



Document Revision History

Version Number	Date	Description
V1.0	11/10/17	Draft For CMS Review
V1.0	11/29/17	CMS Approved

Send inquiries to:

Puerto Rico Department of Health

Medicaid Program

P.O Box 70184

San Juan, PR 00936-8184

E-Mail: PRMedicaidInfo@salud.pr.gov



Request for Quotation (RFQ) issued by Puerto Rico Department of Health (PRDoH)

STATEMENT OF CONFIDENTIALITY

Participating Vendors must treat this Request for Quotation (RFQ) for the new Puerto Rico Eligibility and Enrollment (PREE) System as confidential and must not disclose it to any party other than specific employees with a need to know. This obligation does not apply to information that is in the public domain through no breach of confidence by the participating Vendors or information that is available from a source other than Puerto Rico Department of Health (PRDoH).

If a Vendor does not agree with these provisions, the Vendor must refer to Section 9 of this RFQ.



Table of Contents

1	<u>PUERTO RICO MEDICAID PROGRAM REPLACEMENT SYSTEM SOLICITATION</u>	1
1.1	Overview of Puerto Rico Medicaid Program Eligibility Determination	1
1.2	Project Goals and Objectives	3
1.3	Business Case for PREE	4
1.4	Vision for Puerto Rico's Medicaid Eligibility & Enrollment	7
1.4.1	No Wrong Door	7
1.4.2	Streamlined Medicaid Application Processing	7
1.4.3	Electronic Data Verification Processing	9
1.4.4	Document Imaging	9
1.4.5	Rules Engine	10
1.4.6	Improve Determination Accuracy	10
1.5	Current Environment	10
1.5.1	MEDITI2 Eligibility System	11
1.5.2	ASES Eligibility & Enrollment System	12
2	<u>TECHNOLOGY STANDARDS</u>	14
2.1	CMS Requirements	14
2.2	Puerto Rico Technology Standards	16
2.2.1	Azure App Service, Reference Architecture	17
2.2.2	Virtual Machines Reference Architecture	18
3	<u>SCOPE OF WORK (SOW)</u>	21
3.1	System Overview	21
3.1.1	Puerto Rico / Vendor Partnership Model	21
3.1.2	Hosting Model	22
3.1.3	Azure Services	23
3.1.4	Timeliness of Solution	25
3.2	Functional Requirements	25
3.2.1	General	26
3.2.2	Intake	26
3.2.3	Document Scanning	26
3.2.4	Eligibility Determination	27



3.2.5	Enrollment, Denial, & Termination	27
3.2.6	Alerts	27
3.2.7	Case Maintenance	27
3.2.8	Notices	28
3.2.9	Appeals	28
3.2.10	Audit & Quality Management	28
3.2.11	Functional Quality	28
3.2.12	Workflow Management	28
3.2.13	Reports	28
3.3	Technical Requirements	29
3.3.1	Usability	30
3.3.2	Audit and Compliance	30
3.3.3	Performance and Availability	31
3.3.4	Interoperability and Interfaces	31
3.3.5	Scalability and Extensibility	31
3.3.6	Regulatory and Security	31
3.3.7	Interface List	31
3.3.8	Solution Management and Administration	31
3.3.9	Technology Platform Requirements	32
3.4	Implementation Scope, and Deliverables	35
3.4.1	Project Management and Monitoring	35
3.4.2	Project Tools	35
3.4.3	Project Close Out	36
3.4.4	Project Planning	36
3.4.5	Technical Environment Setup and Management	36
3.4.6	Solution Design, Development & Implementation (DDI)	36
3.4.7	Data Conversion and Migration	37
3.4.8	Testing Requirements	37
3.4.9	Organizational Change Management, Training and Knowledge Transfer	38
3.4.10	Pilot, Roll-Out and Go-Live	38
3.4.11	Warranty Support	38
3.5	Maintenance and Operations	39
3.5.1	Application M&O Service Requirements	40
3.5.2	Design, Development and Implementation (DDI) to M&O Transition	40
3.5.3	Modifications/Enhancements Requirements	40
3.5.4	Maintenance and Operations Transition Requirements	41
3.6	Hosted Cloud Requirements	41



4	COST MODEL AND BUDGETING SPECIFICATIONS	42
4.1	Labor Rate	42
4.2	Implementation Costs	43
4.3	Provide Maintenance and Operation Services	43
4.4	Packaged Software	44
4.5	Hardware Costs	44
4.6	Cloud Hosting Services	45
4.7	Assumptions	45
5	PROJECT MANAGEMENT AND GOVERNANCE	46
5.1	Project Organization	46
5.2	Project Governance Model	47
5.2.1	Project Governance Responsibilities	48
5.3	Project Owner / Sponsor	51
5.4	The PR Medicaid Program Program Manager	51
5.4.1	Authority of PR Medicaid Program Program Manager	51
5.5	PREE Steering and Governance Committee	52
5.6	Key Staff Committee	53
5.7	Integrated Project Management Office	54
5.8	Change Management	54
5.9	Supporting Communications	55
6	KEY PERSONNEL	57
6.1	Vendor Staffing Model	57
6.1.1	Resumes	59
6.1.2	Collaboration	59
7	PROJECT PERFORMANCE STANDARDS	60
7.1	Service Level Agreements and Guarantees	60
7.2	Implementation Service-Level Requirements	60
7.3	Maintenance, Operations and Support Services Level Requirements	61
7.4	System Performance Services Level Requirements	63
7.4.1	Average Response Time	63
7.4.2	Maximum Response Time	63
8	CONTRACT STANDARDS	64



8.1	General Terms and Conditions for PR Medicaid Program Vendors	64
8.2	Notification of Puerto Rico Contractual and Privacy Requirements	66
8.2.1	Invoicing Provision:	66
8.2.2	Health Insurance Portability and Accountability Act (HIPAA) Provision:	66
8.2.3	Contract Award provision:	66
9	<u>GENERAL INSTRUCTIONS AND RFQ REQUIREMENTS</u>	67
9.1.1	Communication with PR Medicaid Program	67
9.1.2	Preparation Costs	67
9.1.3	RFQ Package Overview	68
9.1.4	RFQ Submission Instructions	68
9.1.5	Instructions for RFQ Response Content	69
<u>APPENDIX A.</u>	<u>DEFINITIONS AND ACRONYMS</u>	74
<u>APPENDIX B.</u>	<u>ELIGIBILITY & ENROLLMENT PROCESS REVIEW</u>	81
<u>APPENDIX C.</u>	<u>REFERENCE OF PUBLIC LAW</u>	85
<u>APPENDIX D.</u>	<u>FEDERAL REQUIREMENTS</u>	87
<u>APPENDIX E.</u>	<u>CMS REGULATIONS AND REQUIREMENTS</u>	97



Table of Figures

Figure 1 Compliance Environment	4
Figure 2 Imaging Workflow	8
Figure 3 Call Center Workflow	8
Figure 4 Kiosk Workflow	8
Figure 5 Online Workflow	8
Figure 6 Current Environment	10
Figure 7 Azure Government Cloud iSaaS to iPaaS	16
Figure 8 Azure App Service Reference Architecture	17
Figure 9 Azure Multi-region HA VM N-tier Reference Architecture	19
Figure 10 Dev-Test deployment for iPaaS	22
Figure 11 Dev-Test deployment for iSaaS	23
Figure 12 Microsoft Azure Infrastructure and Platform Services	24
Figure 13 Azure Application Service Centric Approach	25
Figure 14 Sample Azure App Service Architecture	30
Figure 15 Project Organization Chart	46
Figure 16: PREE Project Governance Model	48



1 Puerto Rico Medicaid Program Replacement System Solicitation

Puerto Rico Department of Health and its Medicaid Program Office (PR Medicaid Program) is issuing this Request for Quotation (RFQ) with the intent to acquire a replacement Puerto Rico Medicaid Eligibility and Enrollment (PREE) System. PRDoH is in the process of a major Medicaid infrastructure transformation to establish a modernized set of information systems and sophisticated business processes to fully support Puerto Rico Medicaid operations, improve the ability to manage the program and to fully comply with CMS regulations. After the replacement system is fully in operation, PRDoH expects to obtain a certificate to operate the replacement system with management and operations funding as a certified system qualified for enhanced 75/25 federal financial participation.

1.1 Overview of Puerto Rico Medicaid Program Eligibility Determination

PR Medicaid Program operates a managed care model Medicaid program. All eligible members are enrolled in the mandatory Mi Salud Program. In addition, the PR Medicaid Program operates a unique program for its Medicare eligible members, Platino, which provides premium assistance for those eligible who are also enrolled in the Medicare Advantage program. PR Medicaid Program receives limited territorial funding for Medicaid. The PR Medicaid Program's funding has traditionally been limited by law to a federal block-grant with a financial cap that limited both program and administrative expenditures. For decades, the federal share of Medicaid costs covered approximately 15%, of annual program expenditures, with the bulk of the funding for Mi Salud being provided from local government funding. Since OAIT (Office of Administration Information Technology) and administrative expenditures were also under the cap, the limitations in federal funding resulted in underinvestment in technology and program oversight. A brief chronology follows:

- In 2009, Changes in federal law contained in the Children's Health Insurance Program Reauthorization Act (CHIPRA) legislation opened the availability to the PR Medicaid Program of enhanced federal funding for the design, development, implementation maintenance and operations of Medicaid information systems. For the first time, information technology was able to be funded through enhanced federal funding participation outside the federal cap.
- In 2010, the Affordable Care Act (ACA) allotted additional funding to the PR Medicaid Program to increase the federal Medicaid funding. To comply with the requirements attached to the receipt of these additional federal funds, Puerto Rico's Medicaid program must adjust its state plans, and operations to align with the requirements which apply to all other U.S. jurisdictions. This includes supporting and promoting the adoption of MAGI methodologies for Medicaid eligibility determination.



- In 2013, the PR Medicaid Program completed a Medicaid Information Technology Architecture (MITA) State Self-Assessment that found that most current operations fell well short of minimal federal system requirements for enhanced funding. During the MITA assessment It was determined that the current eligibility determination system, MEDITI2, would be a poor foundation on which to build a long-term certifiable eligibility system.
- In 2014, the PR Medicaid Program initiated projects to achieve full CMS compliance through the acquisition and implementation of implement changes to the PR Medicaid Program and ASES business processes and systems to attain full compliance with current CMS requirements. Among these efforts were activities to enhance the PR Medicaid Program MEDITI (now MEDITI2) eligibility system to address, Modified Adjusted Gross Income (MAGI) income based eligibility as required by the ACA.
- In 2016, the PR Medicaid Program began the DDI phase of the PRMMIS Module 1, to transform a number of critical administrative systems and business processes to increase data collection, data access and data quality for Medicaid data. PRMMIS Module 1 is primarily oriented to improved reporting and strengthened oversight over contracted services delivered through MCOs. However, since PRMMIS Module 1 is limited to existing data sources, PRMMIS by itself requires the PR Medicaid Program to expand and qualify data used by PRMMIS, including eligibility data from MEDITI2. Most notable are CMS conditions which require Puerto Rico to improve federal reporting, in summary reporting and in submission of data reporting through the Transformed Medicaid Statistical Information System (T-MCIS). Implementation of PRMMIS in early 2018 is expected to expose the inherent weaknesses in the data quality and in the eligibility processes.

The PR Medicaid Program has recently completed the enhancement of MEDITI2 to comply with federal requirements for MAGI eligibility determinations. However, the system enhancements did not bring the system into compliance with the federal standards and the enhanced MEDITI2 is an interim step toward ACA compliance until modernized Medicaid systems are implemented.

The PR Medicaid Program has been working diligently with CMS to realize the goals and objectives of these important projects. The PR Medicaid Program seeks to procure the services of a professional Vendor to implement an off-the-shelf eligibility system solution that is compliant with the Medicaid Information Technology Architecture (MITA) and is CMS certified for the Modified Adjusted Gross Income (MAGI) eligibility determination. The PR Medicaid Program is issuing this Request for Quotation (RFQ) with the objective to acquire a firm fixed-price proposal for a replacement Puerto Rico Eligibility and Enrollment (PREE) System. Vendors are encouraged to propose solutions that demonstrate reuse of technologies that are already developed and available in the marketplace, and that are configurable to meet the PR Medicaid Program requirements.



1.2 Project Goals and Objectives

In establishing for the design, development, implementation and operational future vision for the PR Medicaid Program, the following goals have been identified:

- **Goal 1:** Achieve full compliance with all federal programmatic, systems, management and operations requirements
- **Goal 2:** Improve the accuracy of program payments and provide full accountability and transparency in the eligibility and enrollment processes
- **Goal 3:** Provide a first-class user experience, through a single, streamlined application and through a data driven verification processes
- **Goal 4:** Increase federal funding for Medicaid operations
- **Goal 5:** Fully support the eligibility and enrollment information needs of the future PR Medicaid Program System to be able to use information in the system to assess program administration and contractor payment accuracy.

In the early stages of the solution approach, PR Medicaid Program established the following objectives for the replacement system:

- **Objective 1:** Simplify the Medicaid application process for citizens in Puerto Rico
- **Objective 2:** Provide a path for future integration with other federal programs, such as:
 - Nutrition Assistance for Puerto Rico (NAP) also known as Food Stamps
 - Special Supplemental Nutrition Program for Women, Infants and Children (WIC, PR WIC)
 - Administration for the Sustenance of Minors (ASUME)
- **Objective 3:** Achieve full compliance with federal requirements and CMS guidance
- **Objective 4:** Improve the accuracy of Medicaid eligibility determination
- **Objective 5:** Reduced Operational Cost due to Electronic Processing
- **Objective 6:** Enhance customer service, increase eligibility worker efficiency, improve access to program information, and increase access to assistance programs through technology improvements
- **Objective 7:** Align business processes with best practices
- **Objective 8:** Maximize qualification for 90 percent funding for the enhanced Federal Funding Participation (FFP) for the development and implementation of the new PREE System
- **Objective 9:** Maximize qualification for 75 percent FFP operational funding for the new PREE System

1.3 Business Case for PREE

In addition to the goals and objectives described above, the PR Medicaid Program has identified a number of business objectives that can be achieved through improvements in the eligibility determination and certification systems and associated business processes. The diagram below illustrates the compliance environment in which new PREE processes and systems must operate.

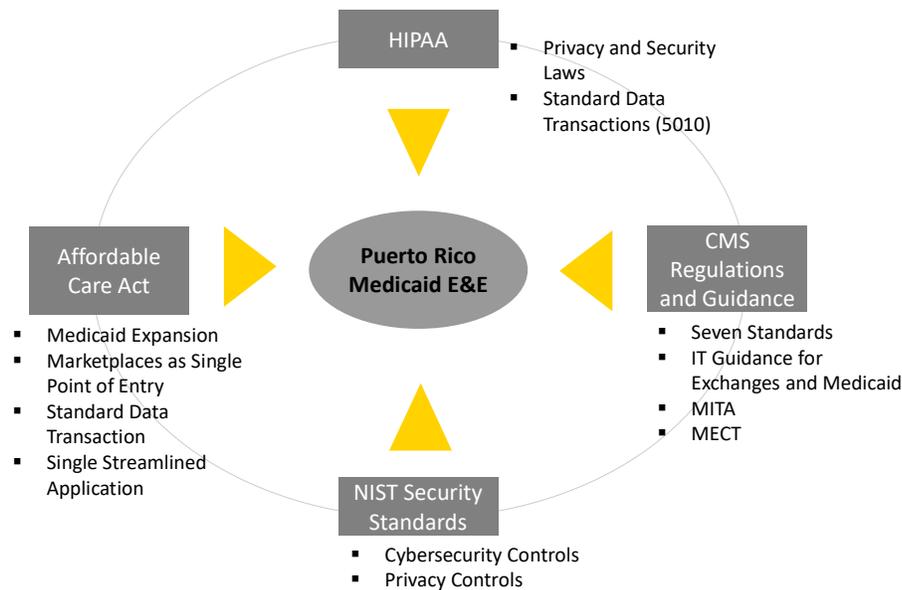


Figure 1 Compliance Environment

(HIPAA Health Insurance Portability and Accountability Act, NIST National Institute of Standards and Technology)

The business case for the replacement eligibility system is based on goals established for the project. This section discusses the business case in context of each of the goals described above and the known limitations also described above.

- **Goal 1: Achieve full compliance with all federal programmatic, systems, management and operations requirements**

Increases in federal funding for the PR Medicaid Program have resulted in increased scrutiny and oversight by the federal government. Prior to ACA, when CMS provided less than 20% of program support, CMS had little leverage to require Puerto Rico to adhere to strict federal requirements. Even though 90% of Medicaid eligible in the Territories reside in Puerto Rico, CMS did not have regulatory authority to demand compliance, and CMS did not have the resources and commitment to require full compliance since the amount of funding available for program expenditures and administrative costs were



capped at approximately \$15 million per year. The PR Medicaid Program made do with what was available within the capped dollars, and demonstrated best efforts in achieving full federal compliance.

After CHIPRA made enhanced funding available to the PR Medicaid Program, regulatory action is still limited by law. CHIPRA made enhanced funding available for MMIS and Eligibility systems, however it did not explicitly mandate that territories obtain and operate certifiable Medicaid systems. While the PR Medicaid Program aspired to implement certifiable systems, the lack of expertise, and organizational issues limited the commitment to system compliance even though it would result in significant operational improvements through new funding sources that would strengthen and cost effectively improve program oversight and payment accuracy.

- **Goal 2:** *Improve the accuracy of program payments and provide full accountability and transparency in the eligibility and enrollment processes*

Federal oversight audits have identified a number of Medicaid program integrity findings that found a number of payment appropriateness and payment accuracy issues which the PR Medicaid Program was expected to correct, however, for most if not issues were ones that could not be directly addressed without reliable and accurate data could be used to address issues.

- **Goal 3:** *Provide a first-class user experience, through a single, streamlined application and through a data driven verification processes*

Medicaid eligibility is determined through a network of local PRDoH's in every municipality in Puerto Rico. While automated systems are used to schedule appointments, and to record the results of process, it is a manual system, with a single method of applying for benefits. The ACA mandates that each Medicaid program must offer numerous methods to apply for benefits, in person, by mail, over the telephone and through the internet. This requirement, intended to make it easy to apply for benefits, and quick to provide an answer to the applicant is at the heart of the ACA.

Limitations in the PR Medicaid Program automation greatly limited the ability to make flexible options available to applicants. In Puerto Rico over 1,000,000 interviews were conducted in 2016. This local office based method required almost 1,000 adjudicators to process applications, redeterminations and changes in assets. Because the process is not automated, each step in the process requires extensive documentation to be provided by the applicant to support the determination. In many offices, over 50% of the leased office space is consumed by paper file storage, which is dynamic and must be retained for processing and for quality audit purposes.



To comply with ACA requirements of a data driven system will require the ability to use external sources to verify income and residency requirements. It will also require uniform rules driven process that full addresses the many in line and exception allowances for an income based determination.

To provide user friendly methods to apply for benefits, also requires that the PR Medicaid Program systems be compliant with HIPAA and IRS MARS-E security requirements; each of these regulatory provisions requires a level of control and oversight that is at a scale that is greater than the current systems environment that is only accessible by authorized PR Medicaid Program staff. However, the business case for a “no wrong door” application process together with automated interfaces to other external sources for verification will have significant impact in reduction of manual effort, improved levels of service to applicants, cost savings in management and oversight and increased uniformity and accuracy of benefits.

➤ **Goal 4: Increase federal funding for Medicaid operations**

Effective with the implementation of the ACA, enhanced federal funding at a match rate of 75% federal. Most importantly, funding for certified Medicaid systems is not subject to the Territorial Cap. This additional funding for Maintenance and Operations will cover 75% of the costs of all related eligibility determination support. This represents a large source of cost savings.

Operation of PREE is expected to cost \$?????? To \$??? Per year, however the automated application and eligibility verification can be expected to reduce field offices and staff by 40-50%. This reduction in staff will be better able to support additional focus on program integrity, third party liability and error rate reduction further reducing Medicaid program expenditures.

➤ **Goal 5: Fully support the eligibility and enrollment information needs of the future**

The PR Medicaid Program’s current financial situation is one in which every effort must be made to reduce government expenditures and to make appropriations go as far as possible. Additionally, new Congressional oversight in the form of the Puerto Rico Fiscal Control Board requires transparency and accountability, at a level that is greater than ever. The need for information that can clearly demonstrate program efficiency is expected to grow with respect to these key areas of improvement.

Millions of dollars of additional funding, substantial administrative cost savings, improved accuracy of eligibility determination (financial need and residency) and renewed focus on program integrity and third-party liability make this project a top priority of the PR Medicaid Program.



1.4 Vision for Puerto Rico's Medicaid Eligibility & Enrollment

The PR Medicaid Program has established a to be vision of eligibility and enrollment for Medicaid in the future. This vision is aligned with the PR Medicaid Program Medicaid Information Technology Architecture State Self-Assessment, and current CMS regulations:

1.4.1 No Wrong Door

The newly PREE System must provide a streamlined and efficient new application and renewal process, with no wrong door and with multiple methods for applying for coverage. The vision is for citizens of Puerto Rico to apply for benefits in many ways): by mailing an application to be processed at an image center; by telephone application at the Call Center; at a Medicaid Office and applying using a Kiosk; at home or work entering an application via the Medicaid website; at an internet cafe using a smart device, such as a cell phone or tablet.

1.4.2 Streamlined Medicaid Application Processing

Applicants must be able to apply by mail, by phone, walking into a Medicaid Office, or online via the Internet. Regardless of the method of input, the PREE System is expected to automatically review the application information for completeness, verify the information provided against electronic sources, process, and determine eligibility or define the need for additional information.

The goal of the streamlined Medicaid application processing is to be able to determine eligibility, notify the Applicant, and pass the enrollment information to PRMMIS. The CMS Seven¹ Conditions and Standards require Medicaid Eligibility Systems to meet a broad set of functional and architecture capabilities that can enable real-time or near real time determination. A summary of the conditions and standards is available for reference in Appendix E.

1.4.2.1 Mail Application to Imaging Center

¹ In June 2016 CMS released five additional conditions and standards in letter SMD #16-009. In the remainder of this document these will be referred to as the CMS conditions and standards.



Figure 2 Imaging Workflow

Applicants can use the streamlined application to apply for benefits by printing the approved application and submitting it by mail to the eligibility application receiving center where it is imaged and indexed into the electronic document management system. Workflow driven queues are used to route applications to PR Medicaid Program Eligibility Case Workers for finalization and approval.

1.4.2.2 Phone in Application to Call Center

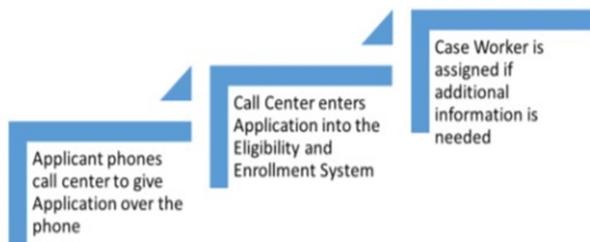


Figure 3 Call Center Workflow

As required by the ACA, Applicants must be able to apply for Medicaid from a telephone to a Call Center, where they will receive assistance in determining eligibility for all members of the household.

1.4.2.3 Walk into Medicaid Office to Case Worker or Kiosk

Applicants can visit local offices in-person to apply for Medicaid with a Case Worker or where they will be able to use Kiosks to submit applications. Applicants using the Kiosks will be verified electronically and receive faster determination results than using the Mail Application process.



Figure 4 Kiosk Workflow

1.4.2.4 Enter On-Line Application on Medicaid Website

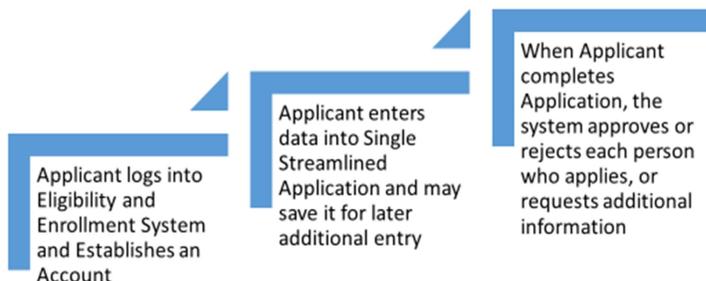


Figure 5 Online Workflow

Applicants can also apply through an internet or a mobile device application that captures information by fillable forms or direct entry into the user interface via a web portal.



1.4.3 Electronic Data Verification Processing

Rather than requiring copies of information from the Applicant, ACA requires Medicaid to electronically screen and verify information through direct, and sometimes real-time, action, including verification of income and/or verification of a person's identity through a business service that makes external sources of data available to the PREE System. Electronic verification is a key capability that can improve the Applicant's experience, make determination faster and more consistent and results in improved accuracy.

The new PREE System shall make use of electronic verification by implementing interfaces and data exchanges with other Puerto Rico agencies, Federal departments and private entities. The System will be able to use the new data hub services developed by CMS, which employs interface file matches to support the eligibility determination process.

The goal is to verify what information is required and to determine the majority of Applicant eligibility without requiring case worker to take action, thus allowing case workers to improve customer service and focus more attention on complex cases.

The PR Medicaid Program intends to establish a verification process, such as:

- Federal Data Services Hub (FDSH)
- Social Security Administration (SSA)
- Income Eligibility Verification System
- Department of Homeland Security (DHS)
- Systematic Alien Verification Entitlement Program (SAVE)
- Puerto Rico Treasury (Hacienda)
- Puerto Rico Department of Transportation
- Puerto Rico Corrections Department

1.4.4 Document Imaging

The PR Medicaid Program lacks a document imaging solution and uses paper file folders stored onsite at each of the seventy-three local offices, seven regional offices, three satellite offices and main office.

. Currently, paper records are maintained in over 4,000 filing cabinets across the island. If information is requested from one Medicaid office to another Medicaid office in Puerto Rico, the record is mailed, sometimes taking over a week to reach its destination. The new PREE System with an integrated document imaging component will reduce paper storage allocation, cost associated with storage, and improve data privacy and

security measures. By implementing an electronic document management component, the new solution will deliver electronic case records and immediately provide information online. This will improve availability of information for managing cases, reporting and redetermination efforts.

1.4.5 Rules Engine

The new PREE System must include an integrated Rules Engine component to determine eligibility under MAGI and non-MAGI categories, and potentially other future non-Medicaid eligibility programs, such as the NAP or TANF. An integrated Rules Engine component will increase the speed of service by providing real-time interfaces and allow eligibility determinations to be made as soon as all of the electronic verifications are available. This improves productivity and can provide significant long term operational savings to the PR Medicaid Program.

1.4.6 Improve Determination Accuracy

The PR Medicaid Program expects the new PREE System will improve determination accuracy by integrating key components, such as the Electronic Data Verification, Data Imaging, and a Rules Engine. The new components will improve accuracy in application processing and benefit determination, as policy will be consistency applied.

1.5 Current Environment

MEDITI2 is responsible for eligibility determination for PR Medicaid program. There are 1.5 million cases per year with an average of 125,000 cases per month to be renewed in Puerto Rico. The Medicaid verification and determination of benefits is currently processed through the custom-built system, MEDITI2, that is hosted in the Oficina De Informática Y Avances Tecnológicos (OIAT), the technology department of the PRDoH.).

The current process to apply for Medicaid benefits include the following steps:

- Applicants place a telephone call to the Call Center to schedule an appointment to visit the local Medicaid Office.
- An initial prescreening process is conducted to help the Applicant understand the required supporting documentation.
- Applicant visits the local Medicaid Office to provide the requested documentation and undergo the verification steps for eligibility determination.
- Copies of the required documentation are made and placed into paper

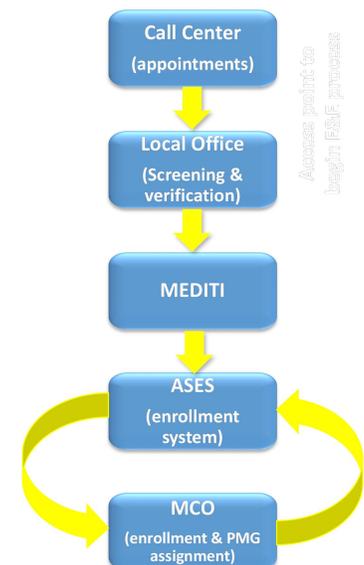


Figure 6 Current Environment



folders for filing and storage.

- Medicaid staff members enter Applicant information into the MEDITI2 system, the current production system supporting the local Medical offices.
- Paper forms are printed and provided to the Applicant.
- Eligibility information is entered into MEDITI2, that interfaces nightly with the ASES enrollment system.
- The ASES system determines which of the MCOs the Applicant is to be enrolled to, based on the regional location of the Applicant.
- The MCOs assign the new enrollee to a Provider Medical Group (PMG), issue insurance cards and provide member supporting services.
- The MCO adds the PMG assignment to the enrollment record, which interfaces back to ASES to complete the enrollment and enable the MCO to receive monthly premium payments.

1.5.1 MEDITI2 Eligibility System

The MEDITI2 Eligibility System is currently used in the Medicaid offices for eligibility determination under the Medicaid program in Puerto Rico. MEDITI2 is a custom-developed web-based application with several modules, including the following:

- Appointment Calendar
- Application Form
- Calculation Sheet
- Query / Response

The system is available via intranet within the Medicaid Program. The MEDITI2 System uses electronic data sources, primarily based on batch files from multiple government agencies, which are delivered on a monthly to quarterly basis, to validate key beneficiary information.

The PR Medicaid Program has a Universal Database (also known as “Base de Datos Universal” or BDU) as part of the Puerto Rico fraud detection program. BDU is used by MEDITI2 to flag discrepancies detected between information provided by the beneficiary and BDU Data. The information from the BDU is delivered in an overnight batch process. The system utilizes a proprietary custom-developed rules engine (.Net, SQL) design coupled with GUI display screens to support Applicant determinations. The current system does not include electronic verification capabilities or otherwise address compliance to the CMS Conditions and Standards. OIAT hosts the MEDITI2 system on clusters of load balanced, virtual servers that are separated as Application Servers, SQL Servers, and Reporting Servers.



The following are known limitations of the eligibility determination process in Puerto Rico:

- Paper-based Verifications – Verification processes of beneficiary documentation are handled entirely via manual, paper-based verification, requiring the physical presence of the beneficiary in the Medicaid office. Human-to-machine query verification processes can be impacted by human error.
- Verification Data Sources – Data sources for eligibility verification are delivered via batch files from various government agencies on a monthly to quarterly basis. Real-time electronic verification and post-determination updates are unavailable features within the current system.
- Interoperability with Government Agencies and PREE Stakeholders – The interchange of data among PREE stakeholders and government agencies is performed primarily by transferring batch files. The system does not allow for data to interface seamlessly, within real-time, among the entities. PR Medicaid Program currently does not have the capability to exchange data through the Federal Hub.
- Extensibility and Modularity – The system was designed using proprietary software development principles that make modifications of existing functionality, or the extension of new functionality, difficult to address efficiently and economically. Although MEDITI2 provides MAGI eligibility determinations, it only offers a slight advance on the MITA maturity modular approach.
- Lack of Documentation – Few MEDITI2 documentation artifacts exist for solution and application development delivery. It is either non-existent or outdated documentation which may result in difficulties to allow the system to be reusable and extensible in accordance with CMS Conditions and Standards.
- Compliance to CMS Regulations and Conditions – The system does not meet the standards specified by CMS to support a single-streamlined application and lacks electronic verifications.
- HIPAA Compliance – Data exchanged within the MEDITI2 system and between entities do not utilize HIPAA-compliant data layouts.

This project, now named the Puerto Rico (Medicaid) Eligibility and Enrollment (PREE) System Project is now at the procurement phase to begin the planning, design, development implementation of the replacement eligibility system.

1.5.2 ASES Eligibility & Enrollment System

ASES is responsible for contracting with MCOs, performing enrollment and disenrollment and serves as fiscal agent for paying capitated premiums to MCOs. Puerto Rico Medicaid is a managed care model with MCOs contracted at-risk to manage all services for beneficiaries using a per member per month (PMPM) capitation payment model.

ASES maintains its own Eligibility & Enrollment System primarily responsible for storing eligibility and enrollment data and for transferring data to MCOs. Eligibility data from the MEDITI2 system is delivered on a



daily basis, as a batch file to ASES and stored and maintained in ASES. Enrollment data is also submitted on a daily basis by the MCOs and is stored and used to maintain the enrollment status of beneficiaries within the same database. Following the daily processing of eligibility and enrollment data by the ASES system, files are produced by region for each MCO with updates of all beneficiary information. These files are then exchanged to the MCOs. Through their own internal systems, the MCOs handle all enrollments, auto-assignment of PMGs, disenrollment, and member communication.

MEDITI2 has responsibility for providing enrollment and disenrollment information to ASES.

The ASES Eligibility & Enrollment System is programmed in Java, JavaScript, HTML, XML, and Linux Shell Scripts. The database utilized in ASES is MySQL Server Version 5.5.31-0 (Ubuntu). The system is run on Linux Ubuntu 12.04.1 the servers are hosted remotely by an external provider.



2 Technology Standards

2.1 CMS Requirements

CMS only approves enhanced FFP funding when Medicaid infrastructure and information systems projects meet statutory and regulatory requirements to support efficient and effective operation of the program. The MITA Framework provides an initial maturity model to apply to increasing levels of capabilities for compliance with the Enhanced Funding Requirements: CMS Conditions and Standards. CMS will continue to provide future editions of the Conditions and Standards with additional input and consultation from States.

The MITA Team evaluated and incorporated the guidance in the Federal Registry “42 CFR Part 433 Medicaid Program; Federal Funding for Medicaid Eligibility Determination and Enrollment Activities” into the MITA Framework for purposes of guiding the MITA stakeholders. MITA fosters integrated business and Information Technology (IT) transformation across the Medicaid Enterprise to improve the administration and operation of the Medicaid program. The MITA Medicaid Enterprise includes all three (3) of the MITA architectures (i.e., business, information, and technology) and supports the CMS Conditions and Standards.

The Vendor must propose a PREE System that meets the statutory and regulatory requirements to support efficient and effective operation of the Medicaid program. The Government of Puerto Rico is pursuing a PREE System solution that complies with the CMS Conditions and Standards and FFP funding requirements.

To meet CMS requirements, the proposed PREE System shall:

- Meet the system requirements in 42 CFR §433.112(2) and the State Medicaid Manual, as periodically amended.
- Be compatible with the information retrieval systems used in the administration of Medicare for prompt eligibility verification for persons eligible per 42 CFR §433.112(3).
- Provide an online SSA per 42 CFR §435.603 Application of MAGI.
- Support the data requirements of quality improvement organizations established under Part B of Title XI of the Social Security Act.
- Provide ownership of any software that is designed, developed, installed or improved with 90 percent FFP.
- Offer a royalty-free, non-exclusive, and irrevocable license to reproduce, publish, or otherwise use and authorize others to use, for federal government purposes, software, modifications to software, and documentation that is designed, developed, installed, or enhanced with 90 percent FFP.
- Align to, and advanced increasingly in, MITA maturity for business, architecture, and data.



- Align with, and incorporation of, industry standards adopted by the Office of the National Coordinator for Health IT in accordance with 45 CFR part 170 subpart B: the Health Insurance Portability and Accountability Act of 1996 (HIPAA) privacy, security and transaction standards; accessibility standards established under section 508 of the Rehabilitation Act, or standards that provide greater accessibility for individuals with disabilities, and compliance with federal civil rights laws; standards adopted by the Secretary under section 1104 of the Affordable Care Act; and standards and protocols adopted by the Secretary under section 1561 of the Affordable Care Act.
- Support accurate and timely processing and adjudications/eligibility determinations and effective communications with providers, beneficiaries, and the public.
- Produce transaction data, reports, and performance information that will contribute to program evaluation, continuous improvement in business operations, and transparency and accountability.
- Support seamless coordination and integration with the Federal Data Services Hub, and allow interoperability with health information exchanges, public health agencies, human services programs, and community organizations providing outreach and enrollment assistance services.
- Deliver acceptable modified adjusted gross income-based system functionality, demonstrated by performance testing and results based on critical success factors, with limited mitigations and workarounds.
- Support and enable an effective and efficient business process that produces and communicates the intended operational results with a high degree of reliability and accuracy.
- Support the following CMS Conditions and Standards documented in Appendix E:
 - CMS requirements for 90/10 FFP for design, development and installation of the new PREE System
 - CMS requirements for 75 percent FFP for ongoing operations and maintenance once the PREE System is in place
 - Original CMS Conditions and Standards
 - New Conditions and Standards added in the CMS letter dated 06/27/2016, SMD # 16-009

2.2 Puerto Rico Technology Standards

The Government of Puerto Rico desires a solution that utilizes Infrastructure-as-a-Service (iSaaS) in the Microsoft Azure Government Cloud. The Vendor must propose a solution that can be provisioned, deployed, and managed on the Azure. PR Medicaid Program 's preference is a solution that is deployed as a Platform-as-a-Service (iPaaS) in order to minimize the ongoing maintenance effort. The Azure Government Cloud offers several ways to host internet solutions:

- Azure App Service
- Service Fabric
- Virtual Machines

The Vendor may propose if they choose a multi-step implementation approach initially starting with a solution deployed on iSaaS that then matures within the time limits of the project to a iPaaS solution.

Azure Virtual Machines is an iSaaS, while App Service and Service Fabric are an iPaaS.

A maturing vision from iSaaS to iPaaS

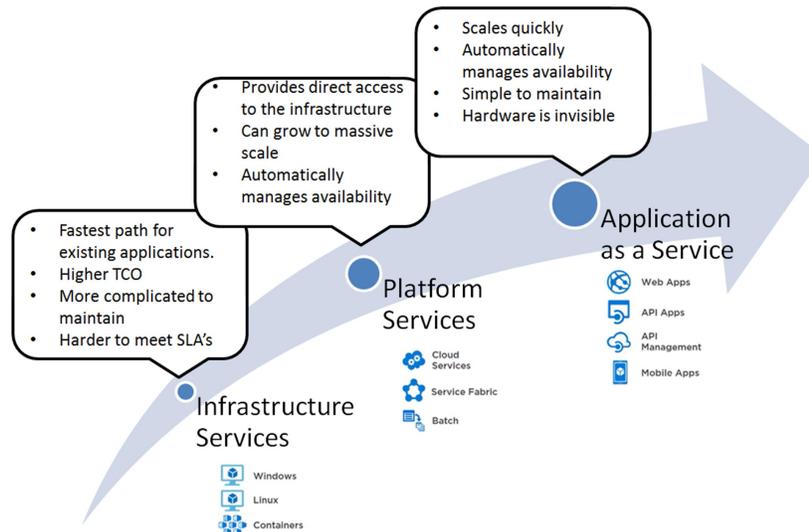


Figure 7 Azure Government Cloud iSaaS to iPaaS

The Vendor may propose an alternate cloud solution, such as a hybrid cloud-to-ground or cloud-to-cloud architecture, with a detailed and compelling justification if the Vendor deems it suitable within the proposed solution architecture. All proposed solutions must be comprised of proven, advanced technologies coupled with exceptional professional services to support the PR Medicaid Program's key objectives and transformation goals.

The proposed solution must align with the following established PR Medicaid Program Enterprise Standards:

- An evolution to the MITA framework technology architecture (TA), information architecture (IA), and business architecture (BA).
- Fulfillment of all the proposed solution(s) requirements outline in this RFQ.
- Compliance with all applicable state and federal laws, rules, regulations, guidelines, policies and procedures.
- The ability to adapt to change and respond to changes in the health care industry.
- The ability to learn and adapt to new challenges and paradigms and provide utilities or services that integrate with health care on an enterprise wide level.
- A verifiable record of accomplishment of successful, similar implementations of proposed solutions within a defined timeframe.

2.2.1 Azure App Service, Reference Architecture

Azure App Service/Reference Architecture is typically the best choice for most web applications. Deployment and management are integrated into the platform and the site can scale quickly to handle high traffic loads. Built-in load balancing and traffic manager provide high availability. PR Medicaid Program prefers system solutions that conform to the following reference architecture, which shows a set of proven practices for improving scalability and performance in a web application running on Microsoft Azure.

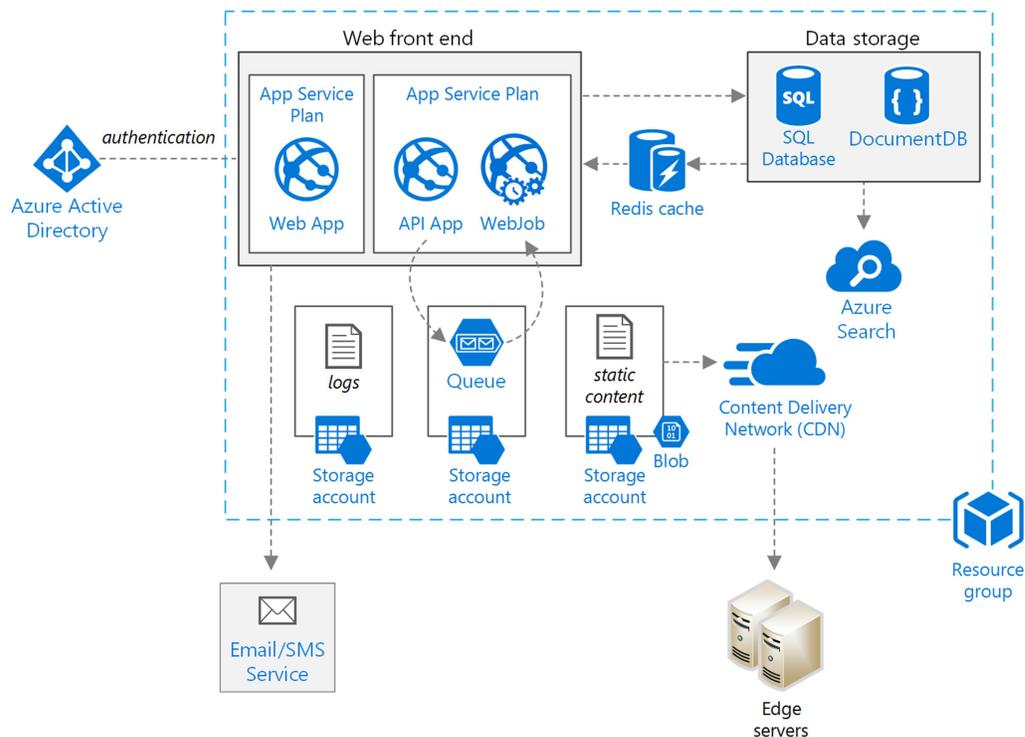


Figure 8 Azure App Service Reference Architecture



This architecture depicted above includes the following components:

- **Resource group** – A resource group is a logical container for Azure resources.
- **Web App and API App** – A typical modern application might include both a website and one or more RESTful web APIs. A web API (application program interface) might be consumed by browser clients through AJAX (Asynchronous JavaScript and XML), by native client applications, or by server-side applications.
- **WebJob** – The Vendor should consider using Azure WebJobs to run long-running tasks in the background. WebJobs can run on a schedule, continuously, or in response to a trigger, such as putting a message on a queue. A WebJob runs as a background process in the context of an App Service app.
- **Queue** – In the architecture shown above, the application queues background tasks by putting a message onto an Azure Queue storage queue. The message triggers a function in the WebJob. Alternatively, the Vendor can use Service Bus queues. The Vendor should consider the use of Service Bus Queues and Azure functions to meet PR Medicaid Program interoperability and interface requirements.
- **Cache** – Store semi-static data in Azure Redis Cache for enhanced performance.
- **CDN** – Use Azure Content Delivery Network (CDN) to cache publicly available content for lower latency and faster delivery of content.
- **Data storage** – Use Azure SQL Database for relational data. For non-relational data, consider a NoSQL store, such as Cosmos Database.
- **Azure Search** – Use Azure Search to add search functionality, such as search suggestions, fuzzy search, and language-specific search. Azure Search is typically used in conjunction with another data store, especially if the primary data store requires strict consistency. In this approach, store authoritative data in the other data store and the search index in Azure Search. Azure Search can also be used to consolidate a single search index from multiple data stores.
- **Email/SMS** – Use a third-party service to send email or Short Message Service (SMS) messages, instead of building this functionality directly into the application.

2.2.2 Virtual Machines Reference Architecture

The PR Medicaid Program recognizes that Virtual Machines (VMs) are a good choice for existing application that would require substantial modifications to run in App Service or Service Fabric. Azure Windows VMs provides on-demand, high-scale, secure, virtualized infrastructure using Windows Server.

VMs simplify migrating to the cloud. Configuring, securing, and maintaining VMs requires much more time and IT expertise. The Vendor will need to demonstrate, as part of its response to cost model and budgeting, that the combination of design, development and implementation (DDI) development on a VM platform and ongoing maintenance effort to patch, update, and manage VMs is less than using an application service architecture.

The reference architecture below shows a set of proven practices for running an N-tier application in multiple Azure regions in order to achieve availability and a robust disaster recovery infrastructure. A similar architecture pattern can be used for Linux VM.

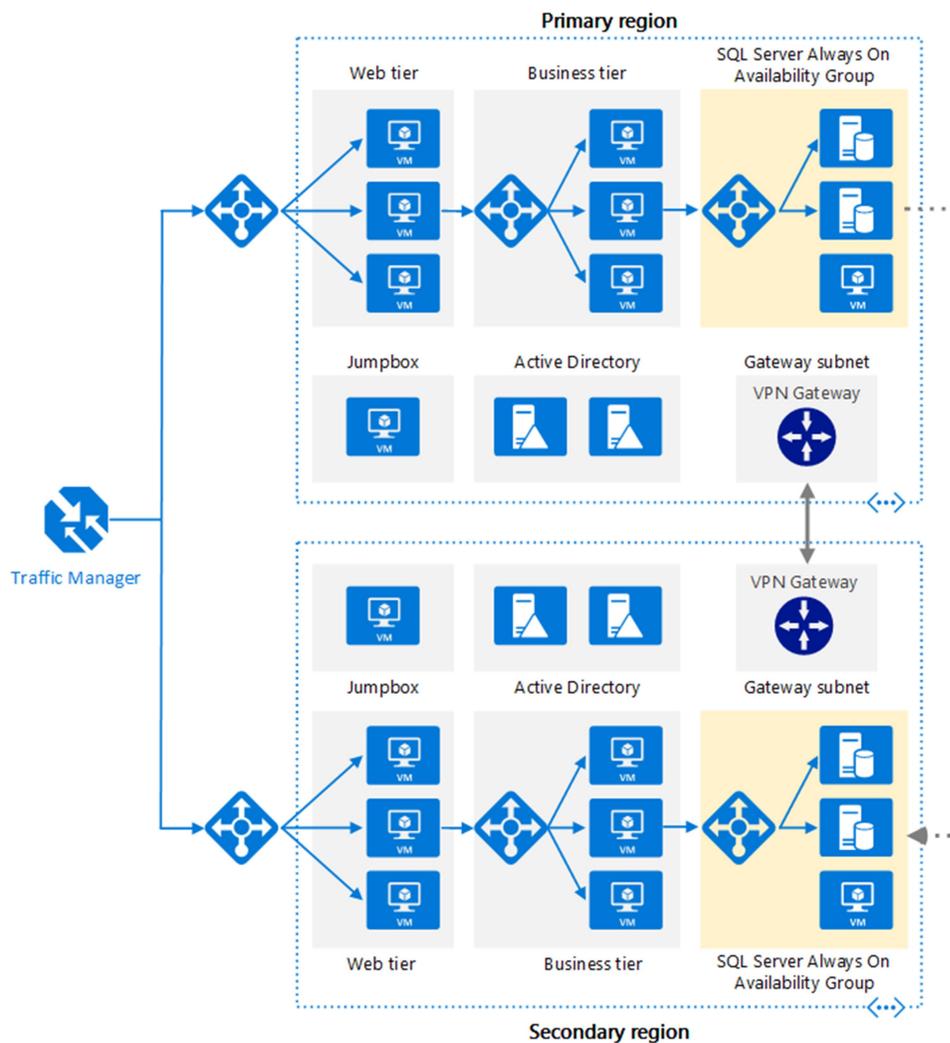


Figure 9 Azure Multi-region HA VM N-tier Reference Architecture

- Primary and secondary regions** – Azure operates in multiple geographies around the world. An Azure geography is a defined area of the world that contains at least one Azure Region. An Azure region is an area within a geography, containing one or more datacenters. Each Azure region is paired with another



region within the same geography, together making a regional pair. The exception is Brazil South, which is paired with a region outside its geography.

- **Azure Traffic Manager** –Traffic Manager routes incoming requests to one of the regions. During normal operations, it routes requests to the primary region. If that region becomes unavailable, Traffic Manager fails over to the secondary region.
- **Resource groups** – Create separate resource groups for the primary region, the secondary region, and for Traffic Manager. This gives flexibility to manage each region as a single collection of resources. For example, redeploy one region without taking down the other one. Link the resource groups and run a query to list all the resources for the application.
- **VNets** – Create a separate VNet for each region. Make sure the address spaces do not overlap.
- **SQL Server Always On Availability Group** – If the solution uses SQL Server, PR Medicaid Program recommends SQL Always On Availability Groups for high availability. Create a single availability group that includes the SQL Server instances in both regions.
 - PR Medicaid Program prefers that the Vendor consider using Azure SQL Database, which provides a relational database as a cloud service. This eliminates the need to configure an availability group or manage failover.
- **VPN Gateways** – Create a Virtual Private Network (VPN) gateway in each VNet, and configure a VNet-to-VNet connection, to enable network traffic between the two VNets. This is required for the SQL Always On Availability Group.

Azure has two different deployment models: Resource Manager and classic. PR Medicaid Program prefers Resource Manager, which Microsoft recommends for new deployments.

2.2.2.1 Multi-Region

A multi-region architecture can provide higher availability than deploying to a single region. If a regional outage affects the primary region, the solution can use Traffic Manager to fail over to the secondary region. This architecture can also help if an individual subsystem of the application fails.

There are several general approaches to achieving high availability across regions:

- **Active/passive with hot standby.** Traffic goes to one region while the other waits on hot standby. Hot standby means the VMs in the secondary region are allocated and running at all times.
- **Active/passive with cold standby.** Traffic goes to one region while the other waits on cold standby. Cold standby means the VMs in the secondary region are not allocated until needed for failover. This approach costs less to run, but will generally take longer to come online during a failure.



- Active/active. Both regions are active and requests are load balanced between them. If one region becomes unavailable, it is taken out of rotation.

The reference architecture focuses on active/passive with hot standby using Traffic Manager for failover. Note that the proposed solution infrastructure could deploy a small number of VMs for hot standby and then scale out as needed to meet the performance and availability requirements described in 7Project Performance Standards.

3 Scope of Work (SOW)

The Vendor shall have sole responsibility and accountability for all PREE requirements of this RFQ and shall provide a solution that meets the requirements comprised of the PREE modules and components described in the sections below.

The system Functional Requirements detailed under Section 3.2 and the Non-Functional Requirements detailed in Sections (3.3 – 3.6) were developed in consideration of the business needs for PR Medicaid Program, expectations for the use of new technology for citizens and staff, Federal requirements, and CMS compliance. The Vendor shall provide supporting documentation to describe how the proposed solution, staffing models and management approach meet these requirements.

3.1 System Overview

3.1.1 Puerto Rico / Vendor Partnership Model

The PR Medicaid Program has evaluated several options for implementing its PREE and with the approval of CMS, decided to do a partnership with a Vendor selected through this RFQ process. The module owner “a Vendor” is selected and then the donor State is selected. The system and its modules will be copied from the donor state and then copied to the Puerto Rico instance in the Microsoft Azure Government Cloud. This provides many of the features and benefits outlined below in the "Hoteling State Partnership Model".

Key features of a using a Hoteling State Partnership model are:

- All States contract with a PREE Vendor separately following their own State procurement regulations.
- All States pay the PREE Vendor separately for services being provided to their state.
- All States have their own version of the PREE application and data.
- Each State has its own certified code base.



3.1.2 Hosting Model

The data systems will reside on the Microsoft Azure Government Cloud. To ensure that Puerto Rico fully satisfies CMS requirements for open source, cloud-based, and commercial products, the Vendor is expected to pursue a service-based and cloud-first strategy for system development. To satisfy the requirements in [Section 3.4.5 Technical Environment Setup and Management](#), the Vendor is required to provide detailed specifications for its development, test and production environments and accompanying architecture.

For iPaaS solution architectures with a typical solution built Visual Studio Team Services, SQL Database, Redis Cache, and Application Insights Azure managed services, the deployment architecture may be similar to the following Figure 10 Dev-Test deployment for iPaaS.



Figure 10 Dev-Test deployment for iPaaS



For iSaaS solutions built on the Azure managed services: Visual Studio Team Services, Azure DevTest Labs, Virtual Machines, and Application Insights, the infrastructure may be closer to Figure 11 Dev-Test deployment for iSaaS

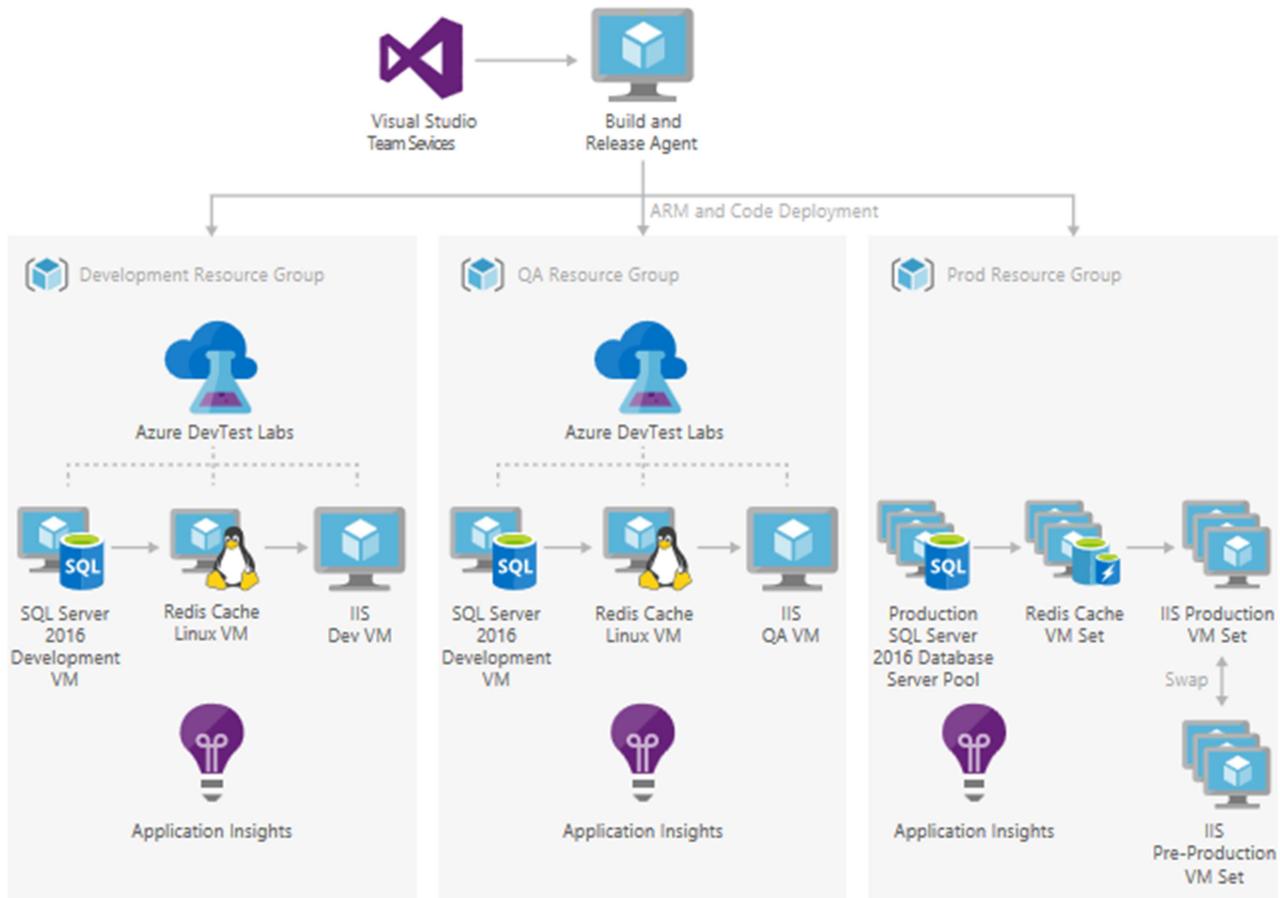


Figure 11 Dev-Test deployment for iSaaS

In both cases, the Vendor is expected to propose services running in a high-availability environment, patched and supported, allowing the DDI team to focus on the solution instead of the environment in which it runs.

3.1.3 Azure Services

PR Medicaid Program envisions a solution that is deployed as a Platform-as-a-Service (iPaaS) to minimize the ongoing maintenance effort.

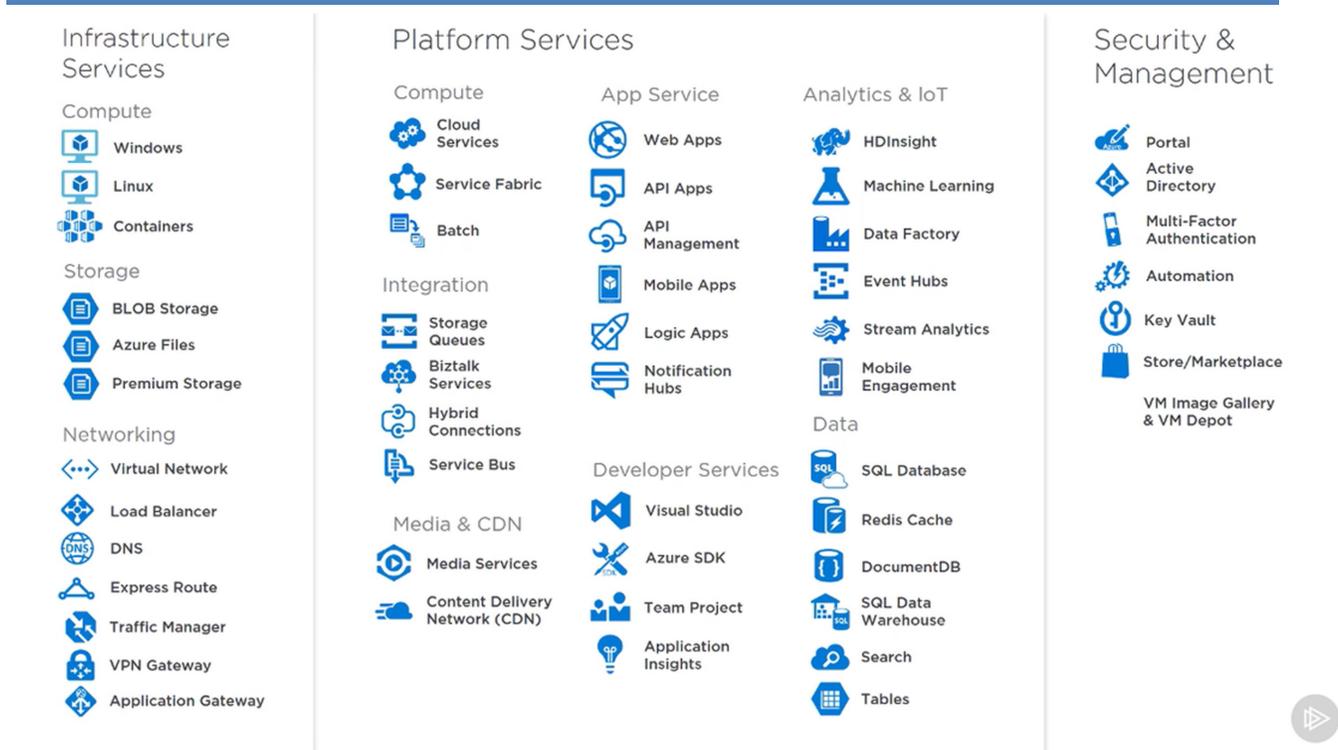


Figure 12 Microsoft Azure Infrastructure and Platform Services

In describing the Solution Architecture, the Vendor is requested to identify which of the Microsoft Azure infrastructure, platform, and security services its solution will initially leverage when shifting to a virtual cloud environment. The Vendor is also requested to identify what re-factoring effort will be required and to describe the Vendors product roadmap for development of an application service centric product consistent with the Azure App Service Reference architecture described in the previous sections.

Once successfully deployed the copied instance is available for further refactoring and development, as needed to meet PR Medicaid Program PR Medicaid Program’s requirements for a service centric application approach that is consistent with CMS Conditions and Standards, that pursues a service-based and cloud-first strategy, that reuses components and technologies already developed, and uses cloud technologies to share infrastructure and applications.

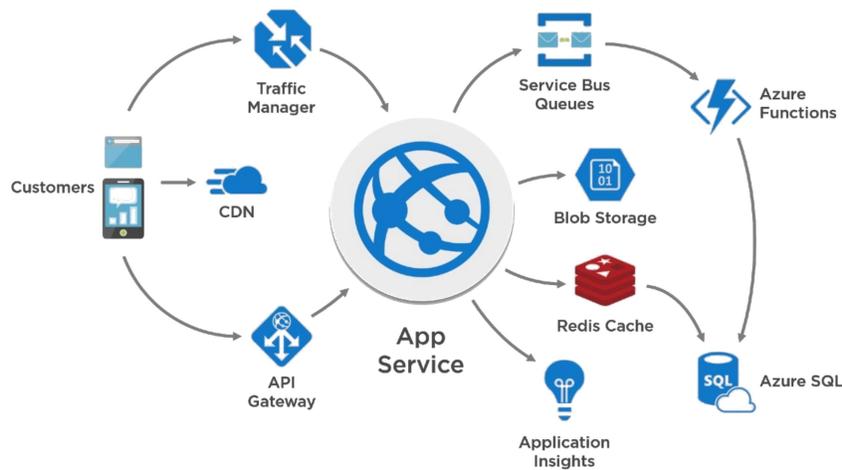


Figure 13 Azure Application Service Centric Approach

3.1.4 Timeliness of Solution

Timeliness of the Vendor's solution is of the essence. The proposed solution must be fully operational and deployed to all Puerto Rico Medicaid offices by the end of December 2019. As defined in the subsequent requirements section of this document, fully deployed requires that the system successfully exited operational pilot phases and is operating under regular maintenance and operations procedures. Any outstanding development activities remaining after December 2019 will be subject to liquidated damages as defined in 60Project Performance Standards

3.2 Functional Requirements

The PR Medicaid Program expects the Vendor to describe its approach to designing, developing, and implementing Functional Requirements that support its Technical Approach to the PREE System within a Functional Detailed Design document. The functional requirements for the PR Medicaid Program's PREE System are categorized into the sections listed below:

- General
- Intake
- Document Scanning
- Eligibility Determination
- Enrollment, Denial, & Termination



- Alerts
- Case Maintenance
- Notices
- Appeals
- Audit & Quality Management
- Functional Quality
- Workflow Management
- Reports

The individual functional requirements are documented detail in the procurement library in the PR Medicaid Program Functional Requirements RTM workbook. The following sub-sections provide a brief description of each Functional area.

3.2.1 General

The proposed solution must be easy to use conforming to the ISO 9241 standard for Ergonomics of Human System Interaction and Section 508 of the Americans with Disabilities Act (ADA). The proposed solution must be available in Puerto Rican Spanish (Spanish) and English (English) to support Puerto Rico citizens and staff in the Government of Puerto Rico. Requirements FR-GEN-001 through- FR-GEN-006 in the Functional Requirements workbook detail the general functional requirements for the solution.

3.2.2 Intake

Processing of eligibility applications within the PREE System must meet specific criteria to conform to ACA requirements. Applicants must be able to apply by mail, by phone, by walking into a Medicaid Office, and on smart devices or via the Internet using a web browser. Requirements FR-INT-001 through FR-INT-104 detail the requirements for automating Intake applications, and the processes to create efficiencies and maintain a high level of service during the Intake business process.

3.2.3 Document Scanning

The proposed PREE Solution must provide a configurable document scanning solution with an integrated security access role. Requirements FR-INT-106 throughFR-INT-119 detail the requirements for scanning supporting documents, the preference on user interface, and the overall document scanning required functionality.



3.2.4 Eligibility Determination

The proposed PREE System must provide accurate and timely eligibility determinations. This section details the overall requirements to perform the functions involved in making Medicaid eligibility determination, including but not limited to:

- Defining eligibility determination access roles
- Collecting required Applicant and Beneficiary data
- Processing application data
- Performing individual matching
- Verifying eligibility data with Federal and Government of Puerto Rico data sources
- Verifying eligibility data
- Sending and reconciling all necessary eligibility and enrollment information with MMIS

Requirements FR-INT-106 - FR-INT-119 detail the requirements for eligibility determination.

3.2.5 Enrollment, Denial, & Termination

The PREE proposed solution must make real-time benefit determinations. These requirements detail the requirements for the workflow and interactions needed for the enrollment, denial, and eligibility termination processes, including communicating these decisions to the Applicant and the external sources.

Requirements FR-EDT-001 through FR-EDT-007 detail the requirements for eligibility determination.

3.2.6 Alerts

The proposed PREE System must provide functionality for notifications and alerts. The requirements FR-AL-001 through FR-AL-015 describes the requirements in detail for the mechanism to generate and forward notification to internal and external resources.

3.2.7 Case Maintenance

The proposed PREE System must provide Case Maintenance functionality. The requirements FR-CM-001 through FR-CM-042 detail the requirements for how the solution shall facilitate the processes involved with Case Maintenance, including but not limited to audits for fraud and appeals.



3.2.8 Notices

The proposed PREE System must provide automated production of notices. Requirements FR-NT-001 through FR-NT-011 detail the requirements for establishing user roles, assign access to users to generate notices, and the processes the system must support to produce and generate notices to comply with program policies.

3.2.9 Appeals

The proposed solution must provide Appeals functionality. This section details the requirements for how Applicants and members will be able to submit a request for an appeal based on their eligibility determination. The requirements FR-AP-001 through FR-AP-093 detail the workflow process for the Appeal process and the capturing of information to produce a comprehensive history of the appeals and hearings process and all decisions rendered.

3.2.10 Audit & Quality Management

The proposed solution must provide Audit and Quality Management functionality. Functional requirements FR-AQ-001 through FR-AQ-010 list the requirements for the Solution's capability to store audit and historical information on changes made to data and the quality control processes needed for compliance with the Government of Puerto Rico and Federal quality standards.

3.2.11 Functional Quality

Requirements FR-AQ-011 through FR-AQ-014 document the requirements for quality control and review, including but not limited to the control processes needed for compliance with the Government of Puerto Rico quality assurance process and federal quality standards for level error rate measurement.

3.2.12 Workflow Management

Requirements FR-WM-001 through FR-WM-036 detail how cases and/or tasks shall travel through the Solution from inception to resolution. A case and/or task may require the attention of multiple staff before it is fully completed. The Solution shall ensure that this happens in an expedient manner based on the appropriate hierarchies. The Workflow Management component of the Solution shall help to eliminate redundant work and allow PR Medicaid Program to streamline operations.

3.2.13 Reports

Requirements FR-RE-001 through FR-RE-058 detail the mechanisms and methodologies that shall be built to extract relevant information and build reports. The requirements for the Solution's reporting capabilities are founded on user friendliness and adaptability. The proposed solution shall produce raw data and polished



reports, from the individual- to summary-level, to conform to the Government of Puerto Rico and Federal mandates in the present and in the long-term.

3.3 Technical Requirements

The Vendor must provide a written response using the procurement library technical approach template that describes and support its approach of how the proposed solution will fulfill the Technical Requirements outlined in the following sections:

- Usability
- Audit and Compliance
- Performance and Availability
- Interoperability and Interfaces
- Scalability and Extensibility
- Regulatory and Security
- Interface List
- Solution Management and Administration
- Technology Platform Requirements

The Government of Puerto Rico desires to procure an integrated family services-centric system for the Medicaid Program. PR Medicaid Program is pursuing a service-based and cloud-first strategy for system development that aligns with the CMS Conditions and Standards for enhanced federal funding. The Government of Puerto Rico's desired iSaaS (Infrastructure as a Service) is the Microsoft Azure Government Cloud. The PREE Vendor must propose a solution that can be provisioned, deployed and managed on the Azure. PR Medicaid Program 's preference is a solution that is deployed as a Platform-as-a-Service (iPaaS) minimizing the ongoing maintenance effort. To the extent possible the solution must follow the established Government of Puerto Rico and the PR Medicaid Program Enterprise Standards and Preferences below. The Vendor should describe how its approach to the technical requirements will leverage iPaaS / COTS solutions and tools to minimize custom development and future operational costs. If custom development is required, the Vendor should include a detailed description of where and how customization would be undertaken to fulfill specific functionality that cannot be fulfilled by COTS or delivered as part of the COTS future software roadmap.

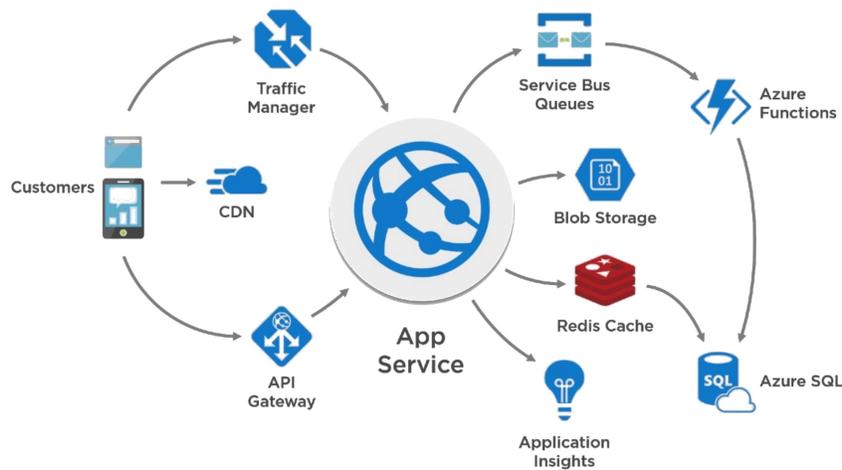


Figure 14 Sample Azure App Service Architecture

The Vendor may propose an alternate cloud solution, for example a hybrid cloud to ground or cloud to cloud architecture with a detailed and compelling justification if it deems suitable within the overall solution architecture being proposed.

The vendor is requested to provide documentation on previous cloud experience and experience in E&E deployment on the cloud. The individual technical requirements are documented detail in the procurement library in the PR Medicaid Program Technical Requirements RTM workbook.

3.3.1 Usability

Requirements G1-US-001 through G1-US-063 describe the requirements for the system user interface and how the system must be designed to deliver a consistent user experience to various user groups using several devices. The Vendor should describe the design approach and the characteristics of the user interface for the System. The System must be designed to utilize both a Web browser based user interface and Rich Internet Application user interfaces (smart phones, tablets, Android OS and Apple iOS applications).

3.3.2 Audit and Compliance

The proposed PREE System must provide audit and compliance functions. The technical requirements GS-AC-001 through G2-AC-015 describes requirements for providing audit records, generating reports, and audit trails in a manner suitable for the designated authorized users to interpret the information.



3.3.3 Performance and Availability

The proposed solution must meet the following requirements G3-PA-001 through G3-PA-012 for a cost effective, high availability solution that minimizes the frequency and impact of system failures, reduces downtime, and minimizes recovery time in the event of catastrophic failure. The Vendor should describe the approach for the System to meet performance standards, including examples using CDN and query strings caching.

3.3.4 Interoperability and Interfaces

Requirements G4-II-001 through G4-II-040 describe the requirements for interoperability using web services, Service Oriented Architecture (SOA), and the real-time and/or batch requirements for interfaces.

3.3.5 Scalability and Extensibility

Requirements G5-SE-001 through G5-SE-008 describe the requirements for a system architecture that supports the future growth, configurability, rapid changing technology, regulatory needs, and the ease of maintenance.

3.3.6 Regulatory and Security

The proposed PREE System must provide strong security and privacy controls. Requirements G6-RS-001 through G6-RS-037 describe the requirements for adhering to the Federal, Territorial, and Local regulations. The system data may include personally identifiable information, and HIPAA protected information. The new solution must ensure data is isolated and protected with a security model to support Personal Health Information (PHI) and Personal Identifiable Information (PII).

3.3.7 Interface List

The selected Vendor must coordinate and cooperate with PR Medicaid Program and its Vendors, as required, to support the design and implementation of the required interfaces to support the end-to-end Eligibility and Enrollment process. Requirements G7-IL-001 through G7-IL-026 includes the list of interfaces to be part of the PREE System. PR Medicaid Program expects these interfaces will be implemented via a combination of Microsoft Azure Service Bus, Service Relay, Azure Batch, and Azure Data Factory.

3.3.8 Solution Management and Administration

Technical requirements G8-SM-001 through G8-SM-035 detail the requirements for Solution Administration, Solution Management and Performance Monitoring. Include in these requirements are the solution



requirements for archive and offsite storage, monitoring, remote administration, document retention, performance management and monitoring.

3.3.9 Technology Platform Requirements

This section describes the overall technology platform requirements. PR Medicaid Program prefers the proposed solution aligns with the Government of Puerto Rico's Enterprise Standards. However, if a technology platform requirement is not recorded as “**mandatory**,” Vendors may propose other technologies by providing documentation to support the impact on:

- Initial investment
- Maintenance and operational costs
- Deployment Time
- Added value
- Extensibility
- Maintainability
- Other relevant factors

A preference will be shown to solutions that are constructed on an iPaaS architecture that use multiple COTS applications and iSaaS infrastructure technologies.

The PR Medicaid Program desires that custom development is kept to a minimum and that desired functionality is achieved through iPaaS and COTS deployment configuration settings or product updates as part of the core product development roadmap.

3.3.9.1 Technology Stack

Requirements T1.0.1 through T1.0.9 describe PR Medicaid Program Technology mandates and preferences for the overall technology platform solution.

3.3.9.2 Presentation Layer

Requirements T1.1.1 through T1.1.23 describe the technology platform requirements for the solution presentation layer and associated citizen and worker portals.

3.3.9.3 Business Components Layer

Requirements T2.1.1 through T2.1.31 describe the requirements for the business rules engine; requirements T2.2.1 through T2.2.29 describe the business process manager; and requirements T2.3.1 through T2.3.67



describe the requirements for the Enterprise Content Management (ECM) including Document Management, Imaging and Image Capture, Record Management, and Web Content Management.

3.3.9.4 Application Infrastructure Service Layer

Requirements T3.1.1 through T3.1.7 describe the requirements for the Application Infrastructure Service Layer. PR Medicaid Program 's preference is a solution that is deployed as a Platform-as-a-Service (PaaS) minimizing the ongoing maintenance effort. Preference will be given to solutions in the following order:

1. App Service
2. Services Fabric
3. Virtual Machines

3.3.9.5 Integration Services Layer

The Government of Puerto Rico preference for Integration is to use the Microsoft Azure Service Bus. The Vendor will lead the effort to conduct end-to-end integration to support a citizen-centered model of practice by building a services hub. The Vendor will lead the effort to integrate with systems external to the PREE System, and the Vendors that support these systems through a – combination of an Enterprise Service Bus (ESB) , Master Data Management (MDM) functionality and Data Integration / ETL.

When the external agency does not have the development expertise to implement web services, the Vendor may be requested to provide assistance in developing the external agencies interfaces.

The Vendor may propose an alternate cloud based solution that meets the following requirements T4.1.1 through T4.1.33 described in technical requirements workbook.

3.3.9.6 Data Services Layer – Data Integration/ETL

The Government of Puerto Rico preference for Data Service is to use the Microsoft Data Factory, Blob Storage, Redis Cache and Azure SQL. The Vendor may propose an alternate cloud based solution that meets the following requirements T4.2.1 through T4.2.40.

Requirements T4.3.1 through T4.3.5 describe the general Master Data Management requirements and required capabilities to support global identification, linking and/or synchronization of client and provider information across heterogeneous data sources. Requirements T4.3.6 through T4.3.36 describe PR Medicaid Program's technical requirements for data modeling, data quality management, Load integration and synchronization, MDM security and data stewardship.

Requirements T5.1.1 through T5.1.30 describe PR Medicaid Program's requirements for the database management components and T5.2.1 through T5.2.7 outline the expected Business Intelligence capabilities.



3.3.9.7 Security Privacy Layer

The Vendors Identity and Access Management component design must comply with U.S. Department of Health & Human Services and U.S. Department of Education privacy and data security requirements, including, but not limited to, the Health Insurance Portability and Accountability Act (HIPAA), the Family Educational Rights and Privacy Act (FERPA) and the Health Information Technology for Economic and Clinical Health (HITECH) Act provisions of the American Recovery and Reinvestment Act (ARRA) of 2009. Additional Security and Privacy layer requirements are described in detail in requirements T6.1.1 through T6.1.59. PR Medicaid Program's Privacy and Consent Management requirements are described in detail in requirements T6.2.1 through T6.2.14.

3.3.9.8 Infrastructure

The PR Medicaid Program has a "Mandatory" requirement for all Virtual Machines to be either Windows Virtual Machines or Linux Virtual Machines.

The PR Medicaid Program prefers infrastructure solutions in the following order of infrastructure abstraction for proposed system architectures:

1. App Service
2. Services Fabric
3. Virtual Machines

The Vendor must meet the requirements described in T7.1 through T7.12 and specify its choice in the proposed system architecture.



3.4 Implementation Scope, and Deliverables

Using the implementation approach template in the procurement library, the Vendor must provide a written response to describe and support its approach of how the proposed solution will fulfill the Implementation Requirements outlined in the following sections:

- Project Management and Monitoring
- Project Tools
- Project Close Out
- Project Planning
- Technical Environment Setup and Management Solution Design, Development & Implementation (DDI)
- Data Conversion and Migration
- Testing Requirements
- Organizational Change Management, Training and Knowledge Transfer
- Pilot, Roll-Out and Go-Live
- Warranty Support

3.4.1 Project Management and Monitoring

The requirements in this section describe the expectation on project management, methodologies, and collaborative approach to provide governance for the PREE System. The selected Vendor shall agree to follow project management methodologies that are consistent with the PMI's PMBOK Guide. The Vendor Project Manager will be held responsible for establishing and managing to these standards throughout the Project. The PR Medicaid Program Project Manager or delegate shall supervise the Vendor's performance to the extent necessary to ensure that the Vendor meets performance expectations and standards, as it relates to effective project management. The requirements for Project Management and Monitoring are described in further detail in the Implementation Requirements Workbook requirements I1-PM-001 through I1-PM-036.

3.4.2 Project Tools

The list of requirements I1-PM-038 through I1-PM-041 details the project management compliance and the preference for document management tools. PR Medicaid Program expects the Vendor to leverage tools during the DDI project whenever they will increase project performance.



3.4.3 Project Close Out

The PR Medicaid Program expects all the documents, artifacts and other materials developed during all the phases of the project for the implementation of the PREE System shall be considered property of PR Medicaid Program PR Medicaid Program. This is documented in requirement I1-PM-042.

3.4.4 Project Planning

This section describes the preferred methodology for the SDLC, expected deliverables, and the review process for such deliverables. PR Medicaid Program plans to have the project follow the Vendor's SDLC and expects this to be comprehensive. For projects of this size, the Government of Puerto Rico prefers a Scaled Agile Framework (SAFe) methodology. The Vendor may propose an alternate SDLC with a detailed and compelling justification, if it deems it suitable within the overall solution architecture being proposed. PR Medicaid Program does not envision a pure waterfall (with one phase and a big bang go-live) nor extreme agile methodologies with high number of release cycles.

The project planning requirements are described in the Requirements I2-PP-001 through I2-PP-007.

3.4.5 Technical Environment Setup and Management

Requirements I3-TE-001 through I3-TE-09 describe the required environments and additional software and tools to manage such environments. It is PR Medicaid Program's intention to provision the production, non-production and disaster recovery environments/infrastructure to the PREE project on the Microsoft Azure Government Cloud. This will include the core technology infrastructure (e.g., servers, storage, and network). Puerto Rico expects the Vendor to leverage the existing iPaaS and COTS' software and/or provide COTS' software for the PR Medicaid Program PREE Solution., The vendor is expected to provide both production and non-production type environments using Puerto Rico's architecture guidance documented.

The PR Medicaid Program anticipates at least six (6) types of environments will be required: 1) development, 2) integration test, 3) user acceptance testing, 4) staging (sub-production), 5) production and 6) disaster recovery. However, the Vendor can combine and/or include other environments, as it deems appropriate.

3.4.6 Solution Design, Development & Implementation (DDI)

The selected Vendor will be responsible for all the Design, Development and implementation (DDI) activities for the PREE System. PR Medicaid Program expects the Vendor to be able provide all the skill sets required to complete a complex project and meet the requirements documented in the Requirements I4-DD-001 through I4-DD-42.



3.4.7 Data Conversion and Migration

Requirements I5-DC-001 through I5-DC-012 describe the requirements for the plans, activities, reviews, and approvals for Data Conversion and Migration tasks. The Vendor should describe its approach to Data Conversion that will optimize the level of automated conversions, including the tools that will be used. The Vendor should also describe how they will ensure data integrity and consistency through all releases of the project.

3.4.8 Testing Requirements

This section details the required documents, reviews, approvals, activities, and expected Vendor support for planning and execution of System Integration Testing (SIT) and User Acceptance Testing (UAT).

The Vendor must develop test plans for each testing cycle including entrance and exit criteria, approach to defect management and progress tracking. Testing cycles should include unit test (J-Unit / N-Unit coverage), system, integration, interface, performance, security, data integration, data conversion, disaster recovery, regression, ADA 508 and UAT.

Testing requirements for the PR Medicaid Program's PREE System are categorized into the three sections listed below:

- Test Planning
- Integration Testing
- User Acceptance Testing

3.4.8.1 Testing Planning

The Vendor must support PR Medicaid Program staff in review and approval of each of the Testing DEDs and Deliverables outlined in the SOW. The Vendor must develop test plans for each testing cycle including entrance and exit criteria, approach to defect management and progress tracking. Testing cycles should include unit test (J-Unit / N-Unit coverage), system, integration, interface, performance, security, data integration, data conversion, disaster recovery, regression, ADA 508 and UAT.

Requirements are described in additional detail in requirements I6-TR-001 through I6-TR-010.

3.4.8.2 Integration Testing

The Vendor must manage each test cycle, with the exception of UAT (this will be managed by PR Medicaid Program), as identified in the applicable test plan, track progress and producing progress and quality reports. Integration requirements in I6-TR-011 through I6-TR-023 describe the Vendors responsibilities in more detail.



3.4.8.3 User Acceptance Testing

Requirements I6-TR-024 through I6-TR-026 describe the Vendor support role and PR Medicaid Program expectations in more detail.

3.4.9 Organizational Change Management, Training and Knowledge Transfer

This section details the required planning, documents, reviews, approvals, and activities for Organizational Change Management (OCM), training, and knowledge transfer. OCM requirements are broken out into two (2) sections:

- General Requirements
- Training, Planning, and Development

Requirements I7-OC-001 through I7-OC-21 describe these requirements in greater detail.

3.4.10 Pilot, Roll-Out and Go-Live

The required activities and deliverables to be reviewed and formally approved prior to Pilot, Roll-Out and Go-Live are documented in requirements I8-PR-001 through I8-PR016-. The Vendor is expected to provide Warranty Support to resolve defects identified after go-live per process outlined in the Maintenance and Operations (M&O) plan. The Vendor should describe what it believes to be the most effective roll-out and deployment strategy, including any recommendations regarding implementing/deploying functionality in separate releases and a phased roll-out and a high-level timeline to ensure continuity of existing service while deploying to each of the, seventy three local offices, seven regional offices, three satellite offices and main office. The Vendor must manage the Pilot Program and collaborate with PR Medicaid Program throughout the process.

3.4.11 Warranty Support

Requirements I9-WS-001 through I9-WS-004 describe the required activities, warranty support period, and transition support expected from the Vendor. The Vendor must follow the processes outlined in the Maintenance and Operations Plan to resolve any defects identified after go-live for a pre-determined length of time. These fixes will be completed at no cost to PR Medicaid Program. A defect is defined as the System not conforming to the specifications documented as part of the Project.



3.5 Maintenance and Operations

Once the PREE System is fully implemented in production, PR Medicaid Program is looking for support from the selected Vendor to transition the Maintenance and Operations (M&O) documentation and activities to PR Medicaid Program . Vender expected to support the system for 5 years with the fifth year being a transition year. Using the Maintenance and Operations Approach template from the procurement library, the Vendor must provide a written response to describe its approach for a successful M&O transition. The Maintenance and Operational Requirements include the following sections:

- Application M&O Service Requirements
- Design, Development and Implementation (DDI) to M&O Transition
- Modifications/Enhancements Requirements
- M&O Turn-Over or Transition Services Requirements

The following table details the established Service Request Priority criteria for PR Medicaid Program.

Service Request Priority				
This grid below establishes the criteria which establish the criticality of Service Requests. This should be referenced in conjunction with the subsequent tables.				
Urgency	Impact			
	Puerto Rico-Wide	Location	Multiple Users	Single User
A full outage of multiple services or all services and/or noncompliance with regulations	Catastrophic	Critical	High	High
An issue completely affecting a service; no workaround available	Critical	High	High	Medium
An issue affecting a service; workaround is available	High	Medium	Medium	Low
An issue that has no impact to the availability of the affected service; redundancy is available	Medium	Low	Low	Low

Table 1: Service Request Priority



3.5.1 Application M&O Service Requirements

The Vendor shall provide application M&O services for the PREE Solution, once it gets developed and after it is deployed (into production (during the pilot). The Vendor shall develop and deliver M&O deliverables to be officially approved by PR Medicaid Program per process outlined in the Project Management Plan and support PR Medicaid Program staff during the transition period.

The following Application and M&O requirements must be provided:

- Application M&O General Service
- System Operations and Administration
- System Performance/Monitoring
- Capacity Management
- Change/Release Management
- Configuration Management
- Disaster Recovery Requirements
- Helpdesk and Incident Management
- Problem Management Services
- User Account Management
- Security Administration
- Break Fix

Requirements O1-MO-001 through O1-MO-004 describe the General requirements. The remaining requirements are described in O1-MO-005 through O1-MR-068.

3.5.2 Design, Development and Implementation (DDI) to M&O Transition

The Vendor must deliver all the documented process and procedures developed during the DDI, including but not limited to, the deliverables and supporting documentation for M& O Transition.

The Vendor shall provide a standard set of metrics to measure Vendor performance in all applicable areas. These metrics must align with the full set of SLRs, including additional SLRs proposed by the Vendor. The Vendor must meet the requirements outlined in 02-DD-001 through O2-DD-TR009.

3.5.3 Modifications/Enhancements Requirements

The selected Vendor must deliver artifacts as identified and documented as follows:



- Minor Enhancements and Ad-Hoc Requests
- Mandated Policy and Software Enhancements
- Documentation Requirements
- Metrics/Key Performance Indicators (KPIs)

Minor Enhancements and Ad-Hoc Requests are described in requirements O3-DD-001 through O3-DD-013. Mandated Policy and Software Enhancements are described in O3-DD-014 through O3-DD-016 and documentation and KPI's are described in requirements O3-DD-017 through O3-DD-017.

3.5.4 Maintenance and Operations Transition Requirements

Requirements O4-TO-001 through O4-TO-14 describe general turn-over or transition service requirements, including roles and responsibilities for the activities in case of termination of Contract or migration of the Application M&O Contract to an alternate Vendor at the time the Contract expires.

3.6 Hosted Cloud Requirements

The Government of Puerto Rico's preferred iSaaS is the Microsoft Azure Government Cloud. The PREE Vendor should propose a solution that can be provisioned, deployed and managed on the Azure. The Vendor shall provide an infrastructure as a service (iSaaS) solution to the applications team and provide the support associated with that infrastructure. This includes, but is not limited to, data center backbone network, servers, disk storage, archive, monitoring tools, security tools, and systems software that support the business application. PR Medicaid Program prefers a solution that is implemented as an iPaaS (Integration Platform as a Service) where the services, as well as the infrastructure, are provisioned virtually.

The following optional requirements O5-HC-001 through O5-HC-133 describe the private cloud requirements for Vendors who wish to propose an alternative to the Azure.

These requirements are broken down into the following categories

- Network, Hosting and Data Center Services
- Storage Management Services Requirements
- Backup and Recovery Requirements
- Remote Access Infrastructure Management Requirements
- Capacity Management Requirements



- System Monitoring Requirements
- Performance Management Requirements
- Change/Release Management Requirements
- Configuration Management Requirements
- Support Level Requirements
- Infrastructure Security Requirements
- Disaster Recovery Requirements
- Batch – Job Control and Scheduling Requirements

4 Cost Model and Budgeting Specifications

This section addresses the cost model and budgeting specifications of the RFQ. It provides guidance to Vendors in terms of the type of procurement PR Medicaid Program is considering in the DDI project phase, and the alignment of operational cost model goals to the PR Medicaid Program's Medicaid vision. The goal of this portion of the procurement is to promote competition, obtain best value in terms of cost and deliverables, and maximize the likelihood of RFQ award and project success.

The costs will be automatically calculated from the budget template spreadsheets in the Procurement Library. It is the Vendor's responsibility to ensure that costs on this sheet reflect the full Proposal cost for the services outlined in the RFQ.

4.1 Labor Rate

The labor rates must be loaded costs, including applicable purchase, delivery, applicable taxes (federal, territorial and local), services, safety, license, travel, per diem, The Vendor's staff training, facilities, and any other expenses associated with the delivery of the proposed items must be included in the Vendor's costs and fixed hourly labor rates. Use of the existing roles in the spreadsheet is desired, but not required. The Vendor may include additional roles to accurately represent the classifications it uses for describing the various classifications and grades of its personnel. The roles used in these tables are expected to align with the roles identified by the Vendor in response to [Section 6.1 Vendor Staffing Model](#).

Labor rates are broken down into the following categories:

- Implementation Hourly Rates
- Reporting Services Hourly Rates
- Application Maintenance and Operations Hourly Rate



- Application Maintenance and Operations Enhancement Hourly Rates

The Vendor is encouraged to differentiate rates for when its staff are on the island and when they are off the island.

4.2 Implementation Costs

All tasks associated with the implementation services proposed shall be included in the total one-time cost for that service, as outlined in the RFQ and associated templates. All deliverable hours and costs must accurately reflect the level of effort required to complete that deliverable. All deliverable costs are subject to approval of the content of the deliverable. Implementation costs must be calculated based on the appropriate composite rate.

It is the responsibility of the Vendor to ensure spreadsheet calculations are correct. PR Medicaid Program will not correct any calculations that are understated. All costs must be fully inclusive.

The Vendor is required to enter the hours to complete the deliverables listed in the accompanying approach documents which may found in the procurement library. The Vendor is to include the number of deliverables where requested. Enter any additional tasks and deliverables, as needed. Insert additional rows, as necessary, where noted for each of the following deliverable groups identified below:

- Project Management and Monitoring
- Planning
- Technical Environment Specification
- Design, Development and Implementation
- Data Conversion
- Testing
- Organizational Change Management, Training and Knowledge Transfer
- Pilot, Roll-Out, and Go-Live
- Warranty Support

4.3 Provide Maintenance and Operation Services

The Maintenance and Operation (M&O) costs must include all tasks and deliverables required for ongoing M&O of the Eligibility and Enrollment solution, as described in this RFQ and documents contained in the Procurement Library. All deliverable hours and costs must accurately reflect the level of effort required to complete the Deliverable Groups described. All costs will be calculated based on appropriate composite rate for each year in the cost workbook.



For Enhancements and Modifications, Vendors must assume a level of effort representing 15,000 hours each year.

It is the responsibility of the Vendor to ensure spreadsheet calculations are correct. PR Medicaid Program will not correct calculation errors. All costs must be fully inclusive.

4.4 Packaged Software

The Vendor must include all packaged software that will be included in their proposed application response solution architecture. This also includes both commercial and open source software.

For any new software that the Vendor's solution will leverage, the Vendor must include all one-time, acquisitions, and anticipated ongoing costs, and specifications in the Package Software Specifications table.

The Vendor must include all new packaged software and capture the manufacturer, brand name, module name, and version number for the items being proposed. Costs shall include any licensing necessary to cover all environments (e.g., Development, Test, Training, Production). All costs associated with the purchase, delivery, installation, inspection, licenses, and production of the software components must be included into the Software Cost. During the transition of operations and maintenance to PRDoH the vendor must ensure that all commercial and open source software licenses required to operate the PREE system are transferred to PRDoH for no additional fee.

Vendors may insert additional rows as needed. It is the responsibility of the Vendor to ensure spreadsheet calculations are correct. PR Medicaid Program will not correct calculations. New Software items under New Packaged Software Costs, must correspond to the Software Items in the, New Packaged Software Specifications. The Vendor must include all software as a service usage and transaction volumes for software items that will be provided by the Azure Government Cloud.

4.5 Hardware Costs

The Vendor costs must include the costs and specifications for all new hardware that cannot be provided in the cloud environment or are required to fulfill a hybrid cloud-to-ground architecture model. Hardware provisioned as iSaaS should be excluded from these line items and recognized under hosting costs. Vendors must plan for a five-year refresh cycle for all hardware items and reflect this in the year five costs.

For any new hardware that the Vendor's solution will leverage, the Vendor must include all one-time, acquisitions, anticipated maintenance costs, and specifications. Costs shall include any licensing necessary to cover all environments (e.g., Development, Test, Training, Production). All costs associated with the purchase, delivery,



installation, inspection, and licenses of the hardware components shall be loaded into New Hardware Costs. Under specification, the Vendor shall list the proposed new hardware manufacturer, brand name, and detailed description for the items being proposed. Hardware Items in the Hardware Costs table shall correspond to the Hardware Items in the Specifications table. During the transition of operations and maintenance to PRDoH the vendor must ensure that all purchased hardware required to operate the PREE system are transferred to PRDoH for no additional fee.

Vendors may insert additional rows, if needed. It is the responsibility of the Vendor to ensure spreadsheet calculations are correct.

4.6 Cloud Hosting Services

This service must include all components (e.g. Operating Systems, servers, data center, network, storage) and the services (e.g. back-up, disaster recovery) required to provide the infrastructure as a service. Under the environment description the Vendor must describe the type, number of instances and cost if providing private cloud services, and the projected number of months that each instance will be required.

It is the responsibility of the Vendor to ensure spreadsheet calculations are correct. All costs must include all applicable taxes, including all applicable Puerto Rico Excise Taxes. All iPaaS Integration Platform as a Service costs must be documented under packaged software costs.

4.7 Assumptions

The Vendor must state all assumptions upon which its pricing is being determined. Assumptions shall not conflict with the Terms and Conditions or Mandatory Requirements of this RFQ, and shall not change the requested scope of the RFQ as described in this procurement. Assumptions that conflict with the requested products/services, mandatory requirements, Terms and Conditions, or other language of the RFQ or its supporting documents, will be invalid and will be interpreted in favor of the RFQ language. PR Medicaid Program may disqualify the Proposal if, in its discretion, it determines that assumptions stated cause the Proposal to inaccurately represent the costs for scope described in the Vendor's Proposal, or meet the needs as described in this RFQ. The Vendor must provide a clear understanding to PR Medicaid Program of the cost impact if any assumption is determined to be invalid; PR Medicaid Program may use these values in consideration of the Cost Proposal.



5 Project Management and Governance

5.1 Project Organization

The project is organized around a functional model that incorporates all participants, including PR Medicaid Program and key PR Medicaid Program partners, including the PREE Vendor (to be selected), the Puerto Rico Office of the CIO as Project Management Office (PMO), and the Independent Verification and Validation (IV&V) contractor. Reporting relationships have been aligned to ensure IV&V independence as shown Figure 15 Project Organization Chart.

Puerto Rico PREE Functional Organization

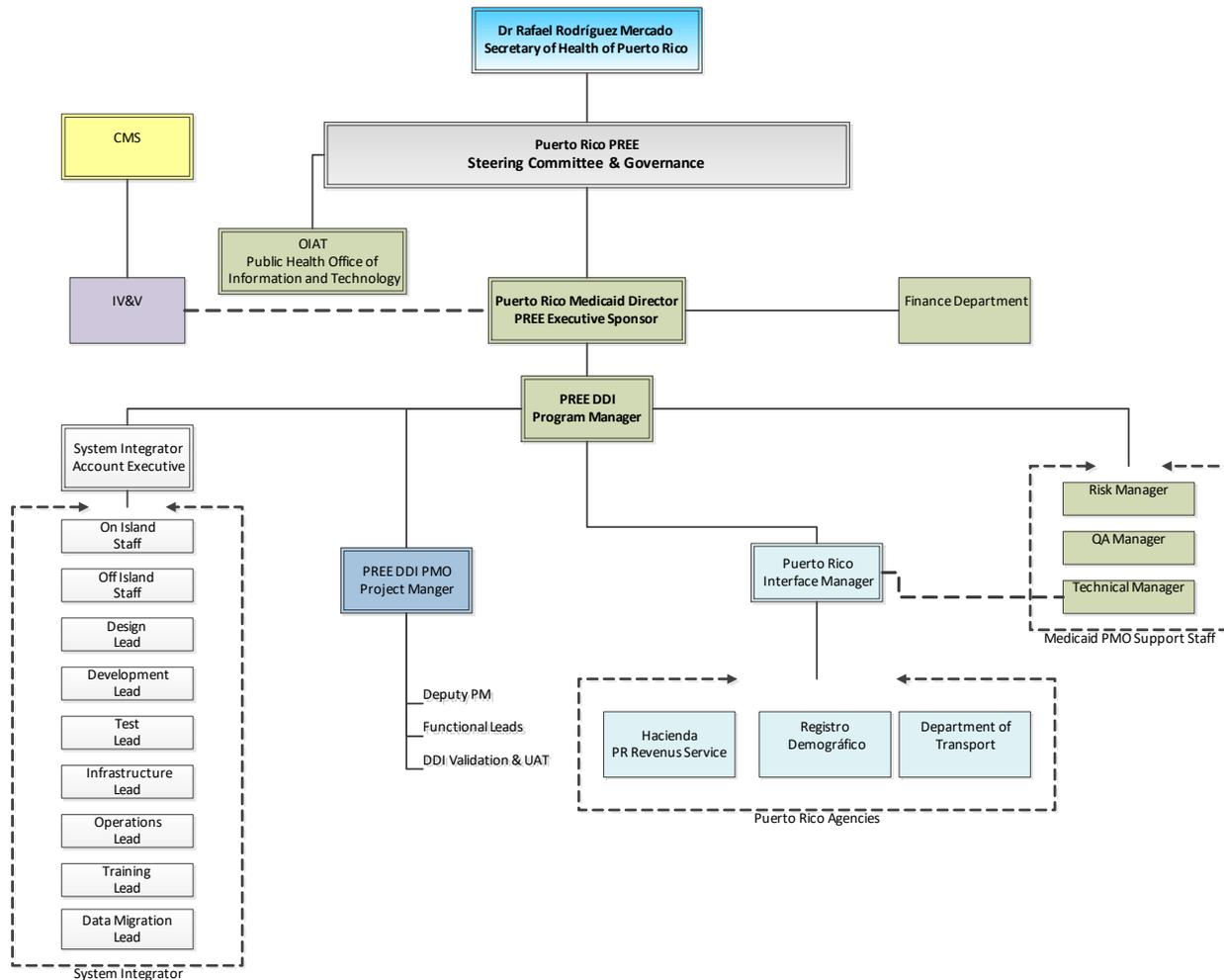


Figure 15 Project Organization Chart



It is expected that the PREE DDI organization will evolve to support new and added functions during the pilot and rollout of the Eligibility and Enrollment system.

5.2 Project Governance Model

The PR Medicaid Program has established a governance model for the PREE Project. The PREE Governance Model describes the specific roles and responsibilities of project stakeholders, focusing on authority levels and decision-making structures and processes. The key points of PREE Project governance are:

- Governance roles and responsibilities are clearly defined.
- Governance policies and processes are communicated to and accepted by all participants and stakeholder organizations.
- A multi-tiered governance structure promotes decision-making by the appropriate stakeholders at the appropriate levels with the appropriate experience and with the appropriate information.
- Governance decisions are documented and available to project participants and stakeholders.
- Governance policies and processes evolve over the life of the project as requirements, risks and opportunities change.
- A well-defined governance plan minimizes delays, risks, and costs.
- A Governance Plan ensures PREE and the selected Vendor project management processes are consistent with the following:
 - Project Management Institute (PMI) project management policies and guidelines as defined in the PMBOK® Guide
 - CMS System Lifecycle Framework guidelines for project management deliverables
 - MEET 1.0 Framework

The PREE Project Governance Model layers the three governance bodies as shown in the Figure 16: PREE Project Governance Model below.



Figure 16: PREE Project Governance Model

Each layer is responsible for resolving its own internal issues, for providing normal guidance to the layers below it, and for resolving issues escalated from lower layers. Depending on the scope and severity of an issue or decision, there is no requirement to proceed sequentially upward through the stack to reach the appropriate level of decision-making.

The primary reason for formal project governance is to reduce risks, delays, and costs. This is achieved by establishing a time-sensitive escalation process, clearly defining the scope of responsibilities for each level, and explicitly assigning decision-making authority to the appropriate roles. The table in the next section broadly describes the authority and responsibilities associated with each governance level.

5.2.1 Project Governance Responsibilities

Each entity involved with the PREE implementation plays a major role in completing the project successfully. Each entity and its major roles are identified in the table below. PR Medicaid Program understands that the success of this implementation lies with the personnel entrusted to manage the Government of Puerto Rico staff assigned to the PREE Project. PR Medicaid Program has established a sound organizational structure and management plan to oversee the DDI.



Table 2: PREE Governance Responsibilities and Authority

Governance Process	Steering and Governance Committee Responsibility and Authority	Key Staff Committee Responsibilities and Authority	PR Medicaid Program Manager Responsibilities and Authority	PMO Responsibilities and Authority
Policies and Procedures	Approving all policies Assigning responsibility for enforcing policies and procedures	Authoring policies and procedures, as necessary Assigning responsibility for enforcing policies and procedures Enforcing changes to SDLC policies and procedures	Ensuring that SDLC management policies and procedures are followed Ensuring that all project communications are timely and informative	Ensuring that SDLC management policies and procedures are followed Identifying and recommending changes to existing SDLC policies and procedures
Contracts and Budget	Final negotiation and approval of all contracts	Ensuring that contract provisions are met Ensuring that budgetary guidelines are met Negotiating and resolving requirement exceptions with Vendors	Recommending changes and contracts Monitoring all contractor payments	Identifying and escalating contractual or budgetary issues
Resources	Approving addition or deletion of key resources	Identifying and justifying need for resources Approving specific resources	Ensuring that PR Medicaid Program and other subject matter experts are accountable Tracking participation	Identifying and escalating resource issues Managing and assigning resources to projects



Governance Process	Steering and Governance Committee Responsibility and Authority	Key Staff Committee Responsibilities and Authority	PR Medicaid Program Program Manager Responsibilities and Authority	PMO Responsibilities and Authority
Scope and Schedules	Approving scheduling changes that impact overall project deadlines	Negotiating and approving scheduling changes that impact joint project deadlines and have been escalated from below Reviewing and determining which changes to scope or schedule are approvable	Holding partners accountable to deadlines Implementing and negotiating schedule changes	Setting and maintaining project schedules Negotiating and approving scheduling changes that impact joint project deadlines and have been escalated from below Identifying and escalating joint project scheduling issues
Requirements and Deliverables	Resolving escalated issues	Resolving escalated issues	Ensuring that deliverables are reviewed on a timely basis	Managing SDLC initiation, review and approval workflows
Technical Standards / Environment	Resolving escalated issues. Approving changes to technical infrastructure that result in additional cost or risk	Approving changes to technical infrastructure that result in no additional cost or risk	Ensuring that all standards, including (HIPAA transactions and CMS standards are met	Identifying and escalating issues
PREE Operations	Responsible for ensuring CMS and other agency policies, procedures and requirements are being met	Confirming that PREE operational policies, procedures and requirements are met	Developing new organizational changes to support PREE Negotiating costs and SLAs	Working with business leads to confirm that operational requirements and SLAs are met



Governance Process	Steering and Governance Committee Responsibility and Authority	Key Staff Committee Responsibilities and Authority	PR Medicaid Program Program Manager Responsibilities and Authority	PMO Responsibilities and Authority
Quality	Ensuring that all stakeholders commit the necessary resources to maintain an adequate level of quality	Ensuring that quality activities are sufficient Evaluating quality reports and reviews	Ensuring that quality standards and full accountability are met Reporting on quality to the PREE Steering and Governance Committee	Ensuring that SDLC activities incorporate QA tasks Integrating QA and IV&V Vendors into the PREE PMO process

5.3 Project Owner / Sponsor

The Project Owner / Sponsor for the PREE DDI Project is the Medicaid Executive Director. Both titles (Project Owner / Sponsor) are used in the PREE Project.

5.4 The PR Medicaid Program Program Manager

The Program Manager for the PREE Project is also responsible for project management of the MMIS and the SSNRI imitative projects at the PR Medicaid Program.

A combination of the Government of Puerto Rico and contractor resources will continue to be involved with project oversight and day-to-day management of the DDI activities. The PR Medicaid Program Program Manager is responsible for serving as the main Vendor point of contact to ensure coordination across all project activities.

5.4.1 Authority of PR Medicaid Program Program Manager

The PR Medicaid Program Program Manager has full authority for project execution in the context of the governance model. The PR Medicaid Program Program Manager reports to the Medicaid Executive Director (Project Owner / Sponsor) and has overall responsibility for all day-to-day aspects of the PREE Project, including responsibility for the development and successful implementation of the PREE, through the implementation and CMS granting its “Authority to Operate”. The PR Medicaid Program Program Manager is also directly accountable to the PREE Steering and Governance Committee (Steering Committee). Steering Committee has the primary policy and oversight responsibilities for the project.



The IV&V Contractor does not report to the PR Medicaid Program Program Manager, but reports directly to CMS and indirectly to the Medicaid Executive Director for contract purposes and to the Steering Committee for project execution and reporting purposes.

All other PREE contractor Project Managers, report directly to the PR Medicaid Program Program Manager; however, IV&V is included in all project management meetings.

5.5 PREE Steering and Governance Committee

The Steering Committee expects to receive regular reports on the status of the PREE project activities. The members of the Steering Committee represent organizations that have a clear stake in the success of the project. Each organization plays an important role in making sure the modern PREE System meets both Federal and Government of Puerto Rico regulations and that the PREE System is developed and implemented within the planned timeframe and expected cost.

The Steering Committee will:

- Provide overall enterprise oversight and final decision-making
- Approves budget and budget changes
- Communicate the mission, vision, and values of the enterprise to the project team
- Communicate specific stakeholder business values to the project team
- Define project success measures
- Provide timely and final decisions
- Establish business and IT priorities
- Allocate resources to enable effective performance
- Provide change management approvals

The Steering Committee is made up of government executives that will be responsible for oversight of the project. The following are the members of Steering Committee. The Secretary of Health chairs the steering committee.

- Secretary of Health
- Medicaid Executive Director
- Government CIO of Puerto Rico
- PRDoH CIO



- Medicaid Finance Director

Non-voting members participate as facilitators and advisors. The non-voting members include:

- PREE PMO Project Manager
- IV&V Project Manager
- PREE selected Vendor Account Manager

5.6 Key Staff Committee

The PREE PMO has established the PREE Key Staff Committee (KSC), a standing committee organized as a decision-making body to support the PREE Project as documented in the PMP. The KSC will meet regularly and address issues, risks, change requests, and other actions escalated by the PREE PMO or other operational processes. Responsibilities of the KSC include:

- Assign subject matter experts (SME s) for lower level analysis, as needed
- Resolve issues or decisions that could not be resolved at a lower level
- Escalate issues and decisions to the steering committee, as needed
- Determine disposition of change requests that do not exceed 500 hours of effort or if a change in management and operations costs is identified
- Communicate decisions upward to executive leadership and downward in the organization
- Make timely decisions
- Be accountable for decision-making

Members of the KSC are trusted staff members assigned by the Steering Committee and include the voting members from:

- PRDoH CIO
- The PR Medicaid Program Program Manager
- PREE selected Vendor Project Manager
- PREE PMO Project Manager

The following non-voting members of the Key Staff Committee will facilitate, support and participate in meetings:

- IV&V Project Manager
- Selected Vendor Account Manager



The KSC will meet on bi-weekly to review and address issues, action items, and decisions.

5.7 Integrated Project Management Office

The PMP created by the PREE PMO establishes an integrated Project Management Office (PMO) who is responsible for executing the management plans to be defined in the PREE Project Management Plan (PMP). The PMO members will review and triage issues, risks, and change requests. The primary difference between the PREE PMO and the IPMO is the addition of the vendor project management team members.

The following are the members of the IPMO:

- The PR Medicaid Program Program Manager
- Deputy PMO Manager
- Selected Vendor Deputy Account Manager
- PMO Risk and Issue Manager

5.8 Change Management

All services that are in addition to, or that change, the original scope of work must be in the form of an approved contract amendment or previously approved change order. No work will be performed by the contractors broadening the project's scope without formal written approval by PR Medicaid Program.

The PREE Project has established a KSC to act as the Change Control Board (CCB) and ensure oversight and approval for changes to requirements. Change processes are described in the Change Management Plan and the Scope Management and Baseline Plan. The PREE PMO is responsible for maintaining the approved project scope as defined in project deliverables and artifacts. The PREE PMO will analyze each request to make a recommendation to the Program Manager.



5.9 Supporting Communications

Key project meetings (Steering Committee and KSC) will be scheduled on a regular, pre-arranged basis and will include agendas and minutes.

Risk Management

An essential aspect of project management is controlling the inherent risks of a project. Risks arise from uncertainty surrounding project decisions and outcomes. Risks differ from problems or issues because a risk refers to potential for future adverse outcome or loss, whereas problems or issues reflect conditions that exist in a project at the present time.

Risks may become issues if they are not addressed effectively. Risk management then is the process of proactively identifying, analyzing, and addressing project risks. The goal of risk management is to maximize the positive impacts, while minimizing the negative impacts associated with project risk.

Risks represent potential threats that could impact the project. If they were to occur, the severity of the risk is assessed to focus on those risks that are most important. Effective risk identification and tracking also includes ensuring that the Risk Log is updated to reflect the current risk profile.

The table below presents the preliminary top four risks identified prior to the project start/initiation and as having the potential to have a major impact on the outcome of the project. The current risks are in the Risk Log in the Project Repository.

Table 3: Example Risks

Risk Category	Risk Description	Owner	Mitigation Strategy
Funding	Because of the government financial debt, PR Medicaid Program may not have funding for its share of the DDI costs in the future.	PR Medicaid Program	Proactively brief and help PR Medicaid Program and government staff understand the project spending plan and the CMS matching funds requirement.
Resources	Because both PR Medicaid Program and the Office of the CIO have limited staff, their ability to dedicate the needed level of staff to the project is uncertain.	PR Medicaid Program	Identify PR staffing gaps and determine an alternative strategy for participation. Identify external sources to backfill current responsibilities.
Requirements	Because the system may be implemented in	PR	Early coordination with other agencies.



Risk Category	Risk Description	Owner	Mitigation Strategy
	modules, the requirements for the first module may change based upon subsequent modules.	Medicaid Program	The plan is to add integrated eligibility after the implementation of Medicaid and CHIP.
Communication	Because PR is bilingual in Spanish and English, some participants may not be able to adequately understand written and verbal communications.	PR Medicaid Program	Assign staff to each Vendor with English and Spanish fluency to ensure that communication barriers can be overcome.

The PREE PMO will be actively engaged in the risk management process. Risk and Issues meetings will be held on a regularly scheduled basis to accept new risks, close risks that have become issues, and to modify mitigation strategies

Effective monitoring of risks and the use of mitigation strategies, trigger criteria, and corrective action plans after risk thresholds are exceeded will effectively ensure that the project is proactively working to overcome threats to the project and to avoid issues that could impact scope, cost, and schedule.



6 Key Personnel

The PREE Project is organized around a functional model that incorporates all participants, including PR Medicaid Program and key PR Medicaid Program partners, the PREE Vendor (to be selected), the PRDoH CIO as PMO and the Independent Verification and Validation (IV&V) contractor.

6.1 Vendor Staffing Model

In the Vendor response to the RFQ, the Vendor must describe its proposed staffing model that meets the requirements described in [Section 3 Scope of Work \(SOW\)](#). To facilitate open competition and innovation, each prospective Vendor should use its expert judgment to propose its model of how to complete this work. The Vendor should base its Key Personnel staffing model on a detailed PMP and schedule that have been developed using the Vendors' methodologies and best practices.

The Vendor must provide a completed Staff Experience Reference Form (see Table4) for each proposed Key Personnel as indicated in the RFQ (must include both the Vendor, as well as subcontractor staff, if any).

Instructions: For each reference listed, indicate the client name and client contact information, whether the engagement was for a public-sector agency, project name, start and end dates the team member performed the role, duration of the experience, and an overview of the project scope that is focused on how the project relates to the scope of this RFQ. Duplicate Table4 Vendor Key Personnel in its entirety for each Key Personnel. Do not change any of the completed cells. Any changes to the completed cells could lead to the disqualification of the Vendor response. A template, PRDoH_Template_Staff_Experience,, has been provided in the RFQ Procurement library to assist the Vendor in this process.

Table4 Vendor Key Personnel

Team Member Name:			
Description of Skill Sets and Experience			
Proposed Project Role for RFQ #:		Subcontractor? (Yes/No)	
Years' Experience in Role:			
REFERENCES			
REFERENCE 1			
Client Name			
Client Point of Contact			



Client Address					
Client Phone					
Client Email					
# of Employees		Public Sector? (Yes/No)		Project Name and Description	
Date/Duration of Staff Involvement	Start (MM/YYYY)			End (MM/YYYY)	
Project Scope					
Staff Role on the Project					
REFERENCE 2					
Client Name					
Client Point of Contact					
Client Address					
Client Phone					
Client Email					
# of Employees		Public Sector? (Yes/No)		Project Name and Description	
Date/Duration of Staff Involvement	Start (MM/YYYY)			End (MM/YYYY)	
Project Scope					
Staff Role on the Project					
REFERENCE 3					
Client Name					
Client Point of Contact					
Client Address					
Client Phone					
Client Email					
# of Employees		Public Sector? (Yes/No)		Project Name and Description	
Date/Duration of Staff Involvement	Start (MM/YYYY)			End (MM/YYYY)	
Project Scope					
Staff Role on the Project					



INDIVIDUAL QUALIFICATIONS				
Certifications (if applicable) e.g IEEE				
PMI/PMP	Member ID#:			
	Earned Date:		Expiration Date:	
Other (Specify)	Member ID#:			
	Earned Date:		Expiration Date:	

6.1.1 Resumes

The Vendor should attach professional resumes of all proposed Key Personnel to this section of the RFQ. Each resume should demonstrate experience germane to the position proposed. The resume should include work on projects cited under the Vendor’s corporate experience, and the specific functions performed on such projects. PR Medicaid Program reserves the right to reject and request additional key resources if they determine the proposed personnel has insufficient experience.

Instructions: Provide a resume for each proposed Key Personnel.

6.1.2 Collaboration

Provide evidence that the Vendor’s proposed team (including subcontractor(s), if proposed) has a proven track record of successfully collaborating in an environment similar to the environment outlined in the RFQ. This must include experiences working with a team to improve maintenance and operations efficiency and effectiveness. The Vendor shall describe how the proposed team , including subcontractor(s), will ensure that they will achieve the required team dynamics.



7 Project Performance Standards

7.1 Service Level Agreements and Guarantees

This section outlines the project performance standards for all phases of the project, as well as any associated damages, as applicable. For each service level, the Vendor is required to propose liquated damages that must be paid if the Vendor fails to perform as promised/contracted. The purpose of this stipulation is to establish a predetermined sum in the event of contract breach.

The amount proposed must be reasonable and consider the actual or anticipated harm caused by the contract breach, the difficulty of proving the loss, and the difficulty of finding another, adequate remedy; the damages should be structured to function as damages, not as a penalty. Consideration has been given to this section to identify critical measures of successful project performance to ensure that performance standards are achieved and maintained throughout the project.

7.2 Implementation Service-Level Requirements

7.2.1.1 Scheduled Deliverable

I10-1 - Scheduled Deliverable	Requirement Met
SLR Description/Objective	To avoid costly delays, all deliverables must be approved according to the baseline schedule
Target	100% of all deliverables are approved on schedule
Measurement	Date approved - planned approval date (captured in the baseline schedule)
SLA Reporting Period	Per deliverable
SLR Measurement of Non-Compliance	Per day the deliverable is late

7.2.1.2 Deliverable Quality

I10-2 - Deliverable Quality	Requirement Met
SLR Description/Objective	The deliverables submitted to PR Medicaid Program for review should be to a quality standard that allows for two (2) review cycles: one PR Medicaid Program review, one update, another PR Medicaid Program review, and then approval
Target	100% approved within 2 review cycles
Measurement	Each review cycle required beyond 2 cycles
SLA Reporting Period	Per deliverable
SLR Measurement of Non-Compliance	Per review cycle



7.2.1.3 Eligibility Determination Accuracy

I10-3 – Eligibility Determination Accuracy	Requirement Met
SLR Description/Objective	The Payment Error Rate Measurement (PERM) rate must be less than CMS established Eligibility Rate for the year of operation
Target	100% of Applicant determinations will have no determination errors. PERM tests both before going live and for each subsequent annual test must match PERM validation criteria.
Measurement	Incorrect eligibility determination
SLA Reporting Period	Twice - Immediately prior to go-live (projected) and immediately after go-live
SLR Measurement of Non-Compliance	# of incorrect determinations made for eligible and ineligible persons

7.3 Maintenance, Operations and Support Services Level Requirements

7.3.1.1 Transition Execution

O7-1 – Transition Execution	Requirement Met
SLR Description/Objective	To avoid costly extensions of existing contracts and/or operational risk, the transition activities must stay on schedule to transition the Application’s M&O services prior to the incumbent Vendor’s contract expiring. This SLR will be measured against milestones defined in the Transition Plan.
Target	100% of all milestones are completed / approved on schedule
Measurement	Date milestones are completed – planned date milestones are completed (captured in the Transition Plan)
SLA Reporting Period	Per Milestone
SLR Measurement of Non-Compliance	Per day the transition milestone is delayed



7.3.1.2 System Availability

O7-2 - Availability	Requirement Met
SLR Description/Objective	The Application must be available to all users of the System
Target	Available 99.75% per description below this table
Measurement	(# of minutes of uptime during the reporting period) / (Total planned uptime during the reporting period)
SLA Reporting Period	Monthly
SLR Measurement of Non-Compliance	Uptime percentage below the target

Planned uptime is 24 hours a day, 7 days a week (24X7), excluding PR Medicaid Program approved maintenance windows. Approved maintenance windows are excluded from both the "# of minutes of update during the reporting period" and "total planned uptime during the reporting period".

Scheduled downtime must be approved by PR Medicaid Program beforehand and performed between 11 PM and 7 PM AST.

Availability is defined as all components of the system are running and the users can perform all tasks supported by the system. This excludes network downtime and interfaces to external systems.

The SLA will be administered commencing on the first month of production operations.



7.4 System Performance Services Level Requirements

7.4.1 Average Response Time

O7-3 - Performance - Average Response Time	Requirement Met
SLR Description/Objective	System performance must meet end-user response time expectations to deliver increased customer satisfaction and efficiency gains
Target	Average response time should be 2 seconds (response time from entering command to receiving result)
Measurement	(Sum of all transaction response time) / (Number of transactions)
SLA Reporting Period	Monthly
SLR Measurement of Non-Compliance	Time difference between measured average response time and 2 seconds

Performance measurement is the end-to-end response time from the user perspective, excluding any delays introduced by the network outside the data center.

7.4.2 Maximum Response Time

O7-4 - Performance - Maximum Response Time	Requirement Met
SLR Description/Objective	System performance must meet end-user response time expectations to deliver increased customer satisfaction and efficiency gains
Target	99.5% of transactions complete (response time from entering command to receiving result) in less than 3 seconds
Measurement	(Transactions completed within required time) / (Total Transactions)
SLA Reporting Period	Monthly
SLR Measurement of Non-Compliance	Percentage of transactions below target



8 Contract Standards

8.1 General Terms and Conditions for PR Medicaid Program Vendors

This Request for Quotation (RFQ) is not an offer by PR Medicaid Program to enter into an agreement with any party. It is a request to receive qualifications and pricing proposals from Vendors interested in providing the products and services outlined herein. Such response submissions shall constitute offers to enter into an agreement. Participating Vendors are advised that an agreement may or may not result from this RFQ process. Additionally, agreements may be put in place with other participants and non-participants to this RFQ process, at PR Medicaid Program's sole discretion, within CMS approved guidelines.

The following are general terms and conditions for all PR Medicaid Program Suppliers and Contractors. PR Medicaid Program wants to make participating Vendors aware that the following terms will be required as part of the contract after it is awarded.

- i. **PENALTIES:** If the Vendor breaches the contract, PR Medicaid Program shall request the services subject of the default from any other Vendor in the open market. The Vendor will be liable for any increase in the price of the goods or services PR Medicaid Program has to pay as a result of the breach of the contract. The contractor shall be held liable for any other damages caused by the default.
 - a. The PR Medicaid Program reserves the right to request the services in the open market, or under an agreement with a new contractor, for the remaining term of the contract.
 - b. The PR Medicaid Program reserves the right, and the Vendor agrees, that in the event of claims, PR Medicaid Program shall be able to request pending balances to respond for damages, or overprices paid as a result of the default.
- ii. **NON-COMPLIANCE:** PR Medicaid Program reserves the right to reject any offer that does not comply with any of the dispositions, terms and conditions set in this invitation.
- iii. **NEGATIVE EXPERIENCES:** PR Medicaid Program reserves the right to reject any offer submitted by a Vendor with whom PR Medicaid Program has had a negative experience as a contractor.
- iv. **NEGLIGENCE OR ABANDONMENT:** The Vendor's abandonment or negligence in the performance of its obligations, or improper conduct in or out its official performance, constitutes grounds for the immediate termination of the contract, without giving previous notice.
- v. **"UL TRAVIRES":** The Vendor shall not perform services under this RFQ/contract once it expires, unless prior to the expiration date, both parties subscribe an amendment setting forth the continuation of the



services. Services offered in contravention of what is set herein shall not be paid. Payments made in violation to this disposition will be made without legal authority.

- vi. **PATENTS:** The Vendor shall be held liable for all the claims against PR Medicaid Program, its officials or employees, for violations to copyrights or other rights, as a result of the purchase or the use of supplies, materials, or delivered equipment obtained as a result of this RFQ. The Vendor shall be held liable for the costs, expenses, or damages caused by such violations.

- vii. **FINANCIAL REPORT:** If required by PR Medicaid Program, the Vendor shall submit a business financial report certified by a Certified Public Accountant (CPA). It is recommended that the Vendors should have this report prepared in advance to avoid delays in the evaluation of its offers.

- viii. **PUBLIC LIABILITY INSURANCE:** The selected Vendor shall maintain public liability insurance to cover damages caused by the negligence or carelessness of its employees to any person, including employees or visitors, or to public or private property. PR Medicaid Program assumes no liability with respect to the aforementioned situation.

- ix. **FALSE INFORMATION:** The submission of deceiving information will be grounds to eliminate the Vendor from PR Medicaid Program 's Vendor consideration for this RFQ, in addition to the penalties established by law.

- x. **DELAYS:** Delay in payment by PR Medicaid Program is not grounds for the selected Vendor to fail to comply with the continuity of the contract. If the Vendor fails to comply with the contract, the services and or the supplies will be purchased in the open market and the difference in price will be charged to the Vendor.

- xi. **TAXATION OF FOREIGN CORPORATIONS:** Foreign corporations not registered in Puerto Rico may be subject to withholding taxes. We strongly advise Vendors to retain a local CPA or Tax Advisor to understand the Taxation situation in Puerto Rico.



8.2 Notification of Puerto Rico Contractual and Privacy Requirements

PRDoH, as part of the Government of Puerto Rico, requires certain provisions to be included in future invoicing and contracting. PR Medicaid Program provides the following three [subsections \(8.2.1; 8.2.2; 8.2.3\)](#) as notification and awareness for Vendors seeking to engage with PR Medicaid Program.

8.2.1 Invoicing Provision:

The selected Vendor must agree to comply with the provisions of Law Number 84 of June 18, 2002, which it establishes the Code of Ethics for Contractors, Suppliers and Applicants of Economic Incentives from the Executive Agencies of the Government of Puerto Rico.

Every invoice to collect the payment for goods or services must contain the following certification:

We certify under penalty of nullity that no public employee of the Department of Health will derive or obtain any benefit or profit of any kind from the contractual relationship which is the basis of this invoice. If such benefit or profit exists, the required waiver has been obtained prior to entering into the Agreement. The only consideration to be received in exchange for the delivery of goods or for services provided is the agreed-upon price that has been negotiated with an authorized representative of the Department of Health. The total amount shown on this invoice is true and correct. The services have been rendered, and no payment has been received.

8.2.2 Health Insurance Portability and Accountability Act (HIPAA) Provision:

Under the Federal Law Health Insurance Portability and Accountability Act of 1996 (HIPAA), PR Medicaid Program shall include in the contract to be formalized with the Vendor that that is selected, the necessary clauses to safeguard the confidentiality of the health information "Protected Health Information" (PHI) of our patients and the "Electronic Protected Health Information" (E- PHI) of Medicaid recipients.

8.2.3 Contract Award provision:

Every Supplier or Contractor to whom the Government of Puerto Rico awards a contract, is obliged to submit a certification stating that it has filed his tax returns for the past five (5) years and that it has made the corresponding payments; or, that it is subject to a payment plan.

To that effect, every contract shall contain a provision pursuant to which the contractor will certify and attest that at the time of signing the contract, it has filed its tax return, as required by the Administrative Bulletin Number OE~1991-92 issued on June 18, 1991.



9 General Instructions and RFQ Requirements

The PR Medicaid Program is soliciting qualifications and pricing proposals from a pool of known Vendors. The Vendors were selected based on a Vendor and partnering selection process that occurred during Q3 2017. PR Medicaid Program anticipates selecting one of the most qualified participating Vendors. A contract term of 24 months is currently being considered for the DDI of PREE and 60 months for maintenance and operations support. Any change to that term will be governed by the change management process. Participating Vendors are advised that PR Medicaid Program retains full discretion and the option to extend the contract upon approval of CMS funds.

As a courtesy, PR Medicaid Program requests that participating Vendors confirm its intent to participate in this RFQ process by sending an email to Luz Cruz, Executive Director of the Puerto Rico Medicaid Program, at PRMedicaidInfo@salud.pr.gov by 5PM AST, 12/13/2017 with the Vendor company's name and intention included in the email subject line (i.e., "XXX intends to participate" or "XXX will not participate").

All key dates in the RFQ process are outlined in Section 9.1.4 RFQ Submission Instructions of this document.

9.1.1 Communication with PR Medicaid Program

All inquiries and questions with regard to this RFQ must be submitted to PRMedicaidInfo@salud.pr.gov. Please reference the specific document, section(s), line number(s), and/or question number(s) to which your question(s) pertain. Discussions regarding this RFQ with other parties within or associated with PR Medicaid Program are subject to confidentiality requirements and may result in disqualification from this process. Substantive questions from RFQ participants and corresponding PR Medicaid Program responses will be shared with all participating Vendors via email, while keeping the source of each question anonymous.

9.1.2 Preparation Costs

Neither PRDoH or the PR Medicaid Program shall not incur liability for any costs incurred by participating Vendors in replying to this RFQ, in demonstrations, oral presentations, or in any other activity relating to the development, submission and evaluation of responsive proposals. Each Vendor is solely responsible for any costs incurred in the preparation and submission of a proposal in response to this RFQ. PR Medicaid Program has no obligation and shall not pay any sums whatsoever to any RFQ recipient for costs they incur while participating in this RFQ process.



9.1.3 RFQ Package Overview

In addition to this document, the Attachments for this RFQ are as follows:

- Attachment 1 – Vendor Response Templates
- Attachment 2 – Functional Requirements RTM
- Attachment 3 – Implementation Requirements RTM
- Attachment 4 – Operational Requirements RTM
- Attachment 5 – Technical Requirements RTM
- Attachment 6 – Cost Workbook

Please Refer to Section 9.1.5 for additional details.

9.1.4 RFQ Submission Instructions

The timeline for this RFQ process is aggressive – with proposals due by 01/11/2018 17:00 AST, Negotiations, presentations, and/or discussions may be initiated with the Vendor(s) who submit proposals found to best meet the requirements and interests of PR Medicaid Program’s initiative. Participating Vendors are advised to review all sections of this RFQ carefully and to follow instructions completely, as failure to make a complete submission as described elsewhere herein may result in rejection of the response submission and disqualification of the Vendor from further participation. Response submissions that depart from or materially alter the terms, requirements, or scope of work defined by this RFQ may be rejected for being non-responsive. Participating Vendors shall be aware that PR Medicaid Program intends to use the language in the RFQ for the final contract. PR Medicaid Program anticipates that there may be several rounds of discussions with participating Vendors, with the first round being used largely to validate pricing and completeness of solution, so that PR Medicaid Program’s understanding of a proposal is consistent with the intent, and any subsequent rounds being used to provide participating Vendors with specific guidance on areas of their proposal that may require closer examination. These follow-up discussions may or may not be needed. The table below provides key dates in the RFQ process.

Table 5 Key Dates

Date	Activity
12/12/2017 17:00 AST	Vendors notify PR Medicaid Program their intent to participate in the RFQ process, as a courtesy
12/12/2017 17:00 AST	Deadline for submitting written questions to PR Medicaid Program
12/19/2018 17:00 AST	The PR Medicaid Program distributes responses to written questions
01/11/2018 17:00 AST	Deadline for submitting Final Response



9.1.5 Instructions for RFQ Response Content

Participating Vendors shall use the electronic files contained in this RFQ, modify them as necessary and per the instructions in each file, submit revised and re-named files as part of its response. In some cases, the Vendors are asked to create new documents that must be provided as part of its response.

The table below describes the documents that must be returned by participating Vendors as part of their proposals made in response to this RFQ. The page limits listed below will be strictly enforced; expected pages per proposal document are delineated in the table below. Where a Vendor Response File Name below is referenced as “Vendor Name,” each participating Vendor is asked to replace “Vendor Name” with its company acronym and to use the same acronym consistently throughout its response.

Description	Format	Vendor Response File Name	Page Limit
Executive Summary	Respond in provided attachment template	Vendor Name_Response Template Section 1	5
Solution Design	Respond in provided attachment template	Vendor Name_Response Template Section 2-5	N/A
Transmittal Letter	Signed and Dated Letter	Vendor Name Transmittal Letter	N/A
General Organization Information	Respond in provided attachment templates	Vendor Name_Response Template Section 6	N/A
Vendor References	Respond in provided attachment templates	Vendor Name_Response Template Section 6	N/A
Service Delivery Staff Biographies	Biographies Respond in provided attachment template	Vendor Name_Response Template Section 6	2 per staff
Pricing	Respond in provided attachment workbook template	Vendor Name_Cost Workbook	N/A
Requirements Catalog	Respond in provided 4 attachment templates	Vendor Name_Implementation_RTM Vendor Name_Functional_RTM Vendor Name_Technical_RTM Vendor Name_Operations_RTM	N/A
MITA SSA	PDF		
Concept of Operations	PDF		
Project Management Plan	PDF		



9.1.5.1 Executive Summary

Participating Vendors shall provide, as a separate document using the Procurement Library Executive Summary template, an Executive Summary of their proposed solution. The Executive Summary should be brief (3-5 pages) and provide a summary of the key aspects of the Vendor's Technical Quotation. The Executive Summary should also include an overview of the Vendor's qualifications, approach to deliver the services described in the RFQ, the time frame to deliver the services and proposed team and advantage of this Quotation to PR Medicaid Program. This document should be written with a focus on communicating to a PR Medicaid Program executive-level audience the Vendor's commitment to serving the interests of PR Medicaid Program. In particular, this document should present the high-level sequence of events and milestone criteria for its proposed PREE System. This document must not contain any information related to pricing of the Vendor's proposed solution. Inclusion of cost information may result in rejection of the response submission and disqualification of the Vendor from further participation.

9.1.5.2 Solution Design Narrative

Using the four Procurement Library templates implementation, functional, technical and operations approach participating Vendors shall provide a narrative that describes in sufficient detail the overall solution proposed to ensure that PR Medicaid Program, especially the members within the evaluation team, can understand and anticipate how services will be delivered.

The Vendor's solution design is expected to document all assumptions and the changes planned in delivering the solution. These four documents, while addressing the entire scope of the Vendor's solution, should specifically articulate the following:

1. **Achievement of PR Medicaid Program's Objectives:** Vendors must describe how their solution, along with the organization's relevant qualifications and experience, fulfills PR Medicaid Program's objectives.
2. **Service Provided:** Vendors must list the services to be provided within the scope of services of this RFQ. If applicable, Vendors should clearly list any other deliverables in addition to what is required and explain the value of these additional deliverables.
3. **Services Not Provided:** Vendors must list any services required in this RFQ that are not included in the response. Unless specific services are listed and excluded, PR Medicaid Program will assume all of the required services will be provided as part of the Vendor's response.
4. **Processes and Methodologies:** Vendors must describe the major processes and methodologies that they will employ in delivering the services requested in this RFQ. Vendors must address how their proposed methodology will integrate with the processes and tools proposed for the PREE Implementation. Vendors shall also indicate, if applicable, any value add or process improvement in the proposed solution.



5. **Timeline:** Vendors must provide a Gantt view with high-level activities and milestones of the proposed solution delivery, along with any descriptive summary that outlines the overall project timeline.
6. **Role:** Vendors must provide their definition of the role of a service delivery team, as well as any past collaborative experience with partnerships and team-based approaches to PREE programs.
7. **Operation:** Vendors must provide an overview on how the service delivery team will work with PR Medicaid Program, the PREE Program affiliations, and any local resources or partnership, if applicable. Vendors must highlight how local resources or partnership will be leveraged for the service delivery.
8. **Technology:** Vendors must provide a description of the technology solution proposed to support PR Medicaid Program. If applicable, include any diagrams of the technology platform(s) to be used.
9. **Service Differentiation:** Vendors must clearly articulate how they have recognized the unique complexities of the PR Medicaid Program PREE program and its required services, and address the challenges of each with unique capabilities, toolsets, and other differentiators. PR Medicaid Program is particularly interested in the Vendor's processes, experienced success rate, and proof points on best in class capabilities in the areas of:
 - Project Management approach
 - Risk/Issue management approach
 - Quality assurance approach
 - Reporting, data analytics, and dashboard analysis
10. **Assumptions and Dependencies:** PR Medicaid Program will rely upon representations made in the Vendor's response . The Vendor must, therefore, identify key assumptions and dependencies on which it has based its response , including any PR Medicaid Program personnel, financial, or operational retained responsibilities. The impact on price, schedule or functionality (including service levels) of any of the Vendor's assumptions must be clearly specified. If no impacts are specified, then PR Medicaid Program will assume there are none.

9.1.5.3 Transmittal Letter and Required Documents

The Transmittal Letter must indicate the Vendor's interest to participate in this procurement process. It shall also include the official (or proposed official) name of the business unit that will be conducting business in Puerto Rico under the terms of this RFQ, the main business address of this entity, the date of delivery of the response, and the name, title, and signature of the Vendor's officer duly authorized to submit the response.

The Transmittal Letter must include a statement that the Vendor understands and will comply with all Puerto Rico and Federal regulations.



9.1.5.4 General Organization

In a separate document and using the Procurement Library Vendor Engagement template, participating Vendors must provide, the following information:

- General Organization Information
- Staff Management procedures
- Training Policies and Procedures
- Approach to staff retention

9.1.5.1 Vendor References

In order to satisfy the mandatory qualifications, the Vendor must document using the Procurement Library Vendor Reference Template, at least three (3) references (for the Prime Vendor) of projects which are of similar size, complexity and scope to this engagement, that have either completed within the last five (5) years or are active projects. Additionally, include at least three (3) references (for the Prime Vendor), of projects implementing and maintaining health services systems that have been completed within the last five (5) years or are active projects. References may overlap if they meet qualifications for both requirements. Each reference chosen should clearly demonstrate the Vendor's ability to perform the Scope of Work described in the RFQ.

9.1.5.2 Service Delivery Staff Biographies/CVs

Using the Vendor Response Template from the procurement library, the Vendor must list the required team member information. Vendors must also provide proposed team member biographies or representative biographies and LinkedIn link, if available, with relevant qualifications, knowledge, and experience for delivering Medicaid services. In the case where the specific team member detail is not available at the time of this proposal submission, Vendors are expected to provide representative staffing information correlated to the level of experience and knowledge required for the role. Please limit the biographies of each team member to 2 total pages per team member.

9.1.5.3 Pricing

The PR Medicaid Program has provided a cost workbook template in a separate Excel file in the Procurement Library to assist participating Vendors in pricing this opportunity. The PR Medicaid Program has structured this pricing template to identify the costs associated with each required deliverable and breakout of specific costs related to travel. PR Medicaid Program recognizes that it is possible that alternate approaches exist that may better reflect pricing for a particular service component. PR Medicaid Program welcomes alternate proposed approaches for component services (e.g. enterprise licensing vs. per core



pricing vs. transaction pricing models) provided that they meet PR Medicaid Program's intent to price the services within a fixed price framework and in a transparent and meaningful way.

Pricing offers must include any applicable excise taxes. Quoted prices shall not include Government tax charges, since the government purchases are exempt of their payment. However, prices for COTS hardware and software must include costs for travel, freight and deliveries.



Appendix A. Definitions and Acronyms

The list of terms and acronyms below are provided for improved understanding of the requirements. Some fields are blank, if they did not provide additional useful information.

Term	Acronym (if used)	Description
Affordable Care Act	ACA	The Patient Protection and Affordable Care Act was signed into law on March 23, 2010. ACA is a Federal Statute that represents the U.S. healthcare system's most significant regulatory overhaul and expansion of coverage since 1965
American Recovery and Reinvestment Act	ARRA	American Recovery and Reinvestment Act of 2009, including any subsequent laws, rules, mandates, etc. derived from it
Applicant		A person applies for benefits and services for themselves and/or family
Application Programming Interface	API	A set of clearly defined methods of communication between various software components
Business Intelligence	BI	Strategies and technologies used by enterprises for the data analysis of business information
Business Process Execution Language	BPEL	An OASIS standard executable language for specifying actions within business processes with web services
Business to Business	B2B	Commerce transactions between businesses, such as between a manufacturer and a wholesaler, or between a wholesaler and a retailer
Code of Federal Regulations	CFR	The codification of the general regulations published in the Federal Register
Children's Health Insurance Program	CHIP	A medical coverage source for individuals under age 19 whose parents earn too much income to qualify for Medicaid, but not enough to pay for private coverage.
Commercial Off-the-Shelf	COTS	Products that are commercially available and can be bought "as is" In the context of the U.S. government, the Federal Acquisition Regulation (FAR) has defined "COTS" as a formal term for commercial items, including services, available in the commercial marketplace that can be bought and used under government contract. For example, Microsoft is a COTS software provider. Goods and construction materials may qualify as COTS, but bulk cargo does not. Services associated with the commercial items may also qualify as COTS, including installation services, training services, and cloud services.
Communications Management Plan		A plan that is included in overall Project Management Plan. A systematic plan, implementing, monitoring, and revision of all the channels of communication within an organization, and between organizations; it also includes the organization and dissemination of new communication directives connected with an organization, network, or communications technology.



Term	Acronym (if used)	Description
Data Dictionary		A centralized repository of information about data, such as meaning, relationships to other data, origin, usage, and format
Data Model		The structure and relationships of data that is independent of its storage method
Database Management System	DBMS	A store for transactional data
Date of Birth	DOB	Date when individual was born. Typically documented on a Birth Certificate
De-identified		Record with PII information removed to ensure identity cannot be determined
Demilitarized Zone	DMZ	Used for network partition
Deliverables Expectation Document	DED	A definition of the required contents of a deliverable
Department of Human Services	DHS	U.S. government's principal agency for protecting the health of all citizens and providing essential human services, especially for those who are least able to help themselves
Disaster Supplemental Nutrition Assistance Program	D-SNAP	Provides temporary food assistance for households affected by a natural disaster. Provides one month of benefits to eligible disaster survivors and can facilitate the issuance of supplemental SNAP benefits for ongoing households. To be eligible for D-SNAP, a household must live in the identified disaster area, have been affected by the disaster, and meet certain D-SNAP eligibility criteria.
Electronic Benefit Transfer	EBT	A method of benefit distribution in the form of a "credit card". TEA and SNAP use the same card and process. TEA and SNAP benefits are distributed to the client's card on different timelines. WIC program also uses an EBT card, but it is not the same physical card used for TEA and SNAP. WIC and TEA/SNAP do not use the same EBT Vendor.
Electronic Data Interchange	EDI	An electronic communication method that provides standards for exchanging data via any electronic means
Eligibility and Enrollment	PREE	CMS projects that focus on eligibility determinations and verification
Enterprise Service Bus	ESB	Implements a communication system between mutually interacting software applications in a service-oriented architecture (SOA).
eXtensible HyperText Markup Language	XHTML	Part of the family of XML markup languages; mirrors or extends versions of the widely used Hypertext Markup Language (HTML)
eXtensible Markup Language	XML	Markup language that defines a set of rules for encoding documents in a format that is both human-readable and machine-readable



Term	Acronym (if used)	Description
Extract-Transform-Load	ETL	A process in database usage, especially in data warehousing
Food and Nutrition Service	FNS	An agency of USDA's Food, Nutrition, and Consumer Services. FNS works to end hunger and obesity through the administration of 15 federal nutrition assistance programs including WIC, Supplemental Nutrition Assistance Program (SNAP), and school meals. In partnership with State and Tribal governments, these programs serve one in four Americans during the course of a year. Working with public, private and non-profit partners, the mission is to increase food security and reduce hunger by providing children and low-income people access to food, a healthful diet and nutrition education in a way that supports American agriculture and inspires public confidence.
Graphical User Interface	GUI	A type of user interface that allows users to interact with electronic devices through graphical icons and visual indicators, such as secondary notation, instead of text-based user interfaces
Health Information Technology for Economic and Clinical Health Act	HITECH Act	Health Information Technology for Economic and Clinical Health Act of 2009, including any subsequent laws, rules, mandates, etc. derived from it
Health Insurance Portability and Accountability Act	HIPAA	Health Insurance Portability and Accountability Act (HIPAA) of 2009, including any subsequent laws, rules, mandates, etc. derived from it
Health Level Seven	HL7	A not-for-profit, ANSI-accredited standard developing organization dedicated to providing a comprehensive framework and related standards for the exchange, integration, sharing, and retrieval of electronic health information that supports clinical practice and the management, delivery and evaluation of health services. In this document, this may also refer to the standards developed and/or managed by the organization.
Hypertext Markup Language	HTML	The standard markup language for creating web pages and web applications
Hypertext Transfer Protocol	HTTP	An application protocol for distributed, collaborative, and hypermedia information systems
Identity and Access Management	IAM	In computer security, the security and business discipline that "enables the right individuals to access the right resources at the right times and for the right reasons". It addresses the need to ensure appropriate access to resources across increasingly heterogeneous technology environments and to meet increasingly rigorous compliance requirements
Information Technology	IT	Application of computers to store, study, retrieve, transmit, and manipulate data, or information; often in the context of a business or other enterprise
Information Technology Infrastructure Library version 3	ITIL v3	A set of standards used in the industry to provide infrastructure based services
Integrating the Healthcare Enterprise	IHE	An initiative by healthcare professionals and industry to improve the way computer systems in healthcare share information. IHE promotes the coordinated use of established standards such as DICOM and HL7 to address specific clinical need in support of optimal patient care. Systems developed in accordance with IHE communicate with one another better, are easier to implement, and enable care providers to use information



Term	Acronym (if used)	Description
		more effectively. In this document, this may also refer to the standards developed and/or managed by the organization.
Limited English Proficiency	LEP	An Applicant or Client language proficiency classification
Local Area Network	LAN	A computer network that interconnects computers within a limited area, such as a residence, school, laboratory, university campus or office building
Maintenance and Operations	M&O	Maintenance and Operations
Maintenance and Operations Plan		A plan that is included in overall Project Management Plan
Medicaid Management Information System	MMIS	A system that processes all Medicaid claims and provides Medicaid data for program management and various research and care planning activities. PR Medicaid currently has an effort to replace the MMIS.
Citizen Portal		Citizen facing portal for new Applicants and existing members applying, renewing or appealing a determination decision
Modified Adjusted Gross Income	MAGI	<p>The figure used to determine eligibility for premium tax credits and other savings for Marketplace health insurance plans and for Medicaid and the Children's Health Insurance Program (CHIP). For many people, it's identical to or very close to adjusted gross income.</p> <p>Includes adjusted gross income plus untaxed foreign income, non-taxable Social Security benefits, and tax-exempt interest</p> <p>Includes these income sources for all household members required to file a tax return. Does not include Supplemental Security Income (SSI). MAGI does not appear as a line tax returns.</p>
Network Time Protocol	NTP	A networking protocol for clock synchronization between computer systems over packet-switched, variable-latency data networks
Non-MAGI	non-MAGI	Refers to person classification group for Medicaid groups who exceed specified income levels but still qualify for pre-defined benefits. Details of non-MAGI qualification are defined by the Federal government.
Organization for the Advancement of Structured Information Standards	OASIS	A global nonprofit consortium that works on the development, convergence, and adoption of standards for security, Internet of Things, energy, content technologies, emergency management, and other areas
Optical Character Recognition	OCR	Technology that enables converting different types of documents, such as scanned paper documents, PDF files or images captured by a digital camera into editable and searchable data
Payment Error Rate Measurement	PERM	Law enacted in 2002 by Congress; the Improper Payments Information Act of 2002 (IPIA). CMS Implemented PERM to measure improper payments in Medicaid and CHIP



Term	Acronym (if used)	Description
Personally Identifiable Information	PII	Information that can be used on its own or with other information to identify, contact, or locate a single person, or to identify an individual in context
Production Release Plan		A plan that included in overall Project Management Plan describing deployment and release strategy
Project Management Institute	PMI	A nonprofit professional organization for project management
Project Schedule		A schedule listing a project's milestones, activities, and deliverables, usually with intended start and finish dates
Protected Health Information	PHI	Under US law any information about health status, provision of health care, or payment for health care that is created or collected by a "Covered Entity" (or a Business Associate of a Covered Entity), and can be linked to a specific individual
Public Key Infrastructure	PKI	A set of roles, policies, and procedures needed to create, manage, distribute, use, store, and revoke digital certificates and manage public-key encryption; purpose of a PKI is to facilitate the secure electronic transfer of information
Puerto Rico Department of Health	PRDoH	Principal agency for protecting and improving the health and wellbeing of all Puerto Rico residents' by providing public health services statewide
Quality Control	QC	Quality Control activities conducted by various PR Medicaid Program staff to ensure consistent quality deliverables.
Quality Management Plan	QMP	A plan that included in overall Project Management Plan; defines the acceptable level of quality, which is typically defined by the customer, and describes how the project will ensure this level of quality in its deliverables and work processes
Relational Database Management Solutions	RDBMS	A Relational Database Management Solutions is a database system that uses a storage model based on the relational model invented by IBM's Edgar F. Codd.
Role-Based Access Controls	RBAC	An approach to restricting system access to authorized users; is policy neutral access control mechanism defined around roles and privileges
Secure Sockets Layer	SSL	Cryptographic protocols that provide communications security over a computer network
Service Level Agreement	SLA	An official commitment that prevails between a Vendor and a client
Service Oriented Architecture	SOA	A style of software design where services are provided to the other components by application components, through a communication protocol over a network. The basic principles of service-oriented architecture are independent of Vendors, products and technologies. A service is a discrete unit of functionality that can be accessed remotely and acted upon and updated independently



Term	Acronym (if used)	Description
Short Message Service	SMS	A text messaging service component of phone, Web, or mobile communication systems. It uses standardized communications protocols to allow fixed line or mobile phone devices to exchange short text messages.
Simple Network Time Protocol	SNTP	A less complex implementation of NTP using the same protocol, but without requiring the storage of the message state over extended periods of time
Simple Object Access Protocol	SOAP	A protocol specification for exchanging structured information in the implementation of web services in computer networks; purpose is to induce extensibility, neutrality and independence
Social Security Number	SSN	A nine-digit number issued to U.S. citizens, permanent residents, and temporary (working) residents under section 205(c)(2) of the Social Security Act, codified as 42 U.S.C. § 405(c)(2)
Software Development Life Cycle	SDLC	The process of dividing software development work into distinct phases to improve design, product management, and project management
Structured Query Language	SQL	A domain-specific language used in programming and designed for managing data held in a relational database management system (RDBMS), or for stream processing in a relational data stream management system
Supplemental Nutrition Assistance Program	SNAP	A program that provides a nutritional safety net for low-income children, families and adults. Recipients receive benefits on an Electronic Benefits Transfer (EBT) card that works at most grocery stores, approved farmers markets, and some smaller stores that sell food. SNAP recipients cannot get cash back from the cards.
Test Plan		A plan that includes: <ul style="list-style-type: none"> a. Unit Testing b. Functional Testing c. Integration Testing d. Security Testing e. Regression Testing f. Stress/Load Testing g. Performance Testing
Transition Employment Assistance	TEA	A program that provides time-limited cash assistance and employment-related services each month to low-income families with dependent children
Transmission Control Protocol / Internet Protocol	TCP/IP	The Internet protocol suite that provides end-to-end data communication specifying how data should be packetized, addressed, transmitted, routed, and received
Triple-DES	3DES	Officially the Triple Data Encryption Algorithm (TDEA or Triple DEA); is a symmetric-key block cipher, which applies the DES cipher algorithm three times to each data block
User Acceptance Testing	UAT	A process of verifying that the solution will work for the user (i.e., tests that the user accepts the solution); software Vendors often refer to this as "Beta testing"
Vendor		Company/corporation selected and contracted to participate in planning, implementing, maintaining, enhancing, upgrading, operating, providing support, etc. of the solution
Virtual Private Network	VPN	Extends a private network across a public network, and enables users to send and receive data across shared or public networks as if their computing devices were directly connected to the private network



Term	Acronym (if used)	Description
Web Services	WS	A service offered by an electronic device to another electronic device, communicating with each other via the World Wide Web
Wide Area Network	WAN	A telecommunications network or computer network that extends over a large geographical distance
Women, Infants and Children	WIC	The Special Supplemental Nutrition Program for Women, Infants, and Children that provides Federal grants to States for supplemental foods, health care referrals, and nutrition education for low-income pregnant, breastfeeding, and non-breastfeeding postpartum women, and to infants and children up to age five who are found to be at nutritional risk



Appendix B. Eligibility & Enrollment Process Review

After an Eligibility and Enrollment Review, PR Medicaid Program documented the As-Is activities to the Future vision of the Eligibility and Enrollment Business process. The As-Is included the review of current operational procedures during on-site observations and review of the MEDIT2 documentation.

Business Process	Future Vision	As-is
Eligibility		
Intake/Application	No Wrong Door with automated single streamlined applications processing	The Applicant must establish an appointment; proceed through a prescreening process, and an evaluation process in one of the business offices to apply for benefits.
Information Gathering	Automated retrieval of information once key information is provided	Paper copies of verification documents must be provided to the office worker. These documents are copied in paper form and stored at the facility in a physical folder t.
Verification of Information	Automated verification	Manual verification of the documents is performed by the eligibility worker in the evaluation process.
Requests for Additional Information	Automated requests and online questions	Prescreening at the eligibility office and manual verifications
Determination and Special Circumstances	Automated questions and determination online	The PR Medicaid Program has a policy manual available to allow the eligibility worker to manually determine if the person is eligible based upon special circumstances. Manual of Policies and Procedures Categories and Special Considerations
Notices	Automated production of Notices	Manual preparation, printing, and storage of notices, such as the MA-10 Proof of Eligibility forms
Denials Processing	Automated notification	The eligibility worker produces, prints, and stores the MA-10 Proof of Eligibility form noting the status of not eligible and provides the appeals process information.
Maintain Eligibility Information	Automated verification of updated information	Notice is sent to beneficiary two months in advance of the expiration date advising the beneficiary to schedule an appointment to complete the renew processes in the office of the eligibility worker.
Demographic Changes That Impact Eligibility and Enrollment (Moved, Death, Incarceration)	No Wrong Door with online updates	For eligible members, the changes are the responsibility of the MCOs to update the participant's information and pass it back to ASES. If a person were not eligible and became eligible, then the person would need to be processed through the eligibility office.



Business Process	Future Vision	As-is
<p>SSN Invalids</p>	<p>Verification as part of initial data entry</p>	<p>Manual of Policies and Procedures</p> <p>Eligibility Requirements:</p> <p>ELIGIBILITY REQUIREMENTS</p> <p>SOCIAL SECURITY NUMBER</p> <p>Policy: The Program shall request as an eligibility requirement the Social Security Number of each and every one of the components of the family unit.</p> <p>References:</p> <p>42 CFR §435.910</p> <p>42 CFR §435.920</p> <p>42 CFR §435.960</p> <p>Interpretation: All Applicants and/or beneficiaries must present their Social Security card as an eligibility requirement,</p> <p>Verification: Social Security Card</p> <p>Documentation: A copy of the Social Security card of all the members of the family unit will be kept in the file.</p> <p>Disposition: A procedure has been established for the cases that we mention below who do not have a social security number:</p> <ul style="list-style-type: none"> ▪ newborns (up to one year) ▪ homeless <p>In these cases, the MEDITI2 system automatically assigns a dummy number in the system. The person will be certified for a period of three months. If after the three months the person does not present evidence of the Social Security Number, the system closes the case automatically.</p> <p>In situations where the Applicant is:</p> <ul style="list-style-type: none"> ▪ a victim of domestic violence and is in a shelter ▪ an adult removed from his/her home by the Department of the ▪ Family ▪ an ex-convict in a social adaptation home and does not have his/her Social Security card, but knows the number, the person will be certified for a period of three months. <p>If after the three months, the person does not present evidence of the Social Security Number, the system closes the case automatically.</p>
<p>Management Reporting</p>	<p>Automated management</p>	<p>Management and case reporting are defined in the</p>



Business Process	Future Vision	As-is
	Reporting	contract with the MCOs.
Federal Reporting	Automated Federal Reporting	Data from ASES is passed to the MedInsight Data Warehouse.
Reconciliation		The providers only get paid for enrolled members. The Eligibility is determined by PR Medicaid Program and information transferred via MEDITI2 to ASES. ASES then sends information of the provider organizations that are responsible for the production of cards. The provider is responsible to resolve problems in the assignment process and is not paid for the member until the resolutions are accomplished.
Enrollment		
Auto assignment	Automated integration with MMIS systems	<p>ASES Orientation provides the following summary.</p> <ul style="list-style-type: none"> Organized in family sets Family record Member records Other insurance records Auto Enrollment Process: <p>Under the Auto Enroll System, the Mi Salud Carriers assign the PMG and PCP immediately upon receiving the eligibility data from ASES. They issue ID Cards and update their database with the beneficiaries' enrollment information. They also send enrollment records to ASES.</p> <p>The Carriers assign PMGs and PCPs based on the Physical Address of the beneficiary and the PMGs and PCPs available in that vicinity. When a beneficiary has a previous record, the Carrier assigns the PMG and PCP in that record.</p> <p>If the beneficiary is not satisfied with the PMG or PCP assignment. there is a period of 90 days in which a change can be requested to the Carrier</p>
Change in Plan	Automated integration with MMIS systems	<p>Coverage Changes of ASES Orientation:</p> <p>The Carrier must identify when a record received has a different coverage code than the one in the Carriers Data Base.</p> <p>In this case, the Carrier must issue a new ID Card with the deductibles and co-insurance that correspond to the new coverage code.</p> <p>An Enrollment Transaction (Plan Version Change) must be submitted to ASES</p>
Change in PCP	Automated integration with MMIS systems	Change of PMG and PCP)of the Triple S contract



Business Process	Future Vision	As-is
Plan Reconciliation	Automated integration with MMIS systems	Financial payments are reconciled based upon memberships and coverage.



Appendix C. Reference of Public Law

For reference, Public Law 111-148 (ACA) and Eligibility Regulations have been provided within this appendix.

Citation	Description
ACA Section 1104(b)	Defines the term “operating rules” and elevates them to the same requirement level as HIPAA transactions. Provides for enabling eligibility determination, limiting unneeded additional information, minimizing paper, and using only required or conditionally required data elements.
ACA Section 1104(h)	Requires health plans, such as Medicaid, to certify that the data and information systems are in compliance with applicable standards and associated operating rules.
ACA Section 1413	Specifies the development of a standard application form (Single Streamlined Application) for all programs. The form may be filed online, in person, or by telephone. It must be user friendly and does not require Applicants to subsequently provide additional information unless the information provided is inconsistent or insufficient. Requires participation in a data matching arrangement consistent with the standards, including privacy and security.
ACA Section 1561	Requires the development of interoperable and secure standards and protocols to facilitate enrollment of individuals in federal and state health and human services programs. Requires use of standards and protocols for electronic matching against existing federal and state data, simplification of electronic documentation, reuse of stored eligibility information, and capability for individuals to apply, recertify, and manage eligibility information online.
42 CFR 433.112	Conditions defined for 90% Federal Financial Participation (FFP) for DDI. Requires: <ul style="list-style-type: none"> ▪ Modularity, including use of open interfaces, exposed APIs, separation of business rules from core programming available in human and machine-readable formats ▪ Alignment with and increasing advance in MITA for business, architecture, and data ▪ Alignment with industry standards: HIPAA, Section 508 of Rehabilitation Act, Federal Civil Rights Laws and standards under Section 1104 of ACA ▪ Sharing, leverage, and reuse of Medicaid technologies and systems within and among States ▪ Accurate and timely processing of eligibility determinations and effective communications ▪ Produce Transaction data, reports, and performance information for program evaluation ▪ Allow interoperability with public health agencies, human services programs, and community organizations providing outreach and enrollment assistance
42 CFR 435.907	The agency must accept an application from the Applicant, an adult who is in the Applicant’s household, or family, an authorized representative, or someone acting responsibly for a minor or incapacitated Applicant. The application must be allowed: <ul style="list-style-type: none"> ▪ Via the internet Web site ▪ By telephone ▪ Via mail



Citation	Description
	<ul style="list-style-type: none"> ▪ In person ▪ Through other commonly available electronic means <p>The application must be:</p> <p>The single, streamlined application developed by the Secretary; or</p> <p>An alternative single, streamlined application which may be no more burdensome on the Applicant.</p> <p>The agency may not require an in-person interview for MAGI-based eligibility. And, the agency may only require an Applicant to provide the information necessary to make an eligibility determination or for a purpose directly connected to the administration of State plan.</p> <p>The agency must require that all initial applications are signed under penalty of perjury. Electronic, including telephonically recorded, signatures and handwritten signatures transmitted via any other electronic transmission must be accepted.</p>
42 CFR 433.908	The agency must provide assistance to any individual seeking help with the application or renewal process in person, over the telephone, and online. Individual(s) of the Applicant or beneficiary's choice must be allowed to assist in the application process or during renewal.
42 CFR 433.908	The agency must permit Applicants and beneficiaries to designate an authorized individual or organization. The authorized representative may sign an application, complete and submit a renewal form, receive copies of the Applicant's notices/communications, and act on behalf of the Applicant in all matters with the agency.
42 CFR 435.1200	<p>Stipulates Medicaid agency responsibilities related to other insurance affordability programs, enabling agreements, prompt eligibility determination and enrollment.</p> <p>Defines requirements for acceptance of electronic account transfers from other insurance affordability programs.</p>
42 CFR 457.348	Defines requirements for acceptance of electronic account transfers related to CHIP.



Appendix D. Federal Requirements

This following table provides an extract of Federal Requirements related to the establishment of an Eligibility and Enrollment System that qualify for enhanced FFP. The full citations are available in The Federal Register at <https://www.federalregister.gov/>.

Federal Citation	CFR
<p>42 CFR §431, Subpart E - Fair Hearings for Applicants and Beneficiaries</p>	<p>§ 431.200 Basis and scope</p> <p>(a) Implements section 1902(a)(3) of the Act, which requires that a State plan provide an opportunity for a fair hearing to any person whose claim for assistance is denied or not acted upon promptly;</p> <p>(b) Prescribes procedures for an opportunity for a hearing if the State agency or non-emergency transportation PAHP (as defined in § 438.9(a) of this chapter) takes action, as stated in this subpart, to suspend, terminate, or reduce services, or of an adverse benefit determination by an MCO, PIHP or PAHP under subpart F of part 438 of this chapter; and</p> <p>(c) Implements sections 1919(f)(3) and 1919(e)(7)(F) of the Act by providing an appeals process for any person who -</p> <ol style="list-style-type: none"> (1) Is subject to a proposed transfer or discharge from a nursing facility; or (2) Is adversely affected by the pre-admission screening or the annual resident review that are required by section 1919(e)(7) of the Act. <p>(d) Implements section 1943(b)(3) of the Act and section 1413 of the Affordable Care Act to permit coordinated hearings and appeals among insurance affordability programs.</p> <p>[67 FR 41094, June 14, 2002, as amended at 81 FR 27852, May 6, 2016; 81 FR 86448, Nov. 30, 2016]</p>
<p>42 CFR §433.112(2) & (3) July 18 and 26, 2012 Single Streamlined Application Data Elements webinar</p>	<p>§433.112 FFP for design, development, installation or enhancement of mechanized processing and information retrieval systems.</p> <p>(2) The system meets the system requirements, standards and conditions, and performance standards in Part 11 of the State Medicaid Manual, as periodically amended.</p> <p>(3) The system is compatible with the claims processing and information retrieval systems used in the administration of Medicare for prompt eligibility verification and for processing claims for persons eligible for both programs.</p> <p>CMS Guidance:</p> <ul style="list-style-type: none"> • July 18 and 26, 2012 Single Streamlined Application Data Elements webinar • Single Streamlined Application for the Health Insurance Marketplace: items in online application Revised: 04/29/2013 Attachment A • June 18, 2013 CMS Guidance on State Alternative Applications for Health Coverage



Federal Citation	CFR
42 CFR §435.404 - Applicant's choice of category.	<p>§ 435.404 Applicant's choice of category.</p> <p>The agency must allow an individual who would be eligible under more than one category to have his eligibility determined for the category he selects.</p>
42 CFR §435.603	<p>§435.603 Application of modified adjusted gross income (MAGI).</p> <p>(f) Household—</p> <p>(3) Rules for individuals who neither file a tax return nor are claimed as a tax dependent.</p> <p>In the case of individuals who do not expect to file a Federal tax return and do not expect to be claimed as a tax dependent for the taxable year in which an initial determination or renewal of eligibility is being made, or who are described in paragraph (f)(2)(i), (f)(2)(ii), or (f)(2)(iii) of this section, the household consists of the individual and, if living with the individual—</p> <p>(i) The individual's spouse;</p> <p>(ii) The individual's children under the age specified in paragraph (f)(3)(iv) of this section;</p> <p>and</p> <p>(iii) In the case of individuals under the age specified in paragraph (f)(3)(iv) of this section, the individual's parents and siblings under the age specified in paragraph (f)(3)(iv) of this section.</p> <p>(iv) The age specified in this paragraph is either of the following, as elected by the agency in the State plan—</p> <p>(A) Age 19; or</p> <p>(B) Age 19 or, in the case of full-time students, age 21.</p>
42 CFR §435.902	<p>§435.902 Simplicity of administration.</p> <p>The agency's policies and procedures must ensure that eligibility is determined in a manner <u>consistent with simplicity of administration and the best interests of the Applicant or beneficiary.</u></p>
42 CFR §435.907 (a) & (b)	<p>§435.907 Application.</p> <p>(a) Basis and implementation. In accordance with section 1413(b)(1)(A) of the Affordable Care Act, the agency must accept an application from the Applicant, an adult who is in the Applicant's household, as defined in §435.603(f), or family, as defined in section 36B(d)(1) of the Code, an authorized representative, or if the Applicant is a minor or incapacitated, someone acting responsibly for the Applicant, and any documentation required to establish eligibility—</p> <p>(1) Via the internet Web site described in §435.1200(f) of this part;</p> <p>(2) By telephone;</p> <p>(3) Via mail;</p>



Federal Citation	CFR
	<p>(4) In person; and</p> <p>(5) Through other commonly available electronic means.</p> <p>(b) The application must be—</p> <p>(1) The single, streamlined application for all insurance affordability programs developed by the Secretary; or</p> <p>(2) An alternative single, streamlined application for all insurance affordability programs, which may be no more burdensome on the Applicant than the application described in paragraph (b)(1) of this section, approved by the Secretary.</p> <p>(c) For individuals applying, or who may be eligible, for assistance on a basis other than the applicable MAGI standard in accordance with §435.911(c)(2) of this part, the agency may use either—</p> <p>(1) An application described in paragraph (b) of this section and supplemental forms to collect additional information needed to determine eligibility on such other basis; or</p> <p>(2) An application designed specifically to determine eligibility on a basis other than the applicable MAGI standard. Such application must minimize burden on Applicants.</p> <p>(3) Any MAGI-exempt applications and supplemental forms in use by the agency must be submitted to the Secretary.</p> <p>(e) Limits on information. (1) The agency may only require an Applicant to provide the information necessary to make an eligibility determination or for a purpose directly connected to the administration of the State plan.</p> <p>(f) The agency must require that all initial applications are signed under penalty of perjury. Electronic, including telephonically recorded, signatures and handwritten signatures transmitted via any other electronic transmission must be accepted.</p>
<p>42 CFR §435.908(a)</p>	<p>§435.908 Assistance with application and renewal.</p> <p>(a) The agency must provide assistance to any individual seeking help with the application or renewal process in person, over the telephone, and online, and in a manner that is accessible to individuals with disabilities and those who are limited English proficient, consistent with §435.905(b) of this subpart.</p> <p>(b) The agency must allow individual(s) of the Applicant or beneficiary's choice to assist in the application process or during a renewal of eligibility.</p> <p>(c) Certified Application Counselors. (1) At State option, the agency may certify staff and volunteers of State-designated organizations to act as application assisters, authorized to provide assistance to Applicants and beneficiaries with the application process and during renewal of eligibility. To be certified, application assisters must be—</p>



Federal Citation	CFR
<p>42 CFR §435.912 (a) & (b), §435.912(c)(3)(ii)</p>	<p>§435.912 Timely determination of eligibility.</p> <p>(a) For purposes of this section—</p> <p>(1) “Timeliness standards” refer to the maximum period of time in which every Applicant is entitled to a determination of eligibility, subject to the exceptions in paragraph (e) of this section.</p> <p>(2) “Performance standards” are overall standards for determining eligibility in an efficient and timely manner across a pool of Applicants, and include standards for accuracy and consumer satisfaction, but do not include standards for an individual Applicant's determination of eligibility.</p> <p>(b) Consistent with guidance issued by the Secretary, the agency must establish in its State plan timeliness and performance standards for, promptly and without undue delay—</p> <p>(1) Determining eligibility for Medicaid for individuals who submit applications to the single State agency or its designee.</p> <p>(2) Determining potential eligibility for, and transferring individuals' electronic accounts to, other insurance affordability programs pursuant to §435.1200(e) of this part.</p> <p>(3) Determining eligibility for Medicaid for individuals whose accounts are transferred from other insurance affordability programs, including at initial application as well as at a regularly-scheduled renewal or due to a change in circumstances.</p> <p>(c)(3) Except as provided in paragraph (e) of this section, the determination of eligibility for any Applicant may not exceed—</p> <p>(i) Ninety days for Applicants who apply for Medicaid on the basis of disability; and</p> <p>(ii) Forty-five days for all other Applicants.</p>
<p>42 CFR §435.916 (a)(1) (2) (3) MAGI, §435.916(b) Non-MAGI</p>	<p>§435.916 Periodic renewal of Medicaid eligibility.</p> <p>(a) Renewal of individuals whose Medicaid eligibility is <u>based on modified adjusted gross income methods (MAGI)</u>.</p> <p>(1) Except as provided in paragraph (d) of this section, the eligibility of Medicaid beneficiaries whose financial eligibility is determined using MAGI-based income must be renewed once every 12 months, and no more frequently than once every 12 months.</p> <p>(b) Redetermination of individuals whose Medicaid eligibility is determined on a <u>basis other than modified adjusted gross income</u>. The agency must redetermine the eligibility of Medicaid beneficiaries excepted from modified adjusted gross income under §435.603(j) of this part, for circumstances that may change, at least every 12 months. The agency must make a redetermination of eligibility in accordance with the provisions of paragraph (a)(2) of this section, if sufficient information is available to do so. The agency may adopt the procedures described at §435.916(a)(3) for individuals whose</p>



Federal Citation	CFR
	<p>eligibility cannot be renewed in accordance with paragraph (a)(2) of this section.</p> <p>(2) Renewal on basis of information available to agency. The agency must make a redetermination of eligibility without requiring information from the individual if able to do so based on reliable information contained in the individual's account or other more current information available to the agency, including but not limited to information accessed through any data bases accessed by the agency under §§435.948, 435.949 and 435.956 of this part. If the agency is able to renew eligibility based on such information, the agency must, consistent with the requirements of this subpart and subpart E of part 431 of this chapter, notify the individual—</p> <p>(i) Of the eligibility determination, and basis; and</p> <p>(ii) That the individual must inform the agency, through any of the modes permitted for submission of applications under §435.907(a) of this subpart, if any of the information contained in such notice is inaccurate, but that the individual is not required to sign and return such notice if all information provided on such notice is accurate.</p> <p>(3) Use of a pre-populated renewal form. If the agency cannot renew eligibility in accordance with paragraph (a)(2) of this section, the agency must—</p> <p>(i) Provide the individual with—</p> <p>(A) A renewal form containing information, as specified by the Secretary, available to the agency that is needed to renew eligibility.</p> <p>(B) At least 30 days from the date of the renewal form to respond and provide any necessary information through any of the modes of submission specified in §435.907(a) of this part, and to sign the renewal form in a manner consistent with §435.907(f) of the part;</p> <p>(C) Notice of the agency's decision concerning the renewal of eligibility in accordance with this subpart and subpart E of part 431 of this chapter;</p> <p>(ii) Verify any information provided by the beneficiary in accordance with §435.945 through §435.956 of this part;</p> <p>(iii) Reconsider in a timely manner the eligibility of an individual who is terminated for failure to submit the renewal form or necessary information, if the individual subsequently submits the renewal form within 90 days after the date of termination, or a longer period elected by the State, without requiring a new application;</p> <p>(iv) Not require an individual to complete an in-person interview as part of the renewal process.</p>
<p>42 CFR §435.916(c)</p>	<p>§435.916 Periodic renewal of Medicaid eligibility.</p> <p>(c) <i>Procedures for reporting changes.</i> The agency must have procedures designed to ensure that beneficiaries make timely and accurate reports of any change in</p>



Federal Citation	CFR
	<p>circumstances that may affect their eligibility and that such <u>changes may be reported through any of the modes for submission of applications described in §435.907(a) of this part.</u></p>
<p>42 CFR §435.917(c)</p>	<p>435.917 Notice of agency's decision concerning eligibility, benefits, or services.</p> <p>(a) Notice of eligibility determinations. Consistent with §§ 431.206 through 431.214 of this chapter, the agency must provide all Applicants and beneficiaries with timely and adequate written notice of any decision affecting their eligibility, including an approval, denial, termination or suspension of eligibility, or a denial or change in benefits and services. Such notice must -</p> <p>(1) Be written in plain language;</p> <p>(2) Be accessible to persons who are limited English proficient and individuals with disabilities, consistent with § 435.905(b), and</p> <p>(3) If provided in electronic format, comply with § 435.918(b).</p>
<p>42 CFR §435.918(a), (b) (1), (2), (3), (4), &(6)</p>	<p>§435.918 Use of electronic notices.</p> <p>(a) Effective no earlier than October 1, 2013 and no later than January 1, 2015, the agency must provide individuals with a choice to <u>receive notices and information required under this part</u> or subpart E of part 431 of this chapter <u>in electronic format</u> or by regular mail and must be permitted to change such election.</p> <p>(b) If the individual elects to receive communications from the agency electronically, the agency must—</p> <p>(1) Ensure that the individual's election to receive notices electronically is confirmed by regular mail.</p> <p>(2) Ensure that the individual is informed of his or her right to change such election to receive notices through regular mail.</p> <p>(3) Post notices to the individual's electronic account within 1 business day of notice generation.</p> <p>(4) Send an email or other electronic communication alerting the individual that a notice has been posted to his or her account. The agency may not include confidential information in the email or electronic alert.</p> <p>(5) Send a notice by regular mail within three business days of the date of a failed electronic communication if an electronic communication is undeliverable.</p> <p>(6) At the individual's request, provide through regular mail any notice posted to the individual's electronic account.</p>
<p>42 CFR §435.923</p>	<p>§435.923 Authorized representatives.</p> <p>(a)(1) The agency must permit Applicants and beneficiaries to designate an individual or</p>



Federal Citation	CFR
	<p>organization to act responsibly on their behalf in assisting with the individual's application and renewal of eligibility and other ongoing communications with the agency. Such a designation must be in accordance with paragraph (f) of this section, including the Applicant's signature, and must be permitted at the time of application and at other times.</p>
<p>42 CFR §435.945(a)</p>	<p>§435.945 General requirements.</p> <p>(a) Except where the law requires other procedures (such as for citizenship and immigration status information), the agency may accept attestation of information needed to determine the eligibility of an individual for Medicaid (either self-attestation by the individual or attestation by an adult who is in the Applicant's household, as defined in §435.603(f) of this part, or family, as defined in section 36B(d)(1) of the Internal Revenue Code, an authorized representative, or, if the individual is a minor or incapacitated, someone acting responsibly for the individual) without requiring further information (including documentation) from the individual.</p>
<p>42 CFR §435.948(a)</p>	<p>§435.948 Verifying financial information.</p> <p>(a) The agency must in accordance with this section request the following information relating to financial eligibility from other agencies in the State and other States and Federal programs <u>to the extent the agency determines such information is useful to verifying the financial eligibility of an individual:</u></p> <p>(1) Information related to <u>wages, net earnings from self-employment, unearned income and resources from the State Wage Information Collection Agency (SWICA), the Internal Revenue Service (IRS), the Social Security Administration (SSA), the agencies administering the State unemployment compensation laws, the State-administered supplementary payment programs under section 1616(a) of the Act, and any State program administered under a plan approved under Titles I, X, XIV, or XVI of the Act; and</u></p> <p>(2) Information related to eligibility or enrollment from the Supplemental Nutrition Assistance Program, the State program funded under part A of title IV of the Act, and other insurance affordability programs.</p> <p>(b) To the extent that the information identified in paragraph (a) of this section is available through the electronic service established in accordance with §435.949 of this subpart, the agency must obtain the information through such service.</p>
<p>42 CFR §435.949 (a) & (b)</p>	<p>§435.949</p> <p>(a) The Secretary will establish an electronic service through which States may verify certain information with, or obtain such information from, Federal agencies and other data sources, including SSA, the Department of Treasury, and the Department of</p>



Federal Citation	CFR
	<p>Homeland Security.</p> <p>(b) To the extent that information related to eligibility for Medicaid is available through the electronic service established by the Secretary, States must obtain the information through such service, subject to the requirements in subpart C of part 433 of this chapter, except as provided for in §435.945(k) of this subpart.</p>
<p>42 CFR §435.952(a)</p>	<p>§435.952 Use of information and requests of additional information from individuals</p> <p>(a) The agency must promptly evaluate information received or obtained by it in accordance with regulations under §435.940 through §435.960 of this subpart to determine whether such information may affect the eligibility of an individual or the benefits to which he or she is entitled.</p>
<p>42 CFR §435.952(b) & (c)</p>	<p>§435.952 Use of information and requests of additional information from individuals.</p> <p>(a) The agency must promptly evaluate information received or obtained by it in accordance with regulations under §435.940 through §435.960 of this subpart to determine whether such information may affect the eligibility of an individual or the benefits to which he or she is entitled.</p> <p>(b) If information provided by or on behalf of an individual (on the application or renewal form or otherwise) is reasonably compatible with information obtained by the agency in accordance with §435.948, §435.949 or §435.956 of this subpart, the agency must determine or renew eligibility based on such information.</p> <p>(c) An individual must not be required to provide additional information or documentation unless information needed by the agency in accordance with §435.948, §435.949 or §435.956 of this subpart:</p> <ul style="list-style-type: none"> • cannot be obtained electronically or • the information obtained electronically is not reasonably compatible, as provided in the verification plan described in §435.945(j) with information provided by or on behalf of the individual. <p>(1) Income information obtained through an electronic data match shall be considered reasonably compatible with income information provided by or on behalf of an individual if both are either above or at or below the applicable income standard or other relevant income threshold.</p>
<p>42 CFR §435.956(e)</p>	<p>§435.956 Verification of other non-financial information.</p> <p>(e) Pregnancy. The agency must accept self-attestation of pregnancy unless the State has information that is not reasonably compatible with such attestation, subject to the requirements of §435.952 of this subpart.</p>



Federal Citation	CFR
<p>42 CFR §436.1005</p>	<p>§436.1005 Institutionalized individuals.</p> <p>(a) FFP is not available in expenditures for services provided to—</p> <p>(1) Individuals who are inmates of public institutions as defined in §435.1010 of this chapter; or</p> <p>(2) Individuals under age 65 who are patients in an institution for mental diseases unless they are under age 22 and are receiving inpatient psychiatric services under §440.160 of this subchapter.</p> <p>(b) The exclusion of FFP described in paragraph (a) of this section does not apply during that part of the month in which the individual is not an inmate of a public institution or a patient in an institution for mental diseases.</p> <p>(c) An individual on conditional release or convalescent leave from an institution for mental diseases is not considered to be a patient in that institution. However, such an individual who is under age 22 and has been receiving inpatient psychiatric services under §440.160 of this subchapter is considered to be a patient in the institution until he is unconditionally released or, if earlier, the date he reaches age 22.</p>
<p>42 CFR 440.320</p>	<p>§ 440.320 State plan requirements: Optional enrollment for exempt individuals.</p> <p>(4) For individuals who the State determines have become exempt individuals while enrolled in benchmark or benchmark-equivalent coverage, the State must comply with the requirements in paragraphs (a)(1) through (a)(3) of this section above within 30 days after such determination.</p>
<p>CMS Guidance</p>	<p>CMS Guidance:</p> <ul style="list-style-type: none"> • July 18 and 26, 2012 Single Streamlined Application Data Elements webinar • Single Streamlined Application for the Health Insurance Marketplace: items in online application Revised: 04/29/2013 Attachment A • June 18, 2013 CMS Guidance on State Alternative Applications for Health Coverage
<p>Limited English Proficiency (LEP)</p>	<p>HHS Guidance:</p> <p>http://www.hhs.gov/civil-rights/for-individuals/special-topics/limited-english-proficiency/guidance-federal-financial-assistance-recipients-title-VI/index.html</p> <p>§435.1200(f)(2) Internet Web site.</p> <p>(2) Such Web site, any interactive kiosks and other information systems established by the State to support Medicaid information and enrollment activities must be in plain language and <u>be accessible to individuals with disabilities and persons who are limited English proficient, consistent with §435.905(b) of this subpart.</u></p> <p>§435.905(b)(1) Availability and accessibility of program information</p> <p>(b) Such information must be provided to Applicants and beneficiaries in plain language</p>



Federal Citation	CFR
	<p>and in a manner that is accessible and timely to—</p> <p>(1) Individuals <u>who are limited English proficient</u> through the provision of language services at no cost to the individual including, oral interpretation and written translations;</p>
<p>Limited English Proficiency (LEP)</p>	<p>HHS Guidance: http://www.hhs.gov/civil-rights/for-individuals/special-topics/limited-english-proficiency/guidance-federal-financial-assistance-recipients-title-VI/index.html https://www.cms.gov/CCIIO/Resources/Files/Downloads/exchange_medicaid_it_guidance_05312011.pdf (5.2.3 Standards for Accessibility)</p> <p>435.905(b)(1) Availability and accessibility of program information</p> <p>(b) Such information must be provided to Applicants and beneficiaries in plain language and in a manner that is accessible and timely to—</p> <p>(1) Individuals <u>who are limited English proficient</u> through the provision of language services at no cost to the individual including, oral interpretation and written translations;</p> <p>§435.907(g) Application</p> <p>(g) Any application or supplemental form must be accessible to persons who are limited English proficient and persons who have disabilities, consistent with §435.905(b) of this subpart.</p> <p>435.916(g) Periodic renewal of Medicaid eligibility</p> <p>(g) Any renewal form or notice must be accessible to persons who are limited English proficient and persons with disabilities, consistent with §435.905(b) of this subpart.</p>



Appendix E. CMS Regulations and Requirements

The new PREE System for PR Medicaid Program must meet all CMS Conditions and Standards per 42 CFR 433.112. These include but are not limited to:

- General CMS Requirements for 90/10 FFP
- Original 7 CMS Conditions and Standards
- Post 2016 Additional Conditions and Standards

CMS Requirements for 90/10 FFP

Condition / Standard	Condition/Standard Description
Improved Efficiency	(1) CMS determines the system is likely to provide more efficient, economical, and effective administration of the State plan.
Conditions and Standards of State Medicaid Manual – Ch 11	(2) The system meets the system requirements, Conditions and Standards, and performance standards in Part 11 of the State Medicaid Manual, as periodically amended.
Compatible with Medicare Claim Processing Rules	(3) The system is compatible with the claims processing and information retrieval systems used in the administration of Medicare for prompt eligibility verification and for processing claims for persons eligible for both programs.
Data Quality Improvement under Title XI, Part B	(4) The system supports the data requirements of quality improvement organizations established under Part B of title XI of the Act.
State Owns Software	(5) The State owns any software that is designed, developed, installed or improved with 90 percent FFP.
Irrevocable License to Reproduce and Publish Software and Documentation	(6) The Department has a royalty free, non-exclusive, and irrevocable license to reproduce, publish, or otherwise use and authorize others to use, for Federal Government purposes, software, modifications to software, and documentation that is designed, developed, installed or enhanced with 90 percent FFP.
Costs Determined in Accordance with 45 CFR 74.27(a)	(7) The costs of the system are determined in accordance with 45 CFR 74.27(a) .
Lifetime of Product Sufficient for Federal funding	(8) The Medicaid agency agrees in writing to use the system for the period of time specified in the advance planning document approved by CMS or for any shorter period of time that CMS determines justifies the Federal funds invested.



Condition / Standard	Condition/Standard Description
Security Safeguards in Subpart F, Part 431	(9) The agency agrees in writing that the information in the system will be safeguarded in accordance with subpart F, part 431 of this subchapter.

CMS Conditions and Standards

Source: (Medicaid-CHIP-Program-Information)

The **CMS** Conditions and Standards are delineated in 42 CFR 433.112(b) and in the CMS Enhanced Funding Requirements: **CMS** Conditions and Standards Medicaid IT Supplement (MITS-11-01-v1.0). The following are excerpts from that reference.

Modularity Standard

Use of a modular, flexible approach to systems development, including the use of open interfaces and exposed application programming interfaces (API); the separation of business rules from core programming; and the availability of business rules in both human and machine-readable formats

Use of Systems Development Lifecycle methodologies

States should use a system development lifecycle (SDLC) methodology for improved efficiency and quality of products and services. The system development lifecycle methodology should have distinct, well-defined phases for inception through close-out; include planning that describes schedules, target dates, and budgets; should exhibit controls over the life of the project via written documentation, formal reviews, and signoff/acceptance by the system owner(s); and should have well documented, repeatable processes with clear input and output criteria (e.g., artifacts).

Some mature methodologies for consideration include the traditional “waterfall” model; Rapid Application Development (RAD); Spiral Approach; Unified Process or Rational Unified Process (RUP), which reinforces the usage of Unified Modeling Language (UML); and Agile Development.

Identification and description of open interfaces

States should emphasize the flexibility of open interfaces and exposed APIs as components for the service layer. States should identify all interfaces in their development plan and discuss how those interfaces will be maintained. States must develop and maintain an exposed API to any data services hub available for the reporting of data, verifications, and exchange of data among states. Service interfaces should be documented in an Interface Control Document (ICD).



Use of business rules engines

States should ensure the use of business rules engines to separate business rules from core programming, and should provide information about the change control process that will manage development and implementation of business rules. States should be able to accommodate changes to business rules on a regularized schedule and on an emergency basis. States should identify and document the business rules engines used, the manner in which the business rules engine(s) is implemented in the state's architecture, the type of business rules engine (e.g., forward-chaining, backward-chaining, deterministic/domain specific, event processing, inference-based, etc.); the licensing and support model associated with the business rules engine(s); and the approximate number of rules the business rules engine(s) executes for a given business process.

Submission of business rules to a HHS-designated repository

States should be prepared to submit all their business rules in human-readable form to an HHS repository, which will be made available to other states and to the public. In their APD, states must specify when they expect to make those business rules available.

MITA Condition

This condition requires states to align to and advance increasingly in MITA maturity for business, architecture, and data. CMS expects the states to complete and continue to make measurable progress in implementing their MITA roadmaps. Already the MITA investments by federal, state, and private partners have allowed us to make important incremental improvements to share data and reuse business models, applications, and components. CMS strives, however, to build on and accelerate the modernization of the Medicaid enterprise that has thus far been achieved.

MITA Self Assessments

The 3.0 version of MITA takes into account the changes required by the Affordable Care Act and the availability of new technologies, such as cloud computing, and build out maturity levels 4 and 5.

MITA Roadmaps

States will provide to CMS a MITA Maturity Model Roadmap that addresses goals and objectives, as well as key activities and milestones, covering a 5-year outlook for their proposed MMIS solution, as part of the APD process. This document will be updated on an annual basis. States should demonstrate how they plan to improve in MITA maturity over the 5-year period and their anticipated timing for full MITA maturity. States should ensure that they have a sequencing plan that considers cost, benefit, schedule, and risk.

Concept of Operations (COO) and Business Process Models (BPM)



States should develop a concept of operations and business work flows for the different business functions of the state to advance the alignment of the state's capability maturity with the MITA Maturity Model (MMM). These COO and business work flows should align to any provided by CMS in support of Medicaid and Exchange business operations and requirements. States should work to streamline and standardize these operational approaches and business work flows to minimize customization demands on technology solutions and optimize business outcomes.

Industry Standards Condition

States must ensure alignment with, and incorporation of, industry standards: the Health Insurance Portability and Accountability Act of 1996 (HIPAA) security, privacy and transaction standards; accessibility standards established under section 508 of the Rehabilitation Act, or standards that provide greater accessibility for individuals with disabilities, and compliance with federal civil rights laws; standards adopted by the Secretary under section 1104 of the Affordable Care Act; and standards and protocols adopted by the Secretary under section 1561 of the Affordable Care Act. CMS must ensure that Medicaid infrastructure and information system investments are made with the assurance that timely and reliable adoption of industry standards and productive use of those standards are part of the investments. Industry standards promote reuse, data exchange, and reduction of administrative burden on patients, providers, and Applicants.

Identification of industry standards

States will be required to update systems and practices to adhere to evolving industry standards in order to remain eligible for enhanced FFP funding.

Incorporation of industry standards in requirements, development, and testing phases

States must implement practices and procedures for the system development phases such as requirements analysis, system testing, and user acceptance testing (UAT). States' plans must ensure that all systems comply fully and on-time with all industry standards adopted by the Secretary of HHS. To comply with to the Rehabilitation Act's section 508(c) for accessibility of user interfaces for disabled persons, states must produce a Section 508 Product Assessment Package as part of their SDLC.

Leverage Condition

State solutions should promote sharing, leverage, and reuse of Medicaid technologies and systems within and among states. States can benefit substantially from the experience and investments of other states through the reuse of components and technologies already developed, consistent with a service-oriented architecture, from publicly available or commercially sold components and products, and from the use of cloud technologies to share infrastructure and applications.



Multi-state efforts

States should identify any components and solutions that are being developed with the participation of or contribution by other states.

Availability for reuse

States should identify any components and solutions that have high applicability for other reuse by other states, how other states will participate in advising and reviewing these artifacts, and the development and testing path for these solutions and components will promote reuse. As the capability becomes available, states should supply key artifacts to a common, national cloud-based repository accessible by all states and CMS.

Identification of open source, cloud-based and commercial products

States should pursue a service-based and cloud-first strategy for system development. States will identify and discuss how they will identify, evaluate, and incorporate commercially or publicly available off-the-shelf or open source solutions, and discuss considerations and plans for cloud computing. States should identify any ground-up development activity within their development approaches and explain why this ground-up activity has been selected.

Customization

States will identify the degree and amount of customization needed for any transfer solutions, and how such customization will be minimized. Transition and retirement plans. States should identify existing duplicative system services within the state and seek to eliminate duplicative system services if the work is cost effective such as lower total cost of ownership over the long term.

Business Results Condition

Systems should support accurate and timely processing of claims (including claims of eligibility), adjudications, and effective communications with providers, beneficiaries, and the public. Ultimately, the test of an effective and efficient system is whether it supports and enables an effective and efficient business process, producing and communicating the intended operational results with a high degree of reliability and accuracy. It would be inappropriate to provide enhanced federal funding for systems that are unable to support desired business outcomes.

Degree of automation

The state should be highly automated in systematic processing of claims (including claims of eligibility) and steps to accept, process, and maintain all adjudicated claims/transactions.

Customer service



States should document how they will produce a 21st-century customer and partner experience for all individuals (Applicants, beneficiaries, plans, and providers). This 21st-century customer experience should include the ability to submit and manage interactions with Medicaid through the web and to self-manage and monitor accounts and history electronically. It should also outline how customer preferences for communications by email, text, mobile devices, or phones will be accommodated. States should also commit to testing and evaluation plans to ensure providers, Applicants, and others interacting with and using their systems will have the opportunity to provide feedback and assessment of accessibility, ease of use, and appropriateness of decisions.

Performance standards and testing

CMS intends to provide additional guidance concerning performance standards—both functional and non-functional, and with respect to service level agreements (SLA) and key performance indicators (KPI). We expect to consult with states and stakeholders as we develop and refine these measures and associated targets. As this list of measures will be focused on very core elements/indicators of success, states should also consider adding state-specific measures to this list. For the implementation of IT system enhancements, states will execute tests against test cases intended to verify and validate the system's adherence to its functional and non-functional requirements. For operational IT systems, states will periodically evaluate system performance against established SLAs. When SLAs are not met, states will create and execute a Plan of Action with Milestones (POAM).

Reporting Condition

Solutions should produce transaction data, reports, and performance information that would contribute to program evaluation, continuous improvement in business operations, and transparency and accountability. Systems should be able to produce and to expose electronically the accurate data that are necessary for oversight, administration, evaluation, integrity, and transparency. These reports should be automatically generated through open interfaces to designated federal repositories or data hubs, with appropriate audit trails. MITA 3.0 will provide additional detail about reporting requirements and needs that arise from the Affordable Care Act.

Interoperability Condition

Systems must ensure seamless coordination and integration with the Exchange (whether run by the state or federal government), and allow interoperability with health information exchanges, public health agencies, human services programs, and community organizations providing outreach and enrollment assistance services. CMS expects that a key outcome of the government's technology investments will be a much higher degree of interaction and interoperability in order to maximize value and minimize burden and costs on providers, beneficiaries, and other stakeholders. CMS is emphasizing in this standard and condition an expectation that Medicaid agencies work in concert with Exchanges (whether state or federally administered) to share business



services and technology investments in order to produce seamless and efficient customer experiences. Systems must also be built with the appropriate architecture and using standardized messaging and communication protocols in order to preserve the ability to efficiently, effectively, and appropriately exchange data with other participants in the health and human services enterprise. As stated in MITA Framework 2.0, each state is “responsible for knowing and understanding its environment (data, applications and infrastructure) in order to map its data to information sharing requirements”. The data-sharing architecture also addresses the conceptual and logical mechanisms used for data sharing (i.e., data hubs, repositories, and registries). The data-sharing architecture will also address data semantics, data harmonization strategies, shared-data ownership, security and privacy implications of shared data, and the quality of shared data.

Interactions with the Exchange

States should ensure that open interfaces are established and maintained with any federal data services hub and that requests to the hub are prepared and available for submission immediately after successful completion of the application for eligibility. States must ensure and test communications between Exchange and Medicaid systems so that determinations and referrals can be effectively transmitted from the Exchange. States should describe how shared services will support both the Exchange and Medicaid.

Interactions with other entities

States should consult with and discuss how the proposed systems development path will support interoperability with health information exchanges, public health agencies, and human services programs to promote effective customer service and better clinical management and health services to beneficiaries. States should also consult with and discuss how eligibility systems will allow community service organizations to assist Applicants seeking health care coverage to complete forms and to submit those forms electronically.

Post 2016 Additional CMS Conditions and Standards

On December 4, 2015 the Centers for Medicare & Medicaid Services (CMS) published a final rule, “Mechanized Claims Processing and Information Retrieval Systems (90/10),” which became effective January 1, 2016. This final rule extended enhanced federal funding for Medicaid Eligibility Systems and revised the conditions and standards state Medicaid IT systems must meet to qualify for enhanced federal funding to better support Medicaid eligibility, enrollment, and delivery systems. This final rule also supported existing requirements for modular systems development. This guidance reflects input from commenters in the rulemaking process, our state partners and other stakeholders.

Modified Adjusted Gross Income (MAGI)-based System Functionality



For PREE Systems, the State must have delivered acceptable MAGI-based system functionality, demonstrated by performance testing and results based on critical success factors, with limited mitigations and workarounds.

In December 2012, CMS identified critical success factors (CSFs) in order for the states to demonstrate operational readiness, including: Ability to accept a single, streamlined application; ability to convert existing state income standards to modified adjusted gross income (MAGI); ability to convey state-specific eligibility rules to the Federally-Facilitated Marketplace (FFM), as applicable; ability to process applications based on MAGI rules; ability to accept and send application files (accounts) to and from the Marketplace; ability to respond to inquiries from the Marketplace on current Medicaid or CHIP coverage; and, ability to verify eligibility based upon electronic data sources (the Federal Data Services Hub (FDSH) or an approved alternative).

Mitigation Plan

The State must submit plans that contain strategies for reducing the operational consequences of failure to meet all major milestones and functionality. Mitigation plans for major Medicaid Eligibility System projects should address minimum expected functionality, critical success factors, and risk factors as tied to major milestones identified in the APD. The mitigation plans should also reflect key events and dates that would trigger the mitigation, and projected timeframe for the mitigation sunset.

Key Personnel

The agency, in writing through the APD, must identify key state personnel by name, type and time commitment assigned to each project. This condition refines and strengthens the existing APD requirements regarding personnel resource statements as required under 45 CFR 95.610

Documentation

Systems and modules developed, installed or improved with 90 percent match must include documentation of components and procedures such that the systems could be operated by a variety of contractors or other users.

This condition is limited to software that is developed using federal funds; it does not apply to Commercial Off-the-Shelf (COTS) software, Software-as-a-Service, or Business-Solutions-as-a Service. Adequate documentation means that other users could operate the software with reasonable alterations for a specific hardware or operating system. Documentation must follow industry standards and best practices, and must include components, procedures, layouts, interfaces, inputs, outputs, and other necessary information so that the systems could be installed and operated by a variety of contractors or other users.

Minimization of Cost for Operation on an Alternate System



For software systems and modules developed, installed or improved with 90 percent match, the State must consider strategies to minimize the costs and difficulty of operating the software on alternate hardware or operating systems.

This condition recognizes the significant federal and state investments that are involved with major Medicaid IT projects and requires that states consider options beyond software that will reduce costs or promote reuse.

States should consider, at a minimum, the options that offer more opportunities for reuse, lower development costs, lower long-term operating costs, and shorter development time as well as the extent to which the solutions can be readily implemented with alternate hardware and operating systems