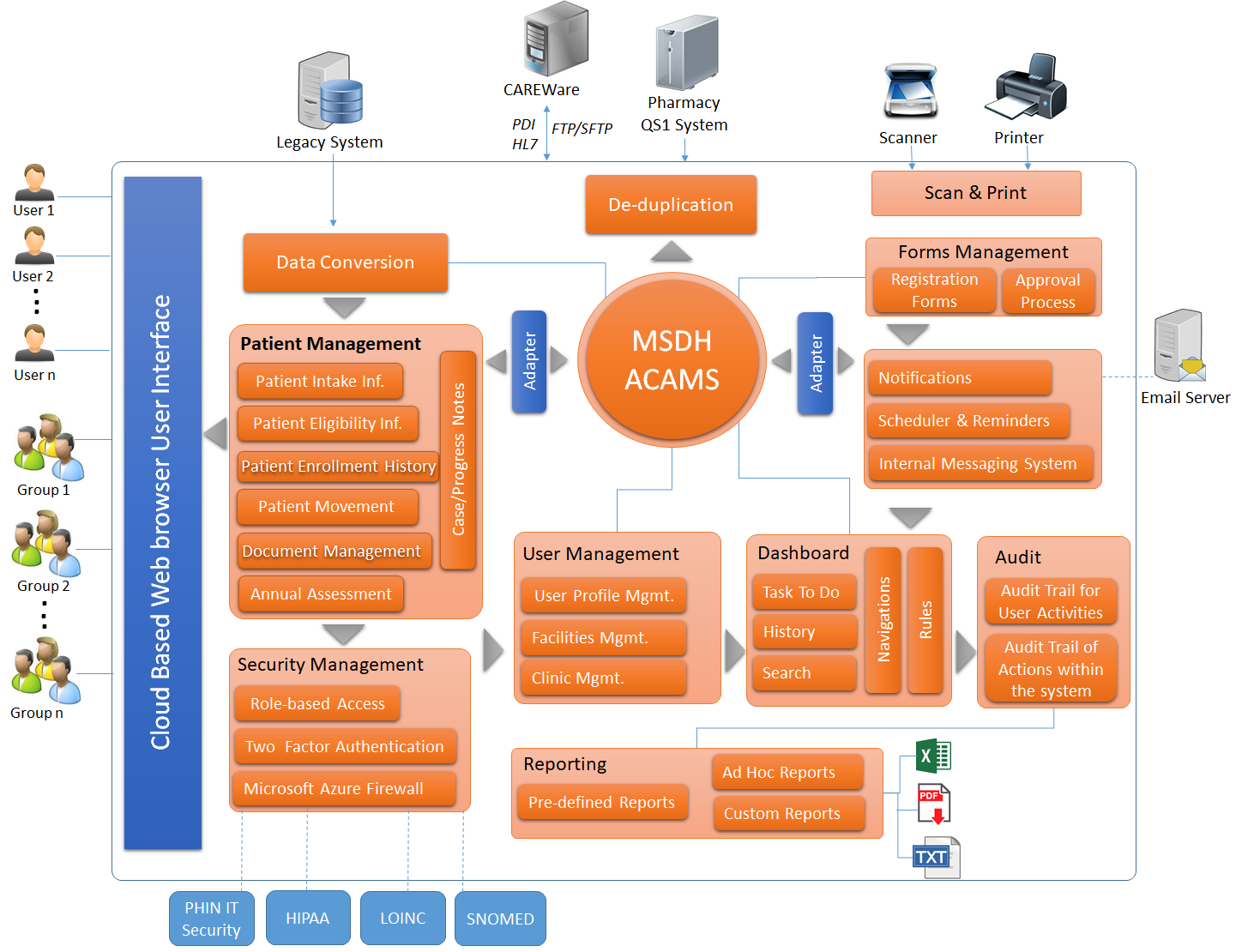
The Document Management module helps a user to simplify the management of client’s documents.  User can search and upload wide variety of document types so they are easily accessible for all users involved in the client’s case. These documents are securely managed across the entire application retaining the client confidentiality across the system.

1. **Report**

Users can easily create reports through ACAMS by choosing parameter(s) that act as filters fulfilling the set of relevant criteria asked in the report.

## Product Perspective

ACAMS will allow individuals and Case Coordinator to access health care services for HIV/AIDS. The system will automate the Ryan White Case Management process - starting from ‘Form Registration’ to ‘Out-referral’ of the client to various Providers for different services.

ACAMS will be hosted in the Microsoft Azure Cloud environment which is in conformance with the HIPAA/HITECH security, data protection and encryption requirements. The architecture solution of Azure is mirrored and clustered, which allows for an almost unnoticeable disaster recovery model.

ACAMS is designed to provide single sign-on capability and integrate with both the agency’s Active Directory for authentication and authorization. Each user is able to access a limited set of functionalities (based on the role definition assigned to the group to which this user belongs) when signed in to ACAMS through the Portal and a browser (admin tools and maintenance routines allow quick and flexible changes to access rights). ACAMS users are able to view patient data within the central database at agency defined levels of access based on user security privileges.

Authorized User (MSDH-ACAMS CC/ Patients) completes the **‘Registration Process’** – fills in personal, demographic and **eligibility** details. All the required **documents will be uploaded**. System will send the details to the Approving Authority. For the **approved Patient**, MSDH-ACAMS CC will assess the Patient and complete the other eligibility requirements. Based on the **assessment**, CC **‘Out-refer’** the Patient to Provider and Clinic to avail services. MSDH-ACAMS CC can **schedule appointments** and **reminders** as and when required. **Notifications** and **Alerts** will be send by the system. System will manage and maintain the entire case management process of HIV/AIDS Patients. Various reports can be generated based on the data in the system.

The **reporting module** will help address all of the scheduled/batch and real-time reporting requirements of the application. The reports module will address the summary, detailed, and ad hoc reporting requirements. This reporting module will provide flexible reporting capabilities, including standard reports and the ability to create and store customized reports.

Using the pre-defined Access template of Provider Data Import (PDI), the MSDH-ACAMS system will **transfer data** to CAREWare system. All the paper format legacy data will be scanned into MSDH-ACAMS.

MSDH-ACAMS provides native **audit logging** for Application Account Information logging includes – successful and failed application authentication attempts, application account changes (e.g., account creation and deletion, account privilege assignment), use of application privileges, application operations, application startup and shutdown, application failures, major application configuration changes application transactions

## System Workflow

## ER Diagram

## Operating environment

**Database**

The database will exist on a Microsoft Windows Server that runs MS-SQL 2008. This server will only serve requests from inside MSDH-ACAMS.

**Application**

The main user application will be built as a web-­based system. Users will access it through a browser and login window. The spring MVC model will be used as a base.

**Session App**

The session application will be hosted on laptops with Windows OS.

# FUNCTIONAL REQUIREMENTS / User Stories

This section contains the requirements for MSDH-ACAMS. These requirements are organized by the features discussed in the RFP document. Features from RFP are then refined into use case diagrams and to sequence diagram to best capture the functional requirements of the system. All these functional requirements can be traced using tractability matrix.

| **System requirement ID** | **Sub ID** | **Description of the requirement** | **remarks** |
| --- | --- | --- | --- |
| **BR001** | **I** | **User Log-in** |  |
|  | **1** | System must allow user to enter ‘User ID’ and ‘Password’ to login. |  |
|  | **2** | The password that will be used to login in MSDH-ACAMS must be composed of minimum of an eight (8) character string that includes a combination of lower and upper case alphanumeric characters, the numerals 0-9, and at least 1 special character. |  |
|  | **3** | System must restrict user from using the User ID as the password. |  |
|  | **4** | Password must be encrypted. |  |
|  | **5** | System must not allow the use of the user’s full name or the same password when prompted for a new password. |  |
|  | **6** | System shall have an account option of ‘User must change password at next login’. |  |
|  | **7** | Will ensure that passwords cannot be reused by a single individual within a specified time period. |  |
|  | **8** | System must display ‘Forgot your Password’ on log-in window. |  |
|  | **9** | System must have Active Directory log-in. |  |
|  | **10** | System must have multiple factors for authentication when logging in. |  |
|  | **11** | Users with valid credentials shall login the MSDH-ACAMS system. |  |
|  | **12** | Data Privacy statement should be displayed and the user must agree to in order to continue the log in process. |  |
| **BR002** | **II** | **Client Log-in** |  |
|  | **1** | System must allow client to ‘Sign-Up’ with basic inputs – Client Last Name, Client First Name, Client DOB, Client Gender, Email, Password, and Confirm Password. |  |
|  | **2** | System shall email User ID and Password to the Client. |  |
|  | **3** | System must allow client to enter ‘User ID’ and ‘Password’ to login. |  |
|  | **4** | The password that will be used to login in MSDH-ACAMS must be composed of minimum of an eight (8) character string that includes a combination of lower and upper case alphanumeric characters, the numerals 0-9, and at least 1 special character. |  |
|  | **5** | System must restrict Client from using the User ID as the password. |  |
|  | **6** | Password must be encrypted. |  |
|  | **7** | System must not allow the use of the Client’s full name or the same password when prompted for a new password. |  |
|  | **8** | System shall have an account option of ‘User must change password at next login’. |  |
|  | **9** | Will ensure that passwords cannot be reused by a single individual within a specified time period. |  |
|  | **10** | System must display ‘Forgot your Password’ on log-in window. |  |
|  | **11** | System must have multiple factors for authentication when logging in. |  |
|  | **12** | Client with valid credentials shall login the MSDH-ACAMS system. |  |
|  | **13** | Data Privacy statement should be displayed and the user must agree to in order to continue the log in process. |  |
| **BR003** | **III** | **Patient Registration** |  |
|  | **1** | Patient Registration process shall consists of six parts – capturing Intake Information, Demographic Information, Diagnosis Information, Health Insurance Information, Referral Needs and Supporting Documents. |  |
|  | **1.1** | **Client Intake Information:** This section shall include the personal and address details of the client. |  |
|  | **1.2** | **Client Demographic Information:** This section shall include the Employment details, Primary Care Provider and Specialist Provider details. |  |
|  | **1.3** | **Client Diagnosis Information:** This section shall include Diagnosis details along with the Risk Factors. |  |
|  | **1.4** | **Health Insurance Information:** This section shall include Health Insurance Screening details, Private or Employer-provided Health Insurance, Medicare and Other Governmental Health Insurance Programs. |  |
|  | **1.5** | **Referral Needs:** This section shall include the details of the needs or services availed by the Client previously. |  |
|  | **1.6** | **Supporting Documents:** This section shall include the list of all the required documents that should be submitted to avail the service. |  |
|  | **2** | System shall also capture the acknowledgement details of the Client. |  |
|  | **3** | System shall generate Master Patient Index (MPI) for identification of the Client. |  |
|  | **4** | Client/User must be able to enter client information into the system for the ADAP registration. |  |
|  |  |  |  |
| **BR004** | **IIII** | **Client Eligibility** |  |
|  | **1** | System must consider the client to be eligible:   1. Must be HIV positive; 2. Must have a primary home address in Mississippi; 3. Must have household income below 300% of the Federal Poverty Level (as per current guidelines); 4. Must obtain the services available through Medicaid, Medicare, SCHIP, Federal Exchange Marketplace plans, or other payor if covered |  |
|  | **2** | System shall maintain the Enrollment Status and Enrollment Date of the Client. Enrollment Date is the  first day the client was served by your agency Enrollment Status can be: |  |
|  | **2.1** | 1. **Active** ‐ The client is currently enrolled in case management and will be continuing in the program. |  |
|  | **2.2** | 1. **Referred/Discharged Indicates that:**  * Referred the client to another Part B funded provider * Closed the client because he/she requested closure from case management. * Lost contact with a client and they are considered to be “lost to follow up” * Been notified that client is deceased. |  |
|  | **2.3** | 1. **Removed ‐** The client was terminated due to violation of rules. |  |
|  | **2.4** | 1. **Incarcerated** ‐ The client will not be continuing in the agency’s program because he or she is serving a criminal sentence in a Federal, State, or local penitentiary, prison, jail, reformatory, work farm, or similar correctional institution |  |
|  | **2.5** | 1. **Relocated** – Indicates that the client has been re-located. |  |
|  | **3** | System shall review the eligibility of the client at annual re-enrollment and six-month recertification. |  |
|  | **4** | System shall consider the following parameters for Financial Eligibility: 1) employment income, 2) self-employment income, and 3) unearned income for the client and other members of the household. |  |
|  | **5** | System shall provide an option for Vital Status and Death Date. |  |
|  | **6** | System shall display Eligibility Status (Yes, No) along with Eligibility Date. |  |
|  | **7** | System shall display HIV Status and Risk Factors. HIV Status values shall include: |  |
|  | **7.1** | 1. **HIV‐negative (affected)—**Client has tested negative for HIV, is an affected partner or family member of an individual who is HIV‐positive |  |
|  | **7.2** | 1. **HIV‐positive, not AIDS—**Client has been diagnosed with HIV but has not advanced to AIDS |  |
|  | **7.3** | 1. **HIV‐positive, AIDS status unknown—**Client has been diagnosed with HIV. It is not known whether the client has advanced to AIDS |  |
|  | **7.4** | 1. **CDC defined AIDS—**Client is an HIV‐infected individual who meets the CDC AIDS case definition for an adult or child. |  |
|  | **7.5** | 1. **HIV‐indeterminate (infants only)—**A child under the age of 2 whose HIV status is not yet determined but was born to an HIV‐infected mother. |  |
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| **BR005** | **V** | **Dashboard** |  |
|  | **1** | The dashboard must contain easy to see and use lists. |  |
|  | **2** | The dashboard must contain reminders about priorities, goals, and various reports. |  |
|  | **3** | The dashboard must contain system notifications. |  |
|  |  |  |  |
|  |  |  |  |
| **BR006** | **VI** | **Document Management** |  |
|  | **1** | System shall have the capability to scan files/documents into the system. |  |
|  | **2** | System must be able to scan prescriptions into the system |  |
|  | **3** | System shall allow User/Client to upload Residency document, Proof of Diagnosis, Proof of Income, and Proof of Insurance. |  |
|  | **4** | System must be able to categorize documents |  |
|  | **5** | System shall allow User/Client to upload multiple documents. |  |
|  |  |  |  |
| **BR007** | **VII** | **Approval** |  |
|  | **1** | System shall have the provision to validate the Client details submitted through ‘Registration’ through the approval process. |  |
|  | **2** | The approval process shall include approve, reject, return for more information. |  |
|  | **3** | System shall facilitate the approver to provide ‘Temporary approval’. |  |
|  |  |  |  |
| **BR008** | **VIII** | **Re-Certification** |  |
|  | **1** | System shall maintain the Re-certification date of client Enrollment. Recertification of program eligibility is required within six (6) months of program enrollment or re-enrollment each year, per Ryan White guidelines. |  |
|  | **2** | Client/User must be able to complete the re-certification form. |  |
|  | **3** | Client/User should be able to attach the required documents for Re-certification. |  |
|  |  |  |  |
| **BR009** | **VIIII** | **Search** |  |
|  | **1** | System must include a client search feature that will allow users to easily find and select client records. |  |
|  | **2** | System shall provide the option of ‘Advance Search’ to simplify the search effort. |  |
|  | **3** | System shall allow an authorized user to search for a case using designated criteria including but not limited to case number, client name, SSN, DOB, MPI. |  |
|  |  |  |  |
| **BR0010** | **X** | **Assessment** |  |
|  | **1** | System shall allow MSDH-ACAMS CC to complete the Annual Assessment of the Client. |  |
|  | **2** | System shall allow user to perform the assessment of the following – Insurance, FPL, Annual Screening (HIV Primary Care, Housing Arrangement, HIV Risk Reduction Counseling, Mental Health and Substance Abuse) |  |
|  | **3** | System allow user to upload relevant documents. |  |
|  |  |  |  |
| **BR0011** | **XI** | **Out-Referral** |  |
|  | **1** | System shall allow authorized user to out-refer the client to Provider/Clinic. |  |
|  | **2** | System shall allow authorized user to add services required by the Client in the Out-Referral process. |  |
|  | **3** | System shall allow user to select the service along with contract and provider. |  |
|  | **1** | System shall provide an option to capture Out-Referral Status. |  |
|  | **1.1** | 1. **Pending** – Status of all new referrals. |  |
|  | **1.2** | 1. **Completed** – When you have evidence that client has made initial contact with the agency to which you referred the client. |  |
|  | **1.3** | 1. **Lost** **to follow up** – After a reasonable amount of time, or a maximum of 3 months, during which time you have been usable to verify the outcome of the referral. |  |
|  | **1.4** | 1. **Rejected** – If at any point in the referral process, the client informs you that they no longer need or desire the referral you provided. |  |
|  | **2** | System shall provide the following services Ambulatory patient services; Emergency services; Hospitalization; Maternity and newborn care; Mental health and substance use disorder services, including behavioral health treatment; Prescription drugs; Rehabilitative and habilitative services and devices; . Laboratory services; Preventive and wellness services and chronic disease management; and Pediatric services, including oral and vision care. |  |
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| **BR0012** | **XII** | **Appointments** |  |
|  | **1** | System shall allow user to schedule an appointment with the Client. |  |
|  | **2** | System shall allow user to schedule an appointment with the Provider/Clinic. |  |
|  | **3** | System shall allow authorized users to create, modify and delete appointments. |  |
|  | **4** | System shall allow an authorized user to reschedule and cancel a scheduled appointment. Upon reschedule or cancellation of a booked appointment, system shall make the original timeslot again available for scheduling. |  |
|  | **5** | System shall allow an authorized user to filter appointments by date and case status (e.g. display only future appointments). |  |
|  |  |  |  |
| **BR0013** | **XIII** | **Follow-up** |  |
|  | **1** | System shall allow authorized user to schedule a Follow-up with the Client/Provider/Clinic. |  |
|  | **2** | System shall allow user to Follow-up Notes, based on follow-up attempted/performed. |  |
|  |  |  |  |
|  |  |  |  |
| **BR0014** | **XIV** | **Patient enrollment history** |  |
|  | **1** | System must include the ability for users to manage and maintain patient enrollment history |  |
|  | **2** | The enrollment history shall include Case and Client Summary. |  |
|  |  |  |  |
|  |  |  |  |
| **BR0015** | **XV** | **Alert & Notifications** |  |
|  | **1** | System shall allow authorized user to define specific notification. |  |
|  | **2** | System must allow users to configure notification preferences – Dashboard, Email and Menu notification. |  |
|  | **3** | System must allow patients to receive notifications. |  |
|  | **4** | System must send users notifications of system events and reminders |  |
|  | **5** | System must be able to send notifications to the MSDH Pharmacy |  |
|  | **6** | System shall provide automatic notification of expiration of passwords. |  |
|  | **7** | System must send notification to the approver reviewing the Client registration form and documents. |  |
|  | **8** | System must send notification to the MSDH-ACAMS CC for status of the registration. |  |
|  | **9** | System must send notification to the Client for status of the registration. |  |
|  | **10** | System shall manage the notifications based on the eligibility date of the Client. |  |
|  | **11** | System shall display system notifications on Dashboard. |  |
|  | **12** | System shall provide automatic notification of expiration of password. |  |
|  | **13** | System shall provide an email notification window is displayed notifying the user that the password has been emailed |  |
|  | **14** | System shall provide notification to Client and CC for re-certification and Re-enrollment. |  |
|  |  |  |  |
| **BR0016** | **XVI** | **Internal Messaging system** |  |
|  | **1** | System shall allow users to share information (data and documents) though Cloud solution. |  |
|  |  |  |  |
| **BR0017** | **XVII** | **De-duplication** |  |
|  | **1** | System must be able to identify duplicate clients. |  |
|  | **2** | System shall consider the following parameters de-duplicacy check - |  |
|  | **3** | System shall display all the matching client to the user to select. |  |
|  | **4** | System shall provide an option to either create a new client or update the existing client. |  |
|  | **5** | System must delete duplicate records. |  |
|  |  |  |  |
| **BR0018** | **XVIII** | **Facilities and clinics** |  |
|  | **1** | System must be divided into different facilities and clinics |  |
|  | **2** | Each facility and clinic must have its own access in the system. |  |
|  | **3** | System shall allow facility and clinic to view client details referred to them. |  |
|  | **4** | System shall allow facility and clinic to add services with the Client. |  |
|  | **5** | Users from each facility and clinic must not have the capability to see other patients’ information from other facilities and clinics |  |
|  | **6** | Each patient must be assigned to a specific facility. |  |
|  | **7** | System must have the capability to move patients from one facility to another. |  |
|  | **8** | System shall provide the features such as – Scheduling an Appointment, Adding Progress/Case Note, Search Client. |  |
|  | **9** | System shall provide an option to add Encounter details. Encounter details will include: Vital Signs, Hospital/ER Admissions, Medications, Labs, Screening Labs, Screenings, Immunization and Diagnoses. |  |
|  |  |  |  |
|  |  |  |  |
| **BR0019** | **XIX** | **User management** |  |
|  | **1** | System shall allow Administrator to create and edit ‘User’ for MSDH-ACAMS. |  |
|  | **2** | System shall allow Administrator to create ‘Group’ of the Users. |  |
|  | **3** | System shall provide access rights to the User and Group. |  |
|  | **4** | System shall provide the option to View, Edit and Soft Delete the access rights given to the user. |  |
|  | **5** | System shall allow Admin/authorized user to search the user. |  |
|  | **6** | System shall allow user to set the announcement. |  |
|  | **7** | System shall provide the option to Manage Password. |  |
|  | **8** | System shall provide the option to change the Security Question. |  |
|  | **9** | System shall allow Admin to change the User Status – Activate, Deactivate. |  |
|  | **10** | System shall allow Admin to change the Account Status – Unlock, Lock |  |
|  | **11** | Multi-level security definitions including role-based, group-based, or access list based security levels and allow system administrator(s) the ability to set rights to access data either by individual, group, role, or access lists. |  |
|  | **12** | System must provide application and menu level security and allow setup of inquiry, add, update, and delete access by user and/or group. |  |
|  | **13** | System application security level will determine the level of access each individual has and what that individual will be allowed to view and perform on each screen or field of the application. |  |
|  | **14** | Associate a set of functions to a group and to a user. |  |
|  | **15** | Provide security and access controls that do not depend on ‘hard-coded’ program logic. |  |
|  |  |  |  |
| **BR0020** | **XX** | **Disenrollment/Case Closure** |  |
|  | **1** | System shall dis-enrolled the client the client in the following circumstances -   * The individual no longer resides in Mississippi * The individual has died. * The client’s household income rises above the level where they qualify for services * The client has deliberately reported false information on a re-enrollment or six-month re-certification application |  |
|  |  |  |  |
| **BR0021** | **XXI** | **Reports** |  |
|  | **1** | System must be able to produce reports about client and staff activity in the ADAP program. |  |
|  | **1.1** | **Client Case Report:** This report shall consist of the client related reports. |  |
|  | **1.2** | **Client Case Search Report:** This report shall display data on the basis of Case Activity when the Case is initiated in the system.  Search Criteria - Care Coordinator (All Care Coordinator), Case Start From, Case Start To, County, Race, Ethnicity, Zip, and Case Status (Open, Closed).  Report Output Format – CC, MPI#, Case#, Client Name, DOB, Case Status, Case Start Date, Case End Date, Assessment Date, ZIP, County.  Report shall display total number of Client linked with each CC. |  |
|  | **1.3** | Case Closure Report: This report shall display the total number of cases closed by each CC.  Search Criteria – CC, Case Closure Code, From Date, To Date.  Report Output Format- |  |
|  | **1.4** | Client Service Detail Report |  |
|  | **1.5** | Client Renewal Report |  |
|  | **1.6** | Client Out-Referral Report |  |
|  |  |  |  |
|  | **2** | Staff Activity Report |  |
|  | **2.1** | **CC Activity Report: -** The CC Count Activity report display the activity count corresponding to each Care Coordinator within the specified date range. The report will show - total no. of New, Active, and Closed cases corresponding to each Care Coordinator. Date filter works on the date when client was initiated in the system  Search Criteria – CC, From Date, To Date, Region.  Report Output Format- Region, CC, New Cases , Closed Cases , Active Cases , Total  Report shall display total number of Client linked with each CC. Clicking on count detailed list of client associated with that CC will be displayed. |  |
|  | **2.2** | **Case Load Report: -** The 'Case Load' report is a summary report, providing statistics for each Care Coordinator based on Case Type and Case Status.  Search Criteria – CC, From Date, To Date, Region.  Report Output Format- Active Cases , Inactive, Active -Intake Only , Total  Report shall display total number of Client linked with each CC. Clicking on count detailed list of client associated with that CC will be displayed. |  |
|  | **3** | **Clinical Encounter Reports** |  |
|  | **4** | **No Service in X Days:** This report shall display the list of clients who have not received a specified service in a certain number of days. |  |
|  | **5** | System must be able to create, save, and share custom reports without programming. |  |
|  | **6** | Custom reports must include the Report’s title, a footer, and all of the fields that make up a report’s content. |  |
|  | **7** | System must be able to change sorting and filtering capabilities. |  |
|  | **8** | System must have the ability to produce that allows users to change the following without programming - Format of the report, Types of charts, Labels, and Data filters. |  |
|  | **9** | System must be able to export reports in PDF, Excel, CSV, and Word format |  |
|  | **10** | Risk Factor Report: This report shall provide the risk factor detail of the Client. |  |
|  | **11** | Audit Report |  |
|  | **11.1** | Client Log-In Report |  |
|  | **11.2** | User Log-In Report |  |
|  | **11.3** | Operating System Events Report |  |
|  | **11.4** | Ryan White HIV Services Report |  |
|  |  |  |  |
| **BR0022** | **XXII** | **Audit** |  |
|  | **1** | System must have an audit trail/change log. |  |
|  | **2** | Audit log must show how many reports were started and completed |  |
|  | **3** | Application Account Information logging shall include successful and failed application authentication attempts, application account changes, use of application privileges, application startup and shutdown, the event date and timestamp, and Personally Identifiable Information (PII) data fields that were edited/ updated. |  |
|  | **4** | Audit log must show when an application was first put into the system and any changes that were made to it |  |
|  | **5** | The audit log must maintain an on-going log of who accessed, made changes to, deleted, etc. a file |  |
|  | **6** | The audit log must show when an application was first put into the system and any changes that were made to it. |  |
|  | **7** | The audit log must maintain an on-going log of who accessed, made changes to, deleted, etc. a file. |  |
|  |  |  |  |
|  |  |  |  |

# INTERFACE / Non Functional REQUIREMENTS

| **System requirement ID** | **Sub Id** | **Description of the Functionality** | **Remarks** |
| --- | --- | --- | --- |
| **BR0023** | **I** | **Usability** |  |
|  | **1** | The system shall provide a uniform look and feel between all the web pages. |  |
|  |  |  |  |
| **BR0024** | **II** | **Reliability & Availability** |  |
|  | **1** | The system shall provide storage of all databases on redundant computers with automatic switchover. |  |
|  | **2** | The system shall provide for replication of databases to off-site storage locations. |  |
|  | **3** | System shall provide data backups nightly with full redundancy. |  |
|  | **4** | System must provide 24/7 secure FTP access to the nightly backups. |  |
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|  |  |  |  |
|  |  |  |  |
| **BR0025** | **III** | **Accessibility** |  |
|  | **1** | System must be accessible at least ninety nine percent (99%) of the time, twenty-four (24) hours a day, seven days a week, except for scheduled maintenance and required repairs |  |
|  |  |  |  |
| **BR0026** | **IIII** | **Performance** |  |
|  | **1** | The product shall be based on web and has to be run from a web server |  |
|  | **2** | The product shall take initial load time depending on internet connection strength which also depends on the media from which the product is run. |  |
|  | **3** | The performance shall depend upon hardware components of the client/customer. |  |
|  |  |  |  |
| **BR0027** | **V** | **Security** |  |
|  | **1** | System must provide for encrypted data and data transmission. |  |
|  | **2** | System must be housed in a secure data center. |  |
|  |  |  |  |
|  |  |  |  |
| **BR0028** | **VI** | **Interfaces** |  |
| **BR0029** | **VII** | **Communication Interface** |  |
|  | **1** | MSDH-ACAMS shall use the HTTP protocol for communication over the internet and for the intranet communication will be through TCP/IP protocol suite |  |
|  | **2** | System must provide 24/7 secure FTP access to the nightly backups. |  |
|  | **3** | Health Level Seven (HL7) version 2.5 Standards for Messaging. |  |
| **BR0030** | **VIII** | **Maintenance** |  |
|  | 1 | System must provide scheduled maintenance and updates to the system. |  |
|  | 2 | Vendor will give at least 48-hour notice to MSDH prior to scheduled maintenance and updates. |  |
|  |  |  |  |
| **BR0031** | **VIIII** | **Data Conversion/Migration** |  |
|  |  |  |  |
|  |  |  |  |
| **BR0032** | **X** | **Integration** |  |
|  | **1** | system may need to integrate with the Pharmacy’s QS1 system |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

# REGULATORY REQUIREMENTS

| **System requirement ID** | **Sub Id** | **Description of the Functionality** | **Remarks** |
| --- | --- | --- | --- |
|  |  | System shall adhere to HIPAA Security and Privacy specifications. |  |
|  |  | Comply with PHIN IT Security and Critical Infrastructure Protection requirements |  |
|  |  |  |  |
|  |  |  |  |

# APPENDICES / Attachements

<<As applicable >>