

# Enterprise Objective Monitoring and Control Services

Change Management Plan Aid

V1.1



GOVERNMENT OF PUERTO RICO

Department of Health  
Medicaid Program

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# Table of Contents

<b>Section</b>	<b>Page</b>
Table of Contents.....	i
Revision History .....	1
1.0 Introduction .....	2
1.1 Purpose and Objectives.....	3
1.2 Scope .....	4
1.2.1 In Scope.....	4
1.2.2 Out of Scope .....	4
1.3 Approach .....	5
1.3.1 Assumptions.....	5
1.3.2 Constraints .....	5
1.3.3 Dependencies .....	5
1.3.4 Standards and References.....	6
2.0 Roles and Responsibilities .....	8
2.1 CCB.....	9
2.2 PRMP Leadership .....	9
2.3 PRMP Program Director .....	9
2.4 PRMP Project Lead .....	9
2.5 PRMP PgMO.....	10
2.6 Vendors .....	10
3.0 Change Management Process.....	11
3.1 Identify Change .....	11
3.2 Create CR .....	12
3.3 Assign CR Owner .....	12
3.4 Perform CR Analysis .....	12
3.5 Present CR to CCB.....	12
3.6 Update Configuration Items .....	13



3.7 Close CR ..... 13

4.0 CR Log and Reporting ..... 15

    4.1 CR Log Attributes ..... 15

    4.2 Change Control Monitoring, Controlling, and Reporting ..... 16

Appendix A – Acronyms List ..... 17

## Revision History

The Puerto Rico Medicaid Program's (PRMP) Program Management Office (PgMO) will store the approved Change Management Plan Aid and any approved revisions on the PgMO SharePoint site or in an alternative location specified by PRMP. PRMP and the PgMO will make the plan available to project stakeholders as needed. Currently, BerryDunn provides PRMP PgMO services.

Table 1 presents the revision history for this document. When changes occur, the PRMP PgMO will increment the version number and the date. The PRMP PgMO will record the name of the person or entity making the change and a description of the change in the revision history.

**Table 1: Revision History**

Date	Document Version	Description	Author(s)
6/22/2022	V1.0	Initial delivery	BerryDunn PgMO Team
8/16/2022	V1.1	Updated 3.4 Perform CR Analysis Section	BerryDunn PgMO Team

## 1.0 Introduction

The PRMP is committed to the implementation of successful projects for the residents of Puerto Rico and has established a Puerto Rico Medicaid Enterprise Systems (PRMES) PgMO to provide guidance, support, and oversight for vendor projects within the Medicaid Enterprise.<sup>1</sup> The PRMP PgMO has created plan aids to assist with completing projects effectively and efficiently. Project management involves applying best practice processes, tools, and techniques. The PRMP PgMO plan aids provide guidance for delivering more predictable and consistent plans, processes, and practices, which will result in meeting the goals and objectives of PRMP and vendor partners, as well as meeting stakeholder expectations.

The Change Management Plan Aid is a living document intended to provide PRMP vendors with guidance on the PRMP’s expectations regarding project change management. The PRMP expects vendors to develop and submit a Change Management Plan for the project(s) for which they are providing services. Vendors should reference this document when creating their Change Management Plans to help ensure compliance with the PRMP’s expectations and a common understanding between the PRMP and the vendor regarding change management. The PRMP PgMO will update this Change Management Plan Aid when new applicable standards (or versions of a standard) are released or when there are changes to PRMP policies that affect change management.

If a vendor finds a contractual conflict with guidance provided in this plan aid, vendors should defer to their contract and/or any updated PRMP guidance.

The Introduction section of this document provides information on the Change Management Plan Aid’s purpose and objectives, scope, standards, assumptions, dependencies, and constraints. To help ensure an understanding of project change, Table 2 provides definitions for baseline, change, change control, Change Request (CR) Log, Change Management Plan, Configuration Management Plan, and CR.

**Table 2: Change Definitions**

Term	Definition
<b>Baseline</b>	The approved version of a work product that can be changed only through formal change control procedures and is used as a basis for comparison to actual results
<b>Change</b>	A modification to any formally-controlled project deliverable, project management plan component
<b>Change Control</b>	A process where modifications to documents, deliverables, or baselines relating to the project are identified, documented, approved, or rejected

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<sup>1</sup> In this aid, “vendor” refers to vendors that implement and maintain systems within the PRMES, as well as contractors and other entities that provide non-solution-related PRMES services to PRMP.

Term	Definition
<b>CR Log</b>	A comprehensive list of changes submitted during the project and their current status
<b>Change Management Plan</b>	A component of the Project Management Plan (PMP) that establishes the Change Control Board (CCB), documents the extent of its authority, and describes how the change control system will be implemented. Change management is focused on the change control process rather than the specific items that will be subject to the change control process
<b>Configuration Item</b>	A subset of service asset that has a direct impact on service delivery and needs to be managed in order to deliver a product or service. These items of the project are identified as items that will be recorded and updated through a formal change control process, so that the product of the project remains consistent and operable. Examples of configuration items include software and applications, locations and offices, employees and customers, documentation, hardware and changes
<b>CR</b>	A formal proposal to modify a document, deliverable, or baseline

## 1.1 Purpose and Objectives

The purpose of the Change Management Plan Aid is to provide guidance for processes and standards for the management of change throughout the PRMP projects. Through this process, the PRMP’s vendors should establish an orderly and effective procedure for tracking submission, coordination, review, evaluation, categorization, and approval for release of all changes to the project’s baselines.

The objectives of the Change Management Plan Aid are to:

- Provide guidance to the project-specific vendors in the development of their Change Management Plans. The project-specific plans should demonstrate the vendor’s process for managing changes in alignment with the guidelines described in the Change Management Plan Aid.
- Describe the vendor’s recommended process to manage and perform change control for managing change to configuration items related to documents and requirements as applicable.
- Define a process to facilitate communication among PRMP stakeholders and minimize uncertainty around the existence and outcome of a change.
- Establish change management consistency across all PRMP PRMES projects and initiatives.

The Change Management Plan Aid primarily provides guidance for vendors to develop and implement a Change Management Plan. These processes are defined in detail in the Change Management Process, CR, and Reporting sections of this document.

## 1.2 Scope

The scope statement defines both the work included and the work not included in the scope of a project. For purposes of this PgMO Change Management Plan Aid, this section addresses what is in scope and out of scope for an anticipated plan. The aid provides guidance to vendors on addressing processes and procedures related to managing and controlling submitted changes for PRMP projects.

### 1.2.1 In Scope

Vendors should identify all the items subject to change management as part of the overall project. This pertains to the entirety of the project and includes all changes that impact scope, schedule, and cost. Additional items that are known to impact the configuration items without necessarily impacting the scope, schedule, and cost are also considered to be in scope. The following is a representative list of areas that may undergo change leading to a CR:

- Scope
- Time
- Duration
- Cost
- Resources
- Deliverables
- Product
- Process
- Quality
- Configuration
- Processes to manage the project life cycle, including federal certification if applicable

### 1.2.2 Out of Scope

For purposes of providing guidance to vendors, this Change Management Plan Aid does not include operation updates that are part of operational changes to the product or project services and are considered to be out of scope of the Change Management Plan.

Vendors should list the items considered out of scope. Any scope exclusions must be in alignment with the request for proposals (RFP), vendor's proposal, and the final signed contract as necessary.

## 1.3 Approach

This section describes assumptions, dependencies, constraints, standards, and references. The Change Management Plan takes into consideration the assumptions, dependencies, and constraints for the system implementation projects as described in this section.

### 1.3.1 Assumptions

Per the *Guide to the Project Management Body of Knowledge® (PMBOK® Guide)*, an assumption is a factor expected to be in place or to be in evidence. The following are assumptions considered in the development of the Change Management Plan Aid and are applicable to all PRMP projects:

- Changes to configuration items in the projects are managed using the processes and procedures defined in the Change Management Plan.
- The vendor will have a documented process to identify and account for project artifacts under configuration control (a Configuration Management Plan), and how to record and report changes to them.
- Changes of a contractual nature are managed through the guidelines defined in the change control process, which is also dependent on procurement management plan processes.
- The vendor will have regularly-scheduled change control meetings.
- PRMP PRMES projects are expected to follow this plan aid for uniformity.
- Stakeholders initially assigned to the CCB could be replaced throughout a project, and adjustments should be made as needed.
- PRMP will have a complementary risk and issue management process overseen by PRMP Project Leads and supported by the PRMP PgMO.

### 1.3.2 Constraints

Per the *PMBOK® Guide*, a constraint is a limiting factor that affects the execution of a project or process. The Change Management Plans developed by vendors should conform to the Change Management Plan for managing changes. Scope, schedule, and cost are constrained by the changes and should be managed using the change control process.

### 1.3.3 Dependencies

Per the *PMBOK® Guide*, a dependency is a logical relationship between two activities, or between an activity and a milestone. For example, an activity that cannot begin until another activity has been finished has a dependency. This Change Management Plan Aid has dependencies on plans including, but not limited to:



- **Configuration Management Plan:** The Configuration Management Plan defines and documents configuration items that are subject to the integrated change control process, including items such as requirements, deliverables, and project schedules.
- **Quality Management Plan:** The Quality Management Plan documents the necessary information required to manage project quality from project planning to delivery. It defines a project's quality policies, procedures, criteria for and areas of application, along with roles, responsibilities, and authorities.
- **Procurement Management Plan:** The Procurement Management Plan describes how a project team will acquire goods and services from outside of the performing organization.
- **Requirements Management Plan:** The Requirements Management Plan includes requirement identification, validation, design, verification, and implementation, along with controlling changes to a requirement and communication to stakeholders as a continuous process throughout a project. It also includes identification of the standards and processes for developing backward and forward requirements tracing, individually or collectively, throughout the life cycle of a requirement.
- **Schedule Management Plan:** The Schedule Management Plan defines the processes required to manage timely execution of the work needed to complete a project.
- **Scope Management Plan:** The Scope Management Plan includes two components:
  - Product scope is a collection of functions and features that characterize a product, service, or result.
  - Project scope is the work performed to deliver the product, service, or result with the specified functions and features.

### 1.3.4 Standards and References

This section provides an initial list of standards and references applicable to the Change Management Plan. Per the *PMBOK® Guide*, a standard is a document established by an authority, custom, or general consent as a model or an example. A reference is a source of information and context.

The PRMP PgMO and PRMP vendors are required to use the appropriate standards and references. The PRMP PgMO and PRMP vendors might incorporate additional standards and references if appropriate for the plan content.

Vendors should develop a Change Management Plan based on this plan aid and using the following industry standards:

- *A Guide to the Project Management Body of Knowledge (PMBOK®), Sixth Edition*, Project Management Institute®, Chapter 4.6 Perform Integrated Change Control
- *ISO 27001 Security – Change Management and Control* © 2007 (International Organization for Standardization)

- *Centers for Medicare & Medicaid Services Policy for Change Management v1.0*

Vendors are expected to monitor applicable standards and industry best practices. Vendors should work with the PRMP to determine if updates are required to their Change Management Plans when a new applicable standard (or version of a standard) is released.

## 2.0 Roles and Responsibilities

This section describes the primary roles and responsibilities of the groups that consist of the project staff, sponsors, and stakeholders as they relate to change management. Table 3 illustrates which stakeholders are responsible (R), accountable (A), consulted (C), and informed (I) (RACI), defined as:

- **Responsible:** This stakeholder does the work to complete the task area. This stakeholder may also serve as an Accountable stakeholder for some task areas.
- **Accountable:** This stakeholder delegates work and is the last one to review the task area before it is deemed complete. According to best practice, one stakeholder (or the lowest number possible) should be deemed Accountable.
- **Consulted:** This stakeholder provides input based on how the task area will impact the future work of the project and the stakeholder’s expertise.
- **Informed:** This stakeholder should be aware of the progress associated with the task area.

Table 3 aims to provide insight into how PRMP and the PgMO will interact with project change management processes and responsibilities. The vendor should propose its own stakeholder groups and RACI matrix according to its team’s organizational structure. Table 3 provides vendors with the RACI matrix for PRMP and/or PgMO responsibilities. Vendors may edit this baseline matrix if deviations are discussed and agreed upon with the PRMP and PgMO to determine what is appropriate for the project.

**Table 3: RACI Matrix for Project Change Management**

Task Area	CCB	PRMP Leadership	PRMP Program Director	PRMP PgMO	PRMP Project Lead	Vendor
Identify Change	I	I	I	C	A	R
Create Change	I	I	I, C	C	A	R
Assign CR Owner	I	I	I, C	I, C	A	R
Perform CR Analysis	I	I	I	I, C	A	R
Present CR to CCB	C	C	C	I, C	A	R
Update CR Log and Report	I	I	I	C	A	R

The following subsections provide a description of each stakeholder group.

## 2.1 CCB

The CCB is a governance committee under the Executive Steering Committee that is important to the change management process. The CCB reviews CRs and then decides whether to approve, reject, or put CRs on hold. To review CRs, members of the CCB must analyze the requested change and its impact on the project constraints such as the schedule, budget, other configuration items, and ultimately, additional projects within the PRMP PRMES. Therefore, it is important that the CCB include representation that is supported by stakeholders with ownership and understanding of the process.

The CCB typically constitutes members with voting and non-voting rights. The voting members are those members or designees who vote to authorize or reject the CR on behalf of the division they represent. Non-voting members play a vital role as subject matter experts (SMEs) to provide support to the CCB in the deliberations of CR reviews and to help the CCB make informed decisions about requested changes.

Most projects will identify a separate CCB to oversee the changes submitted and governed by a corresponding CCB charter. The charter defines membership and authority within that specific CCB. The PRMP PgMO, as defined in the roles and responsibilities section of the Change Management Plan Aid, supports each CCB.

## 2.2 PRMP Leadership

PRMP is the Medicaid agency responsible for administering the Medicaid Program in Puerto Rico, including the Children's Health Insurance Program (CHIP), and a waiver-based section 1915(a) program. PRMP is an agency within the Puerto Rico Department of Health (PRDoH). While leadership roles might vary between projects, in general, the PRMP leadership stakeholder group refers to the PRDoH Secretary, PRMP Executive Director, and the PRMP Executive Steering Committee.

## 2.3 PRMP Program Director

The PRMP PRMES Program Director is a member of the PRMP PgMO.

An important aspect of the PRMP Program Director's role is to set expectations and approve processes for change among the PRMES projects.

## 2.4 PRMP Project Lead

PRMP appoints a Project Lead to oversee each of the PRMES projects under the PRMP programs utilizing the defined PRMP PgMO processes. The Project Lead collaborates with the vendor's Project Manager to help ensure the project execution and implementation is in accordance with the approved schedule and processes defined by the PRMP PgMO.

The PRMP Project Lead will have joint responsibility with the vendor Project Manager (PM), and the PRMP PgMO, to be the initial implementers of the change management processes defined in this plan.

The PRMP Project Lead will have joint responsibility with the vendor Project Lead for defining, developing, monitoring, controlling, and verifying change.

## 2.5 PRMP PgMO

PRMP has designated the PgMO to provide program management guidance and collaborative oversight for its information technology initiatives. As part of this responsibility, the PRMP PgMO has developed this Change Management Plan Aid as a guide for project-specific Change Management Plans.

Each vendor should create an individual Change Management Plan to manage project quality and should collaborate with the PRMP PgMO to gain approval of their process.

## 2.6 Vendors

The vendors supporting PRMP in one or more information technology projects or supporting other PRMP activities are responsible for developing a project-specific Change Management Plan, obtaining PRMP and PRMP PgMO approval of the plan, and managing change in accordance with that plan. The vendor Project Manager is responsible to further elaborate and divide its team into stakeholder groups in this section.

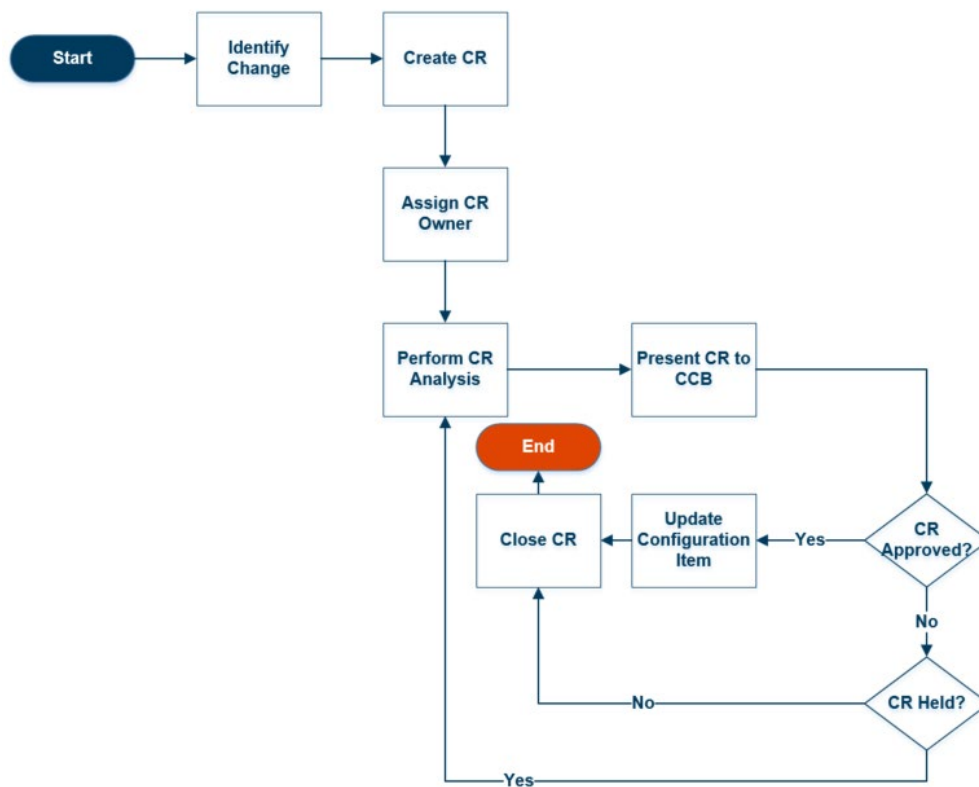
In accordance with the assumptions described in this document, the PRMP anticipates that vendors will manage change according to their PRMP-approved Change Management Plan. The vendor Project Manager will have joint responsibility with the PRMP Project Lead for defining, developing, monitoring, controlling, and verifying change.

### 3.0 Change Management Process

The vendor is responsible for developing a Change Management Plan for each project the vendor implements. The PRMP PgMO Change Management Plan should be referenced for alignment with the process, procedures, communication, and collaboration among the CCB, PRMP leadership, PRMP Program Director, the PRMP PgMO, and PRMP Project Lead. The plan should also include the expectations for the timeframe each priority level of change would be introduced and addressed along each step of the change management process.

The basic flow for the change control process presented in Figure 1 provides a recommended change control process for project vendors:

**Figure 1: Change Control Process**



#### 3.1 Identify Change

The first step in the change management process is to identify the need for a change and communicate it to the vendor Project Manager and PRMP Project Lead. Anyone on the project team can identify the need for change reviews with their immediate supervisor or Project Manager, which leads to creation of a CR.

## 3.2 Create CR

A proposed change is identified, it is analyzed by the vendor Project Manager for initial qualification on the impacts and is submitted to the PRMP Project Lead. The Project Lead reviews the change item and, if in agreement with the information provided, the vendor Project Manager creates a CR and makes an entry into the CR Log. If additional information is needed, the request is made prior to logging the CR. Whenever a CR is posted, information related to the CR is included in the CR Log (see Table 4: CR Attributes). The final part of this step is to share the CR and CR log with the PRMP Program Director and the PRMP PgMO as they may assist later steps in the CCB process.

## 3.3 Assign CR Owner

When a change is identified and the CR is logged, the PRMP Project Lead assigns the CR owner. The vendor CR owner, or point person, takes responsibility for analyzing the impact of the change, reviewing the analysis with the PRMP Project Lead, following up on the implementation of the change, and communicating the status of the change to the PRMP Project Lead and the PRMP PgMO.

## 3.4 Perform CR Analysis

The CR owner is responsible for analyzing the CR and estimating the effort needed to implement the change. The assessment includes the impacts to the project in the areas such as scope, quality, security, schedule, resources, and costs being done at the time versus later or not implementing the change. For instance, a CR could be created for a change in functionality to address new regulations or policies. This CR may require updates to the requirements, design documents, system code or functionality, and system infrastructure. To understand the full scope of the change, the CR owner should work with the business analysts and development and infrastructure teams to assess the full scope of change. The CR owner should also work with the PRMP Project Lead and vendor Project Manager to determine the impact the change may have on the project schedule and further collaborate with the PRMP PgMO and PRMP Program Director to help ensure other Medicaid systems are not affected by the proposed change. The CR owner should also work with the PR Medicaid Security staff to complete a Security Impact Assessment. A Security Impact assessment should be completed for every CR, as required by CMS.

## 3.5 Present CR to CCB

After completing a thorough analysis of the requested change, the CR owner presents the CR to the PRMP Project Lead for submission to the CCB. As part of the process, the CR should be communicated to the CCB members and the PRMP leadership for awareness. This allows an opportunity to convene a meeting based on the priority of the CR. The goal of this communication is to provide CCB members time to understand and question the nature, need, and impact of the change ahead of the meeting. Ultimately, this allows CCB members to be prepared to discuss and provide approval decision regarding the CR in the CCB meeting.

After the CR is presented to the CCB, the CCB members deliberate on the change, and then voting members cast their vote for approval, denial, or hold status of the CR. If the CCB voting members choose, this vote may be a closed vote where only voting members of the board are present. In the case of approval, the CR is moved to the next step of implementing the change. If the CR is denied, then it moves to the step of closure. If the CCB votes to put a CR on hold, then the CR is moved to the step of performing analysis in addition to the original analysis, or—in some instances—transitions into a holding pattern until a triggering event arises.

The CCB may vote to place a CR on hold for a variety of reasons including allowing more time for analysis based on questions raised in the CCB. In this case, additional analysis should be completed for the CR to be re-presented at the next CCB meeting.

Another reason for voting to place a CR on hold is that the change is not time sensitive. In this case, the CR moves back to the perform analysis process because passage of time might affect the analysis of the CR impact.

### 3.6 Update Configuration Items

Approved CRs are moved to the update configuration items step. In this process, the assigned CR owner updates the configuration items or manages the updates to those configuration items. The updates to configuration items usually include updates to the project schedule and requirements to account for additional/reduced tasks and scope. Additionally, other documents, system code, and infrastructure components may require updates as defined in the CR.

Throughout the implementation of the CR, the CR owner maintains the responsibility for communicating the status of the implementation to project stakeholders, the PRMP Program Director, PRMP PgMO, and PRMP leadership, as well as updating the CR Log to reflect progress on the implementation. Once implemented, the CR owner marks the CR as complete and requests closure from the PRMP.

### 3.7 Close CR

If the CCB votes to deny a CR, the vendor closes the CR with a description indicating the date of the decision and details from the CCB outlining the reason that the request was denied (see Table 4 -CR Attributes).

Changes in scope may, in some instances, trigger a contract change; however, these changes are not included in the scope of the Change Management Plan. If this type of change occurs, the change status will be marked as “Held for Future Consideration.” The CCB and Executive Steering Committee will then discuss the need for changes to the vendor contract. If the CCB votes to approve a CR, the CR Log is updated, and the changes are included in the appropriate project implementation phase.

After the CR owner implements the change, the CR owner provides the PRMP Project Lead, PRMP Program Director, and the PRMP PgMO with documentation stating the status of the CR is complete. The PRMP Project Lead reviews the update and, if needed, provides feedback. The vendor Project Manager updates the CR Log, and marks it as completed upon receiving approval from the PRMP or its designee. Review of the implementation information is intended to



help ensure that the CR was implemented correctly and no additional changes were made. Once this verification occurs, the vendor creates a new baseline for each configuration item and their associated relationships to reflect that the item has a new baseline. After the baseline(s) are complete, the vendor closes the CR.

Regardless of whether the CR closes after a denial or after the implementation is completed, the vendor sends out a communication on the status of the CR in the status meetings.

After the CR is closed, the CR process is complete.

## 4.0 CR Log and Reporting

This section defines the CR Log attributes, attribute descriptions required to log a CR. This section also describes the monitoring and reporting requirements for CRs.

### 4.1 CR Log Attributes

When developing a new CR, several identifying attributes should be gathered, documented, and input to the CR Log. The vendor should create, track, and maintain a CR Log that includes, at a minimum, the attributes in Table 4.

Tracking and maintaining the CR is based on the processes and procedures set forth in the Change Management Plan, Section 3 – Change Management Process.

**Table 4: CR Attributes**

CR Attribute	Description
<b>CR Identification Number</b>	Sequential system-generated number to identify the CR
<b>CR Title</b>	Brief sentence or phrase summarizing the change presented
<b>CR Status</b>	Indicates the CR status. CR status indicators are: <ul style="list-style-type: none"> <li>▪ Open</li> <li>▪ Ready for CCB review</li> <li>▪ Held for future consideration</li> <li>▪ In implementation</li> <li>▪ Completed</li> <li>▪ Closed</li> <li>▪ Canceled/Denied</li> </ul>
<b>Creation Date</b>	Date CR was originally identified
<b>CR Owner</b>	Name of the person responsible for seeing the CR through to conclusion
<b>CR Description</b>	Detailed definition of the project change, including, but not limited to: <ul style="list-style-type: none"> <li>▪ Description of the proposed change</li> <li>▪ Justification why proposed change should be implemented</li> <li>▪ Impact if not implementing the change</li> <li>▪ Name of the person identifying the request or the meeting originating the request</li> </ul>
<b>Project Assigned To</b>	Vendor and Project Name
<b>Change Impact</b>	<ul style="list-style-type: none"> <li>▪ Documents the full impact of the change, including schedule and cost, if applicable</li> <li>▪ Documents the configuration items that need to be changed as a result</li> </ul>

CR Attribute	Description
	<ul style="list-style-type: none"> <li>▪ Documents the impact to other projects and systems in operation</li> </ul> <p>Note: change impact information may be provided as an attachment to the CR and noted as such in the Change Impact attribute</p>
<b>Notes/Updates</b>	To capture notes and/or updates during the life cycle of a CR
<b>Work Estimate (in hours)</b>	<p>Identifies estimated hours by project phase for vendor resources, client resources, and other resource groups that have tasks that should be included for project.</p> <ul style="list-style-type: none"> <li>▪ Initiation</li> <li>▪ Planning</li> <li>▪ Executing</li> <li>▪ Monitoring and Controlling</li> <li>▪ Closing</li> <li>▪ Implementation</li> </ul>
<b>Implementation Date</b>	Date projected change is expected to be implemented
<b>CR Approval Date</b>	Date CR was approved and ready for project inclusion
<b>CR Close Date</b>	Date CR is closed

## 4.2 Change Control Monitoring, Controlling, and Reporting

Vendors should maintain their CRs in separate CR Logs by project for PRMP. The CRs are monitored by the PRMP PgMO and are reviewed for updates in the vendor’s status report.

The CR Log—along with new CRs reviewed and approved during the CCB meetings as they are scheduled—will be monitored and archived in an approved repository. In their individual Change Management Plans, Vendor should describe their repositories and whether they will support PRMP PgMO monitoring through direct access to the repositories, regular meetings, outputs (e.g., reports), or a combination.

## Appendix A – Acronyms List

Table 5 presents a list of the acronyms used in this document.

**Table 5: Acronyms**

Term or Acronym	Definition
<b>CCB</b>	Change Control Board
<b>CHIP</b>	Children's Health Insurance Program
<b>CR</b>	Change Request
<b>EOMC</b>	Enterprise Objective Monitoring and Control
<b>ISO</b>	International Organization for Standardization
<b>KL</b>	BerryDunn KnowledgeLink
<b>OIAT</b>	Oficina de Informática y Avances Tecnológicos
<b>PRDoH</b>	Puerto Rico Department of Health
<b>PgMO</b>	Program Management Office
<b>PMBOK® Guide</b>	<i>A Guide to the Project Management Body of Knowledge®</i>
<b>PMP</b>	Project Management Plan
<b>PRMES</b>	Puerto Rico Medicaid Enterprise Systems
<b>PRMP</b>	Puerto Rico Medicaid Program
<b>RACI</b>	Responsible, Accountable, Consulted, Informed
<b>RFP</b>	Request For Proposals
<b>SME</b>	Subject Matter Expert

<b>Change Request (CR) Attribute</b>	<b>Description</b>
<b>CR Identification Number</b>	Number to identify the CR
<b>CR Title</b>	Brief sentence or phrase summarizing the change presented
<b>CR Status</b>	CR status elements: <ul style="list-style-type: none"> <li>▪ Open</li> <li>▪ Ready for Change Control Board (CCB) review</li> <li>▪ Held for future consideration</li> <li>▪ In implementation</li> <li>▪ Completed</li> <li>▪ Closed</li> <li>▪ Canceled/Denied</li> </ul>
<b>Vendor</b>	Name of Vendor involved with the CR.
<b>CR Owner</b>	Name of the person responsible for seeing the CR through to conclusion
<b>CR Description</b>	A detailed definition of the project change, including: <ul style="list-style-type: none"> <li>▪ Description of the proposed change</li> <li>▪ Justification why proposed change should be implemented</li> <li>▪ Impact if not implementing the change</li> <li>▪ Name of the person identifying the request or the meeting originating the request</li> </ul>
<b>Project Assigned To</b>	Vendor and Project Name
<b>Change Impact</b>	<ul style="list-style-type: none"> <li>▪ Document the full impact of the change, including schedule and cost, if applicable</li> <li>▪ Document the configuration items that need to be changed as a result</li> <li>▪ Document the impact to other projects and systems in operation</li> <li>▪ Note: This information may be provided as an attachment to the CR and noted as such in the Change Impact attribute</li> </ul>
<b>Notes/Updates</b>	To capture notes and/or updates during the life of the CR
<b>Work Estimate (in hours)</b>	Identify estimated hours by project phase for vendor resources, client resources, and other resource groups that have tasks that should be included for project. <ul style="list-style-type: none"> <li>▪ Initiation</li> <li>▪ Planning</li> <li>▪ Executing</li> <li>▪ Monitoring and Controlling</li> <li>▪ Closing</li> <li>▪ Implementation</li> </ul>
<b>Implementation Date</b>	Date projected change is expected to be implemented
<b>CR Creation Date</b>	Date CR was originally identified
<b>CR Approval Date</b>	Date CR was approved and ready for project inclusion
<b>CR Close Date</b>	Date CR was closed

CR Identification Number	CR Title	CR Status	Vendor	CR Owner	CR Description	Project Assigned To	Change Impact	Notes/Updates	Work Estimate (in hours)	Implementation Date	CR Creation Date	CR Approval Date	CR Close Date	Notes/Updates
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**Acronyms**

CCB	Change Control Board
CR	Change Request

# Enterprise Objective Monitoring and Control Services

Puerto Rico Medicaid Program  
Communications Management Plan Aid  
V1.0



GOVERNMENT OF PUERTO RICO

Department of Health  
Medicaid Program

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22 June 2022



# Table of Contents

<b>Section</b>	<b>Page</b>
Table of Contents.....	i
Revision History .....	1
1.0 Introduction .....	2
1.1 Purpose and Objectives .....	3
1.2 Scope .....	4
1.2.1 In Scope .....	4
1.2.2 Out of Scope .....	5
1.3 Approach .....	5
1.3.1 Assumptions.....	5
1.3.2 Constraints .....	5
1.3.3 Dependencies .....	5
1.3.4 Standards and References .....	6
2.0 Roles and Responsibilities.....	7
2.1 PRMP Leadership.....	7
2.2 PRMP Program Manager.....	8
2.3 PRMP Project Lead .....	8
2.4 PRMP PgMO .....	8
2.5 Vendors .....	8
3.0 Plan Communication .....	9
3.1 Communications Management Planning Overview .....	9
3.1.1 Plan Communications Management.....	10
3.1.2 Manage Communications.....	11
3.1.3 Monitor Communications.....	12
3.2 Communication Approval .....	13
3.2.1 Outward Communication .....	13
3.3 Information Channels.....	13



Appendix A: Acronyms and Abbreviations..... 15

Appendix B: Deliverable Acceptance Criteria ..... **Error! Bookmark not defined.**

## Revision History

The Puerto Rico Medicaid Program’s (PRMP’s) Program Management Office (PgMO) will store the approved Communications Management Plan Aid and any approved revisions on the PgMO Sharepoint site. PRMP and the PRMP PgMO will make the plan available to project stakeholders as needed. Currently, BerryDunn provides PRMP PgMO services.

Table 1 presents the revision history for this document. When changes occur, the PRMP PgMO will increment the version number and the date. The PRMP PgMO will record the name of the person or entity making the change and a description of the change in the revision history.

**Table 1: Revision History**

Date	Document Version	Description	Author(s)
6/22/2022	V1.0	Initial delivery to PRMP	BerryDunn PgMO Team

## 1.0 Introduction

PRMP is committed to successful projects for the residents of Puerto Rico and has established a Puerto Rico Medicaid Enterprise Solution (PRMES) PgMO to provide guidance, support, and oversight for vendor projects within the Medicaid Enterprise.<sup>1</sup> The PRMP PgMO has created plan aids to assist in effectively and efficiently accomplishing executed projects. Project management involves applying best practice processes, tools, and techniques. The PRMP PgMO aids provide guidance for more predictable and consistent plans, processes, and practices, which will result in meeting the goals and objectives of PRMP and vendor partners, and meeting stakeholder expectations.

The Communications Management Plan Aid is a living document intended to provide PRMP vendors with guidance on PRMP’s expectations for conducting effective communications for PRMES projects to help manage project team and stakeholder expectations and prevent unchanneled communication.

PRMP expects vendors to develop and submit a Communications Management Plan for the project(s) for which they are providing services. Vendors should reference this document when creating their Communications Management Plans to help ensure PRMP’s expectations are met and that there is a common understanding between PRMP and the vendor regarding the expected methods and activities needed to ensure timely and appropriate collection, generation, dissemination, storage, and ultimate disposition of project information among project teams and stakeholders.

The PRMP PgMO will update this aid when new applicable standards (or versions of a standard) are released or when there are changes to PRMP policies that affect communications management.

If a vendor finds a contractual conflict with guidance provided in this plan aid, vendors should defer to their contract and/or any updated PRMP guidance.

To help ensure an understanding of key terms, Table 2 provides definitions for key terms found in the Communications Management Plan Aid.

**Table 2: Key Definitions**

Term	Definition
<b>Communications Management Plan</b>	Component of the project, program, or portfolio management plan that describes how, when, and by whom information about the project will be administered and disseminated
<b>Communication Methods</b>	A systematic procedure, technique, or process used to transfer information among project stakeholders

<sup>1</sup> In this aid, “vendor” refers to solution vendors that implement and maintain systems within the PRMES, as well as contractors and other entities that provide non-solution-related PRMES services to PRMP.

Term	Definition
<b>Project Communications</b>	The products of the planning process addressed by the Communications Management Plan
<b>Process</b>	A systematic series of activities directed toward causing a result such that one or more inputs will be acted upon to create one or more outputs
<b>Stakeholder</b>	An individual, group, or organization that may affect, be affected by, or perceive itself to be affected by a decision, activity, or outcome of a project, program, or portfolio

The Introduction section of this document provides information on the aid’s purpose and objectives, scope, approach, assumptions, constraints, dependencies, and standards and references.

## 1.1 Purpose and Objectives

Per *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)* Edition, the purpose of the Communications Management Plan is to describe how project communications will be planned, structured, implemented, and monitored for effectiveness.

*PMBOK® Guide* guidance indicates that the Communications Management Plan should address how the vendor will determine and manage:

- Stakeholder communication requirements
- Information to be communicated, including language, format, content, and level of detail
- Escalation processes
- Reason for the distribution of that information
- Time frame and frequency for the distribution of required information and receipt of acknowledgment or response, if applicable
- Person responsible for communicating the information
- Person responsible for authorizing release of confidential information
- Person or groups who will receive the information, including information about their needs, requirements, and expectations
- Methods or technologies used to convey the information, such as memos, email, press releases, or social media
- Resources allocated for communication activities, including time and budget
- Method for updating and refining the Communications Management Plan as the project progresses and develops, such as when the stakeholder community changes as the project moves through different phases

- Glossary of common terminology
- Flow charts of the information flow in the project, workflows with possible sequence of authorization, list of reports, meeting plans, etc.
- Constraints derived from legislation or regulation, technology, organizational policies, etc.

## 1.2 Scope

The Communications Management Plan Aid details expectations for the communication strategy for PRMES projects. It documents the preferred approach, processes, and tools for vendors to document how they will effectively communicate to the internal and external stakeholder groups impacted by PRMES implementations and process changes. Communication informs, but more importantly, it helps impacted users adopt PRMES implementations, system enhancements, and process changes. PRMP vendors should align their communication management processes and strategies with the information outlined in this Communications Management Plan Aid.

PRMP expects vendors to build a framework of project-specific communications management processes based on the standards outlined in this aid, as well as vendor experience and research. Refer to the Assumptions section of this document for guidance on PRMP expectations.

### 1.2.1 In Scope

Vendors should identify all the items related to communications management as part of the overall project. The communication strategy for PRMP incorporates multiple tools to reach the appropriate audiences, such as print, email, online collaboration, and face-to-face methods. Per the *PMBOK® Guide*, Seventh Edition, vendor communication plans should address the following for project communications activities and artifacts:

- Collection (e.g., responsibility, method)
- Creation (e.g., responsibility, process)
- Dissemination (e.g., technology, method, audience)
- Storage (e.g., location, access)
- Retrieval (e.g., standardized guidelines)
- Management (e.g., verifying information is appropriately generated and formatted, verifying information has been received by the intended audience)
- Tracking (e.g., status and changes)
- Disposition of project information

## 1.2.2 Out of Scope

Vendors shall list the items considered out of scope. Any scope exclusions shall align with the PRMP Request for Proposals (RFP), vendor proposal, and the final signed contract.

## 1.3 Approach

This section describes assumptions, constraints, dependencies, standards, and references. The Communications Management Plan Aid takes into consideration the assumptions, constraints, and dependencies for projects as described in this section.

### 1.3.1 Assumptions

Per the *PMBOK® Guide*, an assumption is a factor expected that is considered to be true, real, or certain, without proof or demonstration. The PRMP PgMO considered these assumptions related to the Communications Management Plan Aid, which apply to all PRMES projects:

- Vendors shall use their own communication processes to promote effective communication with PRMP staff, sponsors, vendors, contractors, and internal and external stakeholders. Vendors shall coordinate the process with the PRMP project managers and will provide transparency to PRMP. The vendor's own communications management practices shall adhere to any guidelines provided in this document.
- PRMP will have a complementary communications management process managed by the PRMP project lead and supported by the PRMP PgMO.
- In vendors' Communications Management Plan, vendors shall provide a detailed list of all assumptions as they pertain to communication requirements and standards compliance in communications management across the projects being executed.
- The Vendor will incorporate into their communication plans as necessary the need for native Puerto Rican Spanish speaking and writing abilities.

### 1.3.2 Constraints

Per the *PMBOK® Guide*, a constraint is a limiting factor that affects the execution of a project or process. No constraints are identified for this Communications Management Plan Aid.

Vendors shall identify constraints related, but not limited, to:

- Communication management methodology
- Data quality
- Tool access

### 1.3.3 Dependencies

Per the *PMBOK® Guide*, a dependency is a logical relationship between two activities, or between an activity and a milestone. For example, an activity that cannot begin until another activity has been finished has a dependency.

A co-dependency exists between the Communications Management Plan and the Stakeholder Engagement Plan. Stakeholders must first be identified and analyzed before communications can be planned or executed.

Per the *PMBOK® Guide*, all approved subsidiary management plans within the Project Management Plan (PMP) should be taken into consideration to make the Communications Management Plan consistent. The methodology outlined in other PMP components might influence how a vendor develops its Communications Management Plan.

### 1.3.4 Standards and References

This section provides an initial list of standards and references applicable to the Communications Management Plan Aid. Per the *PMBOK® Guide*, a standard is a document established by an authority, custom, or general consent as a **model or example**. A reference is a **source of information and context**.

Vendors shall develop a Communications Management Plan based on this PMP Aid and using the following industry standards:

- *PMBOK Guide®*, Sixth Edition, Project Management Institute® (PMI®), Chapter 10 – Project Communications Management

The PRMP project manager, PgMO, and vendors shall use the appropriate standards and references. The PRMP PgMO may incorporate additional standards and references if appropriate for the plan content. Vendors are expected to monitor applicable standards and industry best practices. Vendors shall work with PRMP to determine if updates are required to their Communications Management Plans when a new applicable standard (or version of a standard) is released.



## 2.0 Roles and Responsibilities

The following section describes the primary roles and responsibilities of the groups that consist of the project staff, sponsors, and stakeholders as they relate to communications management. The table below illustrates which stakeholders are Responsible (R), Accountable (A), Consulted (C), and Informed (I) (RACI), defined as follows:

- **Responsible:** This stakeholder does the work to complete the task area. This stakeholder may also serve as an accountable stakeholder for some task areas.
- **Accountable:** This stakeholder delegates work and is the last one to review the task area before it is deemed complete. According to best practice, one stakeholder (or the lowest number possible) should be deemed accountable.
- **Consulted:** This stakeholder provides input based on how the task area will impact the future work of the project and the stakeholder’s expertise.
- **Informed:** This stakeholder should be aware of the progress associated with the task area.

Table 3 aims to provide insight into how PRMP and the PgMO will interact with project communications management processes and responsibilities. The vendor should propose its own stakeholder groups and RACI approach according to its team’s organizational structure. This matrix can be edited from this baseline if the deviations are discussed with PRMP and the PgMO to determine what is appropriate for the project.

**Table 3: RACI Matrix for Communication Management**

Task Area	PRMP Leadership	PRMP Program Manager	PRMP PgMO	PRMP Project Lead	Vendor (Vendor to Elaborate)
Plan Communication	C	C	C	A	R
Manage Communication	C	C	C	A	R
Monitor Communication	I	I	I	A	R

The following subsections describe each stakeholder group.

### 2.1 PRMP Leadership

PRMP is the Medicaid agency responsible for administering the Medicaid Program in Puerto Rico, including the Children’s Health Insurance Program (CHIP), and a waiver-based section 1915(a) program. PRMP is an agency within the Puerto Rico Department of Health (PRDoH). While leadership roles might vary between projects, in general, the PRMP Leadership stakeholder group refers to the PRDoH Secretary, PRMP Executive Director, and the PRMP Executive Steering Committee.

## 2.2 PRMP Program Director

The PRMP Program Director is a member of the PRMP PgMO.

An important aspect of the PRMP Program Director's role is to assess communication effectiveness among PRMES projects, across PRMP, and among external stakeholder groups. The PRMP Program Director will assess potential communication-related findings in a project that may have broader implications.

## 2.3 PRMP Project Lead

PRMP appoints a Project Lead to oversee each of the PRMES projects under PRMP programs utilizing the defined PRMP PgMO processes. The PRMP Project Lead collaborates with the vendor's Project Manager to help ensure the project execution is in accordance with the approved schedule and processes defined by the PRMP PgMO.

The PRMP Project Lead, PRMP PgMO, and the vendors shall be the initial implementers of the communications management processes defined in this plan.

The PRMP Project Lead shall have joint responsibility with vendors to maintain a communication framework that helps to ensure that the correct individuals receive the required information they need in a timely manner throughout the life cycle of a project.

## 2.4 PRMP PgMO

PRMP has designated the PgMO to provide program management guidance and collaborative oversight for its IT initiatives. As part of this responsibility, the PRMP PgMO has developed this Communications Management Plan Aid as a guide for project-specific Communications Management Plans.

Each vendor shall create an individual Communications Management Plan and shall collaborate with the PRMP PgMO to gain approval of the vendor's process.

## 2.5 Vendors

The vendors implementing one or more IT projects or supporting other PRMP activities are responsible for developing a project-specific Communications Management Plan, obtaining PRMP and PRMP PgMO approval of the plan, and managing under that plan. The vendor should further elaborate and divide its team into stakeholder groups in this section.

Under the assumptions described in this document, PRMP anticipates that vendors will coordinate communication efforts with other management plans to help ensure project effectiveness. Vendor communication plans must adhere to requirements defined in the vendor contract with PRMP.

## 3.0 Plan Communication

The *PMBOK® Guide*, indicates that top project managers spend about 90 percent of their time on a project in communicating.

To maximize opportunities for project success, PRMP Project Leads and vendors must not only communicate collaboratively and transparently with PRMP as well as between vendors but also must make sure that project information is efficiently and effectively collected, documented, communicated, and stored.

Communications management focuses on a variety of communication methods to help ensure the employment of an appropriate mix of push and pull communications on a project. Push methods send (or “push”) the project information directly to key stakeholder audiences (e.g., emails and face-to-face meetings), while pull methods help obtain (or “pull”) project information on an as-needed basis (e.g., accessing a sharepoint).

Per the *PMBOK® Guide*, project communications management consists of two parts:

- Developing a strategy to ensure effective communication for stakeholders
- Executing the necessary activities to implement the communication strategy

Communications management provides a framework guide that links the PRMP staff, leaders, vendors, and other internal and external stakeholders through a variety of communications methods. This framework helps to ensure that the correct individuals receive the required information they need in a timely manner throughout the life cycle of a project.

### 3.1 Communications Management Planning Overview

Project communication includes the processes necessary to help ensure that the information needs of the project and its stakeholders are met through the development of effective and efficient communications strategies.

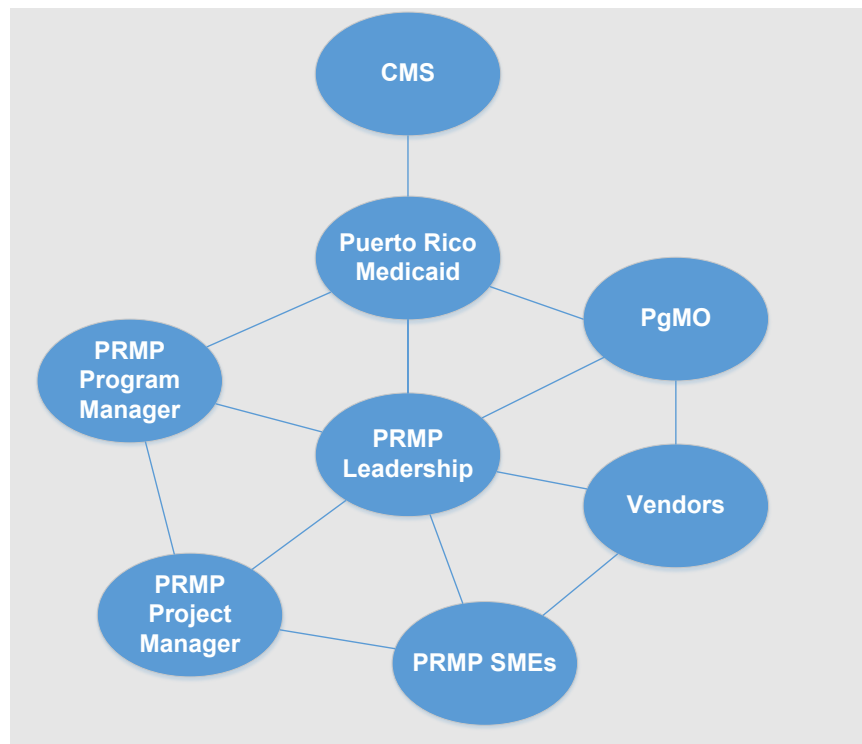
The greater the number of project stakeholders, the greater the number of communication channels the vendor and PRMP project managers need to manage. The potential maximum number of communication channels in a project is dependent on the number of stakeholders involved. One formula for calculating the potential number of communication channels is  $N(N-1)/2$ , where N is the number of project stakeholders. By this formula, if five stakeholders are associated with a project, the maximum number of communication channels is 10.

The vendor and PRMP project leads should limit the actual number of communication channels to those that are necessary. The vendor and PRMP project leads should also make sure that the substance of communications over those channels is effective to assist in meeting the project objectives. The vendor’s Communications Management Plan should describe how the vendor plans to accomplish these objectives.

Figure 1 provides an example of a PRMP project communication network. Please note that this is not an exhaustive depiction of involved stakeholders for the PRMES, and each vendor's

Communications Management Plan will likely require tailoring for a specific project's stakeholders.

**Figure 1: Vendor and PRMP Project Leads' Communication Channels**



The *PMBOK® Guide* outlines the processes for communications management in three areas. Figure 2 illustrates the communications management processes, and the associated steps are described in the following subsections.

**Figure 2: Communication Management Processes**



### 3.1.1 Plan Communications Management

The first step of planning communication focuses on developing communication requirements and standards relevant to project needs and stakeholder capabilities. The foundation of the communications approach stems from the understanding that effective communication comes from addressing the respective needs of different stakeholders across a project. Key insights from a stakeholder assessment enable a project team to tailor the communications approach for

the internal and external groups respectively. The stakeholder assessment is outlined within the Stakeholder Engagement Plan.

In their Communications Management Plans, vendors shall document their approach for developing communication requirements (with a list of sources) and establishing a tailored communication strategy for both internal and external groups.

Additionally, vendors shall document the communication technology that will be used to transfer information among project stakeholders and the factors that will influence the choice of communication technology.

Vendors shall specifically discuss plans for communicating sensitive and/or confidential information.

### 3.1.2 Manage Communications

Managing communications is the process of ensuring timely and appropriate collection, creation, distribution, storage, retrieval, management, monitoring, and the ultimate disposition of project information throughout the project. This process promotes efficient and effective information flow among project teams and stakeholders. PRMP expects a vendor’s Communications Management Plan to include a structured roadmap for communications required for the audience, senders, timing, delivery channels, and key messages throughout a project.

#### 3.1.2.1 Communication Schedule

In their individual Communications Management Plans, vendors should include a list of recommended communication activities by name, description, target audience, key message, delivery method, communication frequency, project phase, target date, sender, and reviewer/approver.

The communication schedule that each vendor develops shall include a combination of communication tools used as well as PRMP-recommended tools used to drive communications.

Table 4 provides communication schedule component expectations and descriptions. The PgMO has provided an example for a project-level monthly status report. This is not meant to be prescriptive in terms of content, but to illustrate how the fields in a communication schedule can be used. The vendor may create its own format for the communication schedule as long as the required components are included.

**Table 4: Communication Schedule Components**

Component	Component Description	Example
<b>Communication Name</b>	The title of the communication	Monthly Status Report
<b>Communication Description</b>	A full description of the communication and objective	Describes risks, issues, accomplishments, upcoming activities, milestones, overall project

Component	Component Description	Example
		health, and impact to target audience
<b>Target Audience</b>	The targeted audience (internal and external stakeholders) for communication	PRMP
<b>Key Message</b>	The key message being communicated	Project updates and their impact on the target audience of this message
<b>Method of Communication</b>	The media method used to deliver the communication	PowerPoint report distributed via email
<b>Frequency</b>	The date and/or frequency of the communication	Monthly
<b>Project Phase</b>	When communication is distributed during the project phase	Monthly throughout all project phases (ongoing)
<b>Target Delivery Date</b>	The deadline for the communication	The 10 <sup>th</sup> of each month
<b>Reviewer/Approver</b>	The person responsible for reviewing and approving the communication	PRMP Project Manager
<b>Sender</b>	The person who delivers the communication	Vendor Project Manager

### 3.1.3 Monitor Communications

The goal of communication monitoring is to help ensure project and stakeholder communication needs are met. This process helps to assess the performance of information flow as defined in the Communications Management Plan and Stakeholder Engagement Plan. The practice of monitoring communications helps to determine if the established communication plan is effective in supporting project success and stakeholder performance. Monitoring communication is important to the success of a project.

Vendors should work closely with PRMP to develop and deliver clear communication channels. Vendor communication plans should include a process to monitor communication to help ensure alignment with PRMP requirements and expectations. Some suggestions for monitoring communications are:

- Customer satisfaction survey
- Collection of lessons learned
- Observations of the team
- Data revision of the issue log
- Evaluation of stakeholder engagement (e.g., responsiveness)

Vendors are not limited to these monitoring tactics and may propose other processes based on their specific projects, stakeholders, and available tools.

## 3.2 Communication Approval

Information on any project requires frequent, informative, and timely communications to stakeholders to help achieve success.

PRMP vendors should include a communication approval process in their communication plans.

### 3.2.1 Outward Communication

Outward communication refers to communicating with stakeholders outside the project from within the department and includes the community partners of PRMP. Outward communication is different from the other forms of communication types because it goes beyond just informing. This communication method has a more direct impact on the support and acceptance of project goals. External stakeholders must receive the appropriate message at the correct time to keep the PRMP and its external stakeholders informed of the impact a project might have on them.

PRMP expects to approve outward communications prior to distribution unless otherwise indicated. PRMP review and approval of external project reporting before release is imperative to help ensure:

- Appropriate resources validate the information
- Principles, objectives, and key messages are consistent with PRMP's vision
- Communication documents are reviewed in a timely manner
- Review points are consistent
- Reviews and edits are performed by the proper people
- Appropriate safeguards are in place to maintain compliance with Health Insurance Portability and Accountability Act (HIPAA) of 1996 regulations

A thorough review and approval process helps ensure the information communicated is clear and has the intended message and impact. Having a structured process in place helps ensure the timeliness and delivery of the outlined communications.

## 3.3 Information Channels

Successful communication management means producing a variety of well-documented and organized communications throughout the project and using specific communication channels for engagement. The methods PRMP prefers for communication management include:

- Emails
- In-person meetings with subsequent distribution of meeting notes

- Virtual meetings (e.g., via Zoom, Microsoft Teams) with subsequent distribution of meeting notes and powerpoint slides
- Project status reports at a frequency defined in the vendor's contract with PRMP, and a format defined as an appendix to the vendor's Communications Management Plan if not otherwise requiring PRMP feedback and approval
- Meeting recaps via email that include action items and decisions
- Stand-up meetings (as needed)



## Appendix A: Acronyms and Abbreviations

**Table 5: Common Acronyms and Abbreviations**

Term/Abbreviation	Definition/Explanation
ASES	Administración de Seguros de Salud
CHIP	Children's Health Insurance Program
EOMC	Enterprise Objective Monitoring and Control
HIPAA	Health Insurance Portability and Accountability Act of 1996
IT	Information Technology
PgMO	Program Management Office
<i>PMBOK® Guide</i>	<i>A Guide to the Project Management Body of Knowledge</i>
PMI®	Project Management Institute®
PMP	Project Management Plan
PRDoH	Puerto Rico Department of Health
PRMES	Puerto Rico Medicaid Enterprise Systems
PRMP	Puerto Rico Medicaid Program
RACI	Responsible, Accountable, Consulted, and Informed
RFP	Request for Proposals
SOW	Statement of Work

# Enterprise Objective Monitoring and Control Services

Cost Management Plan Aid

V1.0



GOVERNMENT OF PUERTO RICO

Department of Health  
Medicaid Program

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22 June 2022

# Table of Contents

<b>Section</b>	<b>Page</b>
Table of Contents.....	i
Revision History .....	1
1.0 Introduction .....	2
1.1 Purpose and Objectives.....	3
1.2 Scope .....	3
1.2.1 In Scope.....	4
1.2.2 Out of Scope .....	4
1.3 Approach .....	5
1.3.1 Assumptions.....	5
1.3.2 Constraints .....	5
1.3.3 Dependencies .....	5
1.3.4 Standards and References.....	6
2.0 Roles and Responsibilities.....	7
2.1 PRMP Leadership.....	8
2.2 PRMP Program Director .....	8
2.3 PRMP Project Lead .....	8
2.4 PRMP PgMO .....	8
2.5 Vendors .....	8
3.0 Cost Management Approach.....	10
3.1 Cost Estimation.....	10
3.2 Budget Determination .....	11
3.3 Project Budget .....	11
3.4 Cost Control.....	12
3.5 Cost Performance .....	13
3.6 Cost Control Monitoring, Controlling, and Reporting .....	13
Appendix A – Acronyms List .....	15

## Revision History

The Puerto Rico Medicaid Program's (PRMP's) Program Management Office (PgMO) will store the approved Cost Management Plan Aid and any approved revisions on the PgMO SharePoint site or in an alternative location specified by PRMP. PRMP and the PRMP PgMO will make the plan available to project stakeholders as needed. Currently, BerryDunn provides PRMP PgMO services.

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**Table 1: Revision History**

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6/22/2022	V1.0	Initial delivery	The PgMO Team

## 1.0 Introduction

The PRMP is committed to successful projects for the residents of Puerto Rico and has established a Puerto Rico Medicaid Enterprise Systems (PRMES) PgMO to provide guidance, support, and oversight for vendor projects within the Medicaid Enterprise.<sup>1</sup> The PRMP PgMO has created plan aids to assist in effectively and efficiently accomplishing executed projects. Project management involves applying best practice processes, tools, and techniques. The PRMP PgMO aids provide guidance for more predictable and consistent plans, processes, and practices, which will result in meeting the goals and objectives of PRMP and vendor partners, and in meeting stakeholder expectations.

The Cost Management Plan Aid is a living document intended to provide PRMP vendors with guidance on PRMP’s expectations regarding management of project costs. PRMP expects vendors to develop and submit a Cost Management Plan for the project(s) for which they are providing services. Vendors should reference this document when creating their Cost Management Plans to help ensure PRMP’s expectations are met and that there is a common understanding between PRMP and the vendor regarding cost management. The PRMP PgMO will update this Cost Management Plan Aid when new applicable standards (or versions of a standard) are released or when there are changes to PRMP policies that affect cost management.

If a vendor finds a contractual conflict with guidance provided in this plan aid, vendors should defer to their contract and/or any updated PRMP guidance.

The Introduction section of this document provides information on the Cost Management Plan Aid’s purpose and objectives, scope, standards, assumptions, dependencies, and constraints. To help ensure an understanding of project cost, Table 2 provides definitions for processes involved in planning estimating, budgeting, financing, funding, managing, and controlling costs.

**Table 2: Cost Management Definitions**

Term	Definition
<b>Cost Management</b>	The process of defining how the project costs will be estimated, budgeted, managed, monitored, and controlled.
<b>Cost Estimation</b>	The approximation of funds needed to complete project activities.
<b>Budget Determination</b>	The process of aggregating the estimated costs of individual activities to establish a baseline for the project budget.
<b>Cost Control</b>	The process of monitoring the status of project spending, updating the project budget, and managing changes to the budget baseline on an ongoing basis.

<sup>1</sup> In this aid, “vendor” refers to solution vendors that implement and maintain systems within the Medicaid Enterprise Solution (MES), as well as contractors and other entities that provide non-solution-related MES services to PRMP.

<sup>2</sup> Unless otherwise noted, all references to the *PMBOK Guide*<sup>®</sup> are for the seventh edition.

Term	Definition
<b>Cost Performance</b>	The process of measuring and controlling project costs.

## 1.1 Purpose and Objectives

The purpose of the Cost Management Plan Aid is to:

- Document the processes for managing costs, including coordinating with PRMP Project Managers to report on, manage, and control costs, including enterprise environmental factors.
  - Three reasons to include enterprise environmental factors in PRMP projects are:
    - Organizational culture and structure can influence cost management.
    - Market conditions for products and services that are available in regional and global markets greatly influence resource costs.
    - Inflation needs to be understood and built into the budget and cost estimate process.

The objectives of the Cost Management Plan Aid are to:

- Provide guidance to PRMES vendors in developing their Cost Management Plans. PRMES vendor Cost Management Plans shall include provisions to help ensure all costs and cost variances are transparent to PRMP.
- Provide guidance in the development of cost planning, cost management, cost control and changes, cost reconciliation, reporting, and metrics.
- Provide a process to identify who is responsible for managing costs.
- Define a process to facilitate communication among PRMP stakeholders and minimize uncertainty around costs.
- Establish consistency across all PRMP Medicaid Enterprise projects and initiatives related to cost management.

## 1.2 Scope

The Cost Management Plan shall address how the project cost will be planned, structured, and controlled. As part of cost management, vendors are required to:

- Define process steps
- Document when and how often they will conduct the cost management process throughout the life cycle of the project
- Define methods for calculating and monitoring cost-related progress, including, but not limited to:

- Units of measure
- Level of accuracy
- Control thresholds
- Rules for performance measurement
- Define cost reporting and formats, including, but not limited to, mechanisms for reporting cost-related progress

The Cost Management Plan should also include:

- **Templates:** All documents that standardize information capture and communication related to cost management
- **Processes:** Descriptions about how vendors estimate and manage costs, including tracking, management, quality processes, reporting, and tools used
- **Standards:** Descriptions of the industry standards vendors employ to manage risks and issues

### 1.2.1 In Scope

Vendors should identify all the items subject to cost management as part of the overall project. This pertains to the entirety of the project and includes all changes that impact scope, schedule, and cost. Vendor-specific Cost Management Plans shall include content describing:

- Cost estimating methods
- Reporting methods
- Cost budgeting tools
- Developing the budget
- Resource planning
- Change requests (CRs)
- Invoicing
- Updating, monitoring, and controlling methods

### 1.2.2 Out of Scope

Vendors should list the items related to cost management considered out of scope. Any scope exclusions must be in alignment with the request for proposals (RFP), vendor's proposal, and the final signed contract as necessary.

## 1.3 Approach

This section describes assumptions, dependencies, constraints, standards, and references. The Cost Management Plan takes into consideration the assumptions, dependencies, and constraints for the system implementation projects as described in this section.

### 1.3.1 Assumptions

Per the *Guide to the Project Management Body of Knowledge® (PMBOK® Guide)*, an assumption is a factor expected to be in place or to be in evidence. The following are assumptions considered in the development of the Cost Management Plan Aid and are applicable to all PRMP projects. Vendors should coordinate the process with PRMP Project Managers and will provide transparency to PRMP. The vendor's own cost management process will adhere to guidelines provided in this document.

- The vendor will have cost budgeting tools and reporting methods to support planning and tracking spending on a monthly basis
- The vendor will compare planned spending to actual spending at multiple levels of detail over multiple time periods
- The vendor will use Earned Value Management (EVM) or another vendor suggested method for measuring and controlling the project costs
- The vendor will provide a dashboard that details, at a minimum, budgeted-to-actual figures, estimated cost to completion, and forecasts of remaining costs
- The vendor will manage costs throughout the project's life cycle
- The vendor will have regularly scheduled budget status meetings
- PRMP PRMES projects are expected to follow this plan aid to help ensure standardization

### 1.3.2 Constraints

Per the *PMBOK Guide®*, a constraint is a limiting factor that affects the execution of a project or process. Vendors should identify constraints in their Cost Management Plan relating, but not limited, to:

- Cost management methodology, including, but not limited to, tools and data sources
- Data quality
- Tool access

### 1.3.3 Dependencies



Per the *PMBOK Guide*<sup>®</sup>, a dependency is a logical relationship between two activities, or between an activity and a milestone. For example, an activity that cannot begin until another activity has been finished has a dependency.

This Cost Management Plan Aid has dependencies on the following plans listed, but not limited to:

- **Project Management Plan:** The Project Management Plan documents the tasks, responsibilities, and supporting activities related to project implementation.
- **Quality Management Plan:** The Quality Management Plan documents the necessary information required to manage project quality from project planning to delivery. It defines a project's quality policies, procedures, criteria for and areas of application, along with roles, responsibilities, and authorities.
- **Risk and Issue Management Plan:** The Risk Management Plan describes how a project team will identify, analyze, and monitor risks.
- **Change Management Plan:** The Change Management Plan defines the activities, roles, and tools used to manage and control change during each stage of the project.
- **Schedule Management Plan:** The Schedule Management Plan defines the processes required to manage timely completion of the work needed to complete a project.
- **Scope Management Plan:** The Scope Management Plan includes two components:
  - Product scope is a collection of functions and features that characterize a product, service, or result.
  - Project scope is the work performed to deliver the product, service, or result related to performance management.

### 1.3.4 Standards and References

This section provides an initial list of standards and references applicable to the Cost Management Plan. Per the *PMBOK Guide*<sup>®</sup>, a standard is a document established by an authority, a custom, or general consent as a model or an example. A reference is a source of information and context.

The PRMP PgMO and PRMP vendors are required to use the appropriate standards and references. The PRMP PgMO and PRMP vendors might incorporate additional standards and references if appropriate for the plan content.

Vendors should develop a Cost Management Plan based on this plan aid and using the following industry standards:

- *A Guide to the Project Management Body of Knowledge (PMBOK*<sup>®</sup>*), Seventh Edition, Project Management Institute*<sup>®</sup>*, Chapter 7.1 Project Cost Management*
- *Practice Standard for Earned Value Management, Second Edition, PMI*<sup>®</sup>

Additionally, vendors may wish to consult the following reference:

- Generally Accepted Accounting Principles (GAAP) issued by the Financial Accounting Standards Board (FASB)

The Cost Management Plan should be developed in accordance with applicable standards and industry best practices. The Enterprise Project Management Office (ePMO) and PRMP vendors shall work with PRMP to determine if updates are required to the Cost Management Plans when a new applicable standard (or version of a standard) is released.

## 2.0 Roles and Responsibilities

This section describes the primary roles and responsibilities of the groups that consist of the project staff, sponsors, and stakeholders as they relate to cost management. Table 3 illustrates which stakeholders are responsible (R), accountable (A), consulted (C), and informed (I) (RACI), defined as:

- **Responsible:** This stakeholder does the work to complete the task area. This stakeholder may also serve as an Accountable stakeholder for some task areas.
- **Accountable:** This stakeholder delegates work and is the last one to review the task area before it is deemed complete. According to best practice, one stakeholder (or the lowest number possible) should be deemed Accountable.
- **Consulted:** This stakeholder provides input based on how the task area will impact the future work of the project and the stakeholder’s expertise.
- **Informed:** This stakeholder should be aware of the progress associated with the task area.

Table 3 aims to provide insight into how PRMP and the PgMO will interact with project cost management processes and responsibilities. The vendor should propose its own stakeholder groups and RACI matrix according to its team’s organizational structure. Table 3 provides vendors with the RACI matrix for PRMP and/or PgMO responsibilities. This matrix can be edited from this baseline if deviations are discussed with PRMP and the PgMO to determine what is appropriate for the project.

**Table 3: RACI Matrix for Project Cost Management**

Task Area	PRMP Leadership	PRMP Program Director	PRMP PgMO	PRMP Project Lead	Vendor
Plan Cost Management	C	C	I	A	R
Estimate Costs	I	I, C	I	A	R
Determine Budget	I	I, C	I	A	R
Control Costs	I	I, R	I	A	R
Cost Change Control	C	C	I	A	R
Monitoring/Reporting	I	I	I	A	R

The following subsections describe each stakeholder group.

## 2.1 PRMP Leadership

PRMP is the Medicaid agency responsible for administering the Medicaid Program in Puerto Rico, including the Children's Health Insurance Program (CHIP), and a waiver-based section 1915(a) program. PRMP is an agency within the Puerto Rico Department of Health (PRDoH). While leadership roles might vary between projects, in general, the PRMP Leadership stakeholder group refers to the PRDoH Secretary, PRMP Executive Director, and the PRMP Executive Steering Committee.

## 2.2 PRMP Program Director

The PRMP PRMES Program Director is a member of the PRMP PgMO.

An important aspect of the PRMP Program Director's role is to monitor and control project costs for all PRMES projects.

## 2.3 PRMP Project Lead

PRMP appoints a Project Lead to oversee each of the PRMES projects under the PRMP programs utilizing the defined PRMP PgMO processes. The Project Lead collaborates with the vendor's Project Manager to help ensure the project execution and implementation are in accordance with the approved schedule and processes defined by the PRMP PgMO.

The PRMP Project Lead will have joint responsibility with the vendor Project Manager (PM) for estimating, monitoring, controlling, and verifying cost with the PRMP PgMO.

## 2.4 PRMP PgMO

PRMP has designated the PgMO to provide program management guidance and collaborative oversight for its information technology initiatives. As part of this responsibility, the PRMP PgMO has developed this Cost Management Plan Aid as a guide for project-specific Cost Management Plans.

Each vendor shall create an individual Cost Management Plan to manage costs and shall collaborate with the PRMP PgMO to gain approval of their process. The PRMP PgMO is responsible for helping to identify and document cost management and budgeting processes used for communicating with the project team; however, the PRMP Project Lead and vendor(s) have primary responsibility for identifying and documenting all cost management approaches.

## 2.5 Vendors

The vendors supporting PRMP in one or more information technology projects or supporting other PRMP activities are responsible for developing a project-specific Cost Management Plan, obtaining PRMP and PRMP PgMO approval of the plan, and managing costs in accordance with that plan. The vendor Project Manager is responsible for reporting costs to the PRMP project lead and the PRMP PgMO.

In accordance with the assumptions described in this document, PRMP anticipates that vendors will manage and control costs according to their PRMP-approved Cost Management Plan. The vendor Project Manager will have joint responsibility with the PRMP Project Lead for defining, developing, monitoring, controlling, and verifying change.

### 3.0 Cost Management Approach

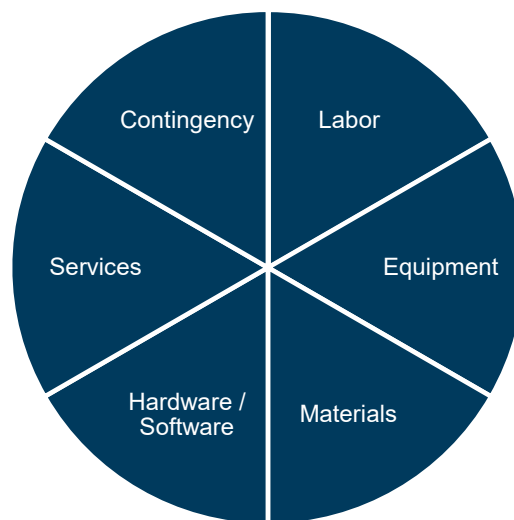
Cost management is the process of defining how the project costs will be estimated, budgeted, managed, monitored, and controlled. Cost management includes information for products and services, and how cost information is recorded, analyzed, reported, and used in decision-making. The vendor’s plan shall provide an approach that includes:

- Aligning with the *PMBOK Guide*® for cost management
- Estimating the overall project budget
- Determining the budget requirements
- Comparing expenditures to approved budget
- Assuring that all necessary financial information is available to produce accurate and timely reports to PRMP, Project Leads, and PRMP PgMO to manage and control costs

#### 3.1 Cost Estimation

Cost estimation involves developing an approximation of the cost of resources needed to complete the project activities. It is an iterative process of collecting and analyzing data, and applying quantitative models, techniques, tools, and databases. Cost estimates are a prediction based on information known at a given point in time. Cost estimates include the identification and consideration of costing alternatives to initiate and complete the project. Costs are estimated for all resources that will be charged to the project and should include considerations for cost trade-offs and risks. Figure 1 displays cost estimation attributes.

**Figure 1: Cost Estimation Attributes**



Cost estimates should be prepared using the best information available at the time of the estimate. This timeframe for each of these estimates must be documented and shared with PRMP to provide further context behind each estimate and to serve as a reference if these estimates need to be revisited. The basis for the estimate must also be fully documented and determine whether the costs in each account are fixed or variable. Metrics and variance analysis must be applied to these components throughout the project life cycle for tracking, re-estimating, and adjusting the budget if needed.

### 3.2 Budget Determination

Budget determination involves the process of aggregating estimated costs of individual activities or work packages to establish an authorized cost baseline. The steps are dependent upon the cost estimations, task durations, and allocated resources. A budget baseline should be established for the entire project in an amount equal to the total cost of ownership calculated during cost estimation. This forms the baseline for cost control.

### 3.3 Project Budget

The project budget is a total sum of money allocated for a particular purpose of the project for a specific period. The project budget controls project costs within the approved budget to deliver the expected project goals. Budgeting serves as a control mechanism where actual costs can be compared with and measured against the project budget. The vendor PM is responsible for estimating the budget required to complete budget activities; estimating costs; developing the budget; and updating, monitoring, and controlling costs. The vendor PM can use manual or automated tools to generate the budget estimate. Budgeting tools may be simple spreadsheets or complex budget estimating tools. Every month, the vendor PM will review project expenditure reports to implement changes to keep the project on track. At minimum, vendors should track the attributes indicated in Table 4.

**Table 4: Project Budget Attributes**

Project Budget Attribute	Description
<b>Project Title</b>	Name of the project
<b>Summary Cost of the Project</b>	Total budgeted and actual costs during the period
<b>Total Budgeted Cost</b>	Total budgeted costs allocated to complete all the activities and work associated with the project
<b>Total Actual Cost</b>	Total costs incurred for the actual work completed
<b>Total Variance</b>	The difference between total budgeted and actual costs
<b>Budgeted Costs</b>	All budgeted costs will be divided into the following categories: <ul style="list-style-type: none"> <li>• Material Cost: Calculated by the multiplying the number of units within the cost per unit</li> <li>• Labor Cost: Calculated by multiplying the number of hours with the cost per hour</li> </ul>

Project Budget Attribute	Description
	<ul style="list-style-type: none"> <li>Fixed Cost: Costs incurred against fixed expenses</li> <li>Miscellaneous Expenses: Other incurred costs</li> </ul>
<b>Budgeted Amount</b>	Total amount of money that is allocated for the project
<b>Actual Cost</b>	Actual cost incurred for each budget line item
<b>Cost Variance</b>	The difference between a budgeted and actual cost for each budget expenditure
<b>Reporting Period</b>	Time interval for which the actual project performance will be compared to the planned performance
<b>Completed Milestones and Deliverables (if applicable)</b>	Milestones, deliverables, and their associated costs (if applicable) completed thus far.
<b>Upcoming Milestones and Deliverables (if applicable)</b>	Milestones, deliverables, and their associated costs (if applicable) coming up in the next 2-3 months.

### 3.4 Cost Control

Cost control is the process of monitoring the status of project spending, updating the project budget, and managing changes to the budget baseline. Updating the budget involves recording actual costs spent to date, as well as tracking costs that are approved but not realized. Project cost control includes, but is not limited to:

- Influencing factors that create changes to the cost baseline
- Managing the actual changes as they occur
- Monitoring cost performance to isolate and understand variances from the approved cost baseline
- Monitoring work performance against funds expended
- Preventing unapproved changes from being included in the reported cost or resource usage
- Informing appropriate stakeholders of all approved changes and associated cost
- Bringing expected cost overruns within acceptable limits
- Making adjustments to the baselined budget to address any overages in spending should occur through the CR process.

In most cases, the vendor PM will be responsible for managing and reporting on the project costs throughout the project. During the monthly project status meeting, the PM will present and review the project’s cost performance and it will be measured using earned value analysis (EVA). EVA is a quantitative technique used to evaluate project performance by computing schedule and cost variances to provide an early and accurate picture of the contract status. EVA allows the vendor to define thresholds for the project and determine what actions will be

taken if the project triggers a control threshold. The vendor can propose an alternative cost management quantitative technique or an alternative measurement of the project cost performance approved by PRMP.

### 3.5 Cost Performance

The approach for cost performance is to use EVM for measuring and controlling costs. EVM integrates project scope, cost, and schedule to help vendors assess and measure project performance and progress. EVM provides an early warning of performance problems and allows the vendor to communicate objective progress as defined by the PRMP PgMO. The vendor can propose an alternative cost performance technique or alternative cost performance measurements approved by PRMP.

The vendor will measure progress against the budget (or planned) value of work scheduled, the actual work completed, and the earned value of the physical work completed. The vendor shall identify cost variances outside of the thresholds set forth in the vendor’s Cost Management Plan, along with any planned corrective actions. CRs triggered by project cost overruns will be identified and tracked in accordance with the Change Management Plan Aid. Table 5 depicts the EVM attributes vendors should use to measure cost performance.

**Table 5: EVM Measures**

EVM Attributes	Description
<b>Planned Value (PV)</b>	Total budget or planned budget to be spent on work performed
<b>Earned Value (EV)</b>	Budget authorized for completed work
<b>Actual Cost (AC)</b>	Direct and indirect costs incurred for work performed
<b>Schedule Variance (SV)</b>	Calculation of actual progress against expected progress
<b>Cost Variance (CV)</b>	Difference between actual costs and budgeted costs
<b>Estimated Cost (EC)</b>	Projection of the amount of costs that will be incurred
<b>Schedule Performance Index (SPI)</b>	Measure of schedule efficiency expressed as a ratio of EV to PV
<b>Cost Performance Index (CPI)</b>	Measure of cost efficiency of budgeted resources expressed as a ratio of EV to AC
<b>Forecasting</b>	Estimation or prediction of all cost information to determine future trends
<b>Trend Analysis</b>	Measure of project performance over time, often displayed with graphs

### 3.6 Cost Control Monitoring, Controlling, and Reporting

The ePMO is responsible for the development of a standardized budget, by project, to be approved by PRMP. The reporting tools should retain a historical record of cost measures and



shall be monitored by the Project Lead, PRMP, and the PRMP PgMO in accordance with the assumptions in this document. The ePMO will collaborate with PRMP PgMO and the PRMP Project Manager to plan, monitor, and control costs in reports agreed upon with PRMP.

## Appendix A – Acronyms List

Table 7 presents a list of the acronyms and their definitions used in this document.

**Table 6: Acronyms**

Term or Acronym	Definition
<b>AC</b>	Actual Cost
<b>CHIP</b>	Children's Health Insurance Program
<b>CPI</b>	Cost Performance Index
<b>CR</b>	Change Request
<b>CV</b>	Cost Variance
<b>EOMC</b>	Enterprise Objective Monitoring and Control
<b>EC</b>	Estimated Cost
<b>ePMO</b>	Enterprise Project Management Office
<b>EV</b>	Earned Value
<b>EVA</b>	Earned Value Analysis
<b>EVM</b>	Earned Value Management
<b>FASB</b>	Financial Accounting Standards Board
<b>GAAP</b>	Generally Accepted Accounting Principles
<b>MES</b>	Medicaid Enterprise Systems
<b>PgMO</b>	Program Management Office
<b>PM</b>	Project Manager
<b>PMBOK®</b>	A Guide to the Project Management Body of Knowledge®
<b>PMP</b>	Project Management Plan
<b>PRDoH</b>	Puerto Rico Department of Health
<b>PRMES</b>	Puerto Rico Medicaid Enterprise Systems
<b>PRMP</b>	Puerto Rico Medicaid Program
<b>PV</b>	Planned Value
<b>RACI</b>	Responsible, Accountable, Consulted, Informed
<b>RFP</b>	Request For Proposals
<b>SME</b>	Subject Matter Expert
<b>SPI</b>	Schedule Performance Index
<b>SV</b>	Schedule Variance

# Enterprise Objective Monitoring and Control Services

Deliverable Management Plan Aid  
V1.0



GOVERNMENT OF PUERTO RICO

Department of Health  
Medicaid Program

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# Table of Contents

<b>Section</b>	<b>Page</b>
Table of Contents.....	i
Revision History .....	1
1.0 Introduction .....	2
1.1 Purpose and Objectives.....	2
1.2 Scope .....	3
1.2.1 In Scope.....	3
1.2.2 Out of Scope .....	3
1.3 Approach .....	3
1.3.1 Assumptions.....	3
1.3.2 Constraints .....	3
1.3.3 Dependencies .....	4
1.3.4 Standards and References.....	5
2.0 Roles and Responsibilities .....	6
2.1 PRMP Leadership .....	7
2.2 PRMP Program Director .....	7
2.3 PRMP Project Lead .....	7
2.4 PRMP PgMO.....	7
2.5 Vendors .....	7
2.6 PRMP SMEs.....	8
3.0 Overview of Deliverable Management.....	9
4.0 Deliverable Review Overview.....	10
4.1 DED Review Process .....	12
4.2 Project Deliverable Review Process .....	14
4.3 Comment Log.....	<b>Error! Bookmark not defined.</b>
4.4 Deliverable Log.....	15
4.4 Deliverable Status and Progress Reporting .....	16

5.0 Document Management ..... 17

Appendix A: Acronyms List ..... 18

Appendix B: Deliverable Versioning ..... 19

## Revision History

The Puerto Rico Medicaid Program’s (PRMP’s) Program Management Office (PgMO) will store the approved Deliverable Management Plan Aid and any approved revisions will be stored on the PRMP PgMO SharePoint site or in an alternative location specified by PRMP. PRMP and the PRMP PgMO will make the plan available to project stakeholders as needed. Currently, BerryDunn provides PRMP PgMO services.

Table 1 presents the revision history for this document. When changes occur, the PRMP PgMO will increment the version number and the date. The PRMP PgMO will record the name of the person or entity making the change and a description of the change in the revision history.

**Table 1: Revision History**

Date	Document Version	Description	Author(s)
<b>6/22/2022</b>	V1.0	Initial delivery to PRMP Program Director	BerryDunn PgMO Team

## 1.0 Introduction

PRMP is committed to successful projects for the residents of Puerto Rico and has established a Medicaid Enterprise Solution PgMO to provide guidance, support, and oversight for vendor projects within the Puerto Rico Medicaid Enterprise Systems (PRMES).<sup>1</sup> The PRMP PgMO has created plan aids to assist in effectively and efficiently accomplishing executed projects. Project management involves applying best practice processes, tools, and techniques. The PRMP PgMO aids provide guidance for more predictable and consistent plans, processes, and practices, which will result in meeting the goals and objectives of PRMP, vendor partners, and meet stakeholder expectations.

The Deliverable Management Plan Aid is a living document intended to provide PRMP vendors with guidance on PRMP’s expectations regarding management of project deliverables. PRMP expects vendors to develop and submit a Deliverable Management Plan for the project(s) for which they are providing services. Vendors should reference this document when creating their Deliverable Management Plans to help ensure PRMP’s expectations are met and that there is a common understanding between PRMP and the vendor regarding deliverable management. The PRMP PgMO will update this Deliverable Management Plan Aid when new applicable standards (or versions of a standard) are released or when there are changes to PRMP policies that affect deliverable management.

If a vendor finds a contractual conflict with guidance provided in this plan aid, vendors should defer to their contract and/or any updated PRMP guidance. The Introduction section of this document provides information on the Deliverable Management Plan Aid’s purpose and objectives, scope, approach, assumptions, constraints, dependencies, and standards and references. To help ensure an understanding of project deliverables, Table 2 provides definitions for deliverables and deliverable management.

**Table 2: Deliverable Definitions**

Term	Definition
<b>Deliverable</b>	Any unique and verifiable product, result, or capability to perform a service that is required to be produced to complete a process, phase, or project.
<b>Deliverable Management</b>	The processes to define, develop, monitor, control, and verify deliverables.

### 1.1 Purpose and Objectives

The purpose of the Deliverable Management Plan Aid is to:

- Communicate PRMP deliverable review processes to vendors and project stakeholders

---

<sup>1</sup> In this aid, “vendor” refers to solution vendors that implement and maintain systems within the PRMES, as well as contractors and other entities that provide non-solution-related PRMES services to PRMP.

The objective of the Deliverable Management Plan Aid is to:

- Provide a consistent framework and processes for deliverables to be managed for each PRMES project through the project life cycle.

## 1.2 Scope

The scope statement defines both the work included and not included in the scope of a project. For purposes of this Deliverable Management Plan Aid, this section addresses what is in and out of scope for an anticipated plan. The aid provides guidance to the vendors to also address processes and procedures related to managing and controlling deliverables for PRMP projects.

### 1.2.1 In Scope

The Deliverable Management Plan scope includes high-level review and approval processes for project deliverables developed during the phases of the project life cycle and certification evidence—when applicable to a system implementation. Specifically, the process includes project deliverable preparation, submission, tracking, review, and formal acceptance.

### 1.2.2 Out of Scope

Vendors should list the items considered out of scope for their specific project related to deliverable management. Any deliverable exclusions must be in alignment with the Request for Proposals (RFP) and the final signed contract as necessary.

## 1.3 Approach

This section describes assumptions, constraints, dependencies, standards, and references. The Deliverable Management Plan takes into consideration the assumptions, dependencies, and constraints for projects as described in this section.

### 1.3.1 Assumptions

An assumption is a factor expected to be in place or to be in evidence. The following assumptions were used in the development of the Deliverable Management Plan Aid and are applicable to all PRMP projects:

- The roles and responsibilities for deliverable management will be based on a stakeholder analysis for each project and are included in a Responsible, Accountable, Consulted, and Informed (RACI) Matrix for each project.
- A secure document management repository suited to the needs of the project is available to project stakeholders for reviewing workflow, tracking, storing, accessing, and managing deliverables and related project artifacts.

Vendors should list assumptions for their specific project related to deliverable management.

### 1.3.2 Constraints



Per the *PMBOK® Guide*, a constraint is a limiting factor that affects the execution of a project or process. The Deliverable Management Plan is subject to the following constraints:

- The project deliverable must meet PRMP quality standards as well as expected scope prior to formal acceptance. The Quality Management Plan outlines quality standards.
- The Deliverable Expectation Document (DED) review process must be completed for each project deliverable prior to the development and submission of a formal project deliverable for acceptance. Deviations from the DED review process requires the vendor to document and propose an alternate process to obtain PRMP review and agreement.

Vendors should list constraints for their specific project related to deliverable management.

### 1.3.3 Dependencies

Per the *PMBOK® Guide*, a dependency is a logical relationship between two activities, or between an activity and a milestone. For example, an activity that cannot begin until another activity has been finished has a dependency. The Deliverable Management Plan has at a minimum the following dependencies:

- **Communication Management Plan** – Communications management comprises the processes necessary to confirm that the project meets the information needs of its stakeholders through the development of artifacts and the implementation of activities. The communications management processes also confirm that the artifacts and activities provide an effective information exchange.
- **Configuration Management Plan** – Configuration management includes the processes and activities to establish and maintain the integrity of work products produced throughout the project life cycle.
- **Change Management Plan** – This plan documents the processes and key project stakeholders involved in managing change requests.
- **Quality Management Plan** – This plan documents the necessary information required to effectively manage project quality from project planning and project deliverable review to delivery. It defines a project's quality policies, procedures, criteria for and areas of application, as well as roles, responsibilities, and authorities.
- **Requirements Management Plan** – This plan documents requirements management and traceability processes and standards.
- **Scope Management Plan** – Project scope management includes the processes to confirm that the work performed to deliver the product, service, or result includes all the work and only the work required to complete the project successfully.
- **Stakeholder Engagement Plan** – Stakeholder engagement comprises the process and activities of identifying project stakeholders and effectively engaging those stakeholders in the project.

Vendors should list dependencies for their specific project related to deliverable management in their Deliverable Management Plan.

### 1.3.4 Standards and References

Vendors shall develop a Deliverable Management Plan, along with any entrance and exit criteria, based on this Project Management Plan (PMP) Aid and using the following industry standards and best practices:

- *PMBOK® Guide*, Sixth Edition, Project Management Institute® (PMI®)
- Institute of Electrical and Electronics Engineers (IEEE®) Standard 1016 – 2009 – Systems Design
- *Capability Maturity Model Integration (CMMI®) for Development*, Version 1.3, Software Engineering Institute, Process Area: Supplier Agreement Management and Requirements Management

## 2.0 Roles and Responsibilities

This section describes the primary roles and responsibilities of the groups that consist of the project staff, sponsors, and stakeholders as they relate to deliverable management. Table 3 illustrates which stakeholders are responsible (R), accountable (A), consulted (C), and informed (I) (RACI), defined as:

- **Responsible:** This stakeholder does the work to complete the task area. This stakeholder may also serve as an Accountable stakeholder for some task areas.
- **Accountable:** This stakeholder delegates work and is the last one to review the task area before it is deemed complete. According to best practice, one stakeholder (or the lowest number possible) should be deemed accountable.
- **Consulted:** This stakeholder provides input based on how the task area will impact the future work of the project and the stakeholder’s expertise.
- **Informed:** This stakeholder should be aware of the progress associated with the task area.

Table 3 aims to provide insight into how PRMP and the PgMO will interact with project deliverable management processes and responsibilities. The vendor should propose its own stakeholder groups and RACI matrix according to its team’s organizational structure. Table 3 provides vendors with the RACI matrix for PRMP and/or PgMO responsibilities. This matrix can be edited from this baseline if deviations are discussed with PRMP and the PgMO to determine what is appropriate for the project.

**Table 3: RACI Matrix for Project Deliverable Management**

Task Area	PRMP Leadership	PRMP Program Director	PRMP Project Lead	PRMP PgMO	PRMP Subject Matter Experts (SMEs)	Vendor
Develop DED	I	C	A	C	C	R
Review DED	C	A	R	C, I	C, I	C, I
Develop Deliverable	I	C	A	C	C	R
Review Project Deliverable	C	A	R	C	C	C
Update Comment Log	I	I	A	I	I	R
Update Deliverable Log	I	I	A	I	I	R
Deliverable Status & Reporting	I	C	A	C, I	I	R

Task Area	PRMP Leadership	PRMP Program Director	PRMP Project Lead	PRMP PgMO	PRMP Subject Matter Experts (SMEs)	Vendor
Overall Document Management	I	C	A	C, I	I	R

## 2.1 PRMP Leadership

PRMP is an agency within the Puerto Rico Department of Health (PRDoH). While leadership roles might vary between projects, in general, the PRMP leadership stakeholder group refers to the PRDoH Secretary, PRMP Executive Director, and the PRMP Executive Steering Committee.

## 2.2 PRMP Program Director

The PRMP Program Director is a member of the PRMP PgMO.

An important aspect of the PRMP Program Director’s role is to supervise program deliverables in terms of all benefits delivered by PRMES initiatives.

## 2.3 PRMP Project Lead

PRMP appoints a Project Lead to oversee each of the PRMES projects under PRMP programs utilizing the defined PRMP PgMO processes. The Project Lead collaborates with the vendor’s Project Manager to help ensure the project execution and implementation are in accordance with the approved deliverable processes defined by the PRMP PgMO.

The PRMP Project Lead, PRMP PgMO, and the vendors shall be the initial implementers of the deliverable management processes defined in the plan.

The PRMP Project Lead has joint responsibility with the vendor Project Manager for defining, developing, monitoring, controlling, and verifying deliverables.

## 2.4 PRMP PgMO

PRMP has appointed the PgMO to provide program management guidance and collaborative oversight for its information technology initiatives. As part of this responsibility, PRMP PgMO has developed this Deliverable Management Plan Aid as a guide for project-specific Deliverable Management Plans.

Each vendor shall create an individual Deliverable Management Plan to manage project deliverables and shall collaborate with the PRMP PgMO to gain PRMP approval of its process.

## 2.5 Vendors

The vendors contracted with PRMP are responsible for developing a project-specific Deliverable Management Plan, obtaining PRMP approval of the plan, and managing deliverables in accordance with that plan.

In accordance with the assumptions described in this document, PRMP anticipates that the vendors will maintain deliverables according to their PRMP-approved Deliverable Management Plan. The vendor Project Manager will have joint responsibility with the PRMP project lead for defining, developing, monitoring, controlling, and verifying deliverables.

## 2.6 PRMP SMEs

PRMP will select SMEs who will aid the project and provide insight into areas of business operations and processes about which the vendor may not have knowledge or expertise. These SMEs will be consulted during various aspects of the project life cycle as well as asked to review deliverables. PRMP SMEs will contribute their specialized knowledge and help verify that any documented processes or business changes are correct in the deliverable and the information is relevant for PRMP staff and stakeholders.

## 3.0 Overview of Deliverable Management

The PRMP PgMO Deliverable Management Plan Aid outlines guidelines for the project deliverable processes the vendor will follow when preparing and submitting a deliverable, as well as responding to deliverable reviewer comments. The plan outlines the review and comment process that deliverable reviewers and approvers will follow once the vendor submits a project deliverable. The plan also provides deliverable management activities related to storing, logging, and coordinating project deliverable movement through formal acceptance.

The deliverable review processes are designed to help ensure:

- PRMP only accepts project deliverables that meet project contractual requirements and document format, content, and payment requirements
- The project deliverable aligns with the applicable DED
- The project deliverable satisfies deliverable-specific acceptance criteria
- Each project deliverable complies with the PRMP PgMO Project Management Plan quality controls and standards

The *PMBOK® Guide* describes a deliverable and the review process as follows:

*Section 4.3.3.1 Deliverables* “A deliverable is any unique and verifiable product, result or capability to perform a service that is required to be produced to complete a process, phase, or project. Deliverables are typically tangible components completed to meet the project objectives and can include elements of the project management plan.”

*Section 5.5 Validate Scope* “Validate Scope is the process of formalizing acceptance of the completed project deliverables. The key benefit of this process is that it brings objectivity to the acceptance process and increases the chance of final product, service, or result acceptance by validating each deliverable.”

## 4.0 Deliverable Review Overview

Project deliverables that the vendor must develop and submit for review and approval during the project phases will vary based on the needs of the project. The project solicitation document contains required project deliverables and the applicable submission and review time frames.

Figure 1 outlines general inputs and tools that the vendor should use to prepare a DED and project deliverables, and that project stakeholders should use during deliverable review and acceptance.

**Figure 1: Deliverable Review Inputs and Tools**

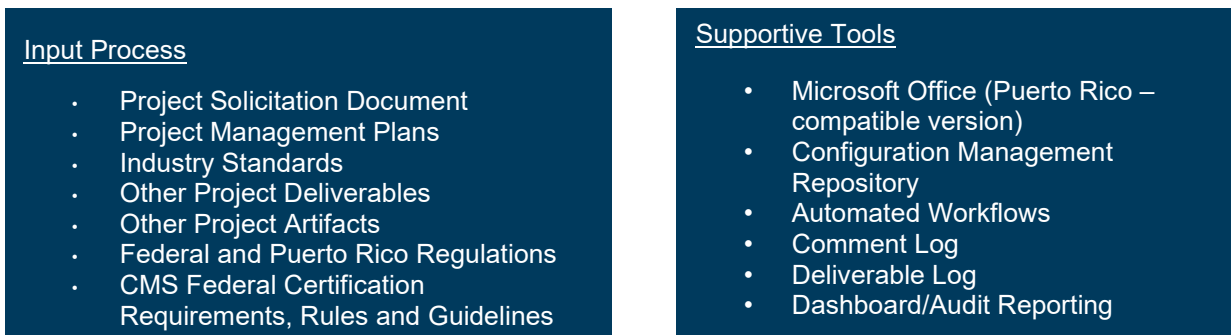


Figure 2 outlines the typical high-level processes from DED preparation through formal project deliverable acceptance. The process may vary based on review and approval requirements established in each project contract. The process detailed below should be discussed with PRMP to confirm common expectations on the project deliverable process, timelines, etc.. Subsequent sections provide more detail about the processes.

**Figure 2: DED and Project Deliverable Process**





This section of the Deliverable Management Plan outlines key components of the review processes:

- DED review process
- Project deliverable review process
- Comment Log
- Deliverable Log
- Deliverable status and progress reporting

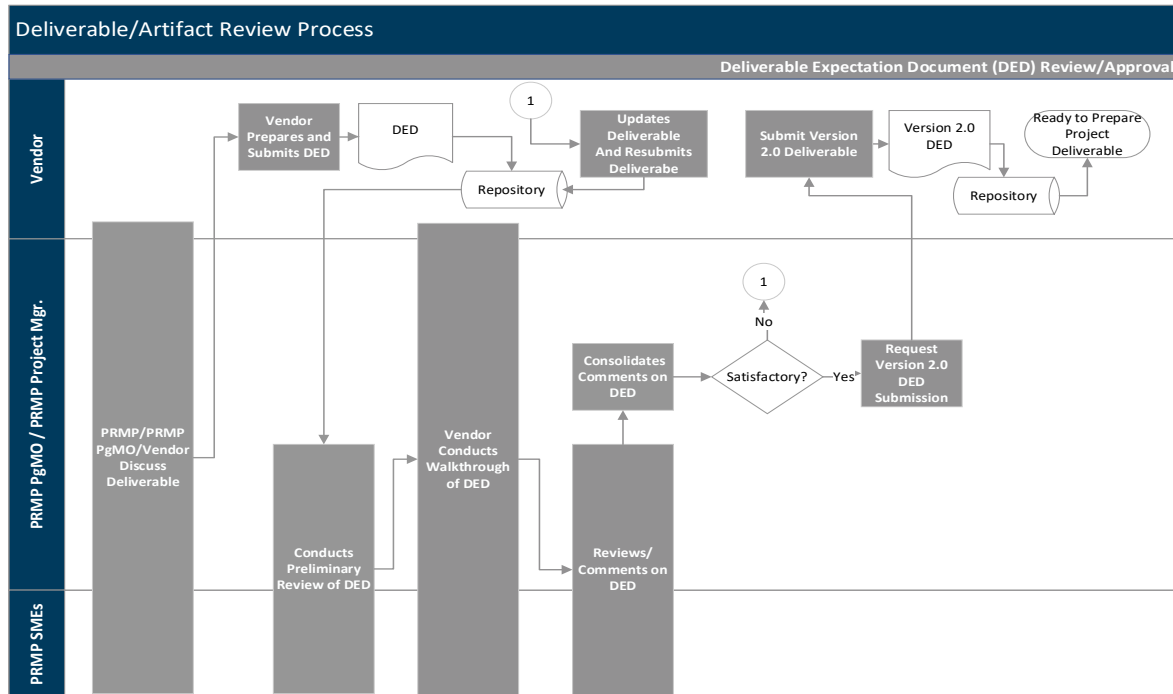
## 4.1 DED Review Process

Unless otherwise agreed upon and documented with PRMP, the vendor shall prepare a DED outlining the standards, scope, and content to be used or included in each project deliverable.

The DED helps establish expectations for the scope and content of a project deliverable as well as acceptance criteria that must be met prior to formal acceptance of a project deliverable. This process is intended to support an efficient review cycle.

The document repository is the tool used to support moving the DED through the review cycle from the vendor's initial submission through PRMP's approval. A Comment Log is used to record all reviewer comments and recommendations, and the vendor records how each comment has been addressed. Once all comments have been satisfactorily addressed, the PRMP project manager will provide acceptance notification to the vendor and log the acceptance as a decision. The vendor can then begin preparing the project deliverable.

Figure 3: DED Review Process



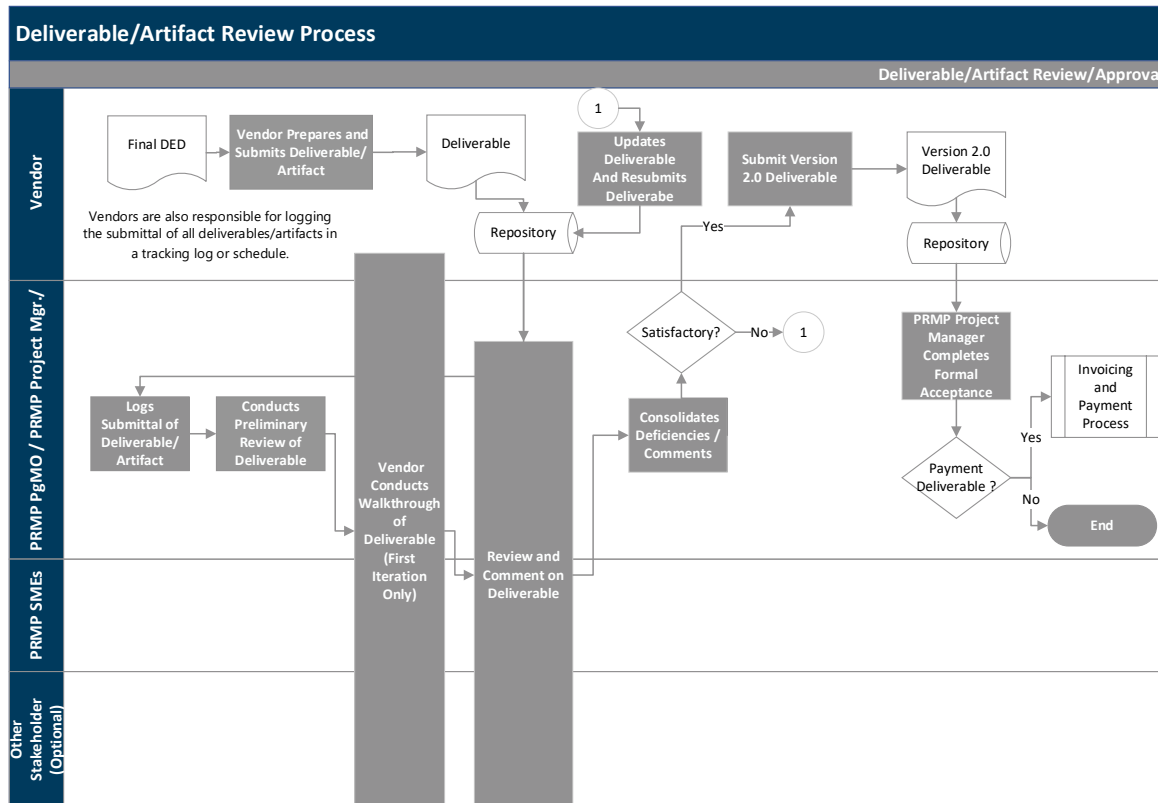
## 4.2 Project Deliverable Review Process

Unless otherwise agreed upon and documented with PRMP, a PRMP-approved DED is a prerequisite for project deliverable preparation and submission. The vendor must prepare and submit each project deliverable in accordance with PRMP and industry standards established in the PMPs outlined in section 1.3.3 Dependencies of this aid and fulfill contract requirements. Contract requirements generally outline review time frames for a DED and a project deliverable. If the contract requirements do not outline these time frames, the vendor should propose time frames for PRMP review in this section of the vendor's Deliverable Management Plan. The review time frame will begin the day of deliverable submission for those submitted prior to noon Atlantic Time, and the next business day when submission occurs after noon Atlantic Time. Vendors should submit deliverables based on PRMP's time zone and with respect to PRMP's planned Out of the Office (OOO) and their related holiday schedule.

A secure document repository with automated review workflows is a typical tool used to support moving the project deliverable through the review cycle from initial submission through formal acceptance. Once all comments have been addressed to the satisfaction of the PRMP project manager, the PRMP project manager will move forward with formal acceptance of the project deliverable. Should deficiencies still exist in the formally submitted project deliverable, the PRMP project manager and vendor must collaborate to determine the approach for successfully resolving those deficiencies.

Figure 4 illustrates the project deliverable review process completed for each project artifact.

**Figure 4: Project Deliverable Review Process**



## 4.4 Deliverable Log

At any point during a project, multiple deliverables may be in the review cycle. Dependencies between project deliverables are common during the project life cycle. This makes tracking project deliverables from the submission through formal acceptance a critical step in the deliverable review process. The document management repository used to support deliverable management must provide project stakeholders with dashboard and reporting capabilities:

- To clearly see where a deliverable is in the review process
- To verify compliance with submission and review time frames
- To provide input for the vendor's status reports where project deliverable status and progress is reported

Vendors are also responsible for logging submittal of all deliverables/artifacts in a tracking log or schedule, which is a helpful practice, using its preferred method, provided the Deliverable Log can be easily produced and shared with PRMP as needed, and includes key information about a project deliverable such as submission and version history, status, and dependencies.

## 4.4 Deliverable Status and Progress Reporting

The vendor's project status reporting must include up-to-date information about project deliverable status. Specific reporting content might vary by project but should minimally include:

- Where a project deliverable is in the review cycle
- A current schedule of deliverables and known impacts
- Any impacts to a project deliverable regardless of its status
- The reviewers of a specific document to assess resources

## 5.0 Document Management

The vendor must provide, implement, operate, and maintain a secure document management solution (DMS) in accordance with requirements outlined in the project solicitation document. The tool must allow appropriate levels of access and availability to project stakeholders. The document management solution must support reviews of project deliverables along the project life cycle. For projects that require CMS certification, the vendor's approved Certification Management Plan should provide more information about how certification artifact documents should be stored and managed. The vendor should discuss and obtain PRMP's approval on the tool and approach forward utilization of their DMS.

The vendor's approved Configuration Management Plan should outline processes and standards to be followed for version control, documentation types, storage, and access for documents. Those processes are applicable to project deliverables and related project artifacts. The project solicitation document may specifically outline additional requirements for document storage and retention.

## Appendix A: Acronyms List

Table 4 presents acronyms used in this document.

**Table 4: Acronyms List**

Acronym	Definition
<b>CHIP</b>	Children’s Health Insurance Program
<b>CMMI®</b>	Capability Maturity Model Integration
<b>CMS</b>	Centers for Medicare & Medicaid Services
<b>DED</b>	Deliverable Expectation Document
<b>EOMC</b>	Enterprise Objective Monitoring and Control
<b>IEEE®</b>	Institute of Electrical and Electronics Engineers
<b>KL</b>	BerryDunn KnowledgeLink
<b>OIAT</b>	Oficina de Informática y Avances Tecnológicos
<b>PgMO</b>	Program Management Office
<b>PMBOK® Guide</b>	<i>A Guide to the Project Management Body of Knowledge</i>
<b>PMI®</b>	Project Management Institute®
<b>PMP</b>	Project Management Plan
<b>PRDoH</b>	Puerto Rico Department of Health
<b>PRMES</b>	Puerto Rico Medicaid Enterprise Systems
<b>PRMP</b>	Puerto Rico Medicaid Program
<b>RACI</b>	Responsible, Accountable, Consulted, and Informed
<b>RFP</b>	Request for Proposals
<b>SME</b>	Subject Matter Expert

## Appendix B: Deliverable Versioning

### 1. Deliverable Versioning Process

Table 5 presents an example of deliverable version control. The vendor’s approved Configuration Management Plan should include more information.

#### 1.1 Versioning Control Process

All deliverables must conform to an approved version control process, such as the example outlined in Table 5, Version Control.

**Table 5: Version Control**

Version	Description
0.1 – 0.nnn	<p>Iterations of the document during internal draft process.</p> <p>Version 0.nnn is used even if a deliverable document is being used for a joint application design or walk-through session with PRMP. This versioning number can change as frequently as the team would like.</p> <p>Note: The deliverable should not be identified as version 1.0 until it is loaded into the document control repository to start the review process with PRMP.</p>
1.0 – 1.nnn	<p>Initial versions of the deliverable sent to PRMP for approval.</p> <p>Important Note: Once the document is loaded into the Project Documentation library on SharePoint to begin the review process—this version number cannot be changed by the project team. The initial version loaded into the Project Documentation library will be v1.0 and will remain v1.0 until it is either rejected by PRMP or approved by PRMP.</p> <p>If rejected by PRMP, the PRMP project manager or project coordinator will initiate the “PRMP Rejected Document” workflow using the Comment Log for the rejected document requesting the PRMP project coordinator team member to create the next version in line, e.g., v1.1 for the team to incorporate changes and turn on “Track Changes.” This version will be placed in the Project Documentation library for team review and updates.</p> <p>If approved by PRMP, the project manager or project coordinator will initiate the “PRMP Approved Document” workflow using the Comment Log for the approved document requesting the PRMP project coordinator to create version 2.0 and place it into the Final Deliverables library for final delivery to PRMP by the project manager.</p>
2.0	<p>Final approved version.</p> <p>When PRMP approves the final draft (v1.n), The PRMP project coordinator will remove any draft references from the document, accept all changes, and change the version number to v2.0.</p>
2.1 – 2.nnn	<p>Version number 2.n reflects modifications to the final approved deliverable as necessary. An example would be the project manager leaves and the project charter is updated; the new version would be v2.1. If a major revision were required to any document that requires approval of PRMP, the version would move to 3.0 after PRMP approval is received.</p>



Version	Description
3.0	PRMP approved version that involved a major change to a previously approved document version.
3.1 – 3.nnn	Version number 3.n reflects modifications to the final approved deliverable as necessary. The same principles apply here for versioning as in the 2.1 – 2.nnn versioning process.

## 1.2 Revision Control Log

The Change Log on page two of the deliverable should reflect any change and the reason for the new version. Table 6 presents the Sample Review and Change Log.

**Table 6: Change Log**

Version Number	Version Date	Summary of Changes	Revised Page #s	Revised By	Job Title
0.1	10/15/20	Initial internal draft	1-15	J. Smith	BIA
0.2	10/19/20	Second internal draft	3-7	J. Doe	Architect
1.0	10/21/21	Initial submission to PRMP	N/A	J. Smith	BIA
1.1	10/28/21	Incorporated customer-requested changes	18-22	J. Smith	BIA
1.2	11/04/22	Incorporated customer-requested changes	16	J. Smith	BIA
2.0	11/05/22	Final version approved by PRMP	N/A	J. Smith	PRMP PgMO

# Enterprise Objective Monitoring and Control Services

Puerto Rico Medicaid Program

Documentation Management Plan Aid

V1.0



GOVERNMENT OF PUERTO RICO

Department of Health  
Medicaid Program

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# Table of Contents

<b>Section</b>	<b>Page</b>
Table of Contents.....	ii
Revision History .....	1
1.0 Introduction .....	2
1.1 Purpose and Objectives.....	2
1.2 Scope .....	3
1.2.1 In Scope.....	3
1.2.2 Out of Scope .....	3
1.3 Approach .....	3
1.3.1 Assumptions.....	4
1.3.2 Constraints .....	4
1.3.3 Dependencies .....	4
1.3.4 Standards and References .....	4
2.0 Roles and Responsibilities.....	5
2.1 PRMP Leadership.....	5
2.2 PRMP MES Program Director.....	6
2.3 PRMP Program Leads .....	6
2.4 PRMP PgMO .....	6
2.5 Vendor Roles .....	6
3.0 Documentation Management Plan.....	8
3.1 Document Development.....	9
3.2 Document Templates.....	9
3.3 Document Reviews (Life Cycle).....	9
3.4 Approved Document Storage.....	10
3.5 Document Naming Conventions.....	10
3.6 Document Recovery and Backup.....	10
3.7 Document Security.....	12



Appendix A: Acronyms and Abbreviations List ..... 13

## Revision History

The Puerto Rico Medicaid Program’s (PRMP’s) Program Management Office (PgMO) will store the approved Documentation Management Plan Aid and any approved revisions on the PRMP PgMO SharePoint site or in an alternative location specified by PRMP. PRMP and PRMP’s PgMO will make the plan available to project stakeholders as needed.

Table 1 presents the revision history for this document. When changes occur, PRMP PgMO will increment the version number and the date. PRMP PgMO will also record the name of the person making the change and a description of the change in the revision history.

**Table 1: Revision History**

Date	Document Version	Description	Author(s)
06/22/2022	1.0	Initial delivery	BerryDunn PgMO Team

## 1.0 Introduction

PRMP is committed to successful operations for the residents of Puerto Rico, by influencing others and developing a sense of commitment in all persons contributing to or involved in PRMP’s projects and operations.

PRMP has established a PgMO to provide guidance, support, and oversight for Vendors’ projects within the Medicaid Enterprise. As part of this initiative, The PRMP PgMO has created plan aids to assist in effectively and efficiently executing projects. Project management involves applying best practice processes, tools, and techniques.

These aids provide guidance for more predictable and consistent plans, processes, and practices, which will result in meeting the goals and objectives of stakeholders and the projects in general.

If the Vendor finds that there is no plan aid for the services they need to perform, PRMP expects the Vendor to develop and submit a plan for approval before performing the tasks. Vendors should contact PRMP’s PgMO with any questions they may have or guidance they may need when creating their plans to help ensure expectations are met.

The Introduction section of this document provides information on the Documentation Management Plan Aid’s purpose and objectives, scope, standards, assumptions, dependencies, and constraints. To help ensure an understanding of what documentation management is, Table 2 provides a definition for documentation based on *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)*.<sup>1</sup>

**Table 2: Documentation Management Definitions**

Term	Definition
<b>Documentation</b>	Documentation is the material that provides official information or evidence or that serves as a record; the process of classifying and annotating text

### 1.1 Purpose and Objectives

The Project Management Institute® (PMI®), in its *PMBOK® Guide*, defines Documentation Management as the management of deliverable documentation required by stakeholders to work with, operate, and sustain the solution. This may include system overview documentation, user guides/help, training manuals, and operations guidelines, etc.

Each Vendor is expected to provide to their partnering PRMP project team and PRMP’s PgMO a Documentation Management Plan for review and approval before the execution of the project.

Document-related activities should be broken into smaller, more discrete activities when developing the plan. These discrete activities are referred to as document implementation

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<sup>1</sup> Unless otherwise noted, all references to the *PMBOK Guide*® are for the sixth edition.

phases. The logical sequence of these phases is preparation, review, update, approval, and refresh.

The purpose of the PRMP Documentation Management Plan is to:

- Guide Vendors in the documentation delivery expectations of the PRMP PgMO
- Provide safe storage and backup of project's documents in a project library
- Provide easy access to the PRMP Medicaid Enterprise Systems (MES) Program Director and PgMO Director and Program Leads to the project library
- Provide clarity regarding which version of a deliverable is the latest version
- Provide a clear record of approved deliverables over the life of the project
- Provide measures to maintain restricted access to confidential documents
- Provide an accurate and complete archive of project documents at the end of the project

## 1.2 Scope

Project scope in the Documentation Management Plan can be defined as a part of project planning that includes figuring out and documenting a detailed list of deliverables or features that are to be involved in the execution of the project. In other words, project scope is defining the goals of the project and what needs to be done to achieve them.<sup>2</sup>

### 1.2.1 In Scope

Vendors should identify all documentation that would be included, related to documentation management, and considered as part of the scope.

Any scope inclusions must be in alignment with the Request for Offers (RFO), Vendor's proposal, and the final signed contract.

Vendors can use their own Documentation Management Plan processes, but they should ensure that their processes adhere to the guidelines provided in this document.

### 1.2.2 Out of Scope

Vendors should identify work that is over and beyond the current scope of the Documentation phase. Any scope exclusions must be in alignment with the RFO, Vendor's proposal, and the final signed contract.

## 1.3 Approach

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<sup>2</sup> Sandeep Kashyap, Project Scope Management – Definition, Importance, Processes & Tips, <https://www.proofhub.com/articles/project-scope-management>

The Documentation Management Plan takes into consideration the assumptions, dependencies, and constraints as described in this section

### 1.3.1 Assumptions

Per the *PMBOK® Guide*, an assumption is a factor expected to be in place or to be in evidence. The assumption made related to the development of a Documentation Management Plan is:

- Vendors shall coordinate their processes with their partnering PRMP project leads and provide transparency to the PRMP PgMO.

### 1.3.2 Constraints

Per the *PMBOK Guide®*, a constraint is the state, quality, or sense of being restricted to a given course of action or inaction. It can be defined as, an applicable restriction or limitation, either internal or external to the project, that will affect the performance of the project or a process. No constraints are identified for this Documentation Management Plan Aid.

### 1.3.3 Dependencies

Per the *PMBOK Guide®*, a dependency is a logical relationship between two activities, or between an activity and a milestone. For example, an activity that cannot begin until another activity has been finished has a dependency. Dependencies identified for this Documentation Management Plan Aid should be completed and approved before this Documentation Management Plan is approved.

- Once the Deliverable Management Plan is approved with a consistent framework and deliverable management processes are in place, the Documentation Management Plan can be established

### 1.3.4 Standards and References

PRMP's PgMO and Vendors are expected to use the appropriate standards and references for MES projects. The PRMP MES Program Director and PRMP's PgMO will review and approve the methodologies and best practices. PRMP's PgMO may request the Vendor incorporate additional standards and references if appropriate for the content of a project management plan (PMP). Vendors are expected to monitor applicable standards and industry best practices. Vendors should plan to work with the PRMP PgMO to determine if updates are required to their PMP—when a new applicable standard (or version of a standard) is released.

- *PMBOK® Guide*, Sixth Edition, PMI®



## 2.0 Roles and Responsibilities

This section describes the primary roles and responsibilities of stakeholder groups as they relate to documentation management, including project staff, sponsors, and stakeholders. Table 3 illustrates which stakeholders are responsible (R), accountable (A), consulted (C), and informed (I), defined as:

- **Responsible:** This stakeholder does the work to complete the task area. This stakeholder might also serve as an accountable stakeholder for some task areas.
- **Accountable:** This stakeholder delegates work and is the last one to review the task area before it is deemed complete. According to best practice, one stakeholder (or the lowest number possible) should be deemed accountable.
- **Consulted:** This stakeholder provides input based on how the task area will impact the future work of the project and the stakeholder’s expertise.
- **Informed:** This stakeholder should be aware of the progress associated with the task area.

Table 3 provides insight into how PRMP Leadership and its PgMO will interact with documentation management processes and responsibilities. The Vendor should propose its own stakeholder groups and RACI matrix according to its team’s organizational structure. Table 3 provides Vendors with the RACI matrix for PRMP and/or PgMO responsibilities. This matrix can be edited from this baseline if deviations are discussed with PRMP PgMO and the PRMP Project Leads to determine what is appropriate for the project.

**Table 3: RACI Matrix for Documentation Management**

Task Area	PRMP Leadership	PRMP Program Director	PRMP PgMO	PRMP Project Lead	Vendor Project Manager
<b>ID Document's Need</b>	I	I	I	A	R
<b>Work w/ Draft</b>	I	I	I	A	R
<b>Revisions</b>	I	I	I	A	R
<b>Approval</b>	R	I	I	A	C
<b>Use</b>	I	I	I	A	R
<b>Archival</b>	I	I	C	A	R

### 2.1 PRMP Leadership

PRMP is the Medicaid agency responsible for administering the Medicaid Program in Puerto Rico, including the Children's Health Insurance Program, and a waiver-based section 1915(a) program. PRMP is an agency within the Puerto Rico Department of Health (PRDoH). While leadership roles might vary between projects, in general, the PRMP leadership stakeholder group refers to the PRDoH Secretary, PRMP Executive Director, and the PRMP Executive Steering Committee.

## 2.2 PRMP MES Program Director

An important aspect of the PRMP Program Director's role is to assess the documentation management processes and to provide guidance on documentation management and needs.

## 2.3 PRMP Program Leads

PRMP appoints a Program Lead to oversee each of the Puerto Rico Medicaid Enterprise Systems projects under PRMP programs utilizing the defined PRMP's PgMO processes. The Program Lead collaborates with the Vendor's project manager to help ensure the project execution and implementation is in accordance with the approved schedule and processes defined by PRMP's PgMO.

## 2.4 PRMP PgMO

PRMP's PgMO provides program management guidance and collaborative oversight for its IT initiatives. As part of this responsibility, PRMP has developed this Documentation Management Plan Aid as a guide for project-specific Documentation Management Plans.

Each Vendor shall create a Documentation Management Plan to manage its project's documents and shall collaborate with PRMP's PgMO to gain approval of the process. PRMP's PgMO is responsible for helping to identify and document program-level documentation needs and communicating with the project team; however, the PRMP Project Lead and Vendor(s) have primary responsibility for identifying project-level documentation management needs.

## 2.5 Vendor Roles

Vendors implementing one or more IT projects or supporting other PRMP activities are responsible for developing a project-specific Document Management Plan, obtaining The PRMP MES Program Director and PRMP's PgMO approval of the plan, and managing documents in accordance with that plan. The Vendor Project Manager is responsible for reporting any issues to the PgMO Program Lead.

PRMP anticipates that Vendors will maintain adequate documentation standards, which includes a documentation library status report. The Vendor Project Manager will consult with the PRMP Project Lead when identifying, and determining documentation needs, as well as raising documentation issues with PRMP's PgMO Leads as needed.



## 3.0 Documentation Management Plan

The Documentation Management Plan Aid is a living document intended to provide PRMP Vendors with guidance on PRMP's expectations regarding management of the project documentation. Vendors should be prepared to develop and submit a Documentation Management Plan to the PRMP PgMO for review and approval. Vendors will need to reference this document when creating their Documentation Management Plans to help ensure the PRMP's PgMO expectations are met and a common understanding between the PgMO the Vendor exists. PRMP's PgMO will update this Documentation Management Plan Aid when new applicable standards (or versions of a standard) are released or when there are changes to PRMP PgMO policies that affect documentation management.

Generally defined as the practices and procedures used to create, distribute, and store various types of project documentation, the Documentation Management Plan will describe how project documentation will be managed and should include, but not be limited to:

- Project types, including but not limited to (in both paper and electronic media):
  - Deliverables
  - Acceptance criteria
  - Meeting materials
  - Artifacts
  - Operations manuals
  - Training materials
  - User guides

Document management is designed to meet the following goals and objectives:

- To provide a mechanism for document production and control without adding substantial process overhead
- To provide standardized formats and templates for document production
- To promote collaboration and consensus through a structured process for document review and approval
- To facilitate document retrieval and accessibility
- To minimize documentation errors through version control and secured access
- To help ensure that all documents are current, and that distribution is timely

## 3.1 Document Development

The purpose of this Documentation Management Plan Guide Aid is to help ensure that all Vendor deliverables are clear, consistent, and compliant with PRMP's PgMO standards and processes.

## 3.2 Document Templates

By using standardized document templates, the task of documenting project activities will be simplified by reducing the time formatting new documents, which creates additional time for the author to focus on content quality and helps to ensure all documents are standardized across all projects managed within the PRMP PgMO.

## 3.3 Document Reviews (Life Cycle)

As documents may pass through a number of revisions before their final version, and also through a number of tools, such as word processing software, file sharing and storage solutions, e-signature apps, and more, all documents go through the following stages: Requirements Analysis, Designing Phase / Content Development, Editing/Proofreading, Publishing, Maintenance Archival or Destruction.

Each stage has distinct characteristics to ensure that documents correspond to the PRMP's standards.

Vendors must initially submit and then update deliverables as required within their contract or as is necessary, and/or at the request of PRMP.

Each document must follow a well-established life cycle, with the following defined steps for document development and revision before publication:

- Requirements Analysis – Collect specific information regarding the product, subject matter experts, and clients. A Requirements Document must be produced and reviewed/accepted by PRMP, before entering the phase of designing/content development.
- Designing / Content Development – Design the document or content by using proper template with the layout, format, and style plus the Requirements Document already defined.
- Editing/Proofreading – Validate the document, as per PRMP's PgMO requirements. Reviewers verify technical portions of text, figures, general content, grammar, punctuation, and document format.
- Publishing – Release and print the document.
- Maintenance – An update in the process triggers an update in the document, which passes through the life cycle of documentation until the document is re-published.

Project documents, previously defined as deliverables, will be managed by a Deliverable Expectations Document (DED), approved by PRMP, where expectations for the delivery, and acceptance criteria will be defined, detailing the requirements that PRMP expects the documents to meet.

### 3.4 Approved Document Storage

For documentation to flow smoothly and efficiently, a well-designed filing system and secure, categorized storage for documents is required. The storage portion of the digital document life cycle involves using multiple levels of electronic storage which is designed to easily retrieve documents and allows long-term storage (archiving) for those that are less frequently used.

Version control is important when creating documents to track any changes and identifies when any key decisions were made. This is especially critical when managing documents that undergo substantial revisions and redrafting, such as annual reviews, or when multiple users are required to manage information contained within a single document.

### 3.5 Document Naming Conventions

Users should use standardized naming conventions to ease document lookups and retrieval. Simple naming conventions help maintain consistency in naming standards.

The PRMP PgMO SharePoint limits the length of the file path to 255 characters. The file path includes the entire location, not starting at the PRMP PgMO location

If you have a filename that incorporates a date, enter the date in YearMonthDay format (20200304 versus 03042020). If the file contains a recurring document such as meeting minutes, status reports, etc., by entering the date in the YearMonthDay format, your files will automatically be sorted. See Table 4 as an example.

**Table 4 - File Name Format**

YearMonthDay format	Monthly_Status_20200105 Monthly_Status_20201008 Monthly_Status_20190415 Monthly_Status_20200810 Monthly_Status_20190104	SORTS TO	Monthly_Status_20190104 Monthly_Status_20190415 Monthly_Status_20200105 Monthly_Status_20200810 Monthly_Status_20201008
MonthDayYear format	Monthly_Status_01052020 Monthly_Status_10082020 Monthly_Status_04152019 Monthly_Status_08102020 Monthly_Status_01042019	SORTS TO	Monthly_Status_01042019 Monthly_Status_01052020 Monthly_Status_04152019 Monthly_Status_08102020 Monthly_Status_10082020

### 3.6 Document Recovery and Backup

For document recovery and backup, Vendors should use their own procedures ensuring that the minimum standards below are met.

The purpose of a backup and restore plan is to allow recovery after a mishap. The first stage of the recovery process must be the analysis of what needs to be restored. Once the extent of what needs to be restored has been determined, recovery can begin by loading the last full weekly backup followed by the last incremental backup. For important and time-critical data, a mirror system, or at least a mirror disk, may be suggested for a quick recovery. Any vendor contact working with the main vendor is also subject to the same recovery and backup requirements to ensure a complete restore of needed data.

Backups should conform to the following best practice procedures:

- All files must be adequately and systematically backed up, including updates
- Records of what is backed up and where it is backed up must be maintained
- The backup media must be precisely labelled, and accurate records must be maintained of completed backups
- Copies of the backup media, together with the backup record, should be stored safely in a remote location for their retention period
- Regular tests of restoring data/software from the backup copies should be undertaken, to help ensure that they can be relied upon for use in an emergency

### 3.7 Document Security

Document security includes maintaining all essential documents stored, filed, backed up, processed, and delivered with the necessary safeguards to reduce the probability of unauthorized access. It is integral as documents often include confidential information that can leave companies open to potential threats. Sensitive data such as protected health information—which the Health Insurance Portability and Accountability Act (HIPAA) strictly regulates—is the most targeted, valued, and frequently stolen by hackers.

Document security can utilize access restriction to help ensure only qualified business personnel have access to certain documents, reducing the risk of leaked information, which in return reduces the risk of lawsuits and fines.

To comply with this, Vendors should provide their plans/actions/reports to provide security to all documentation related to the project (both hardcopies and electronic copies), including vendors they use.

As part of those plans, what constitutes sensitive Information should be defined, along with the required procedures to protect it. Documentation and working papers should always be stored within PRMP's SharePoint designated folders, instead, for example, on working computers or phones.

The approved data sharing method for sensitive data is to use encrypted email.



## Appendix A: Acronyms and Abbreviations List

Table 4 presents acronyms and abbreviations used in this document.

**Table 5: Common Acronyms and Abbreviations**

Acronym	Definition
<b>MES</b>	Medicaid Enterprise Systems
<b>KL</b>	KnowledgeLink
<b>PMP</b>	Project Management Plan
<b>PgMO</b>	Program Management Office
<b>PMBOK® Guide</b>	<i>A Guide to the Project Management Body of Knowledge</i>
<b>PMI®</b>	Project Management Institute®
<b>PRDoH</b>	Puerto Rico Department of Health
<b>PRMP</b>	Puerto Rico Medicaid Program
<b>RFO</b>	Request for Offers

# Enterprise Objective Monitoring and Control Services

Performance Management Plan Aid

V1.0



GOVERNMENT OF PUERTO RICO

Department of Health  
Medicaid Program

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## Table of Contents

<b>Section</b>	<b>Page</b>
Revision History .....	1
1.0 Introduction .....	2
1.1 Purpose and Objectives.....	3
1.2 Scope .....	3
1.2.1 In Scope.....	4
1.2.2 Out of Scope .....	4
1.3 Approach .....	4
1.3.1 Dependencies .....	4
1.3.2 References and Standards.....	5
2.0 Roles and Responsibilities .....	6
2.1 PRMP Leadership .....	7
2.2 PRMP Program Director .....	7
2.3 PRMP Project Lead .....	7
2.4 PRMP PgMO .....	7
2.5 Vendor.....	8
3.0 Performance Management Process .....	9
3.1 Measuring MES Performance.....	9
3.2 CMS Considerations for Performance Management of the MES.....	9
3.3 Enterprise Performance Measures .....	11
3.3.1 Performance Management Metrics.....	11
4.0 Performance Management Monitoring, Escalating, and Reporting .....	13
4.1 Performance Management Monitoring .....	13
4.2 Performance Management Escalation .....	13
4.3 Performance Management Reporting .....	13
Appendix A – Acronyms List .....	15

## Revision History

The Puerto Rico Medicaid Program's (PRMP's) Program Management Office (PgMO) will store the approved Performance Management Plan Aid and any approved revisions on the PgMO Sharepoint site or in an alternative location specified by PRMP. PRMP and the PRMP PgMO will make the plan available to project stakeholders as needed. Currently, BerryDunn provides PRMP PgMO services.

Table 1 presents the revision history for this document. When changes occur, the PRMP PgMO will increment the version number and the date. The PRMP PgMO will record the name of the person or entity making the change and a description of the change in the revision history.

**Table 1: Revision History**

Date	Document Version	Description	Author(s)
6/22/2022	V1.0	Initial delivery	BerryDunn PgMO Team

## 1.0 Introduction

The Puerto Rico Medicaid Program (PRMP) has established a Puerto Rico Medicaid Enterprise System (PRMES) Program Management Office (PgMO) to provide guidance, support, and oversight of projects within the Medicaid Enterprise. The PRMP PgMO has created Plan Aids to help ensure consistency in managing and monitoring projects through the use of quantifiable and evidence-based performance measures. This Plan Aid will enable PRMP to more effectively manage projects and programs related to the PRMES via data-driven metrics. This process will help ensure increased efficiency, cost effectiveness, and optimized performance for projects and programs within the PRMES. PRMP is committed to working to ensure the success of Medicaid projects and priorities to produce desired outcomes centered on improving the health and well-being of the residents of the Commonwealth.

The Performance Management Plan Aid is a living document intended to provide guidance to PRMES vendors on PRMP's expectations regarding performance management. PRMP expects vendors to develop and submit a Performance Management Plan for their respective projects. Vendors should reference this document when creating their Performance Management Plans to help ensure PRMP's expectations are met and that there is a common understanding between PRMP and the contractor regarding performance management expectations. Vendors are also expected to submit evidence-based reports to help corroborate the authenticity of performance measures.

If a vendor finds a contractual conflict with guidance provided in this plan aid, vendors should defer to their contract and/or any updated PRMP guidance.

The PRMP PgMO will update this Performance Management Plan Aid when new applicable standards (or versions of a standard) are released or when there are changes to PRMP policies that affect performance management. The PRMP PgMO will update this Performance Management Plan Aid as additional performance metrics are developed surrounding performance for the latest PRMP guidance on performance management or the vendor's contract. The Introduction section of this document provides information on the Performance Management Plan Aid's purpose and objectives, scope, standards, assumptions, dependencies, and constraints. To help ensure an understanding of project performance management, Table 2 provides definitions for terms related to measuring performance by PRMP, other Puerto Rico government agencies, and related service vendors.

**Table 2: Performance Management Definitions**

Term	Definition
<b>Key Performance Indicators (KPIs)</b>	Quantifiable measures used to evaluate the success of a project in meeting objectives for project performance.
<b>Metrics</b>	Measures of quantitative and evidence-based assessments used for tracking performance.
<b>Outcome</b>	The final result or consequence related to performing and activity.
<b>Performance Management</b>	The process of measuring how a project is performing using quantifiable and evidence-based metrics over time and in accordance with stated objectives.

## 1.1 Purpose and Objectives

The purpose of the Performance Management Plan Aid is to:

- Provide guidance to the PRMES vendors in the development and maintenance of performance management deliverables.
- Describe recommended process to determine who is responsible for monitoring and managing performance for projects and programs monitored across the PRMES.
- Define a process to report performance measures to PRMP on a routine basis as well as to describe the responsibilities of vendors to monitor performance measures.
- Establish performance management consistency across the Medicaid Enterprise.
- Implement a means to manage the PRMES based upon quantifiable and evidence-based measures.

These processes are defined in detail in the Performance Management Process found in Section 3.0.

## 1.2 Scope

This section outlines the scope of a Performance Management Plan. The PRMP PgMO and the PRMP Project Director shall monitor and manage the effectiveness of the performance management approach used by the vendors.

The Performance Management Plan will help address all aspects of performance management that might have an impact on project success, cost, delays, and inefficiencies.

The guidance for carrying out vendor tasks contained in this plan aid include:

- Methods for calculating and monitoring performance-related metrics across the enterprise.
- Mechanisms for reporting performance metrics for the PRMES.
- Guidelines related to performance management.

### 1.2.1 In Scope

The Vendor shall monitor the performance of projects as defined by PRMP. This pertains to the entirety of the project and includes changes in scope, schedule, and performance indicators that may be developed over the life of the projects identified. New projects may be added to the scope as determined by PRMP.

### 1.2.2 Out of Scope

Vendors shall list the items considered out of scope. Any scope exclusions must be in alignment with the Request for Proposal (RFP) and the final signed contract.

## 1.3 Approach

This section describes dependencies, standards, and references. The Performance Management Plan takes into consideration the dependencies, standards, and references related to performance measures identified for the PRMES.

### 1.3.1 Dependencies

Per the *PMBOK Guide*<sup>®</sup>, a dependency is a logical relationship between two activities, or between an activity and a milestone. For example, an activity that cannot begin until another activity has been finished has a dependency. This Performance Management Plan Aid has dependencies, at a minimum, on the following plans:

- **Quality Management Plan:** The Quality Management Plan documents the necessary information required to manage project quality from project planning to delivery. It defines a project's quality policies, procedures, criteria for and areas of application, and roles, responsibilities, and authorities.
- **Risk and Issues Management Plan:** The Risk Management Plan describes how a project team will identify, analyze, and monitor risks.
- **Change Management Plan:** The Change Management Plan defines the activities, roles, and tools used to manage and control change during each stage of the project.

- **Schedule Management Plan:** The Schedule Management Plan defines the processes required to aid in timely completion of the work needed to complete a project.
- **Scope Management Plan:** The Scope Management Plan includes two components:
  - Product scope is a collection of functions and features that characterize a product, service, or result.
  - Project scope is the work performed to deliver the product, service, or result related to performance management.

In addition to the above dependencies, the Performance Management Plan is heavily dependent on each Vendors contract, the related solicitation, and the vendor's proposal response to the solicitation. Within those documents there may be RFP requirements, specifications, Service-Level Agreements (SLAs), Key Performance Indicators (KPIs), and/or contract clauses that require some degree of performance management. Vendors must use those documents to inform their Performance Management Plan.

### 1.3.2 References and Standards

This section provides an initial list of references and standards applicable to the Performance Management Plan. Per the *PMBOK Guide*<sup>®</sup>, a standard is a document established by an authority, custom, or general consent as a model or an example. A reference is a source of information and context.

PRMP vendors are required to use the appropriate standards and references. The PRMP PgMO might incorporate additional standards and references if appropriate for plan content.

The Performance Management Plan should be developed and maintained in accordance with applicable standards and industry best practices. PRMP vendors shall work with PRMP to determine if updates are required to the Performance Management Plan when a new applicable standard (or version of a standard) is released.



## 2.0 Roles and Responsibilities

This section describes the primary roles and responsibilities of the groups consisting of the project staff, sponsors, and stakeholders as they relate to performance management. Table 3 illustrates which stakeholders are responsible (R), accountable (A), consulted (C), and informed (I) (RACI), defined as:

- **Responsible:** This stakeholder does the work to complete the task area. This stakeholder may also serve as an Accountable stakeholder for some task areas.
- **Accountable:** This stakeholder delegates work and is the last one to review the task area before it is deemed complete. According to best practice, one stakeholder (or the lowest number possible) should be deemed Accountable.
- **Consulted:** This stakeholder provides input based on how the task area will impact the future work of the project and the stakeholder’s expertise.
- **Informed:** This stakeholder should be aware of the progress associated with the task area.

Table 3 provides insight into how PRMP and the PgMO will interact with performance management processes and responsibilities. Each vendor should propose its own stakeholder groups and RACI matrix according to its team’s organizational structure. Table 3 provides vendors with the RACI matrix for PRMP and/or PgMO responsibilities. This matrix can be edited from this baseline if deviations are discussed with PRMP and the PgMO based upon what is appropriate for the project.

**Table 3: RACI Matrix for Project Performance Management**

Task Area	PRMP Leadership	PRMP Program Director	PRMP PgMO	PRMP Project Lead	Vendor
<b>Plan Performance Management</b>	I	C, I	C, I	A	R
<b>Reporting of Performance Metrics for Projects Across the Enterprise</b>	C	I	C, I	A	R
<b>Determine Performance Metrics to be Utilized</b>	I	C, I	C, I	A	R
<b>Project Performance Indications</b>	I	C, I	C, I	A	R

Task Area	PRMP Leadership	PRMP Program Director	PRMP PgMO	PRMP Project Lead	Vendor
<b>Change in Performance Metrics</b>	I	I	C, I	A	R
<b>Change in Projects to be Monitored</b>	I	C, I	C, I	A	A

The following subsections describe each stakeholder group.

## 2.1 PRMP Leadership

PRMP is responsible for administering the Medicaid Program in Puerto Rico, including the Children’s Health Insurance Program (CHIP). PRMP is an agency within the Puerto Rico Department of Health (PRDoH). While leadership roles might vary among projects, in general, the PRMP Leadership stakeholder group refers to the PRDoH Secretary, PRMP Executive Director, and the PRMP Executive Steering Committee.

## 2.2 PRMP Program Director

An important responsibility of the PRMP Program Director is to set expectations and approve processes for performance management among MES projects.

## 2.3 PRMP Project Lead

PRMP appoints a Project Lead to oversee each of the PRMES projects under the PRMP programs utilizing the defined PRMP PgMO processes. The Project Lead collaborates with the vendor’s Project Manager to help ensure the project execution and implementation are in accordance with the approved schedule and processes defined by the PRMP PgMO.

The PRMP Project Lead, PRMP PgMO, and vendors shall be the initial implementers of the performance management processes defined in this plan.

The PRMP Project Lead will have joint responsibility with the vendor Project Manager for defining, developing, monitoring, controlling, and verifying changes to the performance management plan.

## 2.4 PRMP PgMO

PRMP has designated the PgMO to provide program management guidance and collaborative oversight for its IT initiatives. As part of this responsibility, the PRMP PgMO has developed this Performance Management Plan Aid as a guide for the PRMES.

Each vendor shall create an individual Performance Management Plan to manage project quality and shall collaborate with the PRMP PgMO to gain approval of its process.

## 2.5 Vendor

The vendor implementing the Project Management Plan is responsible for developing a project-specific Performance Management Plan, obtaining PRMP and PRMP PgMO approval of the plan, and managing performance in accordance with that plan. Vendors should further elaborate and divide its organizational team as required to implement the tasks required by the Performance Management Plan as outlined per the signed contract.

In accordance with the assumptions described in this document, PRMP anticipates that performance management will be deployed according to the PRMP-approved Performance Management Plan. The vendor project manager will have joint responsibility with the PRMP project lead for defining, developing, monitoring, controlling, and verifying changes to the Performance Management Plan.

## 3.0 Performance Management Process

This section outlines considerations related to performance management for the PRMES.

### 3.1 Measuring MES Performance

Performance measurement involves developing a standardized set of performance metrics that can be used to monitor the performance of PRMP projects across the Medicaid Enterprise. Performance management involves collecting and analyzing data, applying quantitative models, techniques, tools, and databases.

Performance management metrics are used to monitor project performance based on a series of attributes. Performance metrics are calculated for projects based on considerations that include, but are not limited to:

- Project Goals and Objectives
- Defined Data Points
- Project Milestones, Deadlines, and Action Items
- Contract Deliverables
- Service-Level Agreements
- Routine and Standardized Monitoring of Project Outcomes and Associated Metrics
- Ongoing Assessment, Reporting, and Escalation of Project Performance

Performance management will be accomplished using best available practice approaches, tools, and methodologies. The performance measures used to monitor projects and programs are subject to change as new data and tools are available and as new guidance is provided by Centers for Medicare & Medicaid Services (CMS).

### 3.2 CMS Considerations for Performance Management of the MES

CMS requires an outcomes-based performance measurement approach as a condition of awarding enhanced federal funding for MES projects. CMS requires the submission of evidence-based performance measures in the Design, Development, and Implementation (DDI) Phase, Streamlined Modular Certification (SMC), and the ongoing Maintenance & Operations (M&O) Phase of performance.

In guidance issued related to SMC, CMS has identified two types of outcomes.

- **CMS-required outcomes** are based on statutory or regulatory requirements and provide a baseline for what is required of an MES, including its contribution to the efficient, economical, and effective administration of the state's Medicaid program.
- **State-specific outcomes** reflect the unique circumstances or characteristics of the state

or territory and its Medicaid program and focus on improvements to the program and its administration that are not specifically addressed by the CMS-required outcomes.

CMS has outlined the below expectations for State Medicaid Agencies (SMAs) for CMS-required outcomes as a condition for an SMA to receive enhanced funding:

- Demonstrate measurable improvements to a state's Medicaid program resulting from the delivery of a new module or enhancement to an existing module.
- Leverage data and testing to inform CMS' assessment of the success of delivered systems and system investments, and inform decisions about future MES investments.
- Enable operational data reporting for system performance, operations monitoring, and functionality to demonstrate the continuous achievement of required outcomes measures.
- Reduce the burden on states and CMS without compromising CMS' responsibility to ensure that federally supported systems satisfy all applicable statutory and regulatory requirements.
- Advance incrementally toward a fully realized, outcomes-based certification (OBC) process for the entirety of the MES.

PRMP will approve the performance-based measures defined and evidence-based documentation for the PRMES metrics based on applicable guidance issued by CMS. The purpose of the performance management metrics and supporting documentation will help demonstrate to CMS:

- If conditions for enhanced federal funding have been met.
- System outcomes are being achieved.
- Performance metrics have been reported per CMS guidance.

Evidence to support system readiness and outcome achievement may include but is not limited to:

- Demonstrations of system functionality.
- Results of system testing.
- Operational reporting.
- Organizational resource readiness.
- User training.
- Readiness of system support services such as call centers, help desk, and other dependent vendor services.

Evidence that is collected and reported to substantiate PRMES performance will be evaluated by CMS to determine if the system is achieving identified outcomes.

### 3.3 Enterprise Performance Measures

Enterprise performance measures are characterized by data-driven, quantified analytics representing technology infrastructure and systems used to assess system performance. Related data points must be gathered, processed, and analyzed to assess system performance. These performance metrics can be instrumental in demonstrating system efficiency as well as indicating early signs of system implementation or maintenance and operational deficiencies

#### 3.3.1 Performance Management Metrics

This section will provide examples of types of performance measures useful in assessing efficiency of the PRMES. This list is intended to be a sample of useful MES performance measures. The list is not an all-inclusive list of available performance measures.

**Table 4: Examples of MES Performance Management Metrics**

Metric	Description
<b>Average Days Enrollee Application is in Error Status</b>	Average number of days it takes to process pending errors at a point in time.
<b>Call Center Abandonment Rate</b>	Percentage of calls where caller hung up before call was answered by a representative.
<b>Call Center Average Hold Time</b>	Average time call was on hold.
<b>Call Center Resolution Rate</b>	Percentage of calls where issue was resolved.
<b>Number of Enrollee Applications in an Error Status</b>	Number of enrollee applications that cannot be processed due to pending errors.
<b>Number of Enrollee Applications Processed</b>	Number of enrollee applications successfully processed in a specified time frame.
<b>Number of Enrollee Eligibility Redeterminations Processed</b>	Number of enrollee eligibility reverification applications successfully processed in a specified time frame.
<b>Service Desk Availability</b>	Hours the help desk is in operation.
<b>System Downtime</b>	Percentage of time the system is not in operation.
<b>System Uptime</b>	Percentage of time the system is in operation.
<b>Timely Clams Processing</b>	Number of days required to process a claim; percentage of clean claims processed in a specified time frame.

Metric	Description
<b>Timely Encounter Submission</b>	Number of days required for a Managed Care Organization (MCO) to submit encounter data to an SMA or its Fiscal Agent.
<b>Timely Enrollee Eligibility Processing</b>	Measure of time for processing initial enrollee applications in an Eligibility and Enrollment System.
<b>Timely Provider Enrollment</b>	Number of days required to process an enrollment application for a new Medicaid Provider.
<b>Timely Provider Recertification Processing</b>	Number of days required to perform reverification steps for existing providers within a Provider Enrollment System.
<b>Timely Enrollee Redetermination Processing</b>	Measure of time for redetermination of enrollee eligibility in an Eligibility and Enrollment System.
<b>User Satisfaction</b>	Percentage of users surveyed who report satisfaction with the system.

## 4.0 Performance Management Monitoring, Escalating, and Reporting

This section defines the PRMP's expectations for monitoring, escalating, and reporting performance measures.

### 4.1 Performance Management Monitoring

PRMP expects that performance measures will be monitored by the appropriate vendor on a time frame approved by the PRMP and the PgMO. The below steps represent a process that defines the path for escalating identified issues.

### 4.2 Performance Management Escalation

This process includes a path for high-priority escalations. The vendor is responsible for the first step in the escalation process. When performance measures indicate that the vendor is not compliant with terms and conditions outlined in the contract, any matter that presents a significant instance of noncompliance should be escalated per the PRMES Governance Process for escalation. In the case of escalation, "significant" is defined as sufficiently important and indicative of material noncompliance with the agreed-upon terms and conditions in place for the vendor.

Performance measures indicating that the vendor is not in compliance with the signed contract will be addressed with the vendor to ensure the vendor is working on a strategy to correct deficiencies. When necessary and with the approval of PRMP, the vendor will be required to submit a Corrective Action Plan (CAP).

The program level is the first level for escalation of a vendor's performance management metrics indicating possible compliance issues. The second level of escalation requires the vendor to escalate to the PgMO. The third point of escalation involves the PgMO escalating issues to the PRMP PgMO Director. The fourth escalation level is the PRMP Executive Steering Committee.

Escalation to the next level will occur when significant issues related to a vendor's performance occur and are not able to be resolved in the short-term. High-priority escalations occur when significant issues related to a vendor's performance management are discovered and decisions are needed on a priority basis related to short-term action steps. PRMP expects that all stakeholders involved in the Performance Management Plan will follow the defined PRMP escalation steps.

### 4.3 Performance Management Reporting

The Vendor is responsible for the development of a standardized reporting mechanism (e.g. reporting dashboard), to maintain the PRMP-approved performance measures. The reporting tool should allow for reporting of the identified performance measures as well as evidence of any anomalies and any action taken to remediate detected issues. Performance measures for



each identified project should be kept for the life of each contract. PRMP expects that performance measures will be monitored by the vendor on a time frame approved by the PRMP and the PgMO.

For CMS-required outcomes, the vendor should develop a reporting tool that meets CMS-required outcomes. Vendors will be responsible for preparing reports for PRMP to deliver to CMS on deadlines as defined by CMS.

## Appendix A – Acronyms List

Table 5 presents a list of the acronyms used in this document.

**Table 5: Acronyms**

Term or Acronym	Definition
<b>CAP</b>	Corrective Action Plan
<b>CHIP</b>	Children's Health Insurance Program
<b>CMS</b>	Center for Medicaid Services
<b>DDI</b>	Design Development and Implementation
<b>EOMC</b>	Enterprise Objective Monitoring and Control
<b>EPMO</b>	Enterprise Program Management Office
<b>ISO</b>	International Organization for Standardization
<b>KL</b>	KnowledgeLink
<b>KPI</b>	Key Performance Indicator
<b>MCO</b>	Managed Care Organization
<b>MES</b>	Medicaid Enterprise Systems
<b>M&amp;O</b>	Maintenance and Operations
<b>OBC</b>	Outcomes based procurement
<b>OIAT</b>	Oficina de Informática y Avances Tecnológicos
<b>PgMO</b>	Program Management Office
<b>PMBOK®</b>	A Guide to the Project Management Body of Knowledge®
<b>PMP</b>	Project Management Plan
<b>PRDoH</b>	Puerto Rico Department of Health
<b>PRMES</b>	Puerto Rico Medicaid Enterprise Systems
<b>PRMP</b>	Puerto Rico Medicaid Program
<b>RACI</b>	Responsible, Accountable, Consulted, Informed
<b>RFP</b>	Request For Proposal
<b>SMA</b>	State Medicaid Agency
<b>SMC</b>	Streamlined Modular Certification
<b>SOW</b>	Scope of Work

# Enterprise Objective Monitoring and Control Services

Puerto Rico Medicaid Program Quality Management Plan Aid  
Version 1.0



GOVERNMENT OF PUERTO RICO

Department of Health  
Medicaid Program

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June 22, 2022

# Table of Contents

<b>Section</b>	<b>Page</b>
Table of Contents.....	i
Revision History .....	1
1.0 Introduction .....	2
1.1 Purpose and Objective.....	3
1.2 Scope .....	3
1.2.1 In Scope.....	4
1.2.2 Out of Scope .....	4
1.3 Approach.....	4
1.3.1 Assumptions.....	5
1.3.2 Constraints.....	5
1.3.3 Dependencies .....	5
1.3.4 Standards and References.....	6
2.0 Roles and Responsibilities.....	6
2.1 PRMP Leadership.....	7
2.2 PRMP Program Director .....	7
2.3 PRMP Project Lead .....	7
2.4 PRMP PgMO .....	7
2.5 Vendors .....	8
3.0 Quality Management .....	8
3.1 Define Project Quality .....	9
3.2 Measure Project Quality.....	10
3.3 Analyze Project Quality.....	10
3.3.1 Tools and Techniques .....	11
3.4 Improve Project Quality.....	11
3.5 Control Project Quality.....	12
4.0 Quality Assurance .....	12



4.1 Quality Assurance.....13

5.0 Quality Control.....13

5.1 Quality Control Plan.....14

Appendix A: Acronyms.....15

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6/22/2022	V1.0	Initial delivery	BerryDunn PgMO Team

## 1.0 Introduction

PRMP is committed to successful projects for the residents of Puerto Rico and has established a Medicaid Enterprise Solution PgMO to provide guidance, support, and oversight for vendor projects within the Medicaid Enterprise.<sup>1</sup>

The Quality Management Plan Aid is a living document intended to provide PRMP vendors with guidance on PRMP’s expectations regarding managing quality. PRMP expects vendors to develop and submit a Quality Management Plan for the project(s) for which they are providing services. Vendors should reference this document when creating their Quality Management Plans to help ensure PRMP’s expectations are met and that there is a common understanding between PRMP and the vendor regarding managing quality. The PRMP PgMO will update this aid when new applicable standards (or versions of a standard) are released or when there are changes to PRMP policies that affect quality management.

If a vendor finds a contractual conflict with guidance provided in this plan aid, vendors should defer to their contract and/or any updated PRMP guidance.

The Introduction section of this document provides information on the Quality Management Plan Aid’s purpose and objectives, scope, standards, assumptions, dependencies, and constraints. To help ensure an understanding of key terms, Table 2 provides definitions of quality management processes.

**Table 2: Quality Management Processes**

Term	Definition
<b>Quality Planning</b>	The process of managing and identifying quality requirements and standards for the projects and deliverables and documenting how the projects shall demonstrate compliance with the requirements and standards.
<b>Quality Assurance</b>	The process of translating the Quality Management Plan into executable quality activities that incorporate an organization’s quality policies and stated vision into the project.
<b>Quality Control</b>	The process of monitoring and recording results that come from quality management activities.

Quality management helps ensure that an organization, product, or service is consistent with the defined quality objectives. Quality management has three main components: quality planning, quality assurance, and quality control. Per the *Project Management Body of*

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<sup>1</sup> In this aid, “vendor” refers to vendors that implement and maintain systems within the PRMES, as well as contractors and other entities that provide non-solution-related PRMES services to PRMP.

*Knowledge (PMBOK) Guide*<sup>®</sup>, quality management falls into three processes: quality planning, quality assurance, and quality control. A Quality Management Plan documents the information required to manage quality effectively from project planning to implementation and/or administration. The plan defines the project's quality policies, procedures, criteria, roles, responsibilities, and authorities.

Quality can apply to process and product quality, which includes software, applications, and other services provided by a vendor in line with contract requirements. The project defines quality by identifying and documenting quality criteria. The quality criteria consist of standards and metrics based on compliance with the finalized contract and quality criteria proposed by vendors and approved by PRMP.

## 1.1 Purpose and Objective

The purpose of the Quality Management Plan Aid is to:

- Detail the processes that apply to quality management
- Establish PRMP's quality management expectations for vendors

The objectives of the Quality Management Plan Aid are to:

- Provide guidance to PRMP Medicaid Enterprise Systems (PRMES) vendors in the development of their Quality Management Plans. These plans shall demonstrate the vendor's processes for managing quality, including coordinating with PRMP project managers to identify, report on, and manage quality. PRMES vendors' Quality Management Plans shall include provisions to make all quality-related findings transparent to PRMP.

## 1.2 Scope

This section outlines the scope of a Quality Management Plan from the perspective of the vendor's responsibility. The PRMP PgMO and the PRMP Project Lead shall monitor and manage the effectiveness of the approach and methodology used by vendors as documented in this section.

PRMP expects vendors to follow a mature industry standard quality management methodology to manage project quality. At a minimum, vendors shall follow the quality management guidance described in the *Chapter 8: Project Quality Management—PMBOK<sup>®</sup>, Seventh Edition, Project Management Institute<sup>®</sup> (PMI<sup>®</sup>)*. PRMP recognizes that there are other industry standard processes and methodologies, including, but not necessarily limited to:

- Define, Measure, Analyze, Improve, and Control (DMAIC) from American Society for Quality (ASQ) Total Quality Management (TQM)
- Plan-Do-Check-Act (PDCA) Cycle from ASQ TQM
- International Organization for Standardization (ISO) quality management procedures



A vendor may choose to follow one of the above quality management methodologies or another methodology with PRMP approval of the vendor's Quality Management Plan.

Within their Quality Management Plans, vendors shall adhere to the guidance provided in this Quality Management Plan Aid as well as:

- Define process steps
- Document when and how often they will conduct quality management processes
- Add related quality management activities to the project schedule

The vendor's Quality Management Plan shall address all aspects of quality management that might have an impact on project success. The quality management processes shall include the steps for prioritizing correcting errors or issues related to quality to allow project teams to focus on resolution of the highest-priority quality challenges. The Quality Management Plan should also include:

- **Templates:** A quality management memorandum, quality management log, or other documents that standardize information capture and communication related to quality
- **Processes:** Descriptions about how vendors manage risks and issues, including tracking, management, quality processes, reporting, and tools used
- **Standards:** Descriptions of the industry standards vendors employ to manage quality

### 1.2.1 In Scope

Vendors shall identify all the items subject to quality management as part of the overall project. Including project, product, and process quality as applicable to PRMP projects. Vendor-specific Quality Management Plans shall include, at a minimum:

- Items related to the guidance within this Quality Management Plan Aid
- Description of the vendor's chosen industry standard quality management methodology
- Details on managing the three main components of quality management: quality planning, quality assurance, and quality control

### 1.2.2 Out of Scope

Vendors shall list the items considered out of scope. Vendors will ensure that any scope exclusions are in alignment with the Request for Proposals (RFP), proposal, and the final signed contract.

## 1.3 Approach

This section describes assumptions, dependencies, constraints, standards, and references. The Quality Management Plan Aid takes into consideration the assumptions, dependencies, and constraints for projects as described in this section.

### 1.3.1 Assumptions

Per the *PMBOK Guide*<sup>®</sup>, an assumption is a factor expected to be in place or to be in evidence. The assumptions made related to the development of Quality Management Plans are:

- Vendors will use their own quality management processes to help ensure quality during a project's life cycle. Vendors shall coordinate the process with the PRMP Project Leads and will provide transparency to the PRMP. The vendor's own quality management processes will adhere to any guidelines provided in this document.
- The PRMP will have a complementary quality management process managed by the PRMP Project Leads and supported by the PRMP PgMO.
- The vendor shall provide a detailed list of all assumptions as they pertain to quality requirements and standards compliance in quality management across the projects being executed.

### 1.3.2 Constraints

Per the *PMBOK Guide*<sup>®</sup>, a constraint is a limiting factor that affects the execution of a project or process. There are no constraints identified for this Quality Management Plan Aid.

Vendors shall identify constraints related but not limited to:

- Quality management methodology
- Data quality
- Quality management tool access

### 1.3.3 Dependencies

Per the *PMBOK Guide*<sup>®</sup>, a dependency is a logical relationship between two activities, or between an activity and a milestone. For example, an activity that cannot begin until another activity has been finished has a dependency. Vendors shall identify, list, and describe dependencies in their Quality Management Plans.

The Quality Management Plan has dependencies on the following plans:

- **Cost Management Plan:** This plan addresses how the project cost will be planned, structured, and controlled.
- **Schedule Management Plan:** This plan includes the processes required to manage timely completion of project work.
- **Test Plan:** This plan includes the processes and procedures to verify and validate the requirements are accurately tested and defects are eliminated through various stages of the project life cycle.
- **Certification Management Plan:** This plan defines the approach to implementing the Medicaid Enterprise Certification processes as required to obtain CMS certification. This

plan is applicable to all PRMP projects that require support, administration, or oversight of federal certification activities.

### 1.3.4 Standards and References

This section provides a comprehensive list of standards and references applicable to the Quality Management Plan Aid. The PRMP PgMO, vendors are required to reference the appropriate standards and references.

- Chapter 8: Project Quality Management—*PMBOK® Guide*, Seventh Edition, Project Management Institute® (PMI®)
- Institute of Electrical and Electronics Engineers (IEEE®) Standard 730-2002 – Standards for Software Quality Plans
- ISO 9001:2015: Quality Management Systems – Requirements
- ISO 9000:2015: Quality Management Systems – Fundamentals and Vocabulary (definitions)
- ISO 9004:2018: Quality Management – Quality of an Organization – Guidance to Achieve Sustained Success (continuous improvement)
- ISO 19011:2018: Guidelines for Auditing Management Systems

Vendors are expected to update their Quality Management Plans when a new applicable standard (or version of a standard) is applied.

## 2.0 Roles and Responsibilities

This section describes the primary roles and responsibilities of the groups that consist of the project staff, sponsors, and stakeholders as they relate to quality management. Table 3 illustrates which stakeholders are responsible (R), accountable (A), consulted (C), and informed (I) (RACI), defined as:

**Responsible:** This stakeholder does the work to complete the task area. This stakeholder may also serve as an accountable stakeholder for some task areas.

**Accountable:** This stakeholder delegates work and is the last one to review the task area before it is deemed complete. According to best practice, one stakeholder (or the lowest number possible) should be deemed accountable.

**Consulted:** This stakeholder provides input based on how the task area will impact the future work of the project and the stakeholder's expertise.

**Informed:** This stakeholder should be aware of the progress associated with the task area.

**Table 3: RACI Matrix for Quality Management**

Task Area	PRMP Leadership	PRMP Program Director	PRMP PgMO	PRMP Project Lead	Vendor
<b>Planning</b>	C	C	C	A	R
<b>Management: Quality Error Identification</b>	I	C	I	A	R
<b>Management: Quality Error Analysis</b>	I	I	C	A	R
<b>Management: Quality Error Responses</b>	I	C	C	A	R
<b>Monitoring/Reporting</b>	I	I	I	A	R

## 2.1 PRMP Leadership

PRMP is the Medicaid agency responsible for administering the Medicaid Program in Puerto Rico, including the Children’s Health Insurance Program (CHIP), and a waiver-based section 1915(a) program. PRMP is an agency within the Puerto Rico Department of Health (PRDoH). While leadership roles might vary between projects, in general, the PRMP Leadership stakeholder group refers to the PRDoH Secretary, PRMP Executive Director, and the Executive Steering Committee.

## 2.2 PRMP Program Director

The PRMP Program Director is a member of the PRMP PgMO.

An important aspect of the PRMP Program Director’s role is to assess quality in terms of the quality management between PRMES projects and across PRMP, including whether any quality-related findings in a project have broader implications.

## 2.3 PRMP Project Lead

PRMP appoints a Project Lead to oversee each of the PRMES projects under PRMP programs utilizing the defined PRMP PgMO processes. The Project Lead collaborates with the vendor’s project manager to help ensure the project execution and implementation is in accordance with the approved schedule and processes defined by the PRMP PgMO.

PRMP project leads, PRMP PgMO, and vendors shall be the initial implementers of the quality management processes defined in the Quality Management Plan.

The PRMP Project Lead will have joint responsibility with the vendor’s Project Manager for maintaining and executing the quality management process.

## 2.4 PRMP PgMO

The PRMP has designated the PRMP PgMO to provide program and project management guidance and collaborative oversight for its IT initiatives. The PRMP PgMO shall support the PRMP Project Leads in approving the vendors' Quality Management Plans and for confirming adherence to the approved processes. As part of this responsibility, the PRMP PgMO has developed this Quality Management Plan as guidance for creating project-specific Quality Management Plans and processes.

The PRMP PgMO shall provide collaborative oversight on quality management to confirm that the project processes and quality criteria are being effectively managed.

## 2.5 Vendors

The vendors shall be responsible for producing and submitting project-specific Quality Management Plans that clearly define quality initiatives and measurements of quality as well as the approach to continual improvements. Additionally, there are requirements to create quality assurance and quality control plans for projects.

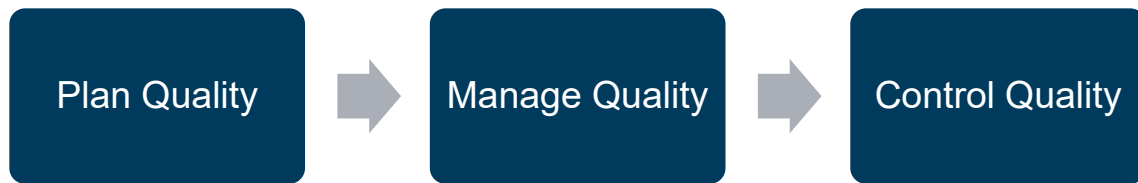
Vendors are responsible for managing projects effectively and controlling the quality criteria and objectives of the projects. Quality directly affects deliverables defined in the vendor's contract. It is important that vendors help ensure that deliverables are fit for use. To this end, vendors will create a performance metric dashboard and share it weekly via the vendors' weekly status reports.

## 3.0 Quality Management

The Quality Management Plan is important in the project life cycle. Through quality assurance and control, the Quality Management Plan helps identify and rectify the errors discovered throughout a project's life cycle including documents and artifacts created as project deliverables. Plan, manage, and control are the simplistic steps in a quality management process. Figure 1 provides an illustration of the quality management process, and the associated steps are described below.

The PRMP PgMO team reviewed the applicable standards as identified in the Standards and References section of this document, augmented industry best practices, and utilized the experience of the project team to develop the Quality Management Plan Aid.

**Figure 1: Quality Management Life Cycle**



**Plan Quality** is the process of managing and identifying quality requirements and standards for the projects and deliverables and documenting how the projects shall demonstrate compliance with the requirements and standards. This process is performed first during the planning phase and repeated at specified intervals throughout the project life cycle. One of the key benefits of this process is the guidance it offers for the management and verification of quality throughout the project.

**Manage Quality** is the process of translating the Quality Management Plan into executable quality activities that incorporate an organization’s quality policies and stated vision into the project. Through this process, it becomes possible to improve the probability of meeting the quality objectives and to remove ineffective processes and the causes of poor quality. Manage quality uses the data and the outcomes from the control quality process to reflect the overall project quality status to project stakeholders. It becomes imperative to conduct this process throughout the project life cycle.

**Control Quality** is the process of monitoring and recording results that come from quality management activities. This process helps to assess performance and ensure that project objectives are complete, accurate, and meet the customer expectations and specifications. The control quality process verifies if the project output meets its intent and is in alignment with the specified standards, requirements, specifications, and regulations. To help ensure that the project metrics are within the defined thresholds, quality control is performed throughout the project life cycle.

PRMP expects vendors to describe their quality management life cycle and process in their projects’ Quality Management Plan. The descriptions should include how the vendor plans, manages, and controls quality. These elements of quality management are described in the following subsections.

### 3.1 Define Project Quality

Define project quality is an important aspect of the quality management process. To define quality, the vendor shall use its project charter to identify the goals of the project and they are in alignment with PRMP’s expectations. The most important part of this process is identifying any quality problems and goals. A process champion is required to champion the improvement goals and is supported by a process owner and accompanying team. Under the supervision of

the vendor or contractor project manager, project staff have specific tasks to complete actions needed to address the identified problems. The vendor’s Quality Management Plan shall provide an approach that:

- Establishes a project charter
- Identifies quality problems and goals
- Defines project quality management

### 3.2 Measure Project Quality

In the measure phase, the team refines the measurements definition and determines the current performance, or the baseline, of the process. In this phase, it is imperative to identify desired metrics and related monitoring processes with which to measure quality standards, develop a plan for measuring quality, define methods of data collection and archiving, and document the time frame for measurements and metrics reporting. The vendor’s Quality Management Plan shall:

- Describe the project quality measurement approach
- Identify data collection and archiving processes related to quality
- Provide a description of how and when the vendor will document measurements and metrics reporting

PRMP will work with each vendor to develop quality metrics for individual projects—these might be defined in the vendor’s contract with PRMP and refined at project startup. Table 4 presents an example of the traffic light indicator (Red/Yellow/Green) commonly used in project performance measurement and reporting.

**Table 4: Sample Quality Metric Measurement Indicators**

<b>Grey</b>	Metrics are not measurable (readiness assessment pending)
<b>Green</b>	Metrics are on plan and no action is needed
<b>Yellow</b>	Metrics are deviating from the plan and need a response
<b>Red</b>	Significant deviation from the plan and needs a Corrective Action Plan (CAP)

### 3.3 Analyze Project Quality

The analyze phase focuses on how quality management work needs to be done, process mapping, process risks, and process inefficiencies that can potentially create new problems. The best approach to the analyze phase is for the team to identify the root causes of the problems and options to resolve them. In this phase, analysis of quality issues is key. Analysis is required on processes and data and should be completed before implementing solutions. In their Quality Management Plans, vendors shall include:

- The process for identifying quality issues and their root causes
- The tools the vendors use to analyze identified issues (e.g., what quality management tool is used, data that might inform identification of quality issues)
- The process used to analyze, mitigate, and resolve project quality issues

### 3.3.1 Tools and Techniques

Vendors are required to provide details related to the selected tools that are used for managing quality and metrics reporting. Additionally, the templates created and used in the project life cycle shall be indicated in this section of the plan.

The *PMBOK Guide*® Seventh Edition references the following seven basic quality tools frequently used in the quality management process across various phases in the project life cycle:

- **Cause and Effect (Fishbone or Ishikawa diagram):** A diagram that outlines the different steps in a process, demonstrates where quality issues might arise, and determines which resources are needed at specific intervals
- **Check Sheet:** A tool used for qualitative and quantitative data gathering and analysis
- **Control Chart:** A graphical tool used to understand how a process changes over time
- **Histogram:** A chart that shows the frequency distribution of different data values
- **Pareto Chart:** A bar graph that represents data frequency of problems or causes in a process
- **Scatter Diagram:** A diagram that depicts the correlation of pairs of numerical data
- **Flowchart/Run Chart:** A diagram that represents a workflow or process

PRMP expects vendors to use a selection of these tools (or similar tools) in their quality management processes.

## 3.4 Improve Project Quality

In the improve project quality phase, the project team brainstorms solutions, pilots process changes, and implements solutions. The team performs data collection to verify the improvements are measurable. A well-organized improvement effort results in innovative solutions that improve the baseline measurements and enhance the customer service experience. Vendors' Quality Management Plans shall describe:

- How the vendor will mitigate quality issues
- What quality improvement process(es) the vendor will employ
- How the vendor will measure quality improvement through metrics



- How the vendor will communicate quality improvement (e.g., via quality management reports, status reports, quality management memoranda)

### 3.5 Control Project Quality

In the Control Project Quality phase, the team is focused on creating a monitoring plan that shall continue measuring the success of the updated processes and develop a CAP in case performance decreases. The focus in this phase is sustainability to help ensure that the improvements made are sustained throughout the project. The project team plays a big role in helping ensure that the processes maintain the gains. Within the Control Project Quality section of the Quality Management Plan, vendors should, at a minimum, describe:

- The quality improvement process
- The communication methods used to control quality
- A description of a CAP template including, but not limited to:
  - Target of the corrective action
    - Quality error background
    - Description of the problem
    - Root cause
    - Processes, systems, or procedures impacted
  - CAP implementation strategy
    - Objective
    - Approach
    - Plan and milestones
    - Risks and issues escalation
  - Testing approach, if related to system quality issues
    - Testing approach
  - After-action activities
    - Performance measures
    - Follow-on activities
  - Support or actions needed from stakeholders
- The vendor's plan for helping to ensure quality is sustained after error resolution

## 4.0 Quality Assurance

Quality assurance is a process that helps ensure the work related to the production of project deliverables is on track and that vendors meet or exceed expectations. The quality assurance process should be proactive to help ensure that project remains on schedule and the maintenance of product and service quality. Vendors are expected to include a Quality Assurance Plan section in their Quality Management Plans.

## 4.1 Quality Assurance

Quality Assurance is comprised of administrative and procedural activities implemented in a quality system so that requirements and goals for a product, service, or activity can be fulfilled. A Quality Assurance Plan describes systematic measurement, comparison with standards, monitoring of processes, and an associated feedback loop to confirm error prevention. Quality assurance operates under two basic principles: 1) Fitness for Purpose, which means a product or service is usable for the intended purpose, and 2) Right First Time, which means defects are mitigated.

An important part of quality assurance is quality verifications. Verifications are performed to confirm that the processes and standards as defined in approved plans (e.g., the Quality Management Plan) are followed by the project team and focus on questions such as:

- Are the documented processes being followed?
- Are the documented processes working?
- Are the documented processes efficient?

Within its Quality Management Plan, a vendor shall produce a comprehensive Quality Assurance Plan detailing the process, standards, and resources required to support contract performance. The Quality Assurance Plan section shall include, at a minimum:

- Quality verification descriptions
- Quality verification approach
- Non-compliance and escalation process
- Quality verification reporting
- Quality verification closure

## 5.0 Quality Control

Quality Control provides a systematic and structured process to evaluate the services the vendor has committed to provide, including but not limited to, processes, methods, metrics, customer satisfaction surveys, service level agreements, and operational level agreements. PRMP shall utilize the results of the Quality Control Plan to document the vendor's quality assurance performance.

Vendors shall develop a Quality Control Plan section within their Quality Management Plans that defines the vendor's approach, processes, and procedures for ensuring the quality and reliability of its products and services throughout the project life cycle.

## 5.1 Quality Control Plan

The quality control process is introduced in the planning phase of the project and followed throughout the entire project life cycle. The process verifies that the project outputs are in alignment with the applicable standards, requirements, regulations, and specifications of the project. This is carried out by monitoring and recording results of the defined quality management activities such as performance assessments that validate that the project outputs are complete, correct, and meet customer expectations. The key benefit of this process is that it verifies the project deliverable and work products meet the requirements specified by the stakeholders for final acceptance.

## Appendix A: Acronyms

Table 5 presents acronyms used in this document.

**Table 5: Acronyms List**

Acronym	Definition
<b>CAP</b>	Corrective Action Plan
<b>CHIP</b>	Children’s Health Insurance Program
<b>DMAIC</b>	Define, Measure, Analyze, Improve, and Control
<b>EOMC</b>	Enterprise Monitoring and Control
<b>IEEE®</b>	Institute of Electrical and Electronics Engineers
<b>ISO</b>	International Organization for Standardization
<b>IT</b>	Information Technology
<b>KL</b>	BerryDunn KnowledgeLink
<b>OIAT</b>	Oficina de Informática y Avances Tecnológicos
<b>PDCA</b>	Plan-Do-Check-Act
<b>PRDoH</b>	Puerto Rico Department of Health
<b>PgMO</b>	Program Management Office
<b>PMBOK®</b>	<i>A Guide to the Project Management Body of Knowledge Guide</i>
<b>PMI®</b>	Project Management Institute
<b>PRMES</b>	Puerto Rico Medicaid Enterprise Systems
<b>PRMP</b>	Puerto Rico Medicaid Program
<b>RACI</b>	Responsible, Accountable, Consulted, and Informed
<b>RFP</b>	Request for Proposals

# Enterprise Objective Monitoring and Control Services

Requirements Management Plan Aid

V1.0



GOVERNMENT OF PUERTO RICO

Department of Health  
Medicaid Program

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June 22, 2022

# Table of Contents

<b>Section</b>	<b>Page</b>
Table of Contents.....	i
Revision History .....	1
1.0 Introduction .....	2
1.1 Purpose and Objectives.....	3
1.2 Scope .....	3
1.2.1 In Scope.....	3
1.2.2 Out of Scope .....	4
1.3 Approach .....	4
1.3.1 Assumptions.....	4
1.3.2 Constraints .....	5
1.3.3 Dependencies .....	5
1.3.4 Standards and References.....	6
2.0 Roles and Responsibilities .....	7
2.1 PRMP Leadership .....	8
2.2 PRMP Program Director .....	8
2.3 PRMP Project Lead .....	8
2.4 PRMP PgMO .....	8
2.5 Vendors .....	8
2.6 PRMP SMEs.....	9
3.0 Requirements Management .....	10
3.1 Requirement Identification .....	10
3.2 Requirement Validation .....	11
3.3 Requirements Design .....	15
3.4 Requirement Verification .....	18
3.5 Requirement Implementation.....	19
3.6 Requirement Change Control .....	19



3.7 Requirements Management Reporting ..... 19

4.0 Requirement Traceability ..... 20

    4.1 Requirement Traceability Categorization ..... 20

    4.2 Requirement Traceability Reporting..... 23

Appendix A: Acronyms List ..... 24

Appendix B: Sample RAD Outline ..... 26

## Revision History

The Puerto Rico Medicaid Program's (PRMP's) Program Management Office (PgMO) will store the approved Requirements Management Plan Aid and any approved revisions on the PgMO SharePoint site. PRMP and the PRMP PgMO will make the plan available to project stakeholders as needed. Currently, BerryDunn provides PRMP PgMO services.

Table 1 presents the revision history for this document. When changes occur, the PRMP PgMO will increment the version number and the date. The PRMP PgMO will record the name of the person or entity making the change and a description of the change in the revision history.

**Table 1: Revision History**

Date	Document Version	Description	Author(s)
6/22/2022	V1.0	Initial delivery	BerryDunn PgMO Team



## 1.0 Introduction

The PRMP is committed to successful projects for the residents of Puerto Rico and has established a Puerto Rico Medicaid Enterprise Systems (PRMES) PgMO to provide guidance, support, and oversight for vendor projects within the Medicaid Enterprise.<sup>1</sup> The PRMP PgMO has created plan aids to assist in effectively and efficiently accomplishing executed projects. Project management involves applying best practice processes, tools, and techniques. The PRMP PgMO aids provide guidance for more predictable and consistent plans, processes, and practices, which will result in meeting the goals and objectives of PRMP and vendor partners, and meeting stakeholder expectations.

The Requirements Management Plan Aid is a living document intended to provide PRMP vendors with guidance on PRMP’s expectations regarding management of project requirements. PRMP expects vendors to develop and submit a Requirements Management Plan for the project(s) for which they are providing services. Vendors should reference this document when creating their Requirements Management Plans to help ensure PRMP’s expectations are met and that there is a common understanding between PRMP and the vendor regarding requirements management. The PRMP PgMO will update this Requirements Management Plan Aid when new applicable standards (or versions of a standard) are released or when there are changes to PRMP policies that affect requirements management.

If a vendor finds a contractual conflict with guidance provided in this plan aid, vendors should defer to their contract and/or any updated PRMP guidance.

The Introduction section of this document provides information on the Requirements Management Plan Aid’s purpose and objectives, scope, approach, assumptions, constraints, dependencies, and standards and references. To help ensure an understanding of project requirements, Table 2 provides definitions for requirements, requirements documentation, Requirements Management Plan, and Requirements Traceability Matrix (RTM).

**Table 2: Definitions Relating to Requirements Management**

Term	Definition
<b>Architectural Requirement</b>	A specification that PRMP, vendors or other entities require of a system, system hardware, software, interfaces, environments, layers, etc. This could include adding new components, removing outdated ones, replacing or improving components, or changing the way in which they are organized and how they work together.
<b>Business Requirement</b>	A statement of goals, objectives, and outcomes that describe why a change has been initiated. They can apply to the whole of an enterprise, a business area, or a specific initiative.

<sup>1</sup> In this aid, “vendor” refers to solution vendors that implement and maintain systems within the PRMES, as well as contractors and other entities that provide non-solution-related PRMES services to PRMP.

Term	Definition
<b>Functional Requirement</b>	A requirement that defines what a system or its component must and must not do.
<b>Non-Functional Requirement</b>	Define system attributes such as security, reliability, performance, maintainability, scalability, and usability. They serve as constraints or restrictions on the design of the system across the different backlogs.
<b>Requirement</b>	A condition or capability that is necessary to be present in a product, service, or result to satisfy a business need.
<b>Requirement Documentation</b>	A description of how individual requirements meet the business needs for the project.
<b>Requirements Management Plan</b>	A component of the Project Management Plan (PMP) that describes how requirements will be analyzed, documented, and managed.
<b>RTM</b>	A grid (i.e. spreadsheet) that links requirements from their origin to the deliverables that satisfy them.
<b>Technical Requirement</b>	A requirement that pertains to the technical aspects that a system must fulfill, such as performance-related issues, reliability issues, and availability issues.

## 1.1 Purpose and Objectives

The purpose of the Requirements Management Plan Aid is to:

- Provide processes and standards for the management of requirements throughout PRMP projects.

The objectives of the PRMP PgMO Requirements Management Plan Aid are to provide vendors with guidance on PRMP’s expectations regarding:

- Requirements management
- RTM

## 1.2 Scope

The scope statement defines both the work included and not included in the scope of a project. For purposes of this Requirements Management Plan Aid, this section addresses what is in and out of scope for an anticipated plan. The plan provides guidance to the vendors to also address processes and procedures related to managing and controlling requirements for PRMP projects.

### 1.2.1 In Scope

The Requirements Management Plan addresses procedures and standards for managing and tracing project product requirements for each phase of the requirement life cycle. Vendors shall identify all items subject to requirements management as part of the overall project. The Requirements Management plan covers what is entailed at a detailed level where the Scope management plan addresses high level changes.

Components of the Requirements Management Plan can include, but are not limited to:

- How requirements activities will be planned, tracked, and reported
- Configuration management activities such as: how changes will be initiated; how impacts will be analyzed; how they will be traced, tracked, and reported; and the authorization levels required to approve these changes
- Requirements prioritization process
- Metrics that will be used and the rationale for using them
- Traceability structure that reflects the requirement attributes captured on the traceability matrix

### 1.2.2 Out of Scope

The Requirements Management Plan Aid is a companion plan to the Scope Management Plan, and therefore, does not include the following:

- Processes for defining the work required to complete the project successfully. The Scope Management Plan addresses this.
- Processes for creating a Work Breakdown Structure. The Scope Management Plan addresses this.
- Processes to validate and control scope. The Scope Management Plan addresses this.
- Processes to manage the project life cycle, including federal certification. The Scope Management Plan addresses this.
- Processes to manage the project schedule. The Schedule Management Plan addresses these processes.

Vendors shall list the items considered out of scope. Any scope exclusions must be in alignment with the Request for Proposals (RFP), vendor's proposal, and the final signed contract as necessary.

## 1.3 Approach

This section describes assumptions, constraints, dependencies, standards, and references. The Requirements Management Plan takes into consideration the assumptions, dependencies, and constraints for projects as described in this section.

### 1.3.1 Assumptions

Per *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)*, an assumption is a factor expected to be in place or to be in evidence. The following are assumptions considered in the development of a vendor's Requirements Management Plan and are applicable to all PRMP projects:

- The roles and responsibilities for requirements management will be based on a stakeholder analysis for each project and are included in a Responsible, Accountable, Consulted, and Informed (RACI) Matrix for each project.
- An agreed-upon methodology will be used for managing the requirement life cycle.
- The project will use an approved tool for the management and traceability of requirements.
- The RTM structure will contain attributes and tracing features to support the current version of the Centers for Medicare & Medicaid Services (CMS) certification process, where required.
- The vendor will baseline the Requirement Analysis Document (RAD) immediately following approval.
- The vendor will re-baseline the RAD immediately following approval of a change request that in any way impacts a requirement (i.e., scope).

The vendor should describe its assumptions related to requirements management.

### 1.3.2 Constraints

Per the *PMBOK® Guide*, a constraint is a limiting factor that affects the execution of a project or process. The following constraint should be considered in the development of a vendor's Requirements Management Plan and is applicable to all PRMP projects:

- The system development life cycle (SDLC) entrance and exit criteria shall be satisfied prior to a requirement advancing through its life cycle.

The vendor should list constraints related to requirements management.

### 1.3.3 Dependencies

Per the *PMBOK® Guide*, a dependency is a logical relationship between two activities, or between an activity and a milestone. For example, an activity that cannot begin until another activity has been finished has a dependency. The following dependencies should be considered in the development of a vendor's Requirements Management Plan:

- **Certification Management Plan:** This plan defines the approach to implementing the Medicaid Enterprise Certification processes as required to obtain CMS certification. This plan is applicable to all PRMP projects that require support, administration, or oversight of federal certification activities.
- **Deliverable Management Plan:** This plan defines the processes for receipt and management of the deliverables and required deliverables vendors submit to PRMP.
- **Change Management Plan:** This plan defines the processes for all change control activities, including changes to configuration item baselines.

- **Quality Management Plan:** This plan documents the information required to effectively manage project quality from project planning to delivery. It defines a project's quality policies; procedures; criteria for and areas of application; and roles, responsibilities, and authorities.
- **Schedule Management Plan:** This plan includes the processes required to manage timely completion of project work.
- **Stakeholder Engagement Plan:** This plan includes the processes and activities to identify project stakeholders to effectively engage those stakeholders in a project.
- **Test Plan:** This plan includes the processes and procedures to verify and validate the requirements are accurately tested and defects are eliminated through various stages of the project life cycle.

### 1.3.4 Standards and References

Vendors shall develop a Scope Management Plan, along with a Work Breakdown Structure (WBS) and entrance and exit criteria, based on this PMP Aid and using the following industry standards:

- *PMBOK® Guide*, Sixth Edition, Project Management Institute® (PMI®), Chapter 5 – Project Scope Management
- *PMBOK® Guide*, Sixth Edition, PMI®, Chapter 2 – Organizational Influences and Project Life Cycle
- Institute of Electrical and Electronics Engineers (IEEE®) Standard 830 – Requirement Specification, IEEE®
- CMS Medicaid Information Technology Architecture (MITA) 3.0 Framework

## 2.0 Roles and Responsibilities

This section describes the primary roles and responsibilities of the groups that consist of the project staff, sponsors, and stakeholders as they relate to requirements management. Table 3 illustrates which stakeholders are responsible (R), accountable (A), consulted (C), and informed (I) (RACI), defined as:

- **Responsible:** This stakeholder does the work to complete the task area. This stakeholder may also serve as an Accountable stakeholder for some task areas.
- **Accountable:** This stakeholder delegates work and is the last one to review the task area before it is deemed complete. According to best practice, one stakeholder (or the lowest number possible) should be deemed accountable.
- **Consulted:** This stakeholder provides input based on how the task area will impact the future work of the project and the stakeholder’s expertise.
- **Informed:** This stakeholder should be aware of the progress associated with the task area.

Table 3 aims to provide insight into how PRMP and the PgMO will interact with project requirements management processes and responsibilities. The vendor should propose its own stakeholder groups and RACI matrix according to its team’s organizational structure. Table 3 provides vendors with the RACI matrix for PRMP and/or PgMO responsibilities. This matrix can be edited from this baseline if deviations are discussed with PRMP and the PgMO to determine what is appropriate for the project.

**Table 3: RACI Matrix for Project Requirements Management**

Task Area	PRMP Leadership	PRMP Program Director	PRMP Project Lead	PRMP PgMO	PRMP Subject Matter Experts (SMEs)	Vendor
Identify Requirements	C	C	A	C	C	R
Validate Requirements	C	C	A	C	C	R
Design Requirements	I	I	A	I	C	R
Verify Requirements	I	I	A	I	C	R
Implement Requirements	I	C	A	I	C	R
Control Requirements	I	C	A	I	I	R
Report Requirements	I	C	A	I	I	R
Trace Requirements	I	C	A	I	I	R

The following subsections provide a description of each stakeholder group.

## 2.1 PRMP Leadership

PRMP is the Medicaid agency responsible for administering the Medicaid Program in Puerto Rico, including the Children's Health Insurance Program (CHIP), and a waiver-based section 1915(a) program. PRMP is an agency within the Puerto Rico Department of Health (PRDoH). While leadership roles might vary between projects, in general, the PRMP Leadership stakeholder group refers to the PRDoH Secretary, PRMP Executive Director, and the PRMP Executive Steering Committee.

## 2.2 PRMP Program Director

The PRMP Program Director is a member of the PRMP PgMO.

An important aspect of the PRMP Program Director's role is to set the expectations for requirements management among the PRMES projects.

## 2.3 PRMP Project Lead

PRMP appoints a Project Lead to oversee each of the PRMES projects under PRMP programs utilizing the defined PRMP PgMO processes. The PRMP Project Lead collaborates with the vendor's Project Lead to help ensure the project execution and implementation are in accordance with the approved schedule and processes defined by the PRMP PgMO.

The PRMP Project Lead and the vendors shall be the initial implementers of the requirements management processes defined in this plan.

The PRMP Project Lead will collaborate with the vendor Project Manager to analyze and confirm project requirements and verify the management and documentation of requirements by the vendor.

## 2.4 PRMP PgMO

PRMP has designated the PgMO to provide program management guidance and collaborative oversight for its information technology initiatives. As part of this responsibility, the PRMP PgMO has developed this Requirements Management Plan Aid as a guide for project-specific Requirements Management Plans.

In addition to providing guidance to vendors, the PRMP PgMO shall be responsible for first line review of major PMPs and the subsidiary plans as submitted by the vendors. Each vendor shall create an individual Requirements Management Plan to manage project requirements and shall collaborate with the PRMP PgMO to gain PRMP approval of its process.

## 2.5 Vendors

The vendors implementing one or more information technology projects or supporting other PRMP activities are responsible for developing a project-specific Requirements Management

Plan, obtaining PRMP and PRMP PgMO approval of the plan, and managing requirements in accordance with that plan.

In accordance with the assumptions described in this document, PRMP anticipates that the vendors will manage project requirements according to their PRMP-approved Requirements Management Plan. The vendor project manager will have responsibility for analyzing, documenting, and managing requirements for the PRMP projects under the vendor's contract.

## 2.6 PRMP SMEs

PRMP will select SMEs who will aid the project and provide insight into areas of business operations and processes about which the vendor may not have knowledge or expertise. These SMEs will be consulted during various aspects of the project life cycle as well as identify, validate, and verify requirements. PRMP SMEs will contribute their specialized knowledge and help verify that any processes or business changes are correct in relation to the requirements for the project.



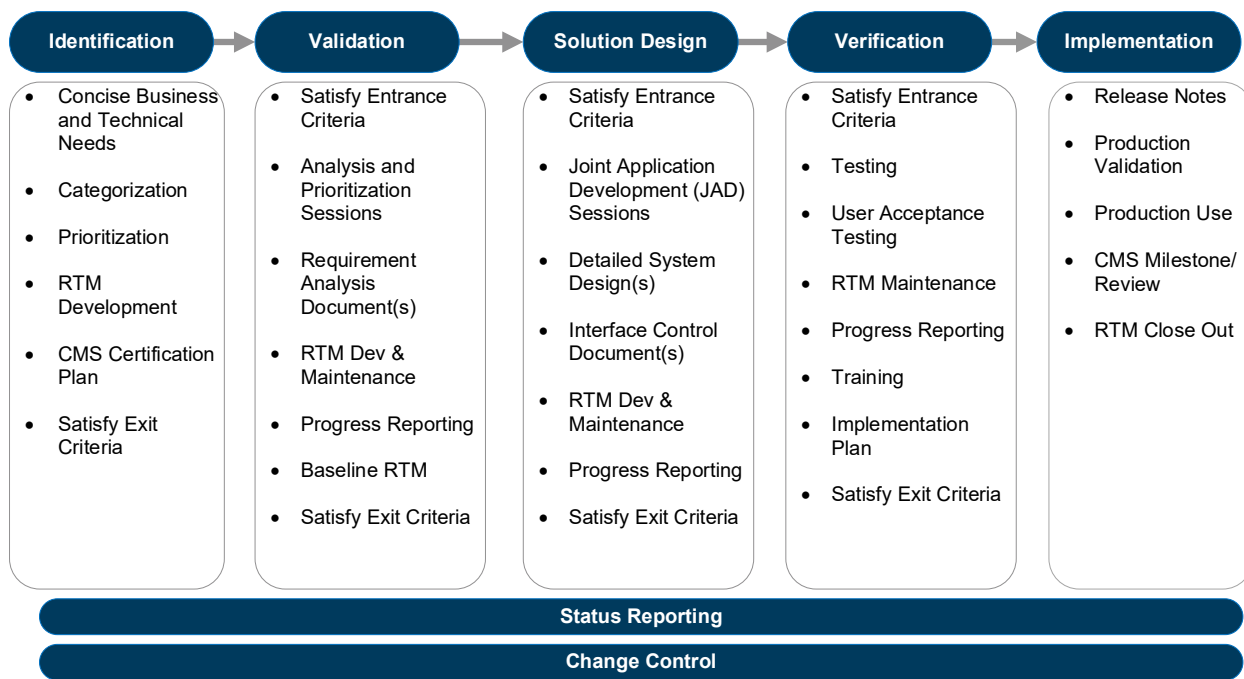
### 3.0 Requirements Management

The PRMP PgMO Requirements Management Plan Aid sets expectations and provides guidance to vendors and project stakeholders for documenting, analyzing, tracking, and reporting on requirements progress throughout the requirements life cycle.

Requirements management must include a bi-directional RTM that supports standardized requirement categorization and the ability to link key project information and project deliverables to a requirement. The categorization includes necessary MITA Framework components that support CMS certification processes. Visibility into a requirement and its attributes should be supported at all times. For more information about standardized categorization, refer to the section of this document titled Requirement Traceability Categorization.

Figure 1 depicts the requirement life cycle and key activities for each phase.

**Figure 1: Requirement Life Cycle**



#### 3.1 Requirement Identification

Requirement identification and definition is the activity of identifying and categorizing specific business and technical needs in a clear and concise manner. The resulting requirements are assigned a requirement identifier and requirement definition.

Additional categorization is applied to the identifier on an ongoing basis as the requirement progresses through its life cycle. Further information about requirement categorization can be found in the Requirement Traceability section of this document.

This activity is accomplished by the PRMP business and technical staff compiling a business case or through requirement-gathering sessions conducted by a vendor both during the

procurement process and subsequent to procurement and contract award. The vendor's Requirements Management Plan should establish responsibility for this activity based on the specific project type and status.

Table 4 outlines characteristics of a requirement.

**Table 4: Requirement Characteristics**

Characteristic	Definition
<b>Unitary</b>	The requirement addresses one and only one thing. The requirement does not contain any conjunctions.
<b>Complete</b>	The requirement is fully stated in one place with no missing information.
<b>Consistent</b>	The requirement does not contradict any other requirement and is fully consistent with all authoritative external documentation.
<b>Traceable</b>	The requirement meets all or part of a specific need as stated by stakeholders and is authoritatively documented. The requirement can be traced forward from need identification and certification, analysis, design, verification, and implementation deliverables such as test plans and test cases as applicable. The traceability is bi-directional.
<b>Current</b>	The requirement has not been made obsolete by the passage of time.
<b>Unambiguous</b>	The requirement is concisely stated without recourse to technical jargon, acronyms (unless defined elsewhere in the requirements document), or other esoteric verbiage. It expresses objective facts, not subjective opinions. It is subject to one and only one interpretation. Vague subjects, adjectives, prepositions, verbs, and subjective phrases are avoided. Negative statements and compound statements are avoided.
<b>Verifiable</b>	The implementation of the requirement can be determined through basic possible methods: inspection, demonstration, test (instrumented), or analysis (to include validated modeling and simulation).

### 3.2 Requirement Validation

The requirement validation phase begins when project initiation Software Development Life Cycle (SDLC) entrance and exit criteria are met and includes multiple activities and close collaboration between the vendor, PRMP, PRMP SMEs, the PRMP PgMO, the PRMP Project Lead, and other project stakeholders.

Entry criteria are the conditions that are required to begin the processing of the current stage and exit criteria are the conditions which sets the stage as completed so that the next stage comes into action. In general, the exit criteria of the current stage acts as entry criteria to the next stage.

The activities are carried out through analysis and/or validation sessions as well as various supportive communication and tracking methods such as workgroup meetings and meeting minutes, action item and decision logs, and the RTM software. The needs of the project

determine the number and type of interactions, how the requirements are defined, how the requirements are prioritized, and the clarity and completeness of the resulting RAD. Project stakeholders should reference the vendor's approved project Schedule Management Plan for more information related to the entrance and exit criteria processes.

Vendors are expected to produce project deliverables in adherence to deliverables outlined in the project solicitation document. The document approval process is outlined in the vendor's approved project Deliverable Management Plan document.

Below are typical project deliverables related to requirement validation:

- **Deliverable Expectation Document (DED):** The vendor shall prepare a DED for the project deliverables that outlines and describes expected content.
- **RAD:** The vendor shall prepare a RAD for the project that aligns with the expectations and requirements defined in the solicitation document of PRMP. Upon approval of the RAD and RTM, project requirements are considered baselined. Reference Appendix B for a sample RAD outline.
- **RTM:** The vendor shall prepare a project RTM that satisfies categorization and mapping expectations. The baseline shall occur immediately following RAD and RTM approval. Reference the Requirement Traceability section for RTM guidance.

The approved RAD and RTM become the project anchor to measure requirement progress and to assess and manage changes. Figure 2 illustrates typical requirement management tasks completed during the requirement validation phase for a design, development, and implementation (DDI) project. The vendor may choose the processes that best support the PRMES PRMP project, and the Requirements Management Plan must document the strategy, processes, and how the requirement management tasks will be addressed during the requirement validation phase.

**Figure 2: Requirement Validation Process Sample**

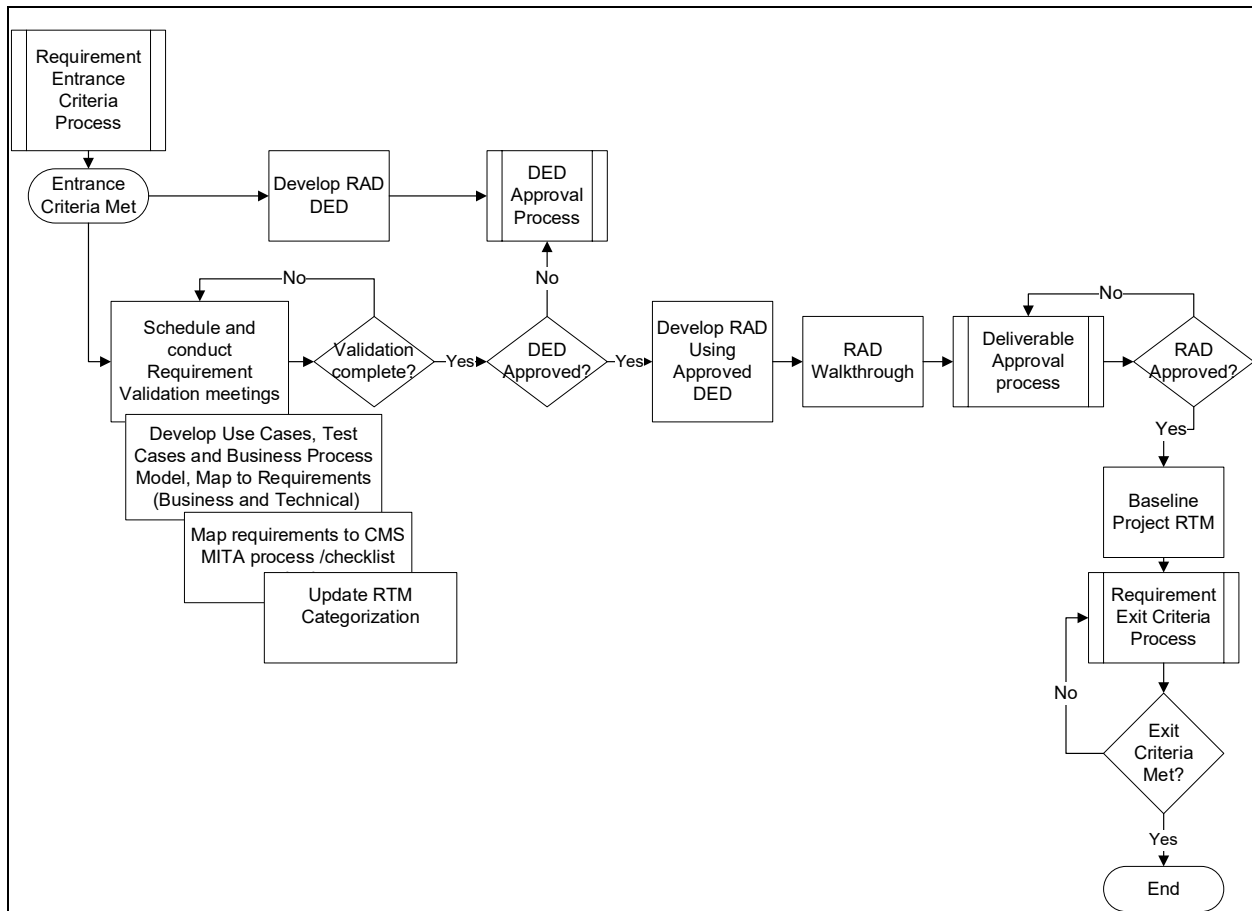


Table 5 represents general tasks, roles, and activities completed during requirement validation. Activities and the roles expected to perform them are determined on a project needs basis. The vendor is expected to outline tasks, roles, responsibilities, and activities in its Requirements Management Plan and Resource Management Plan unless otherwise agreed upon by PRMP.

**Table 5: Requirement Validation General Tasks, Roles, and Activities**

Task	Role	General Activities
<b>Requirement Analysis/ Validation Meetings</b>	PRMP PgMO	<ul style="list-style-type: none"> <li>Provide requirements management guidance</li> </ul>
	PRMP Project Lead	<ul style="list-style-type: none"> <li>Coordinate participation</li> <li>Assist with scheduling meetings</li> <li>Assist with meeting agenda content</li> <li>Assist with meeting facilitation</li> <li>Complete and/or help ensure completion of action items in a timely manner</li> <li>Confirm requirements are validated</li> </ul>
	Vendor	<ul style="list-style-type: none"> <li>Schedule meetings</li> </ul>

Task	Role	General Activities
		<ul style="list-style-type: none"> <li>▪ Prepare meeting agendas</li> <li>▪ Facilitate meetings</li> <li>▪ Provide meeting content</li> <li>▪ Solicit and capture business rules/detail requirements</li> <li>▪ Help ensure requirements meet the characteristics listed in Table 4</li> <li>▪ Complete action items in a timely manner</li> <li>▪ Prepare and distribute meeting notes in a time frame agreed upon with PRMP</li> </ul>
	PRMP SME	<ul style="list-style-type: none"> <li>▪ Collaborate with the PRMP project team, PgMO, and vendor to provide use case/business scenario information</li> <li>▪ Describe business rules/detail requirements</li> <li>▪ Provide requirement clarity as needed</li> <li>▪ Make decisions on items that do not require a change request</li> <li>▪ Complete action items in a timely manner</li> </ul>
<b>Use Case, Business Process Model (BPM), RTM Development</b>	PRMP PgMO	<ul style="list-style-type: none"> <li>▪ Provide requirements management guidance</li> </ul>
	PRMP Project Lead	<ul style="list-style-type: none"> <li>▪ Provide guidance on RTM development and traceability</li> <li>▪ Provide RTM management</li> </ul>
	Vendor	<ul style="list-style-type: none"> <li>▪ Begin developing test cases</li> <li>▪ Develop business and technical process models as necessary to illustrate understanding of requirements and system outputs</li> <li>▪ Update and/or map requirements to CMS MITA business area, business process, and certification criteria</li> <li>▪ Develop RTM</li> </ul>
	PRMP SME	<ul style="list-style-type: none"> <li>▪ Develop, alongside the PRMP project team, PgMO, and vendor, use cases to support requirement analysis/validation</li> <li>▪ Provide information to support BPM and RTM development</li> <li>▪ May also develop test cases</li> </ul>

Task	Role	General Activities
<b>DED/RAD</b>	PRMP PgMO	<ul style="list-style-type: none"> <li>Provide requirements management guidance</li> <li>Participate in deliverable walkthrough</li> <li>Review deliverables and provide feedback</li> <li>Coordinate deliverable approval</li> </ul>
	PRMP Project Lead	<ul style="list-style-type: none"> <li>Provide guidance to vendor on deliverable content</li> <li>Participate in deliverable walkthrough</li> <li>Review deliverables and provide feedback</li> <li>Provide project deliverable acceptance</li> </ul>
	Vendor	<ul style="list-style-type: none"> <li>Develop deliverables and submit for approval</li> <li>Facilitate deliverable walkthrough</li> <li>Respond to and incorporate deliverable feedback</li> <li>Map deliverable document sections to requirement(s) in RTM</li> <li>Update RTM categorization as necessary</li> <li>Baseline RTM after RAD and RTM approval</li> </ul>
	PRMP SME	<ul style="list-style-type: none"> <li>Participate in deliverable walkthrough</li> <li>Review deliverables and provide feedback</li> </ul>
	PRMP Program Director	<ul style="list-style-type: none"> <li>Participate in deliverable walkthrough</li> <li>Review deliverables and provide feedback</li> <li>Provide project deliverable acceptance</li> </ul>

### 3.3 Requirements Design

Requirements management during the design phase includes the vendor collaborating with PRMP SMEs, the PRMP PgMO, the PRMP Program Director, and other project stakeholders. The collaboration results in business and technical requirement details necessary to design a solution that meets project requirements and aligns with the MITA State Self-Assessment (SS-A).

The vendor produces solution design project deliverables in adherence to deliverables outlined in the project solicitation document. Those documents shall be structured to support linking specific project deliverables attributes to applicable requirement(s) and depict how the solution design meets project requirements. Each project deliverables will follow the approval process outlined in the vendor’s approved Deliverable Management Plan.

Below are typical project deliverables created in requirements design:

- **DED:** The vendor shall prepare a DED for project deliverables that outlines and describes expected content.

- Detailed System Design (DSD):** The vendor shall prepare a project DSD for approval that communicates and illustrates detailed specifications about how the design meets product requirements in the RAD and aligns with solicitation deliverable requirements.

Figure 3 outlines typical requirement management tasks completed during the design phase. The vendor may choose the processes that best support the PRMES PRMP project for the design phase, and the Requirements Management Plan must document the strategy, processes, and how the requirement management tasks will be addressed.

**Figure 3: Requirement Design Process Sample**

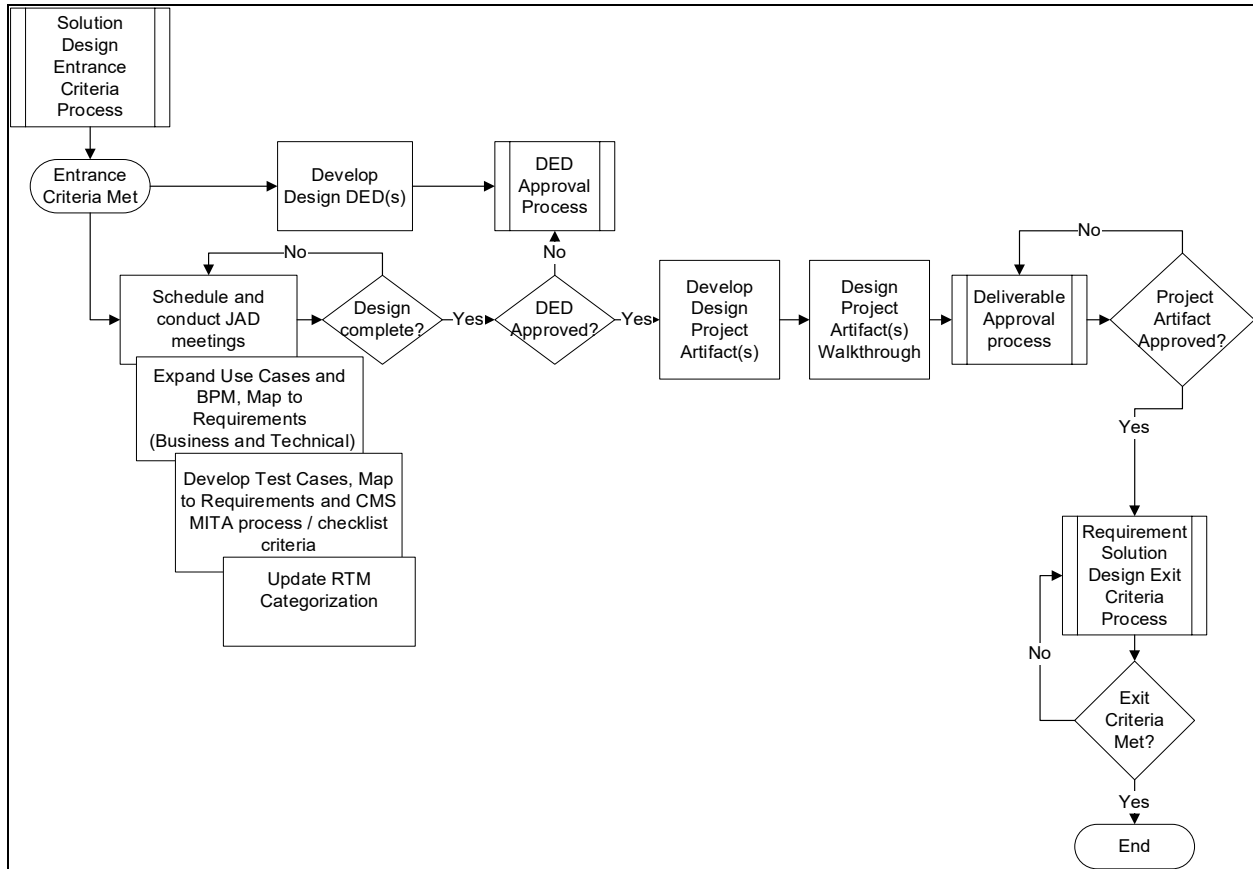


Table 6 represents general tasks, roles, and activities related to requirements management completed during requirement design. Activities and the roles expected to perform them are determined on a project needs basis. For example, the PRMP project manager may assist in RTM management related to mapping user acceptance testing (UAT) test cases, but depending on the RTM tool, the vendor may also be involved in completing this activity. The PRMP PgMO expects the vendor to outline tasks, roles, and activities in its Requirements Management Plan deliverable unless otherwise agreed upon by PRMP.

**Table 6: Requirement Design General Tasks, Roles, and Activities**

Task	Role	General Activities
<b>JAD Meetings</b>	PRMP PgMO	<ul style="list-style-type: none"> <li>▪ Provide requirements management guidance</li> </ul>
	PRMP Project Lead	<ul style="list-style-type: none"> <li>▪ Coordinate participation</li> <li>▪ Assist with scheduling meetings</li> <li>▪ Assist with meeting agenda content</li> <li>▪ Assist with meeting facilitation</li> <li>▪ Complete and/or help ensure completion of actions items in a timely manner</li> </ul>
	Vendor	<ul style="list-style-type: none"> <li>▪ Schedule meetings</li> <li>▪ Prepare meeting agendas</li> <li>▪ Facilitate meetings</li> <li>▪ Provide meeting content</li> <li>▪ Solicit and capture business rules/detail requirements</li> <li>▪ Prepare and distribute meeting notes in a time frame agreed upon with PRMP</li> <li>▪ Present solution design</li> <li>▪ Complete action items in a timely manner</li> </ul>
	PRMP SME	<ul style="list-style-type: none"> <li>▪ Gather existing use case/business scenario information</li> <li>▪ Describe business rules/detailed requirements</li> <li>▪ Provide solution design feedback as needed</li> <li>▪ Complete action items in a timely manner</li> </ul>
<b>Expand Use Cases, BPM, Unified Modeling Language (UML), Develop Test Cases, Update RTM</b>	PRMP PgMO	<ul style="list-style-type: none"> <li>▪ Provide requirements management guidance</li> </ul>
	PRMP Project Lead	<ul style="list-style-type: none"> <li>▪ Provide guidance on development of use cases</li> <li>▪ Provide RTM management</li> <li>▪ Work with the PRMP project team, PgMO, and vendor to begin UAT planning</li> </ul>
	Vendor	<ul style="list-style-type: none"> <li>▪ Develop business and technical process models as necessary to illustrate solution design</li> <li>▪ Develop test cases</li> <li>▪ Map test cases to requirements in RTM</li> </ul>



Task	Role	General Activities
<b>DED/Solution Design Project Artifact(s)</b>	PRMP PgMO	<ul style="list-style-type: none"> <li>Provide requirements management guidance</li> <li>Participate in deliverable walkthrough</li> <li>Review deliverables and provide feedback</li> </ul>
	PRMP Project Lead	<ul style="list-style-type: none"> <li>Provide guidance to vendor on deliverable content</li> <li>Participate in deliverable walkthrough</li> <li>Review deliverables and provide feedback</li> <li>Provide project deliverable acceptance</li> <li>Complete and/or help ensure completion of action items in a timely manner</li> </ul>
	Vendor	<ul style="list-style-type: none"> <li>Develop deliverables and submit for approval</li> <li>Facilitate deliverable walkthrough</li> <li>Respond to and incorporate deliverable feedback</li> <li>Map deliverable document sections to requirement(s) in RTM</li> <li>Update RTM categorization as necessary</li> <li>Complete action items in a timely manner</li> </ul>
	PRMP SME	<ul style="list-style-type: none"> <li>Participate in deliverable walkthrough</li> <li>Review deliverables and provide feedback</li> <li>Complete action items in a timely manner</li> </ul>
	Project Sponsor(s)	<ul style="list-style-type: none"> <li>Participate in deliverable walkthrough</li> <li>Review deliverables and provide feedback</li> <li>Provide deliverable acceptance</li> <li>Complete action items in a timely manner</li> </ul>

### 3.4 Requirement Verification

Requirements management during the verification phase centers on ensuring the delivered solution, product(s), or service(s) is tested sufficiently and verifies alignment with RAD requirements and any approved requirement change requests. The project RTM shall reflect requirement verification attributes, such as test case number(s), to provide clear visibility into requirement progress. In support of the CMS certification reviews, the RTM shall support mapping certification criteria to requirements.

The Test Plan addresses processes and expectations regarding planning and executing project testing activities, including UAT. Reference the Certification Management Plan for information about the CMS certification life cycle.

### 3.5 Requirement Implementation

Requirements management during the implementation phase centers on the ability to track the release of each verified solution requirement into the production environment. The vendor is expected to follow solicitation requirements for implementing the project. A standardized Release Notes document format and naming convention shall be used to support linking the release notes to each product requirement in the RTM. The project RTM should be updated periodically at an agreed-upon frequency to ensure clear visibility into the current system environment of each project requirement and the related certification criteria deliverables.

### 3.6 Requirement Change Control

A key element of requirements management is the ability to control and track changes to a requirement throughout its life cycle. The project RTM shall be baselined following approval of the RAD. Any change to requirement scope shall go through a formal change request process, whether it be through a requirement addition, a requirement becoming obsolete, or requirement verbiage adjustments. Approved changes are expected to be linked to the affected requirement(s) in the RTM and the applicable requirement and design project deliverables. The vendor shall re-baseline the RTM to reflect the requirement change(s). The vendor should reference the Change Management Plan for guidance on the change control process.

### 3.7 Requirements Management Reporting

Throughout the requirement life cycle, clear visibility is necessary to continually monitor and evaluate a requirement, a collection of requirements, or the project requirements overall. The vendor is expected to include project requirement progress as part of its status reporting with content and format agreed upon by the PRMP. Additionally, the RTM tool shall provide flexible dashboard capabilities that allow users to monitor a project's product requirements in a variety of ways. Reference the Requirement Traceability Reporting section of this document for more information about requirement dashboard capabilities.

## 4.0 Requirement Traceability

Requirement traceability is the ability to follow and audit the life of a requirement, in both a forward and backward direction—from its origins, through its realization to its eventual development and use, through subsequent rounds of modification and refinement.

### 4.1 Requirement Traceability Categorization

The RTM is used to trace business, functional, technical, and architectural project requirements defined in the RAD, as well as non-functional project requirements, in support of CMS certification. Traceability occurs throughout the duration of the SDLC, including design, configuration/development, testing, implementation, operations and certification.

The vendor shall use standardized requirement categorization and attributes to maintain the RTM and support forward and backward SDLC traceability, as well as from certification deliverables. The attributes allow other project deliverables to be mapped to a requirement, thereby supporting requirements management needs. Examples of these project deliverables include change requests, RAD sections, solution design project deliverables sections, use case number(s), certification criteria, and test case numbers. PRMP expects that traceability extends to defects identified during testing by mapping defect number(s) to the related test case(s). An RTM provides the PRMP PgMO, vendor, and other project stakeholders with:

- Quick perspective on where a requirement is in the life cycle and its status
- Critical requirement information to support requirement change control
- Insight into assessing requirement coverage in the delivered solution design
- A means of identifying project artifact candidates for use as evidence in the CMS certification reviews

Figure 4 illustrates categorization and project deliverables that should be mapped to applicable requirement(s) in the RTM. The figure also depicts the typical requirement life cycle phase on which the mapping can occur. Operations should be involved throughout the life cycle.

**Figure 4: Requirement Traceability**

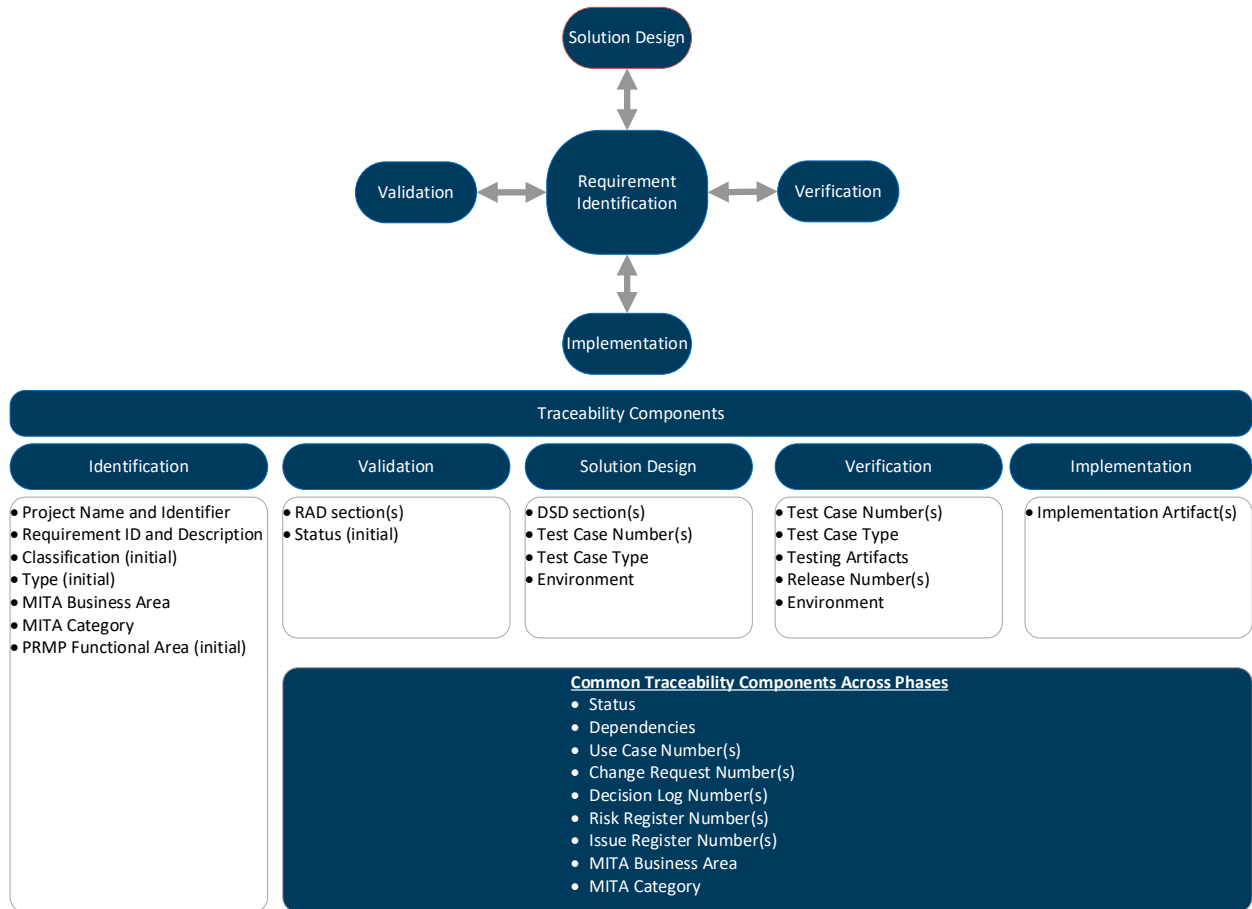


Table 7 provides suggested values for requirement categorization.

**Table 7: Requirement Traceability Categorization**

Categorization/Definition	Values/Description
<b>Requirement Identifier (ID)</b>	<ul style="list-style-type: none"> <li>A meaningful, unique identifier assigned to each defined requirement. The definition and its Requirement ID are included in the solicitation document and shall be traced throughout the requirement life cycle.</li> </ul>
<b>Requirement Definition</b>	<ul style="list-style-type: none"> <li>Requirement definition includes several characteristics that support clear and concise communication. Each definition ties back to its unique identifier.</li> </ul>
<b>Requirement Classification</b>	<ul style="list-style-type: none"> <li>Mandatory – Must have and is contractual for the vendor.</li> </ul>

Categorization/Definition	Values/Description	
	<ul style="list-style-type: none"> <li>▪ Desirable – Would like to have in this project as the use and value is wanted.</li> <li>▪ Future – Recommended or prioritized as an enhancement.</li> <li>▪ Obsolete – No longer required or requested.</li> </ul>	
<b>Requirement Type</b>	<ul style="list-style-type: none"> <li>▪ Business</li> <li>▪ Architectural</li> <li>▪ Functional</li> <li>▪ Non-Functional</li> <li>▪ Other values may be defined as required by a project</li> </ul>	
<b>MITA Business Area (10) (Parent)</b> <b>MITA Category (21) (Child)</b>	<u>MITA Business Area</u>	<u>MITA Category</u>
	<ul style="list-style-type: none"> <li>▪ Business Relationship Management</li> </ul>	<ul style="list-style-type: none"> <li>– Standards Management</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Care Management</li> </ul>	<ul style="list-style-type: none"> <li>– Case Management</li> <li>– Authorization Determination</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Contractor Management</li> </ul>	<ul style="list-style-type: none"> <li>– Contractor Information Management</li> <li>– Contractor Support</li> <li>– Contract Management</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Eligibility and Enrollment Management</li> </ul>	<ul style="list-style-type: none"> <li>– Member Enrollment</li> <li>– Provider Enrollment</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Financial Management</li> </ul>	<ul style="list-style-type: none"> <li>– Accounts Receivable Management</li> <li>– Accounts Payable Management</li> <li>– Fiscal Management</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Member Management</li> </ul>	<ul style="list-style-type: none"> <li>– Member Information Management (future)</li> <li>– Member Support (future)</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Operations Management</li> </ul>	<ul style="list-style-type: none"> <li>– Payment and Reporting</li> <li>– Claims Adjudication</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Performance Management</li> </ul>	<ul style="list-style-type: none"> <li>– Compliance Management</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Plan Management</li> </ul>	<ul style="list-style-type: none"> <li>– Plan Administration</li> <li>– Health Plan Administration</li> <li>– Health Benefit Administration</li> </ul>
<ul style="list-style-type: none"> <li>▪ Provider Management</li> </ul>	<ul style="list-style-type: none"> <li>– Provider Information Management</li> </ul>	

Categorization/Definition	Values/Description	
		- Provider Support
<b>PRMP Functional Area</b>	<ul style="list-style-type: none"> <li>▪ Finance</li> <li>▪ Operations (includes Data Governance Unit, Continuous Improvement Unit, Eligibility and Enrollment, Provider Enrollment Management Unit, and Claims and Encounters Processing Unit)</li> <li>▪ Regional Offices</li> <li>▪ Administration</li> <li>▪ Compliance (includes Quality Control Unit and Fraud Control Unit)</li> <li>▪ Other value(s) as defined by PRDoH / PRMP</li> </ul>	
<b>CMS Certification Criteria and required Outcomes</b>	<ul style="list-style-type: none"> <li>▪ Criteria, outcomes and related KPIs determined as in-scope for CMS system certification</li> </ul>	

## 4.2 Requirement Traceability Reporting

Accurate bi-directional traceability reporting depends on an RTM that the vendor regularly maintains the life cycle of each requirement. This leverages standardized categorization and linking of project artifact attributes to a requirement. Requirement traceability will typically grow in complexity as the requirement progresses through its life cycle. The vendor shall provide requirement status reporting, traceability visualization, and dashboard reporting with the level of detail meeting the needs of the project and project stakeholders throughout the project life cycle. Reference the Requirement Management Reporting section of this document for information about requirement status reporting.

Some reporting types might include:

- **Traceability Matrix:** A traceability matrix is a table representation, with filter capability, that maps a requirement to its related categorization and links to other project deliverables.
- **Traceability Graph:** A traceability graph is a node representation of a requirement and its links to other project deliverables. This is useful in representing development status or verification status from a requirements perspective.
- **Hyperlink:** A hyperlink connects project deliverables to a requirement and supports the ability to access the linked document for details.
- **Dashboard(s):** Dashboard functionality supports the ability for project stakeholders to create and generate requirement reports, ideally by requirement, categorization, or linked project artifact. Drill-down capability provides the stakeholder with different levels of detail without having to generate multiple reports.

## Appendix A: Acronyms List

Table 8 presents acronyms used in this document.

**Table 8: Acronyms**

Term or Acronym	Definition
<b>BPM</b>	Business Process Model
<b>CHIP</b>	Children's Health Insurance Program
<b>CMS</b>	Centers for Medicare & Medicaid Services
<b>DED</b>	Deliverable Expectation Document
<b>DDI</b>	Design, Development, and Implementation
<b>DSD</b>	Detailed System Design
<b>EOMC</b>	Enterprise Objective Monitoring and Control
<b>ID</b>	Identifier
<b>IEEE®</b>	Institute of Electrical and Electronics Engineers
<b>JAD</b>	Joint Application Development
<b>KL</b>	BerryDunn KnowledgeLink
<b>MECT</b>	Medicaid Enterprise Certification Toolkit
<b>MES</b>	Medicaid Enterprise Systems
<b>MITA</b>	Medicaid Information Technology Architecture
<b>OIAT</b>	Oficina de Informática y Avances Tecnológicos
<b>PgMO</b>	Program Management Office
<b>PMBOK® Guide</b>	<i>A Guide to the Project Management Body of Knowledge</i>
<b>PMI®</b>	Project Management Institute®
<b>PMP</b>	Project Management Plan
<b>PRDoH</b>	Puerto Rico Department of Health
<b>PRMES</b>	Puerto Rico Medicaid Enterprise Systems
<b>PRMP</b>	Puerto Rico Medicaid Program
<b>RACI</b>	Responsible, Accountable, Consulted, and Informed
<b>RAD</b>	Requirement Analysis Document
<b>RFP</b>	Request for Proposals
<b>RTM</b>	Requirements Traceability Matrix
<b>SDLC</b>	System Development Life Cycle

Term or Acronym	Definition
<b>SME</b>	Subject Matter Expert
<b>UAT</b>	User Acceptance Testing
<b>UML</b>	Unified Modeling Language
<b>WBS</b>	Work Breakdown Structure



## Appendix B: Sample RAD Outline

Figure 5 provides the RAD template outline.

**Figure 5: RAD Outline**

<b>Table of Contents</b>	
<b>1</b>	<b>Introduction ..... 4</b>
1.1	Impact ..... 4
1.2	Stakeholders ..... 5
<b>2</b>	<b>Assumptions, Dependencies, Constraints, and Notes ..... 6</b>
<b>3</b>	<b>Requirements ..... 7</b>
3.1	Requirement – Title ..... 7
3.2	Requirement – Title ..... 8
<b>4</b>	<b>Out of Scope ..... 9</b>
<b>5</b>	<b>Data Elements, Inputs, and Outputs ..... 10</b>
<b>6</b>	<b>Business Process Models ..... 11</b>
6.1	Business Process #1 ..... 11
6.1.1	Process Descriptions ..... 12
<b>7</b>	<b>Security Controls and Compliance Requirement ..... 13</b>
<b>8</b>	<b>System Integration Approach ..... 14</b>
<b>9</b>	<b>External Artifacts ..... 15</b>
9.1	Requirements Traceability Matrix ..... 15
9.2	Documentation Update Checklist ..... 15
9.3	Business Rules ..... 16
9.4	Project O-types ..... 16

# Enterprise Objective Monitoring and Control Services

## Puerto Rico Medicaid Program Risk and Issue Management Plan Aid

V0.x



GOVERNMENT OF PUERTO RICO

Department of Health  
Medicaid Program

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# Table of Contents

<b>Section</b>	<b>Page</b>
Table of Contents.....	ii
Revision History .....	iv
Introduction .....	1
Purpose and Objectives.....	2
Scope .....	2
In Scope.....	3
Out of Scope .....	3
Approach.....	3
Assumptions .....	3
Constraints.....	4
Dependencies .....	4
Standards and References.....	4
Roles and Responsibilities .....	6
PRMP Leadership .....	6
PRMP Program Director .....	7
PRMP Project Lead.....	7
PRMP Risk & Issue Manager .....	7
PRMP PgMO.....	7
Vendors.....	8
Risk Management.....	9
Plan Risk Management.....	9
Determine Risk Sources and Categories.....	9
Define Risk Parameters .....	9
Manage Individual Risks.....	10
Risk and Issue Management Tools and Data Sources .....	11
Identify Risk .....	11

Risk Register and Reporting .....	11
Analyze Risk.....	13
Plan Responses .....	13
Execute Response .....	15
Monitor Risks.....	15
Issue Management .....	17
Issue Management Plan .....	17
Issue Management Process .....	18
Identify Issue.....	19
Assign Issue.....	19
Resolve Issue .....	19
Close Issue .....	20
Issue Register and Reporting .....	20
Appendix A: Acronyms List .....	21

## Revision History

The Puerto Rico Medicaid Program's (PRMP's) Program Management Office (PgMO) will store the approved Risk and Issue Management Plan Aid and any approved revisions on the PRMP PgMO SharePoint site or in an alternative location specified by PRMP. PRMP and the PRMP PgMO will make the plan available to project stakeholders as needed.

Table 1 presents the revision history for this document. When changes occur, the PRMP PgMO will increment the version number and the date. The PRMP PgMO will record the name of the person making the change and a description of the change in the revision history.

**Table 1: Revision History**

Version	Delivered Date	Description	Author(s)
1.0	6/22/2022	Initial delivery	BerryDunn PgMO Team

## Introduction

PRMP is committed to successful projects for the residents of Puerto Rico and has established a PgMO to provide guidance, support, and oversight for vendor projects within the Medicaid Enterprise.<sup>1</sup> The PRMP PgMO has created plan aids to assist in effectively and efficiently accomplishing executed projects. Project management involves applying best practice processes, tools, and techniques. The PRMP PgMO aids provide guidance for more predictable and consistent plans, processes, and practices, which will result in meeting the goals and objectives of PRMP and vendor partners and will meet stakeholder expectations.

The Risk and Issue Management Plan Aid is a living document intended to provide PRMP vendors with guidance on PRMP’s expectations regarding management of project risks and issues. PRMP expects vendors to develop and submit a Risk and Issue Management Plan for the project(s) for which they are providing services. They should reference this document when creating their Risk and Issue Management Plans to help ensure PRMP’s expectations are met and that there is a common understanding between PRMP and the vendor regarding risk and issue management. The PRMP PgMO will update this Risk and Issue Management Plan Aid when new applicable standards (or versions of a standard) are released or when there are changes to PRMP policies that affect risk and issue management.

If a vendor finds a contractual conflict with guidance provided in this plan aid, vendors should defer to their contract and/or any updated PRMP guidance.

The Introduction section of this document provides information on the Risk and Issue Management Plan Aid’s purpose and objectives, scope, standards, assumptions, dependencies, and constraints. To help ensure an understanding of a risk versus an issue, Table 2 provides definitions for each item based on *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)*.<sup>2</sup>

**Table 2: Risk and Issue Definitions**

Term	Definition
Risk	A risk is an uncertain event or condition that, if it occurs, has a positive or negative effect on one or more project objectives.
Risk Management	Project risk management includes the process of conducting risk management planning, identification, analysis, response planning, response implementation, and monitoring risk on a project. The objectives of project risk management are to increase the probability and/or impact of positive risks and to decrease the probability and/or

<sup>1</sup> In this aid, “vendor” refers to both solution vendors that implement and maintain systems within the Medicaid Enterprise Solution (PRMES), and other entities that provide non-solution-related PRMES services to PRMP.

<sup>2</sup> Unless otherwise noted, all references to the PMBOK Guide® are for the seventh edition.

Term	Definition
	impact of negative risks, in order to optimize the chances of project success.
Issue	An issue is a current condition or situation that might have an impact on the project objectives. In some instances, an existing risk could materialize into an issue.
Issue Management	Issue management is the process of managing and controlling issues that arise during the project.

## Purpose and Objectives

The purpose of the Risk and Issue Management Plan Aid is to:

- Document the processes for identifying and analyzing risks, planning, and implementing risk responses, and monitoring the risks.
- Document the processes for identifying, prioritizing, resolving, and closing issues.

The objectives of the Risk and Issue Management Plan Aid are to:

- Provide guidance to the Puerto Rico Medicaid Enterprise Systems (PRMES) vendors in the development of their Risk and Issue Management Plans. These plans shall demonstrate the vendors' processes for managing risks and issues, including coordinating with the PRMP project managers to identify, report on, and manage risks and issues. MES vendor Risk and Issue Management Plans shall include provisions to help ensure all identified risks and issues are transparent to PRMP.
- Provide a process for escalating program-level risks and issues within the Medicaid Enterprise, including but not limited to, escalation within the project, program, and enterprise levels.
- Establish consistency across all PRMP Medicaid Enterprise projects and initiatives related to risk and issue management.

## Scope

The Risk and Issue Management Plan shall address risk categories and provide a rating process to help the project team prioritize risks. The Risk and Issue Management Plan shall also address the planning and execution of risk responses. As part of risk and issue management planning, vendors are required to:

- Define process steps
- Document when and how often they will conduct the risk and issue management process throughout the life cycle of the project
- Add the related activities to the project schedule

The Risk and Issue Management Plan shall address all risks and issues that might have an impact on project success. The process shall include the steps for prioritizing risks and issues to allow project teams to focus on resolution of the highest-priority issues. The Risk and Issue Management Plan should also include:

- **Templates:** A risk and issue memorandum, risk and issue log, or other documents that standardize information capture and communication related to risks and issues
- **Processes:** Descriptions about how vendors manage risks and issues, including tracking, management, quality processes, reporting, and tools used
- **Standards:** Descriptions of the industry standards vendors employ to manage risks and issues

## In Scope

Vendors shall identify all the items subject to risk and issue management as part of the overall project. Vendor-specific Risk and Issue Management Plans shall include content describing:

- How the vendor manages risks and issues
- How the vendor monitors risks and issues
- How the vendor implements quality management
- How the vendor plans to report on risks and issues
- How the vendor develops and implements risk responses, including options for mitigation strategies
- How the vendor will resolve issues

## Out of Scope

Vendors shall list the items related to risk and issue management considered out of scope. Any scope exclusions must be in alignment with the Request for Proposals (RFP), vendor's proposal, and the final signed contract as necessary.

## Approach

The Risk and Issue Management Plan Aid takes into consideration the assumptions, dependencies, and constraints for projects as described in this section.

## Assumptions

Per the *PMBOK Guide*<sup>®</sup>, an assumption is a factor expected to be in place or to be in evidence. PgMO made the following assumptions related to the Risk and Issue Management Plan:

- Vendors shall use their own risk management processes to identify and analyze risks and to plan and execute risk responses. Vendors shall coordinate the process with



PRMP project managers and will provide transparency to PRMP. The vendor's own risk management processes will adhere to any guidelines provided in this document.

- Vendors will use their own issue management processes to identify, assign, resolve, and close issues. Vendors shall coordinate the process with PRMP project managers and will provide transparency to PRMP. The vendor's own issue management processes will adhere to any guidelines provided in this document.
- PRMP will have a complementary risk and issue management process overseen by PRMP project managers and supported by the PRMP PgMO.

## Constraints

Per the *PMBOK Guide*<sup>®</sup>, a constraint is a limiting factor that affects the execution of a project or process. There are no constraints identified for the PRMP Risk and Issue Management Plan.

Vendors shall identify constraints in their Risk and Issue Management Plans relating, but not limited to:

- Risk management methodology, including, but not limited to, tools and data sources
- Data quality
- Tool access

## Dependencies

Per the *PMBOK Guide*<sup>®</sup>, a dependency is a logical relationship between two activities, or between an activity and a milestone. For example, an activity that cannot begin until another activity has been finished has a dependency.

This Risk and Issue Management Plan does not have any dependencies on other plans or processes. However, per the *PMBOK Guide*<sup>®</sup>, all approved subsidiary management plans within the Project Management Plan (PMP) should be taken into consideration in order to make the Risk Management Plan consistent. The methodology outlined in other PMP components might influence how a vendor develops its Risk and Issue Management Plan.

## Standards and References

This section provides an initial list of standards and references applicable to the Risk and Issue Management Plan. Per the *PMBOK Guide*<sup>®</sup>, a standard is a document established by an authority, custom, or general consent as a model or an example. A reference is a source of information and context.

The PRMP PgMO and PRMP vendors are required to use the appropriate standards and references. The PRMP PgMO might incorporate additional standards and references if appropriate for the plan content.

Vendors shall develop their Risk and Issue Management Plans using the following industry standards:

- *PMBOK® Guide*, Seventh Edition, Project Management Institute® (PMI®), Chapter 11 – Project Risk Management
- Practice Standard for Project Risk Management, PMI®
- Capability Maturity Model Integration (CMMI®) for Development, Version 1.3, Software Engineering Institute, Process Area: Risk Management
- Other Standards

Vendors are expected to monitor applicable standards and industry best practices. Vendors shall work with PRMP to determine if updates are required to their Risk and Issue Management Plans when a new applicable standard (or version of a standard) is released.

## Roles and Responsibilities

This section describes the primary roles and responsibilities of stakeholder groups as they relate to risk and issue management, including project staff, sponsors, and stakeholders. Table 3 illustrates which stakeholders are responsible (R), accountable (A), consulted (C), and informed (I) (RACI), defined as:

- **Responsible:** This stakeholder does the work to complete the task area. This stakeholder might also serve as an accountable stakeholder for some task areas.
- **Accountable:** This stakeholder delegates work and is the last one to review the task area before it is deemed complete. According to best practice, one stakeholder (or the lowest number possible) should be deemed accountable.
- **Consulted:** This stakeholder provides input based on how the task area will impact the future work of the project and the stakeholder’s expertise.
- **Informed:** This stakeholder should be aware of the progress associated with the task area.

Table 3 aims to provide insight into how PRMP and the PgMO will interact with project risk and issue management processes and responsibilities. The vendor should propose its own stakeholder groups and RACI matrix according to its team’s organizational structure. Table 3 provides vendors with the RACI matrix for PRMP and/or PgMO responsibilities. This matrix can be edited from this baseline if deviations are discussed with PRMP and the PgMO to determine what is appropriate for the project.

**Table 3: RACI Matrix for Risk and Issue Management**

Task Area	PRMP Leadership	PRMP Program Director	PRMP PgMO	PRMP Project Lead	PRMP Risk & Issue Manager	Vendor
Planning	C	C	C	A	C, I	R
Management: Risk and Issue Identification	I	C	C	C, I	A	R
Management: Risk and Issue Analysis	I	I	C	C, I	A	R
Management: Risk and Issue Responses	I	C	C	C, I	A	R
Monitoring/Reporting	I	I	I	C, I	A	R

## PRMP Leadership

PRMP is the Medicaid agency responsible for administering the Medicaid Program in Puerto Rico, including the Children's Health Insurance Program (CHIP) and a waiver-based section 1915(a) program. PRMP is an agency within the Puerto Rico Department of Health (PRDoH). While leadership roles might vary between projects, in general, the PRMP Leadership stakeholder group refers to the Secretary, Executive Director, and the Executive Steering Committee.

## PRMP Program Director

The PRMP Program Director is a member of the PRMP PgMO.

An important aspect of the PRMP Program Director's role is to assess risks in terms of the interaction of risks between PRMES projects and across PRMP, including whether any risks identified in a project have broader implications.

## PRMP Project Lead

PRMP typically appoints a Project Lead to oversee each of the PRMES projects under PRMP programs, utilizing the defined PRMP PgMO processes. The Project Lead collaborates with the vendor's Project Manager to help ensure the project execution and implementation is in accordance with the approved schedule and processes defined by the PRMP PgMO.

The PRMP Project Lead will have joint responsibility with the vendor Project Manager for identifying, classifying, and determining severity of risks, as well as raising risks and issues with the PRMP PgMO.

## PRMP Risk & Issue Manager

The PRMP Operations Risk & Issue Manager is responsible for the risk and issue management process for the PRMES. The PRMP Operations Risk & Issue Manager identifies and analyzes various project risks and issues, develops risk management controls, implements risk response strategies, evaluates and monitors risks and issues, and communicates recommendations to management. Vendors shall collaborate with and be responsible to the PRMP Operations Risk & Issue Manager throughout a project's life cycle.

## PRMP PgMO

PRMP has designated the PRMES PgMO to provide program management guidance and collaborative oversight for its IT initiatives. As part of this responsibility, the PRMP PgMO has developed this Risk and Issue Management Plan Aid as a guide for project-specific Risk and Issue Management Plans.

Each vendor shall create an individual Risk and Issue Management Plan to manage risks and issues and shall collaborate with the PRMP PgMO to gain approval of the process. The PRMP PgMO is responsible for helping to identify and document program-level risks and issues and for communicating with the project team; however, the PRMP Project Lead and vendor(s) have primary responsibility for identifying and documenting project-level risks and issues.

## Vendors

The vendors implementing one or more IT projects or supporting other PRMP activities are responsible for developing a project-specific Risk and Issue Management Plan, obtaining PRMP and PRMP PgMO approval of the plan, and managing risks and issues in accordance with that plan. The vendor Project Manager is responsible for reporting risks and issues to the PRMP Project Lead, the PRMP Operations Risk & Issue Manager, and the PRMP PgMO.

In accordance with the assumptions described in this document, PRMP anticipates that vendors will maintain the risk register and the issue register, including recording risks and issues and generating reports. The vendor Project Manager will have joint responsibility with the PRMP Project Lead for identifying, classifying, and determining severity of risks, as well as raising risks and issues with the PRMP PgMO.

## Risk Management

Project risk management includes the processes of conducting risk management planning, identification, analysis, response planning, response implementation, and monitoring project risk. The objective of project risk management is to increase the probability or impact of positive risks (opportunities) and reduce the probability and impact of negative risks (threats).

### Plan Risk Management

The risk management component of the Risk and Issue Management Plan shall contain a section that clearly delineates the vendor's strategy for risk management, outlining the project-level procedures for identifying, documenting, tracking, analyzing, and developing response strategies for risks throughout the project. The vendor's plan shall provide an approach that:

- Aligns with the *PMBOK Guide*<sup>®</sup> standards for risk management
- Coordinates and works with PRMP, project managers, vendors, and PRMP PgMO to identify, manage, and respond to risks
- Implements and maintains a separate risk register for each project

### Determine Risk Sources and Categories

The Risk and Issue Management Plan shall identify the potential risk sources and categories. Examples include:

- Plan and schedule
- Organization and management
- Environmental components
- User involvement
- Requirements management
- Personnel and staffing

### Define Risk Parameters

The Risk and Issue Management Plan shall define the risk parameters for evaluating and prioritizing risks. Specifically, the plan shall define:

- Probability of occurrence (risk likelihood)
- Risk impact on project objectives
- Risk severity
- Risk response approach
- Thresholds to trigger management action

Vendor Risk and Issue Management Plans must include a process for using the probability of occurrence and the potential risk impact to create a risk-severity or risk-rating matrix. Tables 4 and 5 depict how the PRMP PgMO defines and categorizes risk severity and risk values. Vendors shall use risk severity and risk values as defined in Tables 4 and 5 unless there is a project-specific or tool-specific reason that would negatively impact the project’s efficiency or effectiveness by using the defined risk severity and risk value designations. Vendors shall propose and discuss deviations from these scales with PRMP and receive PRMP approval prior to using alternative designations and document the agreed-upon approach in their Risk and Issue Management Plans.

**Table 4: Risk Severity**

Probability	Risk Level				
5 (Near Certainty)	5 – Moderate	10 – Moderate	15 – Significant	20 – Significant	25 – Significant
4 (High Likely)	4 – Minimal	8 – Moderate	12 – Moderate	16 – Significant	20 – Significant
3 (Likely)	3 – Minimal	6 – Moderate	9 – Moderate	12 – Moderate	15 – Significant
2 (Unlikely)	2 – Minimal	4 – Minimal	6 – Moderate	8 – Moderate	10 – Moderate
1 (Remote)	1 – Minimal	2 – Minimal	3 – Minimal	4 – Minimal	5 – Moderate
Impact →	1 – Minimal	2 – Minor	3 – Moderate	4 – Significant	5 – Severe

The Risk and Issue Management Plan shall define the thresholds for management action. For example, Table 5 defines the thresholds used in Table 4.

**Table 5: Risk Values**

Risk Value	Risk Level	Definition
15 – 25	Significant	Major disruption likely. Change in approach required. Mitigation required. Management attention required.
5 – 12	Moderate	Some disruption. Client might want to consider an alternative approach. Mitigation recommended. Management attention recommended.
1 – 4	Minimal	Minimal impact. Oversight required to help ensure risk remains low. Mitigation not necessary.

The objective of defining thresholds is to determine the urgency in the planning and execution of risk responses. The Risk and Issue Management Plan shall define thresholds and define the management action required for risks identified as Moderate and Significant.

## Manage Individual Risks

The Risk and Issue Management Plan shall describe the process for risk identification and analysis as well as for risk response planning and execution. Figure 1 illustrates the overall process for individual project risk management.

**Figure 1: Risk Management Process**



Depending on the complexity of the risk, the project team can execute these processes at the time of risk identification. Complex risks requiring additional research or analysis might require a more elaborate sequential process.

### Risk and Issue Management Tools and Data Sources

In their Risk and Issue Management Plans, vendors shall describe the tools used for risk and issue management as well as the data sources for identifying risks and issues.

#### Identify Risk

Participants in risk identification could be any stakeholder involved in the project, including the PRMP Project Manager, Vendor Project Manager, PRMP PgMO team members, vendor staff, and subject matter experts (SMEs). The Risk and Issue Management Plan shall provide a mechanism to allow these stakeholders to bring risks to the attention and action of the project manager.

It is desirable to identify risks as early as possible in the project to allow the project team time to develop and implement responses early to reduce the likelihood of occurrence. As part of the risk identification process, the project manager and project team members should consider the project deliverables, assumptions, constraints, Work Breakdown Structure (WBS), cost/effort estimates, resource plan, and other key project documents when determining the potential occurrence of a risk.

The Risk and Issue Management Plan shall provide a process for assigning each identified risk to a risk owner. The risk owner can be the stakeholder who identified the risk, the risk manager (if assigned), or a project team member with the skill set to implement the risk response. To the extent that a risk affects the capabilities of the product or the supported business processes, the risk owner will coordinate the planning and execution of risk responses with the relevant business owner.

#### Risk Register and Reporting

The Risk and Issue Management Plan shall also define a risk register. The risk register captures the details of the identified risks, including the risk identifier, a description of the risk, and the assigned risk owner. The risk register will need to be reported in an Excel format.



When identified, the vendor will log risks in its risk register. The risk register will include, at a minimum the elements listed in Table 6.

**Table 6: Risk Values**

Risk Register Element	Definition
Identification (ID) Number	Indicates the risk ID number
Risk Title	Provides the title of the risk
Project Name	Provides name of the project(s) impacted by the risk
Date Identified	Indicates the date the risk was identified
Risk Description	Provides a detailed description of the risk
Risk Probability	Indicates probability of the risk
Risk Severity	Indicates the severity of the risk
Risk Impact	Indicates the impact of the risk
Risk Level	Indicates the risk value rating for the risk
Status	Indicates the status of the risk (e.g., Open, Under Review, Closed, Watch)
Status Change Date	Indicates the most recent date the risk status changed
Risk Response Options	Provides a detailed description of risk response options. Vendors are expected to provide an analysis on multiple options for mitigating a risk and reasons options were not chosen as the mitigation strategy
Selected Risk Response Strategy	Provides a description of the selected risk response strategy, including information on why the selected strategy is the best approach
Update Comments/Notes	Includes the notes or comments on activities related to responding to the risk
PRMP Risk Owner	Provides the name of the PRMP team member responsible for assisting with closure of the risk (if applicable)
Vendor Risk Owner	Provides the name of the vendor risk owner responsible for the closure of the risk
Related Change Request (CR)	Tracks related CR(s), if applicable
Update Date	Indicates the date of the most recent risk comment/note

Once the vendor logs a risk, the vendor should communicate the risk to the PRMP Project Manager as follows, according to risk levels defined in Table 5 of this document:

- **Significant:** Within one business week, via email, standing meeting, or ad hoc meeting as appropriate/needed

- **Moderate:** Within two business weeks, via email, standing meeting, or ad hoc meeting as appropriate/needed
- **Minimal:** Documented in the next status report and discussed in a standing risk management meeting

The vendor team will collaborate with the PRMP PgMO, PRMP Project Manager, and PRMP Operations Risk & Issue Manager to develop a risk response strategy and confirm the risk probability, impact, and ownership. Open risks must be included in project status reports as agreed upon with PRMP. Additionally, a closed risk shall be reported as closed in the report following closure, then removed from the report and maintained in the risk register.

Vendors' Risk and Issue Management Plans shall define the reporting capabilities from the risk register.

## Analyze Risk

The Risk and Issue Management Plan shall include a process for analyzing risks using qualitative and quantitative analysis to determine the risk categories and risk parameters.

The risk analysis process shall assist in prioritizing the risk for further analysis or action, assessing the probability of occurrence and impact. The project team should assign a risk rating based on the probability of the risk occurring and the impact the occurrence could have on the project objectives. Other risk parameters that the project team should consider in the analysis are:

- **Urgency or proximity:** Risks requiring a near-term response might be higher priority to address
- **Manageability:** Ability of the project team to manage the probability or impact of the risk
- **Controllability:** Degree to which the project team can control the risk's outcome

It is useful to assign a risk category to each risk to classify it into a group, and to evaluate all risks in a category, such as all risks related to the project schedule. This grouping can help in performing the root-cause analysis. PRMP expects all vendors to assign a risk category to each risk.

## Plan Responses

The vendor Risk and Issue Management Plan shall include a process for developing responses to risks, both positive and negative. The objective of the risk response process is to determine the action or actions to respond to the risk. Table 7 describes threat response strategies.

**Table 7: Threat Response Strategies**

Strategy	Description
Escalate	Escalation might be appropriate when the threat is outside the scope of the project. PRMP’s project manager and project sponsor shall determine when it is appropriate to escalate a risk.
Avoid	Risk avoidance occurs when the project team acts to eliminate the threat or acts to protect the project from its impact.
Transfer	Transfer involves shifting the ownership of the threat to a third party to manage the risk or bear the impact of its occurrence.
Mitigate	Mitigation involves action to reduce the probability of occurrence or reduce the impact on the project. It is the most common risk response.
Accept	Acceptance acknowledges the existence of a threat, but no action is taken.

Table 8 describes opportunity response strategies.

**Table 8: Opportunity Response Strategies**

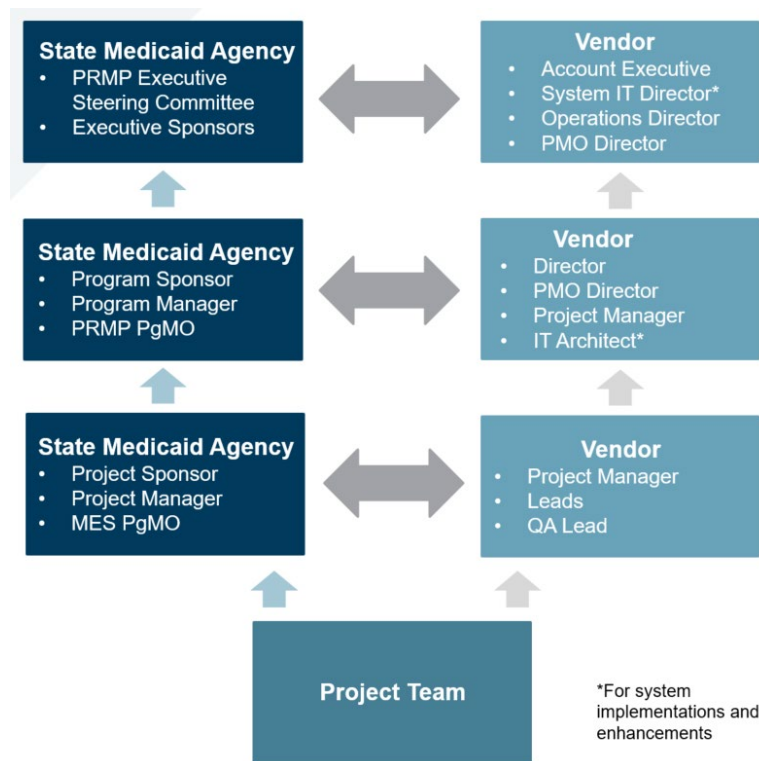
Strategy	Description
Escalate	Escalation might be appropriate when the opportunity is outside the scope of the project. PRMP’s project manager and project sponsor shall determine when it is appropriate to escalate an opportunity.
Exploit	Exploitation enables the gain of benefit corresponding with the opportunity to help ensure that it occurs.
Share	Share involves transferring the opportunity to another party to share in the ownership and benefit.
Enhance	Enhance involves increasing the probability or impact of the opportunity.
Accept	Acceptance acknowledges the existence of an opportunity, but no action is taken.

### Risk Escalation Process

As noted in Section 3.4 one risk response strategy for both threats and opportunities is escalation. If PRMP Project Leads and the project sponsor agree that the proposed response is beyond the project scope or exceeds the authority of the Project Lead, they shall use an escalation strategy.

The vendor’s Risk and Issue Management Plan shall address the escalation process for the project. Figure 2 illustrates the risk escalation process as defined by the PRMP PgMO. In their Risk and Issue Management Plans, vendors should create a risk escalation process diagram depicting the appropriate vendor project and organizational structures/titles to correspond with the State Medicaid Agency (SMA) structure depicted below.

**Figure 2: Risk Escalation Process**



The escalation process is designed to allow the vendor entities to develop the risk response strategies at the lowest level possible while maintaining interaction and transparency between the vendor and PRMP regarding the best response strategy.

### Execute Response

The Risk and Issue Management Plan shall include a process for executing or implementing the planned risk responses.

The execute response process includes allocating the resources to fully execute the agreed-upon response strategies and obtaining regular status updates from the risk owner or other team members involved in the execution process.

### Monitor Risks

Risk management is a continuous forward-looking process that effectively anticipates and mitigates threats and effectively anticipates and exploits opportunities. The process for monitoring risks involves:

- Continually assessing existing risks
- Identifying new or previously undiscovered risks
- Continuously following up on the results of risk response strategies

The Risk and Issue Management Plan shall define the criteria used to determine which risks might rise to the highest threshold for management action. Risks discussed in status meetings shall be included on status reports as agreed upon by PRMP and the vendor.

In addition, the Risk and Issue Management Plan shall describe the vendor’s plan to establish a regularly scheduled risk management meeting. Table 9 represents the Risk Management Meeting Matrix.

**Table 9: Risk Management Meeting Matrix**

Objective	Audience	Inputs	Outputs
Monitor the status of risks and risk response strategies; monitor the status of issues and issue resolutions	<ul style="list-style-type: none"> <li>• PRMP Project Lead</li> <li>• Vendor Project Manager</li> <li>• Risk Manager (if assigned)</li> <li>• PRMP PgMO Representative</li> </ul>	<ul style="list-style-type: none"> <li>• Agenda</li> <li>• Risk Register</li> </ul>	<ul style="list-style-type: none"> <li>• Meeting notes</li> <li>• Updated Decision Log</li> <li>• Updated Risk Register</li> <li>• Updated Issue Register</li> </ul>

## Issue Management

Project issue management is the process for issue management planning and for identifying and resolving project issues in a timely manner to help reduce negative impacts caused by the issue and to enhance the success of the project.

### Issue Management Plan

Each vendor shall provide a Risk and Issue Management Plan that defines the detailed approach to managing project issues. This issue management plan should be reported in Excel format. The vendor’s Risk and Issue Management Plan shall also define the issue register attributes for the project shown in Table 10.

**Table 10: Issue Register Attributes**

Memo Attribute	Attribute Description
Identification (ID) Number	Provides the ID number for the issue
Issue Title	Provides the title of the issue
Issue Description	Provides a detailed description of the issue, including, but not limited to: <ul style="list-style-type: none"> <li>• Trigger event</li> <li>• Description of issue status</li> <li>• Project objective being compromised</li> <li>• Quantified description of impact</li> </ul>
Status	Indicates the status of the issue (Open, Escalated, Closed, or Resolved)
Issue Severity	Indicates the severity level for an issue
Escalation Date	Indicates the date the initial risk was escalated to an issue
Impact Analysis	Describes the issue’s impact, including, but not limited to: <ul style="list-style-type: none"> <li>• Other projects</li> <li>• Finances</li> <li>• Project schedule</li> <li>• Resources</li> </ul>
Projects Impacted	Provides a list of projects impacted by the issue
Date Communicated to PRMP	Indicates the date the original risk was communicated to PRMP
Target Resolution Date	Indicates the date the vendor anticipates resolution of the issue
Proposed Mitigation Strategy	Describes the proposed mitigation strategy(-ies). PRMP expects vendors to provide more than one mitigation strategy, including a description of which strategy is selected or rejected and reasons why
Related Findings	Indicates any related risks and/or issues

Memo Attribute	Attribute Description
PRMP Issue Owner	Provides the name of the PRMP team member responsible for assisting with closure of the issue (if applicable)
Vendor Issue Owner	Provides the name of the vendor issue owner responsible for the closure of the issue
Notes/Comments	Provides updates on the status and progress toward issue resolution

The vendor might maintain separate Risk and issue registers or one combined register as long as the register(s) contain(s) the necessary fields. Project management literature generally describes the source of issues as realized risks. While realized risks are a source of issues, an issue can be any problem, question, action (or inaction), event, or condition that exists and adversely affects one or more of the project objectives for scope, schedule, cost, or quality.

Vendor Risk and Issue Management Plans must include a process for creating an issue severity matrix. Table 9 depicts how the PRMP PgMO defines and categorizes issue severity. PRMP expects vendors to use the issue severity categories and definitions in Table 11 unless there is a project-specific or tool-specific reason that would negatively impact the project’s efficiency or effectiveness. Vendors shall propose and discuss deviations from the issue severity designations with PRMP and receive PRMP approval prior to using an alternative scale. Vendors should note agreed-upon deviations from the issue severity designations in their Risk and Issue Management Plans.

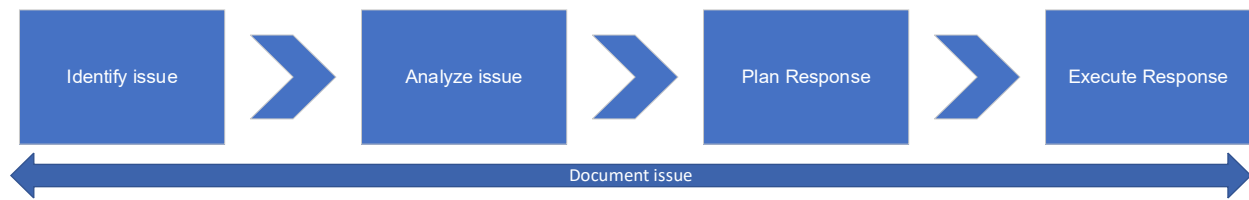
**Table 11: Issue Severity**

Issue Severity	Definition
High	The issue is preventing or might prevent mission-critical project activities from on-time, on-budget completion within scope and quality parameters. The issue must be immediately resolved or mitigated before related project work continues.
Medium	The issue is not currently preventing mission-critical project work from proceeding as planned. To prevent impact, client should address or mitigate issue on a timely basis. Resolution must occur, but work can continue.
Low	The issue is cosmetic in nature and should be resolved, but it does not have to be resolved prior to go-live.

## Issue Management Process

The Risk and Issue Management Plan shall define the process for managing issues for the project. This process is depicted in Figure 3.

**Figure 3: Issue Management Process**



## Identify Issue

An issue is an event, condition, question, or problem that exists and could have an adverse impact on the project. Once identified, the project team documents the issue by logging it into the issue register.

Once the vendor logs an issue, the vendor should communicate the issue to the PRMP Project Manager as follows according to its root-cause and severity analysis:

- **High:** Within two to four business days depending on issue complexity, via email, standing meeting, or ad hoc meeting as appropriate/needed
- **Medium:** Within two business weeks, via email, standing meeting, or ad hoc meeting as appropriate/needed
- **Low:** Documented in the next status report and discussed in a standing issue management meeting

The vendor team will collaborate with the PRMP PgMO and project manager to develop a resolution strategy and confirm the severity and ownership. Open issues shall be included in project status reports as agreed upon with PRMP. Additionally, a closed issue should be reported on said reports as closed in the report following closure, then removed from the report and maintained in the risk and issue register.

## Assign Issue

The vendor project manager assigns the issue to an owner to analyze and recommend a resolution and control the issue to closure. This might be an individual team member or the project manager. The owner should be someone who has authority within the project to see the issue through to resolution, even if they rely on additional team members to take steps to help resolve the issue.

The issue owner shall be responsible for analyzing the issue. The analysis shall include categorizing the issue, assessing the impact of the issue, prioritizing the issue, and determining the appropriate response. The issue owner shall work with the vendor Project Manager during the analysis.

## Resolve Issue

Once the issue owner determines a course of action for resolving the issue, the issue owner should communicate the planned resolution to the vendor project manager, project team



members, and other impacted stakeholders, including the business owner, to obtain buy-in for the planned resolution. The issue owner, PRMP and vendor project managers, and PRMP operations risk & issue manager shall determine the time frame for issue resolution. The PgMO shall be informed of all issues and their statuses.

Considering that the issue might impact one or more of the project objectives, the resolution might involve a variety of project stakeholders.

## Close Issue

The issue owner works with various stakeholders to address the issue satisfactorily. When all stakeholders agree with the resolution, it is marked complete. Based on this step, the issue owner reports the issue status as complete to the PRMP and vendor project managers for approval. The PRMP Project Lead reviews the resolution details and verifies that those details demonstrate full resolution of the issue. On confirmation that they do, the project manager closes the issue and records the resolution date. The project manager shall communicate the issue closure status to project team members and other stakeholders through the established communication process.

## Issue Register and Reporting

Planning for issue management involves recognizing that issues shall arise during a project; implementing a process to identify, assign, resolve, and close the issues; and implementing an issue register to record and track the issues from identification to closure. All open risks and issues shall be included in reports agreed upon with PRMP.

## Appendix A: Acronyms List

Appendix A provides a list of acronyms and their definitions used in this document

**Table 12: Acronyms List**

Acronym	Definition
CHIP	Children's Health Insurance Program
CMMI®	Capability Maturity Model Integration
CR	Change Request
EOMC	Enterprise Objective Monitoring and Control
ID	Identifier
IT	Information Technology
KL	BerryDunn KnowledgeLink
OIAT	Oficina de Informática y Avances Tecnológicos
PgMO	Program Management Office
<i>PMBOK® Guide</i>	<i>A Guide to the Project Management Body of Knowledge</i>
PMI®	Project Management Institute®
PMP	Project Management Plan
PRDoH	Puerto Rico Department of Health
PRMES	Puerto Rico Medicaid Enterprise Systems
PRMP	Puerto Rico Medicaid Program
RACI	Responsible, Accountable, Consulted, Informed
RFP	Request for Proposals
SMA	State Medicaid Agency
SME	Subject Matter Expert
WBS	Work Breakdown Structure

# Enterprise Objective Monitoring and Control Services

Schedule Management Plan Aid



V0.x

GOVERNMENT OF PUERTO RICO

Department of Health  
Medicaid Program

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# Table of Contents

<b>Section</b>	<b>Page</b>
Table of Contents.....	i
Revision History .....	1
1.0 Introduction .....	2
1.1 Purpose and Objectives.....	3
1.2 Scope .....	3
1.2.1 In Scope.....	3
1.2.2 Out of Scope .....	4
1.3 Approach .....	4
1.3.1 Assumptions.....	4
1.3.2 Constraints .....	5
1.3.3 Dependencies .....	5
1.3.4 Standards and References.....	6
2.0 Roles and Responsibilities .....	7
2.1 PRMP Leadership .....	7
2.2 PRMP Program Director .....	8
2.3 PRMP PgMO .....	8
2.4 PRMP Project Lead .....	8
2.5 Vendors .....	8
3.0 Schedule Development Guidelines .....	9
3.1 Leveraging the WBS.....	9
3.2 Selecting the Scheduling Method.....	9
3.3 Selecting the Scheduling Tool .....	10
3.4 Developing the Schedule Model .....	10
3.5 Creating the Baseline .....	11
4.0 Schedule Considerations .....	12
4.1 Project Life Cycle.....	12

4.2 Progressive Elaboration..... 12

4.3 Adaptive Approaches..... 13

5.0 Schedule Maintenance Guidelines ..... 14

5.1 Schedule Status Maintenance ..... 14

5.1.1 Collecting Actual Data ..... 14

5.1.2 Percent Complete and Estimate to Complete ..... 14

5.2 Schedule Metrics ..... 15

5.3 Change Control ..... 15

Appendix A: Acronyms List ..... 17

Appendix B: Project Schedule ..... 19

## Revision History

The Puerto Rico Medicaid Program's (PRMP's) Program Management Office (PgMO) will store the approved Schedule Management Plan Aid and any approved revisions on the PRMP PgMO SharePoint site or in an alternative location specified by PRMP. PRMP and the PRMP PgMO will make the plan available to project stakeholders as needed. Currently, BerryDunn provides PRMP PgMO services.

Table 1 presents the revision history for this document. When changes occur, the PRMP PgMO will provide incremental versioning of the number and the date. The PRMP PgMO will record the name of the person making the change and a description of the change in the revision history.

**Table 1: Revision History**

Date	Document Version	Description	Author(s)
6/22/2022	1.0	Initial delivery	BerryDunn PgMO team

## 1.0 Introduction

The PRMP is committed to the implementation of successful projects for the residents of Puerto Rico and has established a Puerto Rico Medicaid Enterprise Systems (PRMES) PgMO to provide guidance, support, and oversight for vendor projects within the Medicaid Enterprise.<sup>1</sup> The PRMP PgMO has created plan aids to assist with completing projects effectively and efficiently. Project management involves applying best practice processes, tools, and techniques. The PRMP PgMO plan aids provide guidance for delivering more predictable and consistent plans, processes, and practices, which will result in meeting the goals and objectives of PRMP and vendor partners, as well as meeting stakeholder expectations.

The Schedule Management Plan Aid is a living document intended to provide PRMP vendors with guidance on PRMP’s expectations regarding management of the project schedule. PRMP may expect vendors to develop and submit a Schedule Management Plan for the project(s) for which they are providing services. Vendors should reference this document when creating their Schedule Management Plans to help ensure PRMP’s expectations are met and that there is a common understanding between PRMP and the vendor regarding schedule management. The PRMP PgMO will update this Schedule Management Plan Aid when new applicable standards (or versions of a standard) are released or when there are changes to PRMP policies that affect schedule management.

In the event of PRMP guidance, statement of work (SOW), or contract conflicts, the vendor should always default to the latest guidance from PRMP and the vendor’s SOW or contract.

The Introduction section of this document provides information on the Schedule Management Plan Aid’s purpose and objectives, scope, approach, assumptions, constraints, dependencies, and standards and references. To help ensure an understanding of project schedule terms, Table 2 provides definitions for project schedule, project schedule management, schedule baseline, schedule data, schedule management plan, schedule model, scheduling tool, and Work Breakdown Structure (WBS).

**Table 2: Scope Definitions**

Term	Definition
<b>Product Schedule</b>	An output of a schedule model that presents linked activities with planned dates, durations, milestones, and resources.
<b>Project Schedule Management</b>	Project schedule management includes the processes required to manage the timely completion of a project.
<b>Schedule Baseline</b>	The approved version of a schedule model that can be changed using formal change control procedures and is used as the basis for comparison to actual results.

<sup>1</sup> In this aid, “vendor” refers to vendors that implement and maintain systems within the PRMES, as well as contractors and other entities that provide non-solution-related PRMES services to PRMP.

Term	Definition
<b>Schedule Data</b>	The collection of information for describing and controlling the schedule.
<b>Schedule Management Plan</b>	A component of the project or program management plan that establishes the criteria and the activities for developing, monitoring, and controlling the schedule.
<b>Schedule Model</b>	A representation of the plan for executing the project's activities, including durations, dependencies, and other planning information, used to produce a project schedule along with other scheduling artifacts.
<b>Scheduling Tool</b>	A tool that provides schedule component names, definitions, structural relationships, and formats that support the application of a scheduling method.
<b>Work Breakdown Structure (WBS)</b>	The WBS makes the deliverables and objectives more precise and concrete for the project, which enables the project team to know exactly what has to be accomplished within each deliverable. The most common way this is done is by using a hierarchical tree structure. Each level of this structure breaks the project deliverables or objectives down to more specific and measurable components. According to best practice, the project schedule should be built based on an approved WBS.

## 1.1 Purpose and Objectives

The purpose of the PgMO Schedule Management Plan Aid is to define how the vendor will:

- Establish the processes for developing and maintaining a project schedule
- Establish the processes for creating a schedule baseline
- Define the circumstances and processes for releasing and recreating the schedule baseline

The objectives of the PgMO's Schedule Management Plan Aid are to:

- Provide guidance to the project-specific vendors in the development of their Schedule Management Plans and project schedules
- Demonstrate how the vendors should implement the processes for creating project schedules, assigning the baseline, and managing the project schedules

## 1.2 Scope

The scope statement defines both the work included and the work not included in the scope of a project. For purposes of this PgMO Schedule Management Plan Aid, this section addresses what is in scope and what is not in scope for an anticipated plan. The plan provides guidance for PRMES vendors that addresses work included and not included in their scope.

### 1.2.1 In Scope

The Schedule Management Plan scope includes:



- Implementing processes required to manage timely completion of the work needed to deliver the product, service, or result defined in the project scope
- Applying the approved WBS when developing the project schedule
- Identifying methods to aid in project schedule creation, management, and control
- Providing suggestions for project schedule considerations when developing the project schedule
- Providing scheduling maintenance guidelines for vendors
- Providing recommendations for the project schedule tool for PMRP PRMES projects
- Providing suggestions on approved scheduling models for developing a project schedule for PRMES projects.

The Schedule Management Plan must include processes for managing all aspects of the project schedule from initiation through project closure.

### 1.2.2 Out of Scope

For purposes of providing guidance to the vendors, this Schedule Management Plan does not include the following processes:

- Processes to manage requirements definition, validation, and traceability. The Requirements Management Plan defines these processes.
- Processes to determine and manage project scope. The Scope Management Plan addresses these processes.
- Processes to plan, structure, and control cost and project budget. Any requested Cost Management Plan by PRMP should address this need.

PRMES vendors should list the items considered out of scope for their specific project related to project schedule management. Any scope exclusions must be in alignment with the Request for Proposals (RFP) and the final signed contract as necessary.

## 1.3 Approach

This section describes assumptions, constraints, dependencies, standards, and references. The Schedule Management Plan Aid takes into consideration the assumptions, dependencies, and constraints for project schedules as described in this section.

### 1.3.1 Assumptions

Per *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)*, an assumption is a factor expected to be in place or to be in evidence. The Schedule Management Plan is based on the following assumptions:

- The **project** life cycle and the related entrance and exit criteria, discussed in Section 7 – Manage Project Life Cycle of the Scope Management Plan Aid, are part of a phase-based predictive (often called a waterfall) life cycle that the vendor shall adopt regardless of the **development** life cycle used.
- The vendor's team that is performing the work will develop the WBS with PRMP participation. It is important that those defining the work should be the ones performing the work.
- Vendors will collaborate with other vendors, subcontractors, and outside PRMP departments as they create their project schedules. When solutions and implementations are reliant on each other, have similar implementation dates, and require resources from outside vendors or other Puerto Rico staff beyond PRMP, input is necessary.

PRMES vendors should list assumptions for their specific project related to project schedule management in the vendor Schedule Management Plan.

### 1.3.2 Constraints

Per the *PMBOK® Guide*, a constraint is a limiting factor that affects the execution of a project or process. The Schedule Management Plan and the schedule management processes have the following constraints:

- The WBS submitted as part of the Scope Management Plan must be approved by PRMP before the project schedule is submitted for approval.
- PRMES projects must be completed within the time period agreed upon in the contract with PRMP.

PRMES vendors should list constraints for their specific project related to project schedule management.

### 1.3.3 Dependencies

Per the *PMBOK® Guide*, a dependency is a logical relationship between two activities, or between an activity and a milestone. For example, an activity that cannot begin until another activity has been finished has a dependency. The Schedule Management Plan and the schedule management processes are dependent on the following processes and related components of the Project Management Plan (PMP):

- The Scope Management Plan and the Requirements Management Plan.
- The approved WBS provides the basis for the project schedule. As such, there is a dependency between the WBS and the Schedule Management Plan.
- The schedule for the PRMES projects is dependent on how the vendor approaches implementation. Some projects are organized into several modules, releases, or implementations. The vendor could approach each as a separate schedule.

PRMES vendors should list dependencies for their specific project related to schedule management.

### 1.3.4 Standards and References

PRMES vendors shall develop their Schedule Management Plans as part of their PMPs. In developing the Schedule Management Plan and the project schedule, the vendors shall use this PMP aid as well as the following industry standards:

- *PMBOK® Guide*, Seventh Edition, Project Management Institute® (PMI®), Chapter 6 – Project Schedule Management
- *Practice Standard for Work Breakdown Structures*, Second Edition, PMI®
- *Practice Standard for Scheduling*, Second Edition, PMI®
- *Practice Standard for Project Estimation*, PMI®

Additionally, vendors may wish to consult the following references and best practices depending on methodology:

- *Practice Standard for Earned Value Management*, Second Edition, PMI®
- *Program Analysis Pamphlet (PAM) 200.1*, Defense Contract Management Agency (DCMA), Section 4.0, 14-Point Schedule Metrics for Integrated Master Schedules (IMS) Analysis

The PRMP PgMO and vendors are expected to use the appropriate standards and references. The PRMP PgMO may incorporate additional standards and references if appropriate for the plan content. Vendors are expected to monitor applicable standards and industry best practices. Vendors should plan to work with PRMP to determine if updates are required to their Schedule Management Plans when a new applicable standard (or version of a standard) is released.

## 2.0 Roles and Responsibilities

This section describes the primary roles and responsibilities of the groups that consist of the project staff, sponsors, and stakeholders as they relate to project schedule management. Table 3 illustrates which stakeholders are Responsible (R), Accountable (A), Consulted (C), and Informed (I) (RACI), defined as:

- **Responsible:** This stakeholder does the work to complete the task area. This stakeholder may also serve as an Accountable stakeholder for some task areas.
- **Accountable:** This stakeholder delegates work and is the last one to review the task area before it is deemed complete. According to best practice, one stakeholder (or the lowest number possible) should be deemed accountable.
- **Consulted:** This stakeholder provides input based on how the task area will impact the future work of the project and the stakeholder’s expertise.
- **Informed:** This stakeholder should be aware of the progress associated with the task area.

Table 3 aims to provide insight into how PRMP and the PgMO will interact with project schedule management processes and responsibilities. The vendor should propose its own stakeholder groups and RACI matrix according to its organizational structure and project team. PRMP and/or PgMO responsibilities can be edited from this baseline if deviations are discussed with PRMP and the PgMO to determine what is appropriate for the project.

**Table 3: RACI Matrix for Schedule Management**

Task Area	PRMP Leadership	PRMP Program Director	PRMP PgMO	PRMP Project Lead	Vendor
Determine Project Schedule Methods, Tools, and Models	I	A	C	R	C, I
Develop Project Schedule	C	C	C	A	R
Monitor Project Schedule	I	I	I	A	R
Control Project Schedule	I	I	I	A	R
Reporting Project Schedule Data and Metrics	I	C	C, I	A	R

### 2.1 PRMP Leadership

PRMP is the Medicaid agency responsible for administering the Medicaid Program in Puerto Rico, including the Children’s Health Insurance Program (CHIP), and a waiver-based section 1915(a) program. PRMP is an agency within the Puerto Rico Department of Health (PRDoH). While leadership roles might vary between projects, in general, the PRMP Leadership stakeholder group refers to the PRDoH Secretary, PRMP Executive Director, and the PRMP Executive Steering Committee.

## 2.2 PRMP Program Director

The PRMP Program Director is a member of the PRMP PgMO.

The PRMP Program Director supervises project schedule milestones in terms of all benefits delivered by PRMES initiatives.

## 2.3 PRMP PgMO

PRMP has designated the PgMO to provide program management guidance and collaborative oversight for its information technology initiatives. As part of this responsibility, PRMP PgMO has developed this Schedule Management Plan Aid as a guide for project-specific Schedule Management Plans.

Each vendor shall create an individual Schedule Management Plan to develop and manage its project schedule(s) and shall collaborate with the PRMP PgMO to gain PRMP approval of its process.

## 2.4 PRMP Project Lead

PRMP appoints a Project Lead to oversee each of the PRMES projects under PRMP programs utilizing the defined PRMP PgMO processes. The PRMP Project Lead collaborates with the vendor's Project Manager to help ensure the project execution and implementation are in accordance with the approved schedule and processes defined by the PRMP PgMO.

PRMP Project Leads and the vendors shall be the individuals initially responsible for implementing the schedule management processes defined in this plan.

The PRMP Project Lead will have joint responsibility with the vendor Project Manager for developing, monitoring, and controlling the project schedule.

## 2.5 Vendors

The vendors implementing one or more information technology projects or supporting other PRMP activities are responsible for developing a project-specific Schedule Management Plan, working with the PRMP PgMO to obtain PRMP approval of the plan, and managing scope in accordance with that plan. The vendor should further elaborate and divide its team into stakeholder groups in this section.

In accordance with the assumptions described in this document, vendors must collaborate with others outside their own team when creating their project schedule due to an overlap of implementation dates, solution dependencies, or resource needs.

PRMP anticipates that the vendors will maintain the project schedule according to their PRMP-approved Schedule Management Plans. The vendor Project Manager will have joint responsibility with the PRMP Project Lead for developing, monitoring, and controlling the project schedule.

## 3.0 Schedule Development Guidelines

The vendor shall prepare a Schedule Management Plan as part of the PMP. The purpose of this plan is to confirm the vendor's commitment and plan to prepare the required project schedule in accordance with industry standards and best practices. The following subsections provide guidance for creating the project schedule in terms of:

- Leveraging the WBS baseline
- Selecting the scheduling method
- Selecting the scheduling tool
- Developing the schedule model
- Creating the baseline

The sections below further describe each of these items.

### 3.1 Leveraging the WBS

The Scope Management Plan Aid provides guidance for developing a WBS and related WBS dictionary. The WBS provides a decomposition of the work required and only the work required to deliver the specified product, service, or result. This WBS will provide the basis for the project schedule.

The vendor shall submit the WBS and WBS dictionary to PRMP for review and approval. On approval, the PRMP project manager and the vendor shall create the WBS baseline. This baseline will form the basis for the project schedule.

### 3.2 Selecting the Scheduling Method

The vendor will select a scheduling method and document that selection as part of the Schedule Management Plan. The most common scheduling methods are:

- Critical Path Method (CPM)
- Precedence Diagramming Method (PDM)
- Critical Chain Method (CCM)
- Program Evaluation and Review Technique (PERT)

PRMP is neutral regarding the scheduling method, so the vendor may choose the method that best fits the project and meets contractual obligations. In selecting the scheduling method, the schedule must be consistent with the approved WBS and should be able to provide:

- The estimated duration for each WBS element
- The projected or forecasted beginning and ending date for each WBS element
- All dependencies within the schedule network

### 3.3 Selecting the Scheduling Tool

PRMP's standard scheduling tool is Microsoft Project. While the vendor may select the scheduling tool that best fits the project, any scheduling tool must be compatible with Microsoft Project.

Additionally, it is possible that not all PRMP staff who are consulted in developing, monitoring, and controlling the project schedule will have access to Microsoft Project. The vendor should provide a copy of the project schedule in Portable Document Format (PDF) for the baseline delivery as well as any re-baselined version(s) and a copy in Microsoft Excel/comma-separated values (CSV).

### 3.4 Developing the Schedule Model

Using the selected scheduling method and scheduling tool, the vendor will create a schedule by which the vendor will complete the work defined in the approved WBS. The vendor's project schedule should contain the following elements:

- Unique ID (Recommended)
- Milestones
- Tasks
- Percent Complete
- Baseline Start Date
- Baseline Finish Date
- Actual Start Date
- Actual Finish Date
- Predecessors
- Successors
- Resources

Dependencies – including lag and lead Dependencies for creating the schedule model consist, at a minimum, of:

- Defining the activities needed to complete the work as described in the WBS
- Sequencing the activities
- Defining task dependencies
- Determining the duration of activities
- Loading and leveling the resources (Recommended)

- Finalizing the schedule model

### 3.5 Creating the Baseline

As part of finalizing the schedule model, the vendor and the PRMP Project Lead shall conduct an Integrated Baseline Review (IBR) session. The attendees shall include, at a minimum:

- The PRMP Project Lead
- The PRMP PgMO
- The PRMP Project Sponsor

The purpose of the IBR is to obtain PRMP and vendor agreement that the project scope and the project schedule are adequately documented and aligned.

Upon PRMP approval of the schedule, the vendor shall create the schedule baseline. This typically occurs within the scheduling tool. The vendor shall submit a point-in-time instance of the schedule baseline to the PRMP project manager and PRMP PgMO. The filename convention for this submittal will be:

{schedule\_filename}\_{baseline date}

The baseline date shall be in the format: yyyy-mm-dd.



## 4.0 Schedule Considerations

The following subsections discuss some scheduling techniques that the vendor may want to consider in developing the schedule model:

- Project life cycle
- Progressive elaboration
- Adaptive approaches

### 4.1 Project Life Cycle

Vendors shall develop an overall project life cycle with distinct phasing and phase entrance and exit criteria.

When PRMES projects have projects that qualify for Federal Financial Participation (FFP), the Centers for Medicare & Medicaid Services (CMS) in Rule 80 FR 75817 requires that projects funded with enhanced FFP have defined system development life cycles (SDLCs) that have distinct, well-defined phases. Entry criteria are the conditions that are required to begin the processing of the current stage and exit criteria are the conditions which sets the stage as completed so that the next stage comes into action. In general, the exit criteria of the current stage acts as entry criteria to the next stage. To implement this requirement, PRMP has defined a project life cycle with distinct phases and with phase entrance and exit criteria. Please refer to the Scope Management Plan, which describes the project life cycle in detail.

### 4.2 Progressive Elaboration

Also called “rolling wave” planning, progressive elaboration allows the vendor to plan near-term WBS elements in detail, while planning for future work at a high level. While the schedule should be planned end-to-end, near-term activities are planned in detail while later activities are included based on the WBS work package estimates and known breakdown. When more schedule-relevant information is available, the project schedule is updated to provide more detailed and accurate information, which allows estimates to be reviewed and adjusted as more is known.

It is understood that the baseline project schedule and dates should not be impacted. Any changes to the project schedule dates would require discussion and review from the PRMP project manager and go through the subsequent PRMP approved change management process as outlined in the vendor-approved Change Management Plan. PRMP will permit progressive elaboration scheduling, provided the schedule model covers the entire project at least at a high level. The vendor shall have the following considerations in mind when using progressive elaboration in the schedule model:

- Progressive elaboration shall not be used to change the scope of the project. The approved WBS shall continue to be the basis of the schedule and will form the overall framework.

- Under progressive elaboration, the vendor shall plan the activities in detail for a subsequent phase as an entrance criterion to that phase.

As described in Section 5.1 – Schedule Status Maintenance of this plan aid, the vendors must provide periodic schedule status updates. During these schedule status sessions, the vendors will describe any additional elaboration to the schedule. The PRMP Project Lead will confirm if the schedule changes are limited to progressive elaboration or if the changes represent a change to the schedule.

### 4.3 Adaptive Approaches

As mentioned previously, both CMS and PRMP require that the project life cycle be based on a predictive model and have distinct phases. Within that project life cycle, however, the development life cycle can be based on an adaptive model, such as iterative, incremental, or agile. If the vendor proposes an adaptive or hybrid approach, including agile development, the PRMP PgMO will review the vendor's schedule to confirm that it binds the vendor to an overall schedule but adheres to the vendor's development approach.

## 5.0 Schedule Maintenance Guidelines

Once the project schedule is approved, the vendor, the PRMP Project Lead, and the PRMP PgMO will track progress continually. The vendor shall document procedures for schedule maintenance, updating, and status reporting in the Schedule Management Plan.

Schedule maintenance begins with the approved baseline. This version of the schedule contains the dates for comparison of progress. Any additional changes from the initial baseline schedule will be documented in a revision log and shared along with the project schedule.

### 5.1 Schedule Status Maintenance

The vendor shall update and submit the approved project schedule on a predetermined time schedule agreed upon and approved in the vendor's Schedule Management Plan. The update cycle shall be agreed upon by the PRMP Project Lead and the vendor Project Manager but shall be no less frequently than twice a month. The update cycle shall have a status date.

#### 5.1.1 Collecting Actual Data

The vendor shall update the project schedule with the actual data as of the status date. The information shall include:

- Actual start date for all activities started during the reporting period
- Actual finish date for all activities completed during the reporting period
- Actual resource utilization for all activities in progress or completed during the reporting period

The vendor shall update the schedule with this actual data as of the status date and submit the updated schedule to PRMP. The filename convention for this submittal will be:

{schedule\_filename}\_{status date}

The status date shall be in the format: yyyy-mm-dd.

#### 5.1.2 Percent Complete and Estimate to Complete

The vendor shall report percent complete for all activities in progress that were started during the reporting period or were already in progress but not completed.

The vendor will provide proposed methods for determining percent complete as part of the vendor's Schedule Management Plan. The method for determining percent complete for Executable Work Packages (EWPs) related to preparation of a deliverable may be different from the method for determining percent complete for EWPs related to development activities.

The PRMP PgMO recommends that the vendor update the forecasted start and finish dates for all activities not completed by the status date. The vendor shall report all variances, both positive and negative, to PRMP, along with a risk assessment based on the variances to

consider as an addition to the project risk register. The vendor should refer to the project-approved Risk and Issue Management Plan for further guidance.

## 5.2 Schedule Metrics

PRMP and the vendor shall agree upon a set of metrics that provide information on project progress. The vendor's project status reports shall include the schedule metrics as of the latest status date. The metrics should provide both the PRMP Project Manager, the PRMP PRIMES PgMO, and the vendor Project Manager with insight to the schedule status and progress.

Metrics may include:

- **Missed Milestones** – Milestone activities that should have been completed during the reporting period but were not.
- **Activities Overdue** – Activities that should have started during the reporting period but did not, as well as activities that should have been completed during the reporting period but were not.
- **Missed Activities** – Number of incomplete activities with actual finish dates after the baseline finish date as a percentage of all activities with baseline finish dates on or before the status date.
- **Percent Complete** – Percent complete for both individual activities and the overall schedule. The vendors shall define the methods for determining percent complete in their Schedule Management Plans.

This is not an exhaustive list of schedule metrics, and the vendors may suggest other metrics for evaluating schedule performance and project progress.

## 5.3 Change Control

The project schedule baseline remains static throughout the life of the project unless there is a need to release and re-create a baseline. The release and re-creation of a baseline shall not occur without approval of PRMP's Change Control Board as described in the vendor's approved Change Management Plan.

The baseline can only be released and re-created under the following circumstances:

- A change in requirements that has been approved by PRMP's Change Control Board. This could include the addition of functions or features to one of the products, services, or results to be implemented under the project. It could also include new products, services, or results added to the project.
- A change in project scope that has been approved by PRMP's Change Control Board that impacts the schedule. This should be considered highly unusual unless there is an accompanying change in requirements.
- A condition in which it is clear that the project end date cannot be met, and PRMP approves a change in baseline as part of the vendor's corrective action plan (CAP).

- A condition in which there are significant changes in activities or phases of the project. The PRMP Project Lead shall determine if the changes are significant enough to warrant release of the baseline and creation of a new baseline.

Expansion of a project schedule under a progressive elaboration technique should never result in the need for release and re-creation of a baseline. In a situation where the vendor has determined that the start date and/or end dates of a higher-level planning package are no longer valid after expansion, the PRMP Project Lead and the vendor project manager need to determine the impact, if any, on the project implementation date. PRMP may require a CAP from the vendor to get the project back on track.

## Appendix A: Acronyms List

Table 4 presents acronyms and abbreviations used in this document.

**Table 4: Common Acronyms and Abbreviations**

Acronym/ Abbreviation	Definition
<b>CAP</b>	Corrective Action Plan
<b>CCM</b>	Critical Chain Method
<b>CHIP</b>	Children's Health Insurance Program
<b>CMS</b>	Centers for Medicare & Medicaid Services
<b>CPM</b>	Critical Path Method
<b>CSV</b>	Comma-Separated Values
<b>DCMA</b>	Defense Contract Management Agency
<b>EOMC</b>	Enterprise Objective Monitoring and Control
<b>EWP</b>	Executable Work Package
<b>FFP</b>	Federal Financial Participation
<b>IBR</b>	Integrated Baseline Review
<b>IMS</b>	Integrated Master Schedules
<b>KL</b>	BerryDunn KnowledgeLink
<b>OIAT</b>	Oficina de Informática y Avances Tecnológicos
<b>PAM</b>	Program Analysis Pamphlet
<b>PDM</b>	Precedence Diagramming Method
<b>PERT</b>	Program Evaluation and Review Technique
<b>PgMO</b>	Program Management Office
<b>PDF</b>	Portable Document Format
<b>PMBOK® Guide</b>	<i>A Guide to the Project Management Body of Knowledge</i>
<b>PMI®</b>	Project Management Institute®
<b>PMP</b>	Project Management Plan
<b>PRDoH</b>	Puerto Rico Department of Health
<b>PRMES</b>	Puerto Rico Medicaid Enterprise Systems
<b>PRMP</b>	Puerto Rico Medicaid Program
<b>RACI</b>	Responsible, Accountable, Consulted, Informed
<b>RFP</b>	Request for Proposals

Acronym/ Abbreviation	Definition
<b>SDLC</b>	System Development Life Cycle
<b>SOW</b>	Statement of Work
<b>WBS</b>	Work Breakdown Structure

## Appendix B: Project Schedule

Figure 1 presents an example of high-level project schedule with the elements required for an MES PRMP project.

**Figure 1: Example Project Schedule**

Unique ID	Milestone	Task Name	% Complete	Baseline Start	Baseline Finish	Actual Start	Actual Finish	Predecessors	Successors
0	No	PMBOK Compliant Project Management	90%	Tue 6/1/21	Wed 8/25/21	Tue 6/1/21	NA		
166	No	Project Start	100%	Tue 6/1/21	Tue 6/1/21	Tue 6/1/21	Tue 6/1/21		4,9
167	No	Initiating	100%	Tue 6/1/21	Wed 6/9/21	Tue 6/1/21	Wed 6/9/21		
168	No	Identified Stakeholders	100%	Wed 6/2/21	Mon 6/7/21	Wed 6/2/21	Mon 6/7/21		
173	No	Project Charter	100%	Tue 6/1/21	Wed 6/9/21	Tue 6/1/21	Wed 6/9/21		
179	No	Initiating Complete	100%	Wed 6/9/21	Wed 6/9/21	Wed 6/9/21	Wed 6/9/21	7,13	24,17,54,51,37,61,45
180	No	Planning	100%	Thu 6/10/21	Fri 7/16/21	Thu 6/10/21	Fri 7/16/21		
181	No	Requirements Document	100%	Thu 6/10/21	Tue 6/15/21	Thu 6/10/21	Tue 6/15/21		
188	No	Project Scope Statement	100%	Wed 6/16/21	Fri 6/25/21	Wed 6/16/21	Fri 6/25/21		
197	No	Work Breakdown Structure and WBS Dictionary	100%	Tue 6/29/21	Tue 7/6/21	Tue 6/29/21	Tue 7/6/21		
201	No	Project Schedule	100%	Mon 6/28/21	Wed 7/7/21	Mon 6/28/21	Wed 7/7/21		
214	No	Quality Management Plan	100%	Thu 6/10/21	Thu 6/10/21	Thu 6/10/21	Thu 6/10/21		
217	No	Staffing Management Plan	100%	Fri 7/2/21	Fri 7/2/21	Fri 7/2/21	Fri 7/2/21		
220	No	Communications Management Plan	100%	Thu 6/10/21	Thu 6/10/21	Thu 6/10/21	Thu 6/10/21		
223	No	Risk Management Plan	100%	Fri 6/11/21	Tue 7/13/21	Fri 6/11/21	Tue 7/13/21		
233	No	Stakeholder Management Plan	100%	Fri 7/9/21	Fri 7/9/21	Fri 7/9/21	Fri 7/9/21		
236	No	Project Management Plan	100%	Wed 7/14/21	Wed 7/14/21	Wed 7/14/21	Wed 7/14/21		
239	No	Project Support Plans	100%	Thu 7/15/21	Fri 7/16/21	Thu 7/15/21	Fri 7/16/21		
247	No	Planning Complete	100%	Fri 7/16/21	Fri 7/16/21	Fri 7/16/21	Fri 7/16/21	62,65,67,68	103,104,73,74,75,82,91
248	No	Executing	100%	Mon 7/19/21	Mon 8/16/21	Mon 7/19/21	Mon 8/16/21		
282	No	Monitoring and Controlling	90%	Mon 7/19/21	Wed 8/11/21	Mon 7/19/21	NA		

Unique ID	Milestone	Task Name	% Complete	Baseline Start	Baseline Finish	Actual Start	Actual Finish	Predecessors	Successors	Resource Names
283	No	Project Information Management System	100%	Tue 7/27/21	Mon 8/2/21	Tue 7/27/21	Mon 8/2/21			
289	No	Project Change Requests	100%	Tue 8/3/21	Wed 8/4/21	Tue 8/3/21	Wed 8/4/21			
290	No	Control Project Scope	100%	Tue 8/3/21	Tue 8/3/21	Tue 8/3/21	Tue 8/3/21	70	131	Project Manager
291	No	Control Scope Changes	100%	Wed 8/4/21	Wed 8/4/21	Wed 8/4/21	Wed 8/4/21	70	131	Project Manager
292	No	Project Acceptance Documents	100%	Mon 7/19/21	Mon 7/19/21	Mon 7/19/21	Mon 7/19/21			
293	No	Manage Project Acceptance	100%	Mon 7/19/21	Mon 7/19/21	Mon 7/19/21	Mon 7/19/21	70	131	Project Manager, Acceptor
294	No	Project Schedule Updates	100%	Tue 7/20/21	Mon 8/9/21	Tue 7/20/21	Mon 8/9/21			
302	No	Quality Control Reports	100%	Mon 7/26/21	Tue 7/27/21	Mon 7/26/21	Tue 7/27/21			
306	No	Project Status Reports	100%	Tue 7/20/21	Wed 7/21/21	Tue 7/20/21	Wed 7/21/21			
309	No	Project Risk Log	100%	Tue 8/10/21	Tue 8/10/21	Tue 8/10/21	Tue 8/10/21			
310	No	Control Project Risks	100%	Tue 8/10/21	Tue 8/10/21	Tue 8/10/21	Tue 8/10/21	70	131	Project Manager
311	No	Subcontractor Status Reports	100%	Thu 7/22/21	Thu 7/22/21	Thu 7/22/21	Thu 7/22/21			
313	No	Stakeholder Engagement	0%	Tue 7/27/21	Wed 8/11/21	NA	NA			
314	No	Control Project Decisions	0%	Wed 8/11/21	Wed 8/11/21	NA	NA	70	131	Project Manager
315	No	Monitor Stakeholder Satisfaction	0%	Tue 7/27/21	Tue 7/27/21	NA	NA	70	131	Project Director
316	Yes	Monitoring and Controlling Complete	0%	Wed 8/11/21	Wed 8/11/21	NA	NA	103,104,105,1136,137,138,1		
317	No	Closing	0%	Tue 8/17/21	Wed 8/25/21	NA	NA			
328	Yes	Milestone: Project Completion	0%	Wed 8/25/21	Wed 8/25/21	NA	NA	140,142		



# Enterprise Objective Monitoring and Control Services

Scope Management Plan Aid

V1.0



GOVERNMENT OF PUERTO RICO

Department of Health  
Medicaid Program

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6/22/2022

# Table of Contents

<b>Section</b>	<b>Page</b>
Table of Contents.....	i
Revision History .....	1
1.0 Introduction .....	2
1.1 Purpose and Objectives.....	3
2.0 Scope.....	4
2.1 In-Scope.....	4
2.2 Out-of-Scope.....	4
3.0 Approach .....	5
3.1 Assumptions .....	5
3.2 Constraints .....	5
3.3 Dependencies.....	5
3.4 Standards and References .....	6
4.0 Roles and Responsibilities .....	7
4.1 PRMP Leadership.....	7
4.2 PRMP Program Director .....	8
4.3 PRMP Project Lead .....	8
4.4 PRMES PgMO.....	8
4.5 Vendors .....	8
5.0 Scope Management Plan .....	9
5.1 Prepare Scope Statement.....	9
5.2 Create WBS.....	10
5.2.3 WBS Terminology .....	10
5.2.3 WBS Characteristics .....	11
5.2.4 WBS Dictionary .....	11
5.3 Progressive Elaboration.....	11
5.4 Validate Scope.....	13



5.5	Validate WBS.....	13
5.6	Establish the Scope Baseline.....	14
5.7	Control Scope.....	15
5.8	Manage Project Life Cycle.....	16
Appendix A: Acronyms List.....		18

## Revision History

The Puerto Rico Medicaid Program's (PRMP's) Program Management Office (PgMO) will store the approved Scope Management Plan Aid and any approved revisions on the Enterprise Objective Monitoring and Control (EOMC) KnowledgeLink (KL) site or in an alternative location specified by PRMP. PRMP and the PRMP PgMO will make the plan available to project stakeholders as needed. Currently, BerryDunn provides PRMP PgMO services.

Table 1 presents the revision history for this document. When changes occur, the PRMP PgMO will increment the version number and the date. The PRMP PgMO will record the name of the person making the change and a description of the change in the revision history.

**Table 1: Revision History**

Date	Document Version	Description	Author(s)
6/22/2022	v1.0	Initial delivery	BerryDunn PgMO Team

## 1.0 Introduction

The Puerto Rico Medicaid Program (PRMP) is committed to the implementation of successful projects for the residents of Puerto Rico and has established a Program Management Office (PgMO) to provide guidance, support, and oversight for vendor projects within the Medicaid Enterprise.<sup>1</sup> The PRMP PgMO has created plan aids to assist with completing projects effectively and efficiently. Project management involves applying best practice processes, tools, and techniques. The PRMP PgMO plan aids provide guidance for delivering more predictable and consistent plans, processes, and practices, which will result in meeting the goals and objectives of PRMP, vendor partners, as well as meeting stakeholder expectations.

The Scope Management Plan Aid is a living document intended to provide PRMP vendors with guidance on PRMP’s expectations regarding management of scope. PRMP expects vendors to develop and submit a Scope Management Plan for the project(s) for which they are providing services. Vendors should reference this document when creating their Scope Management Plans to help ensure PRMP’s expectations are met and that there is a common understanding between PRMP and the vendor regarding scope management. The PRMP PgMO will update this Scope Management Plan Aid when new applicable standards (or versions of a standard) are released or when there are changes to PRMP policies that affect scope management.

If a vendor finds a contractual conflict with guidance provided in this plan aid, vendors should defer to their contract and/or any updated PRMP guidance.

The Introduction section of this document provides information on the Scope Management Plan Aid’s purpose and objectives, scope, standards, assumptions, dependencies, and constraints. To help ensure an understanding of scope, Table 2 provides definitions for product scope, project scope, and scope management.

**Table 2: Scope Definitions**

Term	Definition
<b>Product Scope</b>	The collection of functions and features that characterize a product, service, or result.
<b>Project Scope</b>	The work performed, including implementation and federal certification, to deliver the product, service, or result with the specified functions and features.
<b>Scope Management</b>	A component of the project plan that describes how the scope will be defined, developed, monitored, controlled, and verified.
<b>Work Breakdown Structure (WBS)</b>	The WBS makes the deliverables and objectives more precise and concrete for the project, which enables the project team to know exactly what has to be accomplished within each deliverable. The most common way this is done is by using a hierarchical tree structure. Each level of this structure breaks the project

<sup>1</sup> In this aid, “vendor” refers to solution vendors that implement and maintain systems within the PRMES, as well as contractors and other entities that provide non-solution-related PRMES services to PRMP.

Term	Definition
	deliverables or objectives down to more specific and measurable components. According to best practice, the project schedule should be built based on an approved WBS.

## 1.1 Purpose and Objectives

The purpose of the PgMO Scope Management Plan Aid is to:

- Provide guidance to the project-specific vendors and other Puerto Rico Medicaid Enterprise Systems (PRMES) vendors in the development of their scope management deliverables, including the WBS.
  - Four reasons to use a WBS in PRMP projects are that the WBS:
    - Defines and organizes the scope of the total project.
    - Assigns responsibilities, allocates resources, and provides insight into who will be monitoring and controlling the project.
    - Allows for better estimating of cost, risk, and time.
    - Creates a process for double-checking all deliverable specifications with the stakeholders to help ensure there is nothing missing or overlapping.
- Provide guidance to the project-specific PRMES vendors to be in alignment with Centers for Medicare & Medicaid Services (CMS) requirement for a phase-based system development life cycle (SDLC), as well as PRMP’s requirement for phase entrance and exit criteria.

The objectives of the Scope Management Plan Aid are to:

- Provide guidance to PRMP PRMES vendors in the development of their Scope Management Plans. These plans shall demonstrate the vendor’s processes for managing scope, including how the PRMES vendors document the plan for scope management, define the scope, develop the WBS, and control scope.
- Establish consistency across all PRMP Medicaid Enterprise projects and initiatives.

## 2.0 Scope

The scope statement defines both the work included and the work not included in the scope of a project. For purposes of this PgMO Scope Management Plan Aid, this section addresses what is in scope and what is not in scope for an anticipated plan. The plan provides guidance to the PRMES vendors to also address both the work included and not included in their scope statement.

### 2.1 In-Scope

The Scope Management Plan scope includes:

- Processes for defining the work required to complete the project successfully
- Processes for creating a WBS
- Processes to validate and control scope
- Processes to manage the project life cycle, including federal certification

The Scope Management Plan must include processes for managing all aspects of the scope from initiation until project closure.

### 2.2 Out-of-Scope

For purposes of providing guidance to the vendors, this Scope Management Plan does not include the following processes:

- Processes to manage requirements definition, validation, and traceability. The Requirements Management Plan defines these processes.
- Processes to manage the project schedule. The Schedule Management Plan addresses these processes.

PRMES vendors should list the items considered out-of-scope for their specific project related to scope management. Any scope exclusions must be in alignment with the Request for Proposal (RFP) and the final signed contract. Other project management subsidiary plans required by PRMP address these processes.

## 3.0 Approach

This section describes assumptions, dependencies, constraints, standards, and references. The Scope Management Plan takes into consideration the assumptions, dependencies, and constraints for the system implementation projects as described in this section.

### 3.1 Assumptions

Per the *Project Management Body of Knowledge® (PMBOK) Guide®*,<sup>2</sup> an assumption is a factor expected to be in place or to be in evidence. The Scope Management Plan is based on the following assumptions:

- The project life cycle and the related entrance and exit criteria are part of a phase-based predictive (often called a waterfall) life cycle that the vendor shall adopt regardless of the development life cycle used.
- The vendor's team performing the work will develop the WBS with PRMP participation. It is important that those defining the work should be the ones performing the work.

PRMES vendors should list assumptions for their specific project-related to scope management.

### 3.2 Constraints

Per the *PMBOK Guide®*, a constraint is a limiting factor that affects the execution of a project or process. The Scope Management Plan and the scope management processes have the following constraint:

- The WBS submitted as part of the Scope Management Plan must be approved by PRMP before the project schedule is submitted for approval.

PRMES vendors should list constraints for their specific project related to scope management.

### 3.3 Dependencies

Per the *PMBOK Guide®*, a dependency is a logical relationship between two activities, or between an activity and a milestone. For example, an activity that cannot begin until another activity has been finished has a dependency. The Scope Management Plan and the scope management processes are dependent on the following processes and related components of the Project Management Plan (PMP):

- The scope management processes defined in this plan do not address requirements management processes. However, there is a dependency between this Scope Management Plan and the Requirements Management Plan.

---

<sup>2</sup> Unless otherwise noted, all references to the *PMBOK Guide®* are for the sixth edition.



- The approved WBS provides the basis for the project schedule. As such, there is a dependency between the Scope Management Plan and the Schedule Management Plan.
- The project team creates a baseline for the approved scope as defined through the scope statement and the WBS.
- Once the project team creates the baseline, it can only change through the formal change control process as defined in the Integrated Change Management Plan.
- Deliverables and other work products are an integral part of the scope. The Deliverable Management Plan describes the process for submission and review of deliverables, including Deliverable Expectation Documents (DEDs).

PRMES vendors should list dependencies for their specific project related to scope management.

### 3.4 Standards and References

PRMES vendors shall develop a Scope Management Plan, along with a WBS and entrance and exit criteria, based on this Scope Management Plan Aid and using the following industry standards and best practices:

- *A Guide to the Project Management Body of Knowledge® (PMBOK®)*, Seventh Edition, Project Management Institute® (PMI®), Chapter 5 – Project Scope Management
- *Practice Standard for Work Breakdown Structures*, Second Edition (Reaffirmed), PMI®
- *Capability Maturity Model Integration (CMMI®) for Development*, Version 1.3, Software Engineering Institute, Process Area: Project Planning; Specific Practice: Establish Estimates

The PRMP PgMO and vendors are required to use the appropriate standards and references. The PRMP PgMO may incorporate additional standards and references if appropriate for the plan content.

## 4.0 Roles and Responsibilities

This section describes the primary roles and responsibilities of the groups that consist of the project staff, sponsors, and stakeholders as they relate to scope management. Table 3 illustrates which stakeholders are responsible (R), accountable (A), consulted (C), and informed (I) (RACI), defined as:

- **Responsible:** This stakeholder does the work to complete the task area. This stakeholder may also serve as an Accountable stakeholder for some task areas.
- **Accountable:** This stakeholder delegates work and is the last one to review the task area before it is deemed complete. According to best practice, one stakeholder (or the lowest number possible) should be deemed accountable.
- **Consulted:** This stakeholder provides input based on how the task area will impact the future work of the project and the stakeholder’s expertise.
- **Informed:** This stakeholder should be aware of the progress associated with the task area.

**Table 3: RACI Matrix for Scope Management**

Task Area	PRMP Leadership	PRMP Program Director	PRMP PgMO	PRMP Project Lead	Vendor
Plan Scope	C	C	C	A	R
Create WBS	C	C	C	A	R
Validate Scope	I	C	I	A	R
Control Scope	I	I	I	A	R
Manage Project Life Cycle	I	C	I	A	R

### 4.1 PRMP Leadership

PRMP is the Medicaid agency responsible for administering the Medicaid Program in Puerto Rico, including the Children’s Health Insurance Program (CHIP), and a waiver-based section 1915(a) program. PRMP is an agency within the Puerto Rico Department of Health (PRDoH). While leadership roles might vary between projects, in general, the PRMP Leadership stakeholder group refers to the PRDoH Secretary, PRMP Executive Director, and the PRMP MES Executive Steering Committee (ESC).

## 4.2 PRMP Program Director

The PRMP Program Director is a member of the PRMP PgMO.

The PRMP Program Director supervises program scope in terms of all benefits delivered by PRMES initiatives.

## 4.3 PRMP Project Lead

PRMP appoints a Project Lead to oversee each of the PRMES projects under PRMP programs utilizing the defined PRMP PgMO processes. The Project Lead collaborates with the vendor's Project Manager to help ensure the project execution and implementation are in accordance with the approved schedule and processes defined by the PRMP PgMO.

PRMP Project Lead and the vendors shall be the individuals initially responsible for implementing the scope management processes defined in this plan.

The PRMP Project Lead will have oversight of the vendor Project Manager for defining, developing, monitoring, controlling, and verifying scope.

## 4.4 PRMP PRMES PgMO

PRMP has designated the PRMES PgMO to provide program management guidance and collaborative oversight for its information technology initiatives. As part of this responsibility, PRMP PgMO has developed this Scope Management Plan Aid as a guide for project-specific Scope Management Plans.

Each vendor shall create an individual Scope Management Plan to manage scope and shall collaborate with the PRMP PgMO to gain approval of its processes.

## 4.5 Vendors

Vendors implementing one or more information technology projects or supporting other PRMP activities are responsible for developing a project-specific Scope Management Plan, obtaining PRMP and PRMP PgMO approval of the plan, and managing scope in accordance with that plan.

In accordance with the assumptions described in this document, PRMP anticipates that the vendors will maintain the scope according to their PRMP-approved Scope Management Plan. The vendor project manager will have joint responsibility with the PRMP project lead for defining, developing, monitoring, controlling, and verifying scope.

## 5.0 Scope Management Plan

Either as part of the PMP or as a separate stand-alone subsidiary plan, the vendor shall submit a Scope Management Plan. This plan shall contain, at a minimum:

- A scope statement
- A WBS with WBS dictionary
- A process for PRMP to validate the scope and approve the plan
- A description of how the vendor proposes to control scope
- A description of the project life cycle management

The following subsections describe each of these items.

### 5.1 Prepare Scope Statement

The scope statement is the description of the entire scope of the project, including both project and product scope. The scope statement describes in detail the product(s) resulting from the project. This description does not require a repetition of the detailed product requirements, but a high-level description of the products.

The scope statement provides a detailed description of the project deliverables and work products. This includes ancillary work products such as project management reports. In the scope statement, the vendor shall describe the deliverables at a summary level. The vendors shall provide a progressive elaboration of the deliverables and work products in DEDs as defined in the Deliverable Management Plan.

Vendors shall identify the exclusions to the scope in the scope statement. Explicitly stating both what is in scope and out of scope is important to confirm alignment of expectations between the vendors and PRMP.

## 5.2 Create WBS

Vendors shall provide a WBS as part of the PMP. This is a detailed, deliverable-based decomposition of the project work required to implement the product(s). This section describes the process for creating the WBS.

The most common tool for defining scope is the WBS. The *PMBOK Guide*<sup>®</sup> defines the WBS as “a hierarchical decomposition of the total scope of work to be carried out by the project team to accomplish the project objectives and create the required deliverables.”

The Scope Management Plan submitted by the vendor shall contain a WBS. Where the project results in multiple products, the vendor may provide multiple WBSs. However, where there are common work packages among the products, the WBS shall identify and depict them.

### 5.2.3 WBS Terminology

Of all terms used in the WBS construct, the term *deliverable* is the most difficult. RFP and other solicitation documents frequently use the term *deliverable* to represent a physical document or product. In this context, a deliverable often represents a payment milestone.

The Scope Management Plan Aid, and resulting Scope Management Plan for each vendor, should use the term *deliverable* in accordance with the *PMBOK Guide*<sup>®</sup> definition: “Any unique and verifiable product, result, or capability to perform a service that is required to complete a process, phase, or project.”

Table 4 presents other terms used in this document. For the most part, these definitions do not deviate from PMBOK<sup>®</sup> terminology.

**Table 4: WBS Terminology**

WBS Term	Definition
<b>Work Breakdown Structure (WBS)</b>	The WBS is a hierarchical decomposition of the work required to produce the desired product. The decomposition must be to the level of executable work packages.
<b>Executable Work Packages (EWPs)</b>	The EWPs are the last level of decomposition of the work; they represent a task or group of tasks that provides discrete results.
<b>Project Work Plan</b>	The Project Work Plan is an artifact that describes how the vendor plans to accomplish the work needed to implement the desired product. The project work plan is not a WBS, but it may contain a WBS.
<b>Project Schedule</b>	The Project Schedule represents <i>when</i> the vendor plans to accomplish the work. The WBS may provide the structure for the schedule, but PRMP must validate and approve the WBS prior to the review and approval of the schedule.
<b>WBS Element</b>	The WBS Element can be any single WBS component. An element may be the EWP, or it may be an interim component in the structure.

WBS Term	Definition
<b>Level-of-Effort Work</b>	The Level-of-Effort Work is a support-type activity that does not produce definitive work packages that roll up to the desired product. Level-of-Effort work consists of a uniform rate of work performed over time.

### 5.2.3 WBS Characteristics

Multiple characteristics of a WBS exist. Vendors should include these characteristics when developing their WBSs. The WBS decomposes the work into deliverables and further decomposes the deliverables into EWPs. The vendor must determine the level of detail of decomposition. There should be sufficient detail that the EWPs represent discrete components of work that projects can effectively manage.

The EWPs are unique and should not be duplicated across the WBS. For example, where a project has multiple products and there are common work packages that benefit all products, these work packages should only be represented once in the WBS.

WBSs are subject to the “100% Rule.” This rule states that the WBS contains 100% of the work required to implement the product and complete the project successfully. The rule applies to all levels of the WBS. The sum of work at a “child” level in the WBS hierarchy must equal 100% of the work represented by the “parent.”

The WBS should not include any work that falls outside the actual scope of the project. This includes level-of-effort work, such as project management office activity and other support activity.

Vendors may structure the WBS as an outline, an organization chart, or another method that characterizes the hierarchical structure.

### 5.2.4 WBS Dictionary

A WBS dictionary shall accompany the WBS the vendor submits. The WBS dictionary defines, details, and clarifies the WBS elements. The purpose of the WBS dictionary is to provide a detailed description of each WBS element and to communicate that detail to anyone referencing the WBS. For each WBS element, the WBS dictionary shall include:

- WBS element identifier
- A description of the work of the element
- Any assumptions, dependencies, or constraints
- The responsible organization
- Any schedule milestones associated with the element

## 5.3 Progressive Elaboration

Progressive elaboration is the iterative process of increasing the level of detail in a project plan as greater amounts of information and estimates that are more accurate become available. This process can produce more detailed and accurate WBSs as the project progresses.

Vendors' Scope Management Plans may use progressive elaboration techniques, such as rolling wave planning, provided the initial plan addresses—at least at a high level—all the deliverables and work packages that are known at the time of preparation of the plan. Further, if the vendors use progressive elaboration techniques, then they should add processes to ensure that they make updates to the WBS as soon as the additional information and more accurate estimates are known.

Progressive elaboration of the WBS might reveal work that was not initially part of the baseline, requiring a change request. The vendor should use the PRMP project-approved Change Management Plan for the process of creating and submitting change requests.

## 5.4 Validate Scope

The Scope Management Plan shall describe the processes that allows PRMP to validate and approve the scope. Once PRMP approves the scope statement and the WBS, the vendor creates a scope baseline. This section describes the process for validation of the scope, PRMP approval of the Scope Management Plan, and the process to maintain the integrity of the scope baseline.

Vendors shall include a process to validate scope in their Scope Management Plan. This process shall include a formal acceptance of the scope by PRMP. PRMP must approve the Scope Management Plan, including the WBS, prior to creating derivative work products, such as the project schedule.

## 5.5 Validate WBS

The WBS represents the scope. To validate the scope and approve the Scope Management Plan, PRMP shall use the checklist illustrated in Table 5.

**Table 5: Scope Validation Checklist**

<b>WBS Characteristic</b>	<b>Y/N</b>	<b>Comment</b>
<b>Is the WBS a deliverable-oriented decomposition of the project work?</b>		
<b>Is the WBS a graphical, textual, or tabular breakdown of the scope?</b>		
<b>Does the WBS have at least two levels and one level of decomposition?</b>		
<b>Does the WBS employ a coding scheme for each WBS element that identifies its hierarchical position when viewed in any format, such as a chart or outline?</b>		
<b>Do the WBS and the Scope Management Plan define the entire scope of the project?</b>		
<b>Do the WBS and the WBS dictionary clarify the work and enable communication of the scope to the stakeholders?</b>		
<b>Does the WBS contain 100% of the work needed to implement the product(s)?</b>		
<b>Is the WBS constructed so that each level of decomposition contains 100% of the work in the parent level?</b>		



WBS Characteristic	Y/N	Comment
Does the level of decomposition define the EWP's in sufficient detail so that the project team can specify estimates of project tasks, responsibilities, and schedule?		
Do the EWP's capture all deliverables and work products required in the contract?		
Do the EWP's define the deliverables and work products in a manner that the required work to produce the deliverables and work products can be determined?		
Does the WBS arrange the deliverables and work products in a hierarchical structure that includes interim work products?		
Were the WBS, WBS dictionary, and Scope Management Plan developed by those intended to perform the work?		

## 5.6 Establish the Scope Baseline

PRMP approval of the scope package shall constitute the scope baseline. As mentioned previously, the scope package consists of:

- The scope statement
- The WBS
- The WBS dictionary

## 5.7 Control Scope

This section provides guidance to vendors on how to manage and control scope. It also provides guidance on the use of the WBS to provide information on project progress, periodic status, and project performance.

The *PMBOK Guide*<sup>®</sup> defines scope creep as the “uncontrolled expansion to product or scope without adjustments to time, cost, and resources.” Scope creep is a risk in any project, and project management must be attentive to prevent it.

Section 1 of this document made the distinction between the terms *project scope* and *product scope* and noted that this Scope Management Plan focused on the processes to help ensure that the project includes all the work and only the work needed to implement the specified product. It also referred to the Requirements Management Plan processes for controlling the product scope. However, the linkage between the two could result in scope creep through either product scope expansion or scope expansion.

Another source of scope creep is the discovery of additional work during updates of the WBS when using progressive elaboration techniques.

A third source of scope creep is when project stakeholders request that a vendor perform work that is not necessary to successfully complete the project. The Scope Management Plan shall include processes through which the vendor can identify work requested by stakeholders and to determine if the work is necessary to successfully complete the project. The vendor should share any such requests immediately with the PRMP project manager. In general, the process should be consistent with the implementation change control processes.

The Scope Management Plan, submitted by the vendors, shall describe the processes to manage and control the scope of the project. The processes shall include:

- Removing ambiguity in the product requirements through the requirements validation process (see the Requirements Management Plan)
- Managing the product scope through the Requirements Traceability Matrix as defined in the Requirements Management Plan
- Refining scope and removing any ambiguity in the work effort during the development of the WBS and WBS dictionary
- Managing the scope through regular progress reporting

Sometimes, the scope creep might result in an approved change in the scope. Any such change must be consistent with the change control process defined in the vendor’s approved Change Management Plan.

## 5.8 Manage Project Life Cycle

Vendors shall provide a description of their proposed development life cycle in the PMP. This section provides a detailed description of the phase-based project life cycle along with the phase entrance and exit criteria. This section also discusses the integration of the Medicaid Enterprise Certification Life Cycle (MECL), outcomes-based certification, and the PRMP project life cycle as applicable. The section provides guidance to the vendors to integrate their development life cycle with the project life cycle, as applicable.

As mentioned in Section 1 of this document, CMS requires, as part of the Modularity Standard, that projects have a defined SDLC that has distinct, well-defined phases. PRMP meets this requirement using a project phase entrance and exit criteria process. PRMP has used this process in prior projects to help manage scope and confirm that the vendor has successfully completed a project phase and is fully prepared to initiate the next phase.

This document uses the *PMBOK Guide*<sup>®</sup> definition of the project life cycle as “the series of phases that a project passes through from its start to its completion.” This definition makes a distinction between the project life cycle and the development life cycle. Although the latter can be either predictive or adaptive, the former is predictive.

Vendors shall include a proposed set of entrance and exit criteria for each project phase. PRMP project manager and the vendor’s project manager shall refine and finalize the entrance and exit criteria during the project initiation phase.

Table 6 presents a sample of entrance and exit criteria for the initiation phase of a system development project. The vendor is not required to use these sample criteria, but entrance and exit criteria must include the listed fields, at a minimum.

**Table 6: Entrance and Exit Criteria Sample**

ID	Criterion	Verification Process	Comments	Met? (Y/N)
<b>Initiation Phase Entrance Criteria</b>				
	Contract Signed	Signed contract posted to configuration management repository		
	Approved Project Charter	Project Charter approved by project sponsor and posted to configuration management repository		
<b>Initiation Phase Exit Criteria</b>				
	Project Kickoff Meeting Completed	Notes from Kickoff Meeting approved and posted to configuration management repository		
	Initial Risk Meeting Conducted	<ul style="list-style-type: none"> <li>Risk register updated</li> <li>Meeting notes approved and posted to configuration management repository</li> </ul>		

ID	Criterion	Verification Process	Comments	Met? (Y/N)
	Lessons Learned Updated	Lessons learned document updated and posted to configuration management repository		

Vendors shall complete a full set of criteria for all project life cycle phases in the development of their Scope Management Plan.

## Appendix A: Acronyms List

Table 7 presents acronyms and abbreviations used in this document.

**Table 7: Common Acronyms and Abbreviations**

Acronym	Definition
<b>CHIP</b>	Children’s Health Insurance Program
<b>CMMI®</b>	Capability Maturity Model Integration®
<b>CMS</b>	Centers for Medicare & Medicaid Services
<b>DED</b>	Deliverable Expectation Document
<b>EOMC</b>	Enterprise Objective Monitoring and Control
<b>ESC</b>	Executive Steering Committee
<b>EWP</b>	Executable Work Package
<b>KL</b>	KnowledgeLink
<b>OIAT</b>	Oficina de Informática y Avances Tecnológicos
<b>MECL</b>	Medicaid Enterprise Certification Life Cycle
<b>PgMO</b>	Program Management Office
<b>PMBOK®</b>	<i>A Guide to the Project Management Body of Knowledge®</i>
<b>PMI®</b>	Project Management Institute®
<b>PMP</b>	Project Management Plan
<b>PRDoH</b>	Puerto Rico Department of Health
<b>PRMES</b>	Puerto Rico Medicaid Enterprise Systems
<b>PRMP</b>	Puerto Rico Medicaid Program
<b>RACI</b>	Responsible, Accountable, Consulted, and Informed
<b>RFP</b>	Request for Proposals
<b>SDLC</b>	System Development Life Cycle
<b>WBS</b>	Work Breakdown Structure



GOVERNMENT OF PUERTO RICO

Department of Health  
Medicaid Program

# Enterprise Objective Monitoring and Control Services

Puerto Rico Medicaid Program

Service Level Agreements Aid & Template

Version 1.0



GOVERNMENT OF PUERTO RICO

Department of Health  
Medicaid Program

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## Table of Contents

Table of Contents.....	ii
Revision History.....	iii
1.0 Introduction.....	4
1.1 Purpose and Objectives.....	4
1.2 Integration with the PRMP Outcomes Management Plan.....	5
1.3 Scope.....	5
1.3.1 In Scope.....	5
1.3.2 Out of Scope.....	6
1.4 Approach.....	6
1.4.1 Assumptions.....	6
1.4.2 Constraints.....	6
1.4.3 Dependencies.....	6
1.4.4 Standards and References.....	7
2.0 Roles and Responsibilities, RACI Model.....	8
2.1 PRMP Leadership.....	8
2.2 PRMP Program Director.....	9
2.3 PRMP Program Leads.....	9
2.4 PRMP PgMO.....	9
2.5 Vendors.....	9
3.0 Assessment and Guidance Strategy.....	10
3.1 Defining Achievable Metrics.....	10
3.2 Collecting and Analyzing Metrics.....	11
3.3 Updating Baseline Metrics.....	11
3.4 Communicating Results and Taking Corrective Action.....	11
4.0 Service Level Agreement Templates.....	12
4.1 SLA Metric Template.....	12
Appendix A: Acronyms and Abbreviations.....	15



## Revision History

The Puerto Rico Medicaid Program’s (PRMP’s) Program Management Office (PgMO) will store the approved Service Level Agreement (SLA) Plan Aid and any approved revisions on the PRMP PgMO SharePoint site or in an alternative location specified by PRMP. PRMP and PRMP’s PgMO will make the plan available to project stakeholders as needed.

Table 1 presents the revision history for this document. When changes occur, PRMP’s PgMO will increment the version number and the date. PRMP PgMO will record the name of the person making the change and a description of the change in the revision history.

**Table 1: Revision History**

Date	Document Version	Description	Author(s)
Aug/05/2022	1.0	Initial delivery	BerryDunn PgMO Team



## Introduction

PRMP’s long-term strategy for the administration of its Medicaid program includes goals and objectives that will transform the agency into an information-driven organization with improved program oversight, increased credibility, and modernized technology. PRMP is working to engage all Medicaid stakeholders in contributing to the success of all Medicaid Enterprise System (MES) projects and operations.

PRMP has established a PgMO to provide guidance, support, and oversight for Vendor projects within the Medicaid Enterprise. As part of this initiative, PRMP has created project management (PM) plan aids to assist with the efficient and effective management of all MES projects. Major components of project management include applying best practice processes, tools, and techniques to help in the successful execution of projects. The PM plan aids provide guidance for more predictable and consistent processes, and practices, which will result in meeting the goals and objectives of PRMP and Vendor partners, as well as stakeholder expectations.

PRMP may expect Vendors to develop and submit SLAs for the project(s) for which they are providing services. Vendors should reach out to PRMP’s Leadership with any questions they may have or for feedback when revising any established and approved SLAs to help ensure they meet PRMP expectations.

The Introduction section of this document provides information on the SLA plan aid’s purpose and objectives, scope, standards, assumptions, dependencies, and constraints. The section has been developed to define the meaning of an SLA and ensures vendors understand and can more easily work with PRMP in their development of SLAs. Table 2 provides the definition of an SLA per A Guide to the Project Management Body of Knowledge (PMBOK® Guide) <sup>1</sup>.

**Table 2: SLA Definition**

Term	Definition
<b>Service Level Agreement</b>	An SLA is an agreement between a Service Provider and a customer. This agreement describes the service, documents the service level targets, and specifies the responsibilities of the Service Provider and the customer.
<b>Key Performance Indicator (KPI)</b>	KPIs are metrics that organizations use to track and measure the success of their initiatives.
<b>Performance Measure</b>	A performance measure is a numeric description of a vendors’ work and the results of that work

## Purpose and Objectives

Project Management Institute® (PMI®), in its “A Guide to the Project Management Body of Knowledge (PMBOK® Guide),” defines an SLA as a commitment between a service provider

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<sup>1</sup> Unless otherwise noted, all references to the PMBOK Guide® are for the sixth edition.

and a customer. It can take the form of a legally binding document within a contract between a company and its service provider.

Each Vendor is expected to provide the PRMP Project Lead with their feedback on the proposed SLAs for review and approval before the execution of the project.

The purpose of having PRMP Vendor SLAs is to:

- Help ensure that the proper expectations are addressed to provide consistent service support and delivery to the PRMP by the service provider(s).

The objectives of PRMP Vendor SLAs are to:

- Provide clear reference to service ownership, accountability, roles, and/or responsibilities.
- Present a clear, concise, and measurable description of service.
- Match perceptions of expected service provision with actual service support and delivery.

## Integration with the PRMP Outcomes Management Plan

PRMP's Outcomes Management Plan (OMP) describes the approach PRMP is taking to organize initiatives around enterprise goals and outcomes, and the connection to a metrics-enabled enterprise. The OMP describes the decomposition of enterprise goals and objectives according to the following structure:

**Goal -> Outcome -> Measure -> Metric -> Target -> SLA**

Outcome statements can be either specific to a project or to the overall operations of the enterprise. They describe the desired client-oriented results, where the client is either an internal client, an organizational partner, or beneficiary. For each outcome statement, supporting measures and metrics identify how PRMP will track progress and maintain the intended outcome of the SLA.

SLAs will serve to align vendors and contractors to PRMP stated needs by contractually obligating vendors to maintain target levels set by PRMP, thereby aligning incentives of all parties.

## Scope

The scope of this PM plan aid can be used as a framework that provides PRMP with a complete picture of how the Vendor plans to comply with project requirements by specifying the terms and agreements governing the service engagement.

## In Scope

Vendors shall identify all project tasks related to the SLA as part of the overall project management plan. A task is defined as a single piece of work, or units of related work, which must be completed to satisfy a project deliverable or requirement of a deliverable.

Once all SLAs are reviewed by PRMP as having all project desired outcomes incorporated and PRMP and the vendor has reached consensus; the SLAs will be documented from the original Request for Offers (RFO), Request for Proposal (RFP), Request for Quotations (RFQ) document(s), or other procurement documents.

### Out of Scope

Any scope exclusions must be in alignment with all procurement documents, Vendor's proposal, Performance Standards, and the final signed contract.

### Approach

This section describes assumptions, dependencies, constraints, standards, and references. The SLA Plan Aid takes into consideration the assumptions, dependencies, and constraints for the system implementation projects as described in this section.

### Assumptions

Per the Project Management Body of Knowledge (PMBOK) Guide®, an assumption is a factor expected to be in place or to be in evidence. The assumptions related to the development of SLAs are:

- SLAs developed for a project should align with guidelines provided in this document and any contracts provided by PRMP.
- Changes to SLAs are agreed upon with PRMP, documented, and communicated to all Stakeholders as laid out in the Change Management Plan.
- Vendors will maintain SLA reports until the expiration of the contract period.

### Constraints

Per the PMBOK Guide®, a constraint is the state, quality, or sense of being restricted to a given course of action or inaction. An applicable restriction or limitation, either internal or external to the project, which will affect the performance of the project or a process. The following constraints exist within the SLA Plan Aid but are not limited to:

- Accuracy of the data being calculated
- Access to tools and software to store, calculate, and report data.

### Dependencies

Per the PMBOK Guide®, a dependency is a logical relationship between two activities, or between an activity and a milestone. For example, an activity that cannot begin until another activity has been finished has a dependency. A dependency identified for the SLA Plan Aid is:

- Performance Management Plan – The Performance Management Plan Aid is a document intended to provide guidance to PR MES Vendors on PRMP's expectations regarding performance management.

- Communications Management Plan – The Vendor’s Communications Management Plan identifies communications receptors and frequency, which would also apply to communication of SLA performance.

### Standards and References

PRMP’s PgMO and MES Vendors are expected to use the appropriate standards and references for the MES project. The PRMP PgMO will review and approve the methodologies used using best practices. PRMP’s PgMO may request the Vendor incorporate additional standards and references, if applicable, for the content of a project management plan. Vendors are expected to monitor applicable standards and industry best practices. Vendors should plan to work with PRMP to determine if updates are required to their project management plans when a new applicable standard (or version of a standard) is released.

For the development of this Plan, PRMP’s PgMO used the following industry standards and best practices:

- A Guide to the PMBOK®, Project Management Institute® (PMI®), sixth edition

## Roles and Responsibilities, RACI Model

This section describes the primary roles and responsibilities of stakeholder groups as they relate to SLA management including project staff, sponsors, and stakeholders. Table 3 illustrates the stakeholders that are responsible (R), accountable (A), consulted (C), and informed (I). The RACI acronym is defined as follows:

- Responsible:** This stakeholder does the work to complete the task area. This stakeholder might also serve as an accountable stakeholder for some task areas.
- Accountable:** This stakeholder delegates work and is the last one to review the task area before it is deemed complete. According to best practice, one stakeholder (or the lowest number possible) should be deemed accountable.
- Consulted:** This stakeholder provides input based on how the task area will impact the future work of the project and the stakeholder's expertise.
- Informed:** This stakeholder should be aware of the progress associated with the task area.

Table 3 provides insight into how PRMP and the PgMO will interact with documentation management processes and responsibilities. The Vendor should propose its own stakeholder groups and develop their RACI matrix according to its team's organizational structure.

The following RACI Matrix gives Vendors the RACI matrix that has been developed for PRMP and/or PgMO responsibilities. This matrix can be edited from this baseline if deviations are discussed with PRMP and the PgMO to determine what is appropriate for the project.

**Table 3: RACI Matrix for SLAs**

Task Area	PRMP Leadership	PRMP Program Director	PRMP PgMO	PRMP Project Lead	Vendor Project Manager
<b>SLA Definitions</b>	I	C	R	A	I
<b>SLA Agreements</b>	I	I	R	A	I
<b>SLA Monitoring</b>	I	I	I	A	R
<b>SLA Reporting</b>	I	I	I	A	R
<b>SLA Breach</b>	I	C	C	A	R

### PRMP Leadership

PRMP is the Medicaid agency responsible for administering the Medicaid Program in Puerto Rico, including the Children's Health Insurance Program (CHIP), and a waiver-based section 1915(a) program. PRMP is an agency within the Puerto Rico Department of Health (PRDoH).



While leadership roles vary between projects, in general, The PRMP Leadership Stakeholder Group refers to the PRDoH Secretary, PRMP Executive Director, and the PRMP Executive Steering Committee.

### PRMP Program Director

An important aspect of the PRMP Program Director's role is to assess Vendor SLAs and provide guidance on organizational change management and readiness needs.

### PRMP Program Leads

To oversee each of the PR MES projects PRMP will appoint a Program Lead. The Program Lead collaborates with the Vendor's Project Manager to help ensure the project execution and implementation are in accordance with the approved schedule and processes defined by PRMP's PgMO.

PRMP Program Leads will have joint responsibility with the Vendor Project Manager for revising and agreeing upon Service Levels requirements for the project.

### PRMP PgMO

PRMP has designated the PRMP PgMO to provide program management guidance and collaborative oversight for its MES initiatives.

As part of this responsibility, PRMP's PgMO has developed this SLA Plan Aid as a guide for the project's tasks to be completed in compliance with established agreements.

The PRMP PgMO will be informed on all program-level SLAs; however, the Vendor(s) have the primary responsibility for reporting compliance to the agreed-upon SLAs.

### Vendors

Vendors implementing one or more MES projects or supporting other PRMP activities are responsible for managing SLAs in accordance with the signed contracts. The Vendor Project Manager is responsible for reporting SLAs issues to the PRMP Program Lead and PRMP PgMO.

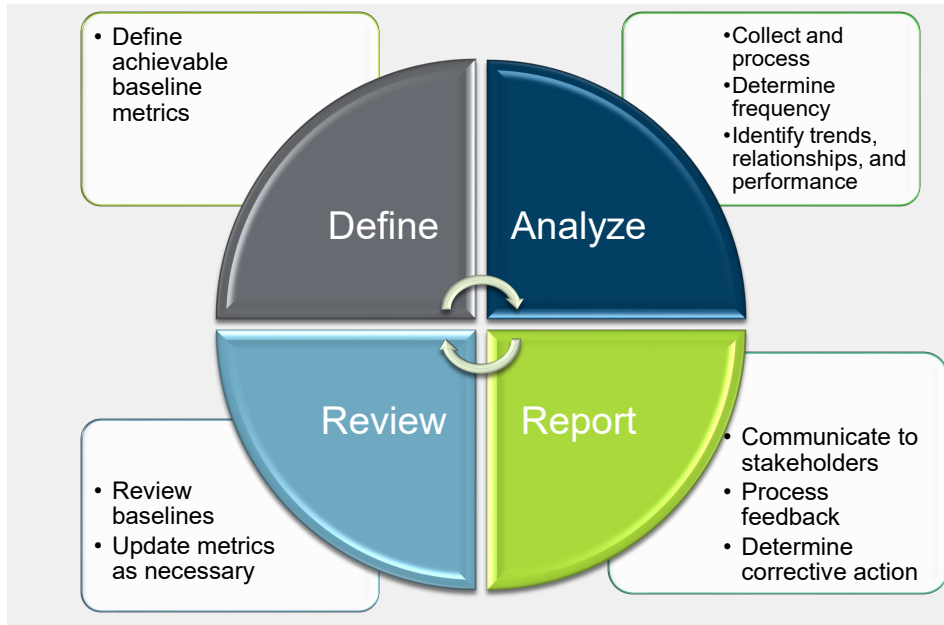
PRMP anticipates that Vendors will maintain adequate SLA management, including providing SLA status reports delivered to the PgMO and the Project Lead.

The Vendor Project Manager will consult with PRMP Program Leads when providing feedback on required SLAs, identifying any issues with the proposed SLAs to PRMP's PgMO.

## Assessment and Guidance Strategy

This section outlines a strategy for establishing baseline SLA metrics, collecting, and analyzing SLA data, updating SLA metrics, and establishing and maintaining Vendor communications surrounding corrective action plans. Figure 1 details PRMP PgMO's recommended strategy for SLA assessment and guidance. The graphic depicts a strategy for ongoing monitoring and review of SLAs and highlights the necessity for escalation of SLA metrics that are not in compliance with contract provisions. As PRMP moves to an outcomes driven organization SLAs will become more significant and prevalent in contracts and agreements that PRMP has entered or will enter.

**Figure 1: SLA Assessment and Guidance Strategy**



### 3.1 Defining Achievable Metrics

Defining achievable SLA metrics in system Vendor contracts is necessary to protect PRMP's financial investment in system implementation projects. In cases where the federal government provides Federal Financial Participation (FFP) for a Vendor contract, PRMP is required to exercise due diligence and protect the interests of CMS.

SLA metrics should be reasonable and achievable. Vendors should develop SLA metrics to help ensure protection if contract objectives are not met. Vendors should work with the PRMP

Program Director and PRMP Program Leads to develop reasonable and achievable SLA metrics.

### 3.2 Collecting and Analyzing Metrics

Vendors should report SLA metrics to the PRMP Program Director and PRMP Program Leads in a timely manner and in alignment with contractual reporting obligations. Vendors should analyze reports required by PRMP to the level needed to determine if they have met the specified SLA for the reporting period. If a Vendor does not supply the necessary information for the PRMP Program Director or PRMP Program Leads to determine SLA compliance for the reporting period, then PRMP may request additional reporting.

The Vendor PM can use manual or automated tools to collect, analyze, and generate SLA metrics. PRMP has begun to require SLA Reports as a deliverable from MES vendors. This report should align with the SLAs that are defined in the contract that MES vendors enter with PRMP.

### 3.3 Updating Baseline Metrics

Throughout the life of the contract, Vendors might need to update baseline metrics to reflect unanticipated factors not considered during contract negotiation. Additionally, Vendors might need to add SLAs to oversee and track new processes. These changes can be made upon mutually agreeable terms and documented in the Vendor's Statement of Work (SOW).

### 3.4 Communicating Results and Taking Corrective Action

When the PRMP Program Director or PRMP Program Lead determines that a Vendor is not meeting SLAs, the contract will be reviewed to determine if damages should be assessed against the Vendor, or if PRMP Leadership should take other corrective action. Vendors should refer to their individual contracts on frequency and method of reporting performance metrics to PRMP. When an SLA is not met, the Vendor should submit for approval to PRMP a written CAP, no later than ten (10) business days from the date PRMP requests the CAP. PRMP will consider extensions to the ten (10)-day timeline on a case-by-case basis. The CAP will include, at a minimum:

- Deficient SLA(s)
- Full description of the issue
- Root cause analysis
- Risks related to the issue
- The resolution, including any failed solutions implemented prior to resolution
- Proposed corrective action to avoid missing the SLA in the future

The Vendor will implement the proposed corrective action only upon PRMP approval of the CAP.



## 4.0 Service Level Agreement Templates

This section defines the SLA template and suggested attributes required to report SLA metrics. This section also describes the monitoring and reporting attributes for SLA Reporting. This section should be used as a guide on how the vendor will report on SLAs to PRMP.

### 4.1 SLA Metric Template

When developing SLAs, several identifying attributes should be gathered and documented to help ensure the reporting is in alignment with contract obligations. Table 4 attributes, at a minimum, should be referenced to document each identified SLA metric:

**Table 4 - SLA Metric Template**

SLA Template	
<b>SLA Description</b>	<p>You can use <b>XXX-YYY-ZZZ</b>, where XXX is for an SLA Code (i.e., SLA-001, SLA-002, etc.), YYY = Number of SLA within the group, i.e., SLA-001-001: SLA-001 (Code), 001 (SLA Deliverable), and ZZZ is a consecutive number within the group.</p> <p>Include a description of the SLA details, SLA breach period, origin (if known), and agreed response time.</p> <p>Example: SLA-003: Solution Availability</p> <p>Description: Solution Availability Service Level is defined as the percentage of possible uptime in a month that the environments are available to authorized solution users or to perform in a backup capacity, including all weekends and holidays. Negotiated downtime for system maintenance during off-peak hours is not included in the calculation of solution availability.</p>
<b>Target</b>	<p>Target on the SLA to fix the non-compliance issue. (i.e., Level 5 incidents will be fixed 95% of the time within 24 hours)</p> <p>Example:</p> <ol style="list-style-type: none"> <li>1. The system shall be accessible 99% of the time during working hours, except for scheduled downtime.</li> <li>2. Authorized solution user access shall be available 99% of the time twenty-four hours per day, seven (7) days per week, except for scheduled downtime.</li> <li>3. Authorized solution user access: Unscheduled production downtime for the solution is to be one (1) hour or less in total within any given twenty-four-hour period.</li> </ol>



	<p>4. All other solution components: Unscheduled production downtime for all components of the EDS is to be 1% or less during the monthly reporting period.</p> <p>5. The production environment shall be accessible 99% of the time except for scheduled downtime.</p>
<p><b>Measurement</b></p>	<p>Document the measure level agreed-on incidents, the nature of the problem, the official start time for the incident, a solution description and anticipated duration for remedy.</p> <p>A Corrective Action Plan with information on what was the measure level agreed upon, how a non-compliance event occurred, and a solution description with an anticipated duration for the remedy must be submitted for each incident.</p> <p>Example:              Up to 5% of the monthly operating fee, as follows:</p> <p>Any two (2) of ten (10) not met: 1%              Any three (3) of ten (10) not met: 2%              Any four (4) of ten (10) not met: 3%              Any five (5) of ten (10) not met: 4%              More than five (5) not met: 5%</p>
<p><b>SLA Reporting Period</b></p>	<p>(Period of time to report, within or without compliance, on the SLA agreement)</p> <p>Example:              By the 10th of each month, the Vendor is to report on these KPIs as follows:              The previous month's availability to include:</p> <ul style="list-style-type: none"> <li>• Daily accounting of downtime minutes during the scheduled availability period</li> <li>• A total accounting of downtime minutes per month during the scheduled availability period</li> <li>• Percentage of downtime as measured against the KPI metric</li> <li>• Production normal business downtime</li> <li>• Production other downtime</li> <li>• Failover downtime</li> <li>• Test environment downtime</li> <li>• Vendor network connectivity downtime</li> <li>• CAP if the KPI metric is not achieved</li> </ul>

## 4.2 SLA Status Report Template

When developing a Status report, several identifying attributes should be gathered and documented to help ensure Status Reports meet the needs of the PRMP Program Director and PRMP Program Leads. Table 5 attributes, at a minimum, should be included in the SLA Status Report:

**Table 5 - Sample SLA for Status Report**

<b>SLA-001-001 Service Level Agreement for Weekly Status Report</b>	
<b>SLA Description</b>	Vendor XXXX agrees to deliver Status Reports on Mondays, following the reported week, to stakeholders identified in the Communications Management Plan. These reports shall include accurate previously agreed-upon information.
<b>Target</b>	Complete reports delivered to stakeholders on or before 9:00am on the proposed day. For non-compliance deliveries, a Corrective Action Plan (CAP) must be created, identifying the most cost-effective actions that can be implemented to correct the error causes to help ensure compliance afterwards.
<b>Measurement</b>	Complete Status reports should be received no later than Monday, 3:00pm after the reported week. For non-compliance issues, document the measure level agreed-on incidents, the nature of the incident, the official start time, a solution description, and anticipated fix date/time. After the incident is resolved, include the resolution status.
<b>SLA Reporting Period</b>	Weekly

## Appendix A: Acronyms and Abbreviations

Table 6 presents a list of the acronyms and their definitions used in this document.

**Table 6 - Common Acronyms and Abbreviations**

Acronym	Definition
<b>CAP</b>	Corrective Action Plans
<b>CHIP</b>	Children's Health Insurance Program
<b>CMS</b>	Center for Medicare and Medicaid Services
<b>EOMC</b>	Enterprise Objective Monitoring and Control
<b>IT</b>	Information Technology
<b>KPI</b>	Key Performance Indicators
<b>MES</b>	Medicaid Enterprise Systems
<b>OIAT</b>	Oficina de Informática y Avances Tecnológicos
<b>OMP</b>	Outcomes Management Plan
<b>PgMO</b>	Program Management Office
<b>PMBOK®</b>	A Guide to the Project Management Body of Knowledge
<b>PMI®</b>	Project Management Institute®
<b>PRDoH</b>	Puerto Rico Department of Health
<b>PRMES</b>	Puerto Rico Medicaid Enterprise System
<b>PRMP</b>	Puerto Rico Medicaid Program
<b>RACI</b>	Responsible, Accountable, Consulted, Informed
<b>RFO</b>	Request for Offers
<b>RFP</b>	Request for Proposal
<b>RFQ</b>	Request for Quotation
<b>SLA</b>	Service Level Agreement



# Enterprise Objective Monitoring Control Services

Puerto Rico Medicaid Staffing Management  
Plan Aid

V1.0



GOVERNMENT OF PUERTO RICO

Department of Health  
Medicaid Program

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# Table of Contents

<b>Section</b>	<b>Page</b>
Table of Contents.....	i
Revision History .....	iii
1 Introduction .....	1
1.1 Purpose and Objectives.....	2
1.2 Scope .....	2
1.2.1 In Scope.....	2
1.2.2 Out of Scope .....	3
1.3 Approach .....	3
1.3.1 Assumptions.....	3
1.3.2 Constraints .....	3
1.3.3 Dependencies .....	3
1.3.4 Standards and References.....	4
2 Roles and Responsibilities .....	5
2.1 PRMP Leadership.....	5
2.2 PRMP Program Director .....	6
2.3 PRMP Project Leads.....	6
2.4 PRMP PgMO .....	6
2.5 Vendor Roles.....	6
3 Staffing Management Plan Guidance .....	6
3.1 Organization Chart and Key Staff Descriptions .....	7
3.1.1 Organization Chart .....	7
3.1.2 Location of Staff .....	8
3.2 Use of PRMP Staff.....	8
3.3 RACI.....	9
Appendix A: Transition, Turnover, and Staffing Closeout Plan .....	10
Turnover Results Report.....	11
Staffing Management Plan   v1.0	i

Appendix B: Acronyms List .....12

## Revision History

The Puerto Rico Medicaid Program’s (PRMP’s) Program Management Office (PgMO) will store the approved Staffing Management Plan Aid and any approved revisions on the PRMP PgMO SharePoint site or in an alternative location specified by PRMP. PRMP and the PRMP PgMO will make the plan available to project stakeholders as needed.

Table 1 presents the revision history for this document. When changes occur, the PRMP PgMO will increment the version number and the date. The PRMP PgMO will record the name of the person or entity making the change and a description of the change in the revision history.

**Table 1: Revision History**

Date	Document Version	Description	Author(s)
06/22/2022	1.0	Initial delivery to PRMP Program Director	BerryDunn PgMO Team



# 1 Introduction

The PRMP is committed to successful projects for the residents of Puerto Rico and has established a PgMO to provide guidance, support, and oversight for vendor projects within the Puerto Rico Medicaid Enterprise Systems (PRMES).<sup>1</sup> The PRMP PgMO has created plan aids to assist in effectively and efficiently accomplishing executed projects. Project management involves applying best practice processes, tools, and techniques. The PRMP PgMO aids provide guidance for more predictable and consistent plans, processes, and practices, which will result in meeting the goals and objectives of PRMP and vendor partners, and in meeting stakeholder expectations.

The Staffing Management Plan Aid is a living document intended to provide PRMP vendors with guidance on PRMP’s expectations regarding management of staffing resource needs. PRMP expects vendors to develop and submit a Staffing Management Plan for the project(s) for which they are providing services. They should reference this document when creating their plans to help ensure PRMP’s expectations are met and that there is a common understanding between PRMP and the vendor regarding staffing. The PRMP PgMO will update this Staffing Management Plan Aid when new applicable standards (or versions of a standard) are released or when there are changes to PRMP policies that affect staffing.

If a vendor finds a contractual conflict with guidance provided in this plan aid, vendors should defer to their contract and/or any updated PRMP guidance.

The Introduction section of this document provides information on the Staffing Management Plan Aid’s purpose and objectives, scope, standards, assumptions, dependencies, and constraints. To help ensure an understanding of Staffing Management, Table 2 provides definitions for each item based on the *Project Management Body of Knowledge (PMBOK) Guide*<sup>®</sup>.<sup>2</sup>

**Table 2: Definitions**

Term	Definition
<b>Staffing Management (Project Resource Management)</b>	Includes the processes to identify, acquire, and manage the resources needed for the successful completion of a project. These processes help ensure that the right resources will be available to the project manager and project team at the right time and place.

---

<sup>1</sup> In this aid, “vendor” refers to solution vendors that implement and maintain systems within the Medicaid Enterprise Solution (PRMES), as well as contractors and other entities that provide non-solution-related PRMES services to PRMP.

<sup>2</sup> Unless otherwise noted, all references to the PMBOK Guide<sup>®</sup> are for the seventh edition.  
Staffing Management Plan | v1.0

## 1.1 Purpose and Objectives

The purpose of Staffing Management Plan Aid is to provide guidance to PRMP PRMES vendors and contractors (henceforth referred to as vendors) and establish consistency across all PRMES projects and initiatives related to Staffing Management.

The objectives of the Staffing Management Plan Aid are to:

- Provide guidance to PRMES vendors in the development of their Staffing Management Plans. These plans shall demonstrate a vendor's processes for managing project human resources, including coordinating with PRMP project leads to identify, report on, and manage human resources needs. PRMES vendor Staffing Management Plans shall include provisions to help ensure all identified human resources needs are transparent to PRMP.

## 1.2 Scope

Vendor Staffing Management Plans shall address how vendors will manage and monitor the Implementation of staffing for adequacy and competency according to their staffing plans.

### 1.2.1 In Scope

Vendors should provide a Staffing Management Plan that includes at a minimum:

- A description of the vendor's proposed project team that exhibits the vendor's ability and capability to provide knowledgeable, skilled, and experienced personnel to accomplish the project work as defined in its contract.
- Organization charts for the project showing both the vendor staff and their relationship to PRMP staff that will be required to support the project. The organization chart should denote all key staff and non-key positions for this project, and a summary of each key staff member's responsibilities.
- Organization charts depicting the vendor relationship to other vendors, CMS, Local Entities and others within the enterprise
- Identification of subcontractor staff, if applicable.
- Identification of PRMP business and technical resources PRMP to support the development, review, and approval of all deliverables as well as the staff necessary to help ensure successful completion of a project. Specifically, the vendor should address the following:
  - Identification of key PRMP roles necessary to support review and approval of project deliverables and scope of work.
  - Identification of the nature and extent of PRMP support required in terms of staff roles and percentage of time available.

## 1.2.2 Out of Scope

Vendors should list the items related to Staffing Management considered out of scope. Any scope exclusions must be in alignment with the project Request for Proposals (RFP) or Request for Offers (RFO) related to the project, vendor's proposal, and the final signed contract.

## 1.3 Approach

The Staffing Management Plan Aid takes into consideration the assumptions, constraints dependencies, and constraints for projects as described in this section.

### 1.3.1 Assumptions

An assumption is a factor expected to be in place or to be in evidence. The PRMP PgMO made these assumptions related to the Staffing Management Plan:

- The vendor's staffing management processes should align with guidelines provided in this document.
- The vendor should coordinate their staffing processes with PRMP PgMO and provide transparency to PRMP.
- The vendor will have staff management processes, tools, and reporting methods to support planning and execution of project needs.
- The vendor will have the resources and capacity to fulfill requirements in the RFO and meet the project needs.

### 1.3.2 Constraints

A constraint is a limiting factor that affects the execution of a project or process. Vendors shall identify constraints in their Staffing Management Plans relating, but not limited to:

- Resource capacity
- Resource capabilities
- Resource cost
- Start of work dependent on CMS approval of contract and contract start time. This may constrain ability to obtain adequate resources,

### 1.3.3 Dependencies

A dependency is a logical relationship between two activities, or between an activity and a milestone. For example, an activity that cannot begin until another activity has been finished has a dependency. The Staffing Management Plan has dependencies, at minimum, on the following plans:

- **Schedule Management Plan:** The Schedule Management Plan defines the processes required to aid in timely completion of the work needed to complete a project.
- **Scope Management Plan:** The Scope Management Plan includes two components:
  - Product scope is a collection of functions and features that characterize a product, service, or result.
  - Project scope is the work performed to deliver the product, service, or result related to performance management.

In addition to the above dependencies, the Staffing Management Plan is heavily dependent on each Vendors contract, the related solicitation, and the vendor’s proposal response to the solicitation. Within those documents there may be RFP requirements, specifications, Service-Level Agreements (SLAs), and/or contract clauses that require some degree of staffing management. Vendors must use those documents to inform their Staffing Management Plan.

### 1.3.4 Standards and References

This section provides an initial list of standards and references applicable to the Staffing Management Plan. Per the *PMBOK Guide*<sup>®</sup>, a standard is a document established by an authority, custom, or general consent as a model or an example. A reference is a source of information and context.

PRMP vendors are required to use the appropriate standards and references. The PRMP PgMO might incorporate additional standards and references if appropriate for plan content.

Vendors should develop their Staffing Management Plans using the following industry standards:

- *PMBOK*<sup>®</sup> Guide, Seventh Edition, Project Management Institute (PMI<sup>®</sup>), Chapter 9 – Project Resource Management

The Staffing Management Plan should be developed and maintained in accordance with applicable standards and industry best practices. PRMP vendors shall work with PRMP to determine if updates are required to the Staffing Management Plan when a new applicable standard (or version of a standard) is released.

## 2 Roles and Responsibilities

This section describes the primary roles and responsibilities of stakeholder groups as they relate to staffing management including project staff, sponsors, and stakeholders. Table 3 illustrates which stakeholders are responsible (R), accountable (A), consulted (C), and informed (I) (RACI), defined as:

- **Responsible:** This stakeholder does the work to complete the task area. This stakeholder might also serve as an accountable stakeholder for some task areas.
- **Accountable:** This stakeholder delegates work and is the last one to review the task area before it is deemed complete. According to best practice, one stakeholder should be deemed accountable.
- **Consulted:** This stakeholder provides input based on how the task area will impact the future work of the project and the stakeholder’s expertise.
- **Informed:** This stakeholder should be aware of the progress associated with the task area.

Table 3 aims to provide insight into how PRMP and the PgMO will interact with human resources management processes and responsibilities. The vendor should propose its own stakeholder groups and RACI matrix according to its team’s organizational structure. Table 3 provides vendors with the RACI matrix for PRMP and/or PgMO responsibilities. This matrix can be edited from this baseline if deviations are discussed with PRMP and the PgMO to determine what is appropriate for the project.

**Table 3: RACI Matrix for Staffing Management**

Task Area	PRMP Leadership	PRMP Program Director	PRMP PgMO	PRMP Project Lead	Vendor
Planning Project Staffing Needs	C	C	C	A, C	R
Onboarding Vendor Staff to Project	I	I	I	A, C	R
Managing Project Resources Staffing Needs, Constraints, Issues	I	I	I	A, C	R
Transitioning Staff	I	I	I	A, C	R

### 2.1 PRMP Leadership

PRMP is the Medicaid agency responsible for administering the Medicaid Program in Puerto Rico, including the Children’s Health Insurance Program (CHIP), and a waiver-based section Staffing Management Plan | v1.0

1915(a) program. PRMP is an agency within the Puerto Rico Department of Health (PRDoH). While leadership roles might vary between projects, in general, the PRMP leadership stakeholder group refers to the PRDoH Secretary, PRMP Executive Director, and the PRMP Executive Steering Committee.

## 2.2 PRMP Program Director

The PRMP Program Director is a member of the PRMP PgMO.

An important aspect of the PRMP Program Director's role is to assess human resource capacity and capability between PRMES projects and across PRMP, and to provide guidance on organizational change management and readiness needs.

## 2.3 PRMP Project Leads

PRMP appoints a Project Lead to oversee each of the PRMES projects under PRMP programs utilizing the defined PRMP PgMO processes. The Project Lead collaborates with the vendor's Project Manager to help ensure the project execution and implementation is in accordance with the approved schedule and processes defined by the PRMP PgMO.

## 2.4 PRMP PgMO

The PRMES PgMO to provide program management guidance and collaborative oversight for its IT initiatives. As part of this responsibility, the PRMP PgMO has developed this Staffing Management Plan Aid as a guide for project-specific Staffing Management Plans.

Each vendor shall create a Staffing Management Plan to manage staff and shall collaborate with the PRMP PgMO to gain approval of their process. The PRMP PgMO is responsible for helping to identify and document program-level staffing needs and communicating with the project team; however, the PRMP Project Lead and vendor(s) have primary responsibility for identifying and documenting project-level staffing needs.

## 2.5 Vendor Roles

The vendors supporting PRMP in one or more information technology projects or supporting other PRMP activities are responsible for developing a project-specific Staffing Management Plan, obtaining PRMP and PRMP PgMO approval of the plan, and managing costs in accordance with that plan. The vendor Project Manager is responsible for reporting staffing issues to the PRMP program lead and the PRMP PgMO.

PRMP anticipates that vendors will maintain adequate staffing capacity, including providing resource capacity reports. The vendor project manager will consult with the PRMP program leads when identifying and determining staffing needs, as well as raising staffing issues with the PRMP PgMO.

# 3 Staffing Management Plan Guidance

The vendor should submit the Staffing Management Plan as part of the PMP. The Staffing Management Plan documents the vendor's approach to monitoring and managing qualified human resources across the project and describes how the roles, responsibilities, and reporting relationships will be structured and addressed in support of the project and operations.

The Staffing Management Plan should include, but not be limited to, the following as they pertain to staff acquisition, management, and termination:

- Organization chart for the project, identifying all staff across vendors to be used for each phase of the project and identifying on-site staff, off-site staff, and subcontractors.
  - The vendor should help ensure that the project table of organization is updated within five business days of any staffing changes and stored in a location accessible to PRMP.

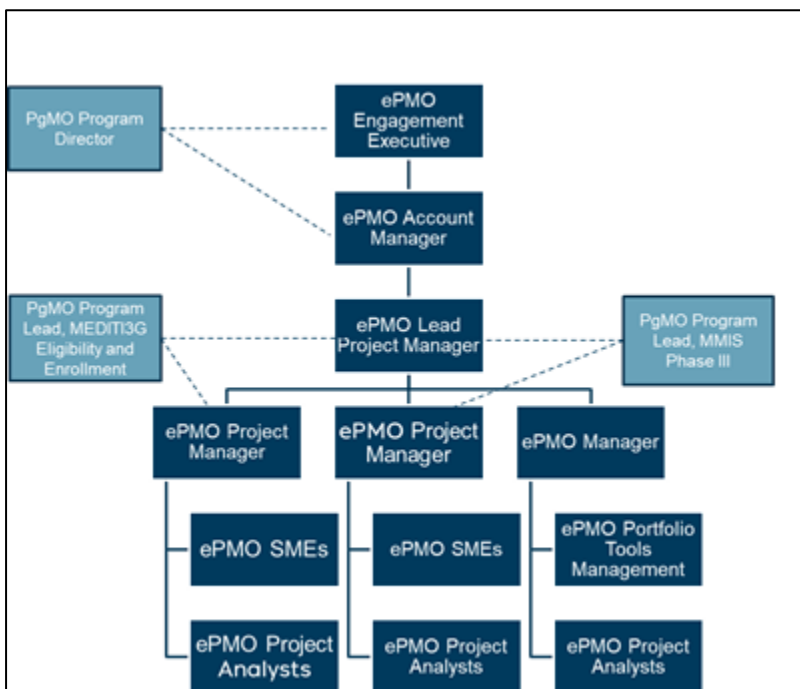
## 3.1 Organization Chart and Key Staff Descriptions

Vendors' Staffing Management Plans should include an organization chart and descriptions of key staff on the vendor's core project team. These resources are responsible for providing leadership and creating the standards and processes required for the various projects the vendor will help support.

### 3.1.1 Organization Chart

Vendors' Staffing Management Plans should include an organization chart in the Staffing Management Plan to outline the key roles, their reporting structure, and relationship with PRMP staff resources. The plans should also describe how the organization chart reflects the vendor's approach to projects that impact operations. For example, if the vendor has a core project management team in addition to specific project teams, the organization chart should reflect the relationship between the teams. Figure 1 depicts a sample organization chart.

**Figure 1: Sample Organization Chart**



### 3.1.2 Location of Staff

Vendors should include a description of the location of staff and location of operations for their team members in their Staffing Management Plans. Vendors should explain how the team and operations locations support the project requirements to have the right resources at the right time in the right positions.

### 3.2 Use of PRMP Staff

Vendors should include in the Staffing Management Plan a description of PRMP business and technical resources the vendor anticipates needing to support the development, review, and approval of all deliverables as well as the staff necessary to help ensure successful completion of a project. Specifically, vendors should address the following:

- The key PRMP roles necessary to support project deliverables and scope of work.
- The nature and extent of PRMP support required in terms of staff roles and percentage of time available.
- Assistance from PRMP staff and the experience and qualification levels of required staff

Table 5 provides an example of how a vendor might indicate the level of PRMP staff support.



**Table 5: Sample Percentage of Time for Role and Experience/Qualifications Table**

PRMP Roles	Percentage of Time for Role	Experience/Qualifications and Assistance
SME	1 full-time equivalent (FTE) @ 20% per week during requirements analysis and design	Experience in particular subject matter
Testers	5 FTE @ 50% per week during UAT	PRMP Operations staff familiar with business processes in project
Lead	1 FTE @ 50% per week during preparation and execution	Experience in particular subject matter, primary approver for PRMP

### 3.3 RACI

The RACI matrix details the responsible contacts for services and deliverables identified in the project. The vendor will include a RACI matrix in the initial Staffing Management Plan and provide updates to the RACI for each of the new vendors and PRMP project personnel as they are identified for both the initial release and the stabilization and enhancement period. The RACI matrix documents the responsible, accountable, consulted, and informed roles and individuals. The RACI matrix is due 30 days after contract start.

Vendors should use the framework and include key roles from vendor and PRMP as demonstrated in Table 6.

- **Responsible:** This stakeholder does the work to complete the task area. This stakeholder might also serve as an accountable stakeholder for some task areas.
- **Accountable:** This stakeholder delegates work and is the last one to review the task area before it is deemed complete. According to best practice, one stakeholder should be deemed accountable.
- **Consulted:** This stakeholder provides input based on how the task area will impact the future work of the project and the stakeholder’s expertise.
- **Informed:** This stakeholder should be aware of the progress associated with the task area.

**Table 6: Sample RACI Matrix Template**

Task Area	PRMP Leadership	PRMP Program Director	PRMP PgMO	PRMP Project Leads	Vendor Role 1	Vendor Role 2
Task 1	I	I	C	A, C	R	I
Task 2	C	C	C	A, C	R	C

## Appendix A: Transition, Turnover, and Staffing Closeout Plan

The vendor should develop and submit to PRMP a Transition, Turnover, and Staffing Closeout Plan X amount of days before contract turnover. The plan should include the following:

- Transition Approach
- Staffing
- Tasks
- Schedule
- Operational documentation and work artifacts
- Key personnel and their responsibilities during transition activities
- Knowledge transfer activities to PRMP or a designated agent
- Detailed description of the transition process to facilitate the smooth transition of operations within timelines
- Turnover/closeout work breakdown structure (WBS), including dependencies on PRMP and other vendors
- Transfer of assets (i.e., software, licenses, subscriptions, branding, hardware, furniture, lockboxes, etc.) and security responsibilities
- Dependencies on resources (e.g., vendor staff, other vendors, technology, licenses, contracts, etc.) necessary to complete the transition activities
- Project communication associated with risk management and project status reporting during the transition
- Transition or closure of active correspondence, as applicable
- Job shadowing and training activities necessary for the transition
- Certificates of destruction of project assets and data, as necessary
- Delivery of project documentation in final as well as editable formats, including the PMP(s), Master Project Schedule, Risk and Issues Register, business/process design, business standard operational procedures, etc.
- Transfer of assets, as applicable
- Transition or closure of active correspondence
- Delivery of the Project Closeout Report

## Turnover Results Report

- The vendor should submit the Turnover Results Report as part of execution of the Turnover and Closeout Management Plan.
- The Turnover Results Report documents completion and results of each step of the Turnover and Closeout Management Plan.

The Turnover Results Report should be delivered to PRMP after the completion of each step on the Transition, Turnover, and Staffing Closeout Plan.

## Appendix B: Acronyms List

**Table 10: Acronyms List**

Acronym	Definition
<b>CHIP</b>	Children's Health Insurance Program
<b>EOMC</b>	Enterprise Objective Monitoring and Control
<b>ePMO</b>	Enterprise Project Management Office
<b>FTE</b>	Full-Time Equivalent
<b>ID</b>	Identifier
<b>IT</b>	Information Technology
<b>IV&amp;V</b>	Independent Verification and Validation
<b>KPI</b>	Key Performance Indicator
<b>MMIS</b>	Medicaid Management Information Systems
<b>PgMO</b>	Program Management Office
<b>PHI</b>	Protected Health Information
<b>PII</b>	Personally Identifiable Information
<b>PMBOK® Guide</b>	<i>A Guide to the Project Management Body of Knowledge</i>
<b>PMI®</b>	Project Management Institute
<b>PMP</b>	Project Management Plan
<b>PRDoH</b>	Puerto Rico Department of Health
<b>PRMES</b>	Puerto Rico Medicaid Enterprise Systems
<b>PRMP</b>	Puerto Rico Medicaid Program
<b>RACI</b>	Responsible, Accountable, Consulted, and Informed
<b>RFO</b>	Request for Offers
<b>RFP</b>	Request for Proposals
<b>RTM</b>	Requirements Traceability Matrix
<b>SDLC</b>	System Development Life Cycle
<b>SLA</b>	Service-Level Agreement
<b>SME</b>	Subject Matter Expert
<b>SSA</b>	Social Security Administration
<b>WBS</b>	Work Breakdown Structure

# Enterprise Objective Monitoring and Control Services

Puerto Rico Medicaid Program Stakeholder Engagement  
Management Plan Aid

V0.x



GOVERNMENT OF PUERTO RICO

Department of Health  
Medicaid Program

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6/22/2022

# Table of Contents

<b>Section</b>	<b>Page</b>
Table of Contents.....	i
Revision History .....	1
1.0 Introduction .....	2
1.1 Purpose and Objectives.....	2
1.2 Scope .....	3
1.2.1 In Scope.....	3
1.2.2 Out of Scope .....	3
1.3 Approach .....	4
1.3.1 Assumptions.....	4
1.3.2 Constraints.....	4
1.3.3 Dependencies .....	4
1.3.4 Standards and References.....	4
2.0 Roles and Responsibilities.....	6
2.1 PRMP Leadership.....	7
2.2 PRMP Program Director .....	7
2.3 PRMP Project Lead .....	7
2.4 PRMP PgMO .....	7
2.5 Vendors .....	7
3.0 Stakeholder Management.....	9
3.1 Identify Stakeholders .....	10
3.1.1 Stakeholder Register .....	10
3.2 Analyze Stakeholders .....	11
3.3 Plan Stakeholder Engagement .....	13
3.3.1 Document Stakeholders .....	13
3.4 Execute.....	13
3.5 Manage Stakeholder Engagement.....	14



3.6 Monitor Stakeholder Engagement..... 14

Appendix A: Acronyms List ..... 15

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<b>6/22/2022</b>	V1.0	Initial delivery to PRMP Program Director	BerryDunn PgMO Team



## 1.0 Introduction

PRMP is committed to successful projects for the residents of Puerto Rico and has established a PgMO to provide guidance, support, and oversight for vendor projects within the Medicaid Enterprise.<sup>1</sup> The PRMP PgMO has created plan aids to assist in effectively and efficiently accomplishing executed projects. Project management involves applying best practice processes, tools, and techniques. The PRMP PgMO plan aids provide guidance for more predictable and consistent plans, processes, and practices, which will result in meeting PRMP’s and vendor partners’ goals and objectives, and stakeholder expectations.

If a vendor finds a contractual conflict with guidance provided in this plan aid, vendors should defer to their contract and/or any updated PRMP guidance.

The Stakeholder Engagement Management Plan Aid is a living document intended to provide PRMP vendors with guidance on PRMP’s expectations regarding identifying, managing, and setting expectations for stakeholders. PRMP expects vendors to develop and submit a Stakeholder Engagement Management Plan for the project(s) for which they are providing services. Vendors should reference this document when creating their Stakeholder Engagement Management Plans to help ensure PRMP’s expectations are met and that there is a common understanding between PRMP and the vendor regarding stakeholder engagement management. The PRMP PgMO will update this aid when new applicable standards (or versions of a standard) are released or when there are changes to PRMP policies that affect stakeholder engagement management.

To help ensure an understanding of key terms, Table 2 provides definitions.

**Table 2: Key Definitions**

Term	Definition
<b>Stakeholder</b>	Individuals and organizations who are actively involved in the project, or whose interests may be positively or negatively affected as a result of project execution or successful project completion.

The Introduction section of this document provides information on the Stakeholder Engagement Management Plan Aid’s purpose and objectives, scope, standards, assumptions, dependencies, and constraints.

### 1.1 Purpose and Objectives

Per the *Project Management Body of Knowledge (PMBOK) Guide*<sup>®</sup>, Sixth Edition, the purpose of the Stakeholder Engagement Management Plan is to identify the people, groups, or organizations that could impact or be impacted by the project, to analyze stakeholder

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<sup>1</sup> In this aid, “vendor” refers to solution vendors that implement and maintain systems within the PRMES, as well as contractors and other entities that provide non-solution-related PRMES services to PRMP.

expectations and their impact on the project, and to develop appropriate management strategies for effectively engaging stakeholders in project decisions and execution.

Specific to PRMP, the objectives of the Stakeholder Engagement Management Plan are to:

- Identify stakeholders
- Analyze stakeholders
- Plan stakeholder engagement
- Execute stakeholder engagement
- Manage stakeholder engagement
- Monitor stakeholder engagement

## 1.2 Scope

The scope section defines both the work included and the work not included in the scope of a project. This section outlines the scope of the Stakeholder Engagement Management Plan from the perspective of the vendor's responsibility. The PRMP PgMO and the PRMP Project Lead should monitor and manage the effectiveness of the approach and methodology used by vendors, which is documented in this section.

### 1.2.1 In Scope

Vendors shall identify all the items subject to stakeholder engagement management as part of the overall project. The scope of the Stakeholder Engagement Management Plan includes:

- Identification and documentation of stakeholders and the documentation of these stakeholders in a stakeholder register.
- Stakeholder analysis resulting in a list of stakeholders and relevant information such as their positions in the organization, roles on the project, expectations, their levels of support for the project, and their interest in information about the project.
- Stakeholder mapping and representation analyzed through an influence/interest grid to determine the most efficient way to engage stakeholders and reevaluated at regular intervals.
- A plan to effectively engage identified stakeholders and evaluate stakeholder levels of engagement.

### 1.2.2 Out of Scope

Vendors shall list the items considered out of scope. Any scope exclusions must be in alignment with the request for proposals (RFP), vendor's proposal, and the final signed contract, as necessary.

## 1.3 Approach

This section describes assumptions, constraints, dependencies, standards, and references. The Stakeholder Engagement Plan Aid takes into consideration the assumptions, constraints, and dependencies for projects as described in this section.

### 1.3.1 Assumptions

An assumption is a factor expected that is considered to be true, real, or certain, without proof or demonstration. The PRMP PgMO considered these assumptions related to the Stakeholder Engagement Management Plan aid, which apply to all PRMES projects:

- In vendors' Stakeholder Engagement Management Plan, vendors shall provide a detailed list of all assumptions as they pertain to stakeholder engagement requirements and standards compliance in stakeholder management across the projects being executed.
- PRMP will have a complementary stakeholder management process managed by the PRMP project lead and supported by the PRMP PgMO.
- Stakeholders will be available and responsive to communications.

### 1.3.2 Constraints

A constraint is a limiting factor that affects the execution of a project or process. No constraints are identified for this Stakeholder Engagement Management Plan Aid.

Vendors shall identify constraints related, but not limited, to:

- Communication Management Plan
- Stakeholder Register
- Timeliness of Stakeholder Response

### 1.3.3 Dependencies

A dependency is a logical relationship between two activities, or between an activity and a milestone. For example, an activity that cannot begin until another activity has been finished has a dependency. Known dependencies related to the Stakeholder Engagement Management Plan are as follows:

- A co-dependency exists between the Stakeholder Engagement Management Plan and the Communications Management Plan.
- The stakeholder engagement management process is related to all other project management processes as they relate to stakeholder roles and responsibilities.

### 1.3.4 Standards and References

This section provides an initial list of standards and references applicable to the Stakeholder Engagement Management Plan. Puerto Rico Medicaid Enterprise (PRMES) vendors shall develop a Stakeholder Engagement Management Plan based on this PMP Aid and using the following industry standards and best practices:

- *PMBOK Guide*<sup>®</sup>, Sixth Edition, Project Management Institute<sup>®</sup> (PMI<sup>®</sup>), Chapter 5 – Project Scope Management

The PRMP PgMO and vendors are required to use the appropriate standards and references. The PRMP PgMO may incorporate additional standards and references if appropriate for the plan content.

## 2.0 Roles and Responsibilities

The following section describes the primary roles and responsibilities of the groups that consist of the project staff, sponsors, and stakeholders as they relate to stakeholder engagement management. The table below illustrates which stakeholders are responsible (R), accountable (A), consulted (C), and informed (I) (RACI), defined as follows:

- **Responsible:** This stakeholder does the work to complete the task area. This stakeholder may also serve as an Accountable stakeholder for some task areas.
- **Accountable:** This stakeholder delegates work and is the last one to review the task area before it is deemed complete. According to best practice, one stakeholder (or the lowest number possible) should be deemed accountable.
- **Consulted:** This stakeholder provides input based on how the task area will impact the future work of the project and the stakeholder’s expertise.
- **Informed:** This stakeholder should be aware of the progress associated with the task area.

Table 3 aims to provide insight into how PRMP and the PgMO will interact with project stakeholder engagement management processes and responsibilities. The vendor should propose its own stakeholder groups and Responsible, Accountable, Consulted, and Informed (RACI) matrix according to its organizational structure and project team. PRMP and/or PgMO responsibilities can be edited from this baseline if deviations are discussed with PRMP and the PgMO to determine what is appropriate for the project.

**Table 3: RACI Matrix for Stakeholder Engagement Management**

Task Area	PRMP Leadership	PRMP Program Director	PRMP PgMO	PRMP Project Lead	Vendor
Identification	C	C	C	A	R
Stakeholder Register	I	I	I	A	R
Plan Engagement	C	C	C	A	R
Execute Engagement	I	I	I	A	R
Monitor Engagement	C	I	I	A	R

The following subsections provide a description of each stakeholder group.

## 2.1 PRMP Leadership

PRMP is the Medicaid agency responsible for administering the Medicaid Program in Puerto Rico, including the Children's Health Insurance Program (CHIP), and a waiver-based section 1915(a) program. PRMP is an agency within the Puerto Rico Department of Health (PRDoH). While leadership roles might vary between projects, in general, the PRMP Leadership stakeholder group refers to the PRDoH Secretary, PRMP Executive Director, and the PRMES Executive Steering Committee.

## 2.2 PRMP Program Director

The PRMP program director is a member of the PRMP PgMO and collaborates with the Oficina de Informática y Avances Tecnológicos (OIAT).

An important aspect of the PRMP Program Director is to set expectations on how stakeholder engagement is conducted across the PRMP organization.

## 2.3 PRMP Project Lead

PRMP appoints a Project Lead to oversee each of the PRMES projects under PRMP programs utilizing the defined PRMP PgMO processes. The Project Lead collaborates with the vendor's Project Manager to help ensure the project execution and implementation is in accordance with the approved schedule and processes defined by the PRMP PgMO.

PRMP Project Leads, PRMP PgMO, and the vendors shall be the initial implementers of the stakeholder engagement management processes defined in the Stakeholder Engagement Plan.

The Project Leads will oversee the identification of stakeholders for all their respective projects. They will also help ensure that stakeholders are being effectively engaged on a consistent basis.

The Project Lead will be accountable for maintaining and updating the stakeholder register for their projects.

## 2.4 PRMP PgMO

PRMP has designated the PRMES PgMO to provide program management guidance and collaborative oversight for its IT initiatives. As part of this responsibility, the PRMP PgMO has developed this Stakeholder Engagement Management Plan Aid as a guide for project-specific plans.

Each vendor shall create an individual Stakeholder Engagement Management Plan to effectively manage stakeholders and shall collaborate with the PRMP PgMO to gain approval of their documented processes.

## 2.5 Vendors

The vendors supporting PRMP one or more IT projects or supporting other PRMP activities are responsible for developing a project-specific Stakeholder Engagement Management Plan,

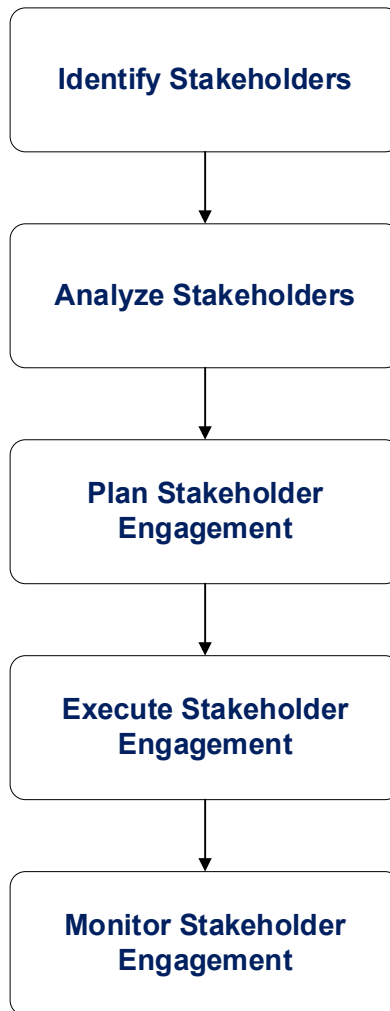
obtaining PRMP approval of the plan, and managing in according to that plan. The vendor should further elaborate and divide its team into stakeholder groups in this section.

In accordance with the assumptions described in this document, PRMP anticipates that vendors will work with the PRMP to identify the vendor team stakeholders for their respective projects and to keep those stakeholders engaged and informed. The vendors will also collaborate with the PRMP Project Leads and the PRMP PgMO in identifying stakeholders and updating them on changes made to the Stakeholder Engagement Plan.

### 3.0 Stakeholder Management

Stakeholder management comprises the process and activities to identify project stakeholders and to effectively engage those stakeholders in the project. Figure 1 illustrates the process and activities.

**Figure 1: Stakeholder Engagement Process**





### 3.1 Identify Stakeholders

The first step in effective stakeholder management is identifying the stakeholders of a project. The process of stakeholder identification should begin as soon as the project charter has been approved by a project sponsor. Stakeholder identification should be continuing throughout the life cycle of the project. The process of identifying stakeholders will utilize and encompass different strategies, resources, and tools. The most common way stakeholders are identified are:

- **Project Charter:** The project charter officially starts the project. The project charter will contain several key stakeholders such as project manager, client, and client sponsor; other key stakeholders can be identified in this charter.
- **Contract Documents:** Contract documents will also contain information on stakeholders. Contracts from the client’s side, vendors who may be involved in the contract, and others may be found in these.
- **Interviews:** Interviewing stakeholders that are being identified in documents and charters is another technique to identifying stakeholders. These interviews may help to uncover stakeholders that were previously unidentified.
- **Brainstorming Sessions:** Brainstorming with your team and subject matter experts (SMEs) is another technique that is used often. This exercise can uncover information by getting the collective knowledge of respective teams.

#### 3.1.1 Stakeholder Register

As the project vendor identifies stakeholders, it will enter the stakeholders in a stakeholder register. It will also document the relevant information about those stakeholders in the stakeholder register. The vendor will also update the stakeholder register on a regular basis including keeping the documentation of communication channels updated. Table 4 provides the recommended layout for a stakeholder register.

**Table 4: Stakeholder Register Fields**

Field Title	Field Description
<b>Stakeholder Last Name</b>	Last name of stakeholder or stakeholder group name
<b>Stakeholder First Name</b>	First name of stakeholder; blank if stakeholder group
<b>Organization</b>	Home organization of stakeholder or stakeholder group
<b>Contact</b>	Name of primary contact (if group or organization)
<b>Title</b>	Stakeholder organizational title (if individual)

Field Title	Field Description
<b>Email Address</b>	Stakeholder email address; email address of contact person if stakeholder group
<b>Telephone Number</b>	Stakeholder telephone number; telephone number of primary contact if stakeholder group
<b>Project</b>	Name of project
<b>Role</b>	Role on project of stakeholder
<b>Grid Reference</b>	Placement of stakeholder on the stakeholder mapping grid
<b>Level of Involvement</b>	Level of stakeholder involvement in the project (narrative)
<b>Expectations</b>	Narrative of stakeholder's expectations from the project
<b>Communication Channel</b>	Preferred method of communication
<b>Comments</b>	Narrative comments regarding stakeholder

The vendor should create, maintain, and deliver the stakeholder register to PRMP in an Excel document. The stakeholder or stakeholder group may be involved in multiple projects under the PRMP PgMO Initiative. The iterative fields occur for each project in which the individual or group is a stakeholder.

### 3.2 Analyze Stakeholders

As the vendor identifies stakeholders, it will analyze and evaluate stakeholders by:

- Influence over the project
- Interest in the project

Combining the level of influence over the project and level of interest in the project allows mapping stakeholders to a six-by-six grid. Table 5 illustrates the stakeholder mapping grid.

**Table 5: Stakeholder Mapping Grid**

Mapping Stakeholders Level of Engagement						
Influence of Stakeholder	Level of Stakeholder Interest					
	Unknown	Uninterested	Resistant	Neutral	Supportive	Engaged
Key Player	1	2	3	1	2	3
Significant	4	<b>C</b>	6	4	<b>A</b>	6
Moderate	7	8	9	7	8	9
Some	1	2	3	1	2	3
Little/None	4	<b>D</b>	6	4	<b>B</b>	6
Unknown	7	8	9	7	8	9

On one axis of the grid, the vendor will classify stakeholder influence over the project with one of six categories:

- **Key Player:** Stakeholders who are key players in the project, such as the project manager or project sponsor.
- **Significant:** Stakeholders who have significant influence over the project such as the Executive Steering Committee members or other members of governance.
- **Moderate:** Stakeholders who may be direct participants (e.g., SMEs) but only have a moderate level of influence over the project.
- **Some:** Stakeholders who are not direct participants in the project but may be able to exert some influence over the direct participants.
- **Little/None:** Stakeholders who have little or no influence over the project. These stakeholders are not direct participants in the project and do not influence the project objectives.
- **Unknown:** Stakeholders who may have some influence over the project, but the level of influence is unknown. It is unlikely that any stakeholders will fit in this category.

On the other axis of the grid, the vendor will classify stakeholder interest in the project under one of six categories:

- **Unknown:** Stakeholders whose level of engagement is unknown even though the project will impact them.
- **Uninterested:** Stakeholders who are uninterested in the project outcome even if that outcome impacts them in some way.
- **Resistant:** Stakeholders who are resistant to the project and the changes it brings.

- **Neutral:** Stakeholders impacted by the project who are neutral to the changes brought by the project. These individuals may be adaptive to the changes.
- **Supportive:** Stakeholders who are supportive of the changes the project brings.
- **Engaged:** Stakeholders who are actively engaged in the project and are supportive of the project goals and objectives.

By mapping each stakeholder to this grid, the vendor and the project team can assess how to address the needs of each stakeholder:

- **Box A:** Stakeholders have a high degree of influence on the project and a high level of interest in the project. These stakeholders are important for the success of the project, and the project team will need to construct a good working relationship with a high level of interactive communication.
- **Box B:** Stakeholders with a high level of interest in the project but a low level of influence over the project. The project team will need to keep these stakeholders informed. The project team will need to create special communication initiatives for these stakeholders.
- **Box C:** Stakeholders with interests not aligned with the goals of the project but who have a high level of influence, and in turn, can affect the project outcomes. These stakeholders are a source of significant risk, and the project team will need to devise directed communication channels with them.
- **Box D:** Stakeholders with low influence on, or interest in, the project objectives. These stakeholders are low risk, and the project team can keep them informed through emails, newsletters, and other electronic communications.

### 3.3 Plan Stakeholder Engagement

Stakeholder engagement is an essential requirement for effective communications management. Therefore, most of the planning for stakeholder engagement will encompass planning communication with these stakeholders.

#### 3.3.1 Document Stakeholders

The tool for documenting the stakeholders and the result of this analysis is the stakeholder register, which the vendor will update. The stakeholder register tool is in Section 3.1.1 Stakeholder Register.

### 3.4 Execute

Stakeholder engagement and management is an ongoing process and will need to be considered daily. Utilizing the Communication Management Plan will help keep communication effective and streamlined. The stakeholder register, RACI, Communication Plan, and stakeholder mapping grid are all tools that should be utilized to help ensure effective stakeholder engagement and management are performed.

### 3.5 Manage Stakeholder Engagement

The vendor's approach to managing stakeholder engagement should be clearly outlined in the Stakeholder Engagement Management Plan. This will include but is not limited to:

- Frequency
- Method of Communication
- Continuous Identification
- Response Development
- Monitoring

### 3.6 Monitor Stakeholder Engagement

The vendor's approach to monitoring stakeholder engagement should be clearly outlined in the Stakeholder Engagement Management Plan. This will include but will not be limited to:

- Evaluation of stakeholder engagement
- Making the appropriate additions and modifications to the stakeholder register

## Appendix A: Acronyms List

Table 6 lists and defines acronyms used in this document.

**Table 6: Common Acronyms and Abbreviations**

Term/Abbreviation	Definition/Explanation
CHIP	Children's Health Insurance Program
EOMC	Enterprise Objective Monitoring and Control
KL	BerryDunn KnowledgeLink
OIAT	Oficina de Informática y Avances Tecnológicos
<i>PMBOK®</i>	<i>Project Management Body of Knowledge (PMBOK) Guide®</i>
PgMO	Program Management Office
PMI®	Project Management Institute®
PRDoH	Puerto Rico Department of Health
PRMES	Puerto Rico Medicaid Enterprise Systems
PRMP	Puerto Rico Medicaid Program
RACI	Responsible, Accountable, Consulted, and Informed
RFP	Request for Proposals
SME	Subject Matter Expert
RACI	Responsible, Accountable, Consulted, and Informed
RAM	Responsibility Assignment Matrix



## Acronyms and Abbreviations

<b>Term/Abbreviation</b>	<b>Definition/Explanation</b>
<b>BCWP</b>	Budgeted Cost of Work Performed
<b>BD</b>	Berrydunn
<b>CMS</b>	Centers for Medicare & Medicaid Services
<b>CRs</b>	Change Requests
<b>ePMO</b>	Enterprise Project Management Office
<b>KL</b>	KnowledgeLink
<b>PRDoH</b>	Puerto Rico Department of Health
<b>PgMO</b>	Program Management Office
<b>PRMP</b>	Puerto Rico Medicaid Program
<b>SLA</b>	Service Level Agreement
<b>SOW</b>	Statement of Work
<b>OIAT</b>	Oficina de Informática y Avances Tecnológicos



## Header Section

For Line 7:

Column A7: Add the Project Name to report

Column F7: Name of the Project Manager

Column J7: Date of the report, following format *mmm dd, yy yy*

## Include in CMS Report?

Flag to identify which items should be included in the CMS report. Select "Y" as the only value to indicate that it is required to be included.

"N" will indicate that values are not used for the CMS report. "B" indicates "Both" (status report and CMS report).

## Key Project Metrics, Schedule Section

This section provides information on the schedule of the project, disclosing any variance that may occur from the target date:

Start Date: Project start date

Baseline Finish Date: Date scheduled to finish

Estimated Finish Date: Represents an appropriate estimation of the current finish date, considering all work that has been completed at the current point in time

## Key Project Metrics, Financials Section

This monthly report section reflects the amount of money spent on the current project, facilitating the accurate and regular reporting of a project's progress and status to senior management.

The Monthly Status Report template gathers the following financial information:

**Budget to Date:** Represents an approved estimate for either the entire project or for a particular schedule activity or work structure breakdown component

**Actuals to Date:** Actual value of money spent

**Variance:** Difference between Budget to Date and Actual to Date figures (automatically calculated)

**Est to Completion:** Estimated dollar amount required to complete the project

## General status of the project

**Guide to general status, scope, schedule, and budget colors:**

**Green** The project area is on track and performing as expected.

**Yellow** The project area is not operating as expected or behind schedule. A plan is established to move project area back to green.

**Red** The project area is not operating as expected, or behind schedule, without a viable plan in place.

## Timeline

In this section, present activities that will be occurring during the next four to five months of the project life cycle in a Gantt-style chart

## Key Issues

Key issues identified and logged into their appropriate logs will be presented here, as part of the status report. Closed items should not be included.

## Identified Risks

Risks identified and logged into their appropriate logs will be presented here, as part of the status report. Closed items should not be included.

## Decisions Taken

List decisions taken during the reporting period.

## Outstanding Change Requests

List change requests with status open or created during this period.

## Change Orders

List change orders with status open or created during this period.

## Current Blockers

All project blockers, identified during the reported month, will be listed here along with the action plan assigned to them. For subsequent months, only open blockers will be listed.

## Recovery Plan(s) for All Work Activities Not Tracking to the Approved Schedule

List planned activities to perform as recovery activities for tasks that missed their due date.

#### Key Accomplishments

List accomplishments met during the reporting period.

#### Upcoming Focus Areas

List all areas that are planned to focus on the next reporting period.

#### Objectives for the Next Reporting Period

Taking into consideration the "Upcoming Focus Areas", list objectives for next reporting period.

#### Client Responsibilities for the Next Reporting Period

List what is required from the client during the next period to fulfill project needs during the period.

#### Items in Need of Decisions

List identified items requiring a decision within the next reporting period, including a brief description, who is responsible for the decision, the decision reached, and date of the decision.

#### Earned Value Graph

Include a summary of the Project Earned Value on the second worksheet (the work that was actually accomplished).

The assumption is made that every component of the project is covered by some part of the budget.