Medicaid Management Information System Replacement (MMISR) Project

MMIS Project Quality Management Plan (QMP) PMO13

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1.0 Introduction

New Mexico's (NM) Human Services Department (HSD) has adopted the Health and Human Services (HHS) 2020 vision, a transformational, enterprise-wide approach to the HHS business. NM HHS 2020 will move service delivery from a program-centric approach to a stakeholder-centric approach. NM HSD will migrate away from program and technology silos into an integrated, flexible framework that supports service delivery and stakeholder interaction across HHS programs and organizations. HHS 2020 is technology-enabled, but includes rethinking organizational design, redesigning and streamlining business processes and reducing barriers between organizations within the HHS enterprise.

The Medicaid Management Information System Replacement (MMISR) Enterprise Project Management Office (EPMO) was created to ensure that project management standards and governance activities are established, measured, and conducted at the enterprise level. The EPMO developed, implemented, and maintains this Quality Management Plan (QMP) deliverable. The Plan defines the quality management activities, processes, and procedures used during the MMISR project. The EPMO is responsible for overseeing the ongoing implementation of the QMP, however, the MMISR project team, HSD State staff, Module Contractors, and other project team members are all responsible for adherence to the QMP and play a key part in maintaining quality excellence.

2.0 Quality Management Plan Purpose

The purpose of this plan is to provide a reference of the processes for the quality management life cycle of the HHS 2020 MMISR project and to allow Module Contractors and State project teams to quickly understand and appropriately support the plan. To that end, this plan seeks to cover each of the five (5) points below:
1. Describe the Quality Planning (QP) that the MMISR project undertakes
2. Define the project quality standards and measurement methodology
3. Define how the Quality Management Plan (QMP) measures are defined for the project and are executed
4. Define the processes and procedures for conducting the Quality Assurance (QA) and Quality Control (QC) activities
5. Define the continuous process improvement activities and measures (i.e., lessons learned, best practices)

3.0 Quality Management Plan Approach

Quality Management (QM) is a planned and systematic approach for defining, executing, reviewing, and evaluating project processes that enhance the project team's ability to produce high-quality work products and deliverables in a manner consistent with internally and externally imposed policies and standards. A QMP is a key enabler in achieving project objectives and is an integral component of the project management approach. The QMP outlines the approach and processes that collectively define QM.

Focusing on quality early in the project enables a culture of discipline, transparency, and consistency from the outset of project activities. It also establishes a mechanism for independent review and assessment of project work products, deliverables, and processes to ensure that project policies and standards are being satisfied at every step. Aligning these goals results in a culture that is continuously measuring, assessing, and adjusting, resulting in gains in efficiency and effectiveness and a focus on continuous process improvement. The culture of quality management for the HHS 2020 initiative that

we seek to achieve is one (1) where "quality is everyone's responsibility" and infuses this culture throughout the creation, review, and approach to all work products.

A consistent approach to quality across the entire HHS 2020 enterprise is necessary to ensure that all Module Contractors and HHS 2020 stakeholders adhere to the same quality requirements and meet all necessary quality standards. The QMP outlines the enterprise requirements that all Module Contractors and HHS 2020 stakeholders must follow. These quality standards apply to project management, deliverables, project processes, test cases, test results, and all activities related to hardware and software design, development, and implementation. Quality should also include the repeatability and reproducibility of a process. Keeping this in mind, part of the approach should include the identification of overlapping outcomes amongst modules and should be part of the quality planning. If the different modules are providing the same service, there are opportunities for conflicts in the outcomes.

The QMP also addresses quality management oversight of Module Contractors, including the responsibilities of each of the component owners, all necessary compliance activities, how quality is measured to ensure that standards are being met, and how reporting is conducted.

QM is a continuous activity performed throughout the project lifecycle, with special attention paid towards the following areas:

- **Quality Planning (QP):** Performed primarily during the project planning process
- **Quality Assurance (QA):** Performed primarily during the project execution process which includes monitoring the accuracy of deliverables, design of software, and test results
- **Quality Control (QC):** Performed primarily during the project monitoring and controlling process in order to include system performance and continued quality improvement over the life cycle of the MMISR project
- **Quality Improvement (QI):** Performed primarily through the "plan, do, check, act" (PDCA) methodology for assessing results and using the feedback to plan for future enhancements to the MMISR project
- **Quality Standards:** Describes the quality standards for deliverables and the processes for creation of deliverables and the annual review cycle

Activities and planning undertaken during the Design, Develop, and Implementation (DDI) phase continues into the Maintenance and Operation (M&O) phase for the MMISR project and all of its business functions and technology solutions. The graphic below gives an example of the cyclical nature of the quality management approach – plan, execute, conduct quality assurance, and quality control activities, leading to continuous process improvement. Each of these areas are described in greater depth throughout this plan.

Figure 1 - Quality Management Approach

4.0 Roles and Responsibilities

We have listed all roles and responsibilities that are involved in the creation, review, and execution of the QMP and its activities (as known today) in the table below:

Table 1 - Roles and Responsibilities

Role	Responsibilities
NM MMISR Leadership team	- Ensure that NM HSD teams execute to their assigned responsibilities in the QMP - Review project Quality Management reports - Responsible for overall quality results for the MMISR project - Serve as escalation point for quality related risks or issues - Promote cooperation among the project team in conducting quality management activities
NM HSD Certification	- Ensure all MMISR project deliverables meet the standards and requirements for Federal Partner Certification - Review deliverables from module contractors for the certification compliance of each

Role	Responsibilities
NM HSD Testing Team	▪ Review Module Contractor test plans, test cases, and testing deliverable reviews and approvals ▪ Review and approve software solutions integration to support MMISR and HHS 2020 ▪ Conduct QA assessments of Module Contractor's offered solutions through demonstrations and conducting User Acceptance Testing (UAT) test case execution on the integrated solutions ▪ Perform audit function for an assigned evaluation standard(s) of test plans and test cases ▪ Review results of approved test reports from Module Contractors ▪ Review and approve evidence of test execution by Module Contractors
HSD Module Owner / HSD Product Owners / HSD MMISR Business Manager	▪ Participate in project quality reviews and compliance audits on deliverables and other project artifacts ▪ Monitor and report on performance ▪ Proactively review the project processes and implement improvements ▪ Review draft and final project management deliverables and work products to ensure conformance to standards and requirements, including key implementation contractor project management deliverables ▪ Review deliverables from Module Contractors and State project teams, provide feedback on all deliverables, and determine the final disposition – approval or rejection – of deliverables ▪ Ensure alignment with the NM HSD strategic objectives for the project ▪ Assist in establishing evaluation standards ▪ Provide input and periodic review evaluation standards ▪ Review and approve software solutions integration to support MMISR and HHS 2020
HSD IT Project Manager	▪ Oversee project quality reviews and compliance audits on deliverables and other project artifacts for assigned module ▪ Monitor and report on performance for assigned module ▪ Manage quality-related project risks and issues for assigned module ▪ Proactively review the project processes and implement improvements ▪ Review draft and final project management deliverables and work products to ensure conformance to standards and requirements, including key implementation contractor project management deliverables ▪ Review deliverables from Module Contractors and State project teams, provide feedback on all deliverables, and determine the final disposition – approval or rejection - of deliverables ▪ Ensure alignment with the NM HSD strategic objectives for the project ▪ Assist in establishing evaluation standards ▪ Provide input and periodic review evaluation standards ▪ Review and approve software solutions integration to support MMISR and HHS 2020
NM HSD Contract Manager	▪ Responsible for quality of deliverables in accordance with the contract ▪ Approve invoices for payment after confirming contract deliverable approvals with NM HSD Module teams
EPMO	▪ Establish the project QMP ▪ Update the project QMP ▪ Monitor and report project performance through enterprise project monthly status report ▪ Manage quality-related project risks or issues ▪ Monitor the quality of the work and seek to resolve any quality related risks or issues ▪ Create and proactively review the project processes and implement improvements ▪ Review draft and final project management deliverables from Module Contractors to ensure conformance to project standards and requirements

Role	Responsibilities
	▪ Consolidate quality metrics from Module Contractor's weekly and monthly status reports for inclusion and assessment in the Enterprise Project Monthly Status Report
Module Contractors project staff	▪ Document Module Contractor's quality management plan for assigned Statement of Work (SOW) ▪ Prepare deliverables in accordance with Request for Proposals (RFPs) and SOWs (as applicable) and project standards and requirements ▪ Participate in quality reviews of deliverables or work products ▪ Conduct internal quality reviews for deliverable and work products ▪ Manage quality-related project risks and issues ▪ Proactively review the project processes and propose or recommend improvements to EPMO ▪ Ensure project work products and deliverables are developed in accordance with PM Plans, applicable project, industry, and quality standards as outlined in the QMP ▪ Execute project processes in a manner consistent with the defined processes, utilizing appropriate plans, procedures, work aids, and templates ▪ Adhere to certification requirements ▪ Responsible for QA activities
Independent Verification and Validation (IV&V)	▪ Provide independent oversight of quality issues and make observations ▪ Participate in deliverable reviews ▪ Participate, as needed, in quality audits and quality reviews ▪ Report on quality evaluation standards ▪ Provide weekly and monthly status reports of project ▪ Confirm work complies with Federal Partner expectations for Certification
Governance Bodies	▪ Monitor quality evaluation standards for Module Contractor's deliverables ▪ Review and approve work products and artifacts supporting Module Contractor offered and implemented solutions ▪ Recommend and vote on approvals for completion or go/no go events for Module Contractor implemented solutions

The Responsible, Accountable, Consulted, and Informed (RACI) Chart below is offered to indicate the roles, by Module Contractor, for the development, maintenance, approval of the QMP, and performance of its various activities.

Table 2 - RACI Chart

ACTIVITY	LEADERSHIP	NM HSD IT PM	NM HSD Module Owner	EPMO	Module Contractors	IV&V
Develop and Maintain Quality Management Plan	R	R	R	A, R	I, C	I, C
Approve Quality Management Plan	I	A, R	A, R	I	I	I, C
Perform activities to support Quality Management Plan	R	R, I, C	R, I, C	A, R	R	I, C
Overall oversight of project's quality	A	R	R	R	R	I, C

Table 3 - RACI Chart Legend

Abbreviation	Description
R	Responsible
A	Accountable
C	Consulted
I	Informed

IV&V, in their role of oversight of the MMISR project, is a reviewer of the QMP Deliverable when updates are made.

5.0 Quality Planning

The project QP process includes both the development and review of contractual specific deliverables and the day-to-day work involved in running a Project Management Office (PMO). These activities can include meeting notes, deliverable reviews, meeting coordination, status updates, internal communications, external stakeholder communications, development of job aids, lessons learned sessions, and risk and issue management.

The MMISR and HHS 2020 project uses a variety of actions and activities throughout the project lifecycle to establish, check status, and monitor progress towards the project's quality standards. Various meetings, reports, deliverables, logs, surveys, and other documents are used to communicate the completion and results of quality activities to track the resolution of quality issues. The matrix below identifies reports and documents that may contain quality related data about project progress and whether it is shared within the project or is solely for internal use. Please note, Module Contractors may have specific quality activities and processes that are not represented in this list, as they are internal to how Module Contractors perform their work and may be internal or proprietary to Module Contractors. For the project's complete Project Management Plan (PMP), please see PMO1 - Project Management Plan. The link for this plan can be found in the Referenced Document Links Table in Appendix C of this QMP.

Table 4 - Communication Vehicle and Description

Communications Vehicle	Description	Responsible Group
Module Contractor Scorecard in Enterprise Monthly Status Report	Used to communicate EPMO's assessment of Module Contractor performance, results of project progress and identify opportunities for improvement. Includes executive dashboard of project metrics.	EPMO
Enterprise Monthly Status Report	Used to communicate the status and completion of project activities, Module Contractor performance and key risks and issues impacting project success.	EPMO
Weekly Status Reports and Bi-Weekly Module Status Report Review meeting	Used to communicate project progress, risks, issues, and barriers to success for the Module Contractors and key project areas.	All Module Contractors, Module Owners (Product Owners) and IT PM's Meeting hosted by EPMO
Deliverable Reviews	Used to review, provide comments, suggestions for improvements on the completeness and accuracy of	NM HSD

Communications Vehicle	Description	Responsible Group
	submitted deliverables following the approved Deliverable Review Process. The link to this process can be found in Appendix C of this QMP.	
Deliverable Reviewer's Inline Comments	Used to communicate deliverable review deficiencies and track the correction of deficiencies or nonconformances.	NM HSD
Lessons Learned Surveys	Used to capture feedback from stakeholders in preparation for a formal, lessons learned meeting	EPMO
Lessons Learned Meetings	Used to review feedback from stakeholders, identify additional lessons learned, and develop or assign action items for follow-up work necessary	EPMO and NM HSD
Lessons Learned Register (included in the Referenced Documents listed in Appendix C)	Used to capture process improvement items such as lessons learned, reported issues, defects, root cause analysis and suggestions for improvements *This register is owned by Grace Aroha, please contact her for access.*	EPMO and NM HSD
Enterprise Project Schedule (EPS) Schedule Review meetings	Used to capture schedule updates for Module Contractors, identify task dependencies and highlight areas of schedule conflict	EPMO
Risk and Issue Weekly Meetings	Used to capture status and progress updates on reported issues and identified risks	EPMO
Data Collaboration Meetings	Used to capture status and progress of data issues, set priority for critical, high, medium, and low defects and manage Software key for managing metadata and file layouts (Erwin)	NM HSD
Module Contractor release planning meetings, release kick-off meetings, and release close-out meetings	Used to communicate plans for each Module Contractor's software or system release(s), set priorities for key items to be completed in each release, and close-out meetings at release end, are used to review release progress, and assess compliance to quality.	Module Contractors
IV&V Monthly Status Report	Used to report the completion, results, and trends related to quality activities, delivered to HSD as part of the IV&V monthly assessment report or as a separate document.	IV&V
IV&V Deliverable Review	Used to review, provide comments, suggestions for improvements on the completeness and accuracy of submitted deliverables. These comments are separate from HSD inline comments.	IV&V
Operational Readiness Reviews / Go No-Go Criteria	Used to review and evaluate the readiness of solutions to support business operations prior to a business change and go live event.	NM HSD & Module Contractors

Along with the listing of project quality activities above, NM HSD leadership holds semi-weekly meetings where the focus is to assess project progress, discuss key project risks and issues, and set direction for project priorities. In addition, the Executive leadership team holds monthly Executive Steering Committee meetings where the focus is to identify ways to achieve a higher level of collaboration across all areas of the project and increase the project's overall effectiveness.

6.0   Project Quality

As stated above in Section 5.0 Quality Planning, project quality is carried out via deliverables, meetings, work products, and activities which are compiled in a variety of project deliverables and sections within this QMP. The project activities are supported through the use of applicable industry standards as outlined in Section 15.0 of this plan. Section 7.0 Quality Standards contains a description of the deliverable process, workflow, deliverable standards checklist, comment logs, and tracker. Section 12.0 contains Templates, documents templates used on the project to drive consistency in communications.

Project quality continues to evolve throughout the project lifecycle as additional Business Process Outsourcing (BPO) Module Contractors are onboarded and begin their implementation activities. Conformance to established standards for architecture, design and data are driven by the appropriate governing bodies – Architecture Review Board (ARB), Data Governance Council (DGC), etc. A full listing of the HHS 2020 Governing bodies and their charters is included in Appendix C. Variations to established standards are required to follow PMO10 Change Control Management Plan and routed through one (1) of the change control boards – technical or project and are voted on for approval.

7.0   Quality Standards

On the HHS 2020 project, a majority of project work is expressed and delivered to NM HSD in the form of deliverables even though these deliverables often contain software development artifacts, release planning details, lists of defects resolved, design documentation, test results and other technical work products during the DDI phase of the project's lifecycle. This section outlines the deliverable approach, methods to ensure deliverable quality, roles, and responsibilities of all project team with regards to deliverables, deliverable workflow, high-level process steps for deliverable development, and the deliverable checklist that HSD uses for all deliverables as a quality tool, along with the deliverable tracker that is used to monitor HSD review cycles.

7.1 Deliverable Approach to Ensure Quality

At the heart of any good deliverable approach is a spirit of collaboration that must be shared by all parties – Module Contractors, HSD reviewers and deliverable owners. The goal is to ensure deliverables articulate the project's needs and objectives, fulfil the requested statement of work, provide both a high-level overview, and a detailed level description of needed project artifacts.

Collaboration begins with following an established workflow process, creation of a Deliverable Expectation Document (DED) prior to Deliverable submission, partnering with the deliverable review team, adherence to timelines for submission and review cycles, and a focused approach on how the plan, work product, software release, "the deliverable" can provide value to HHS 2020 and NM HSD.

7.1.1 Deliverable Workflow

The figure below, provides an outline of the deliverable workflow process, which is followed by all Module Contractors for all MMISR project deliverables. All swim lanes represented in Figure 2 below are meant to represent Module Contractor teams working on a deliverable. The NM HSD swim lane is meant to represent all NM HSD personnel, including security and certification teams, who play a vital role in review of DEDs and deliverables.

Figure 2 - Deliverable

Documentation Development Process
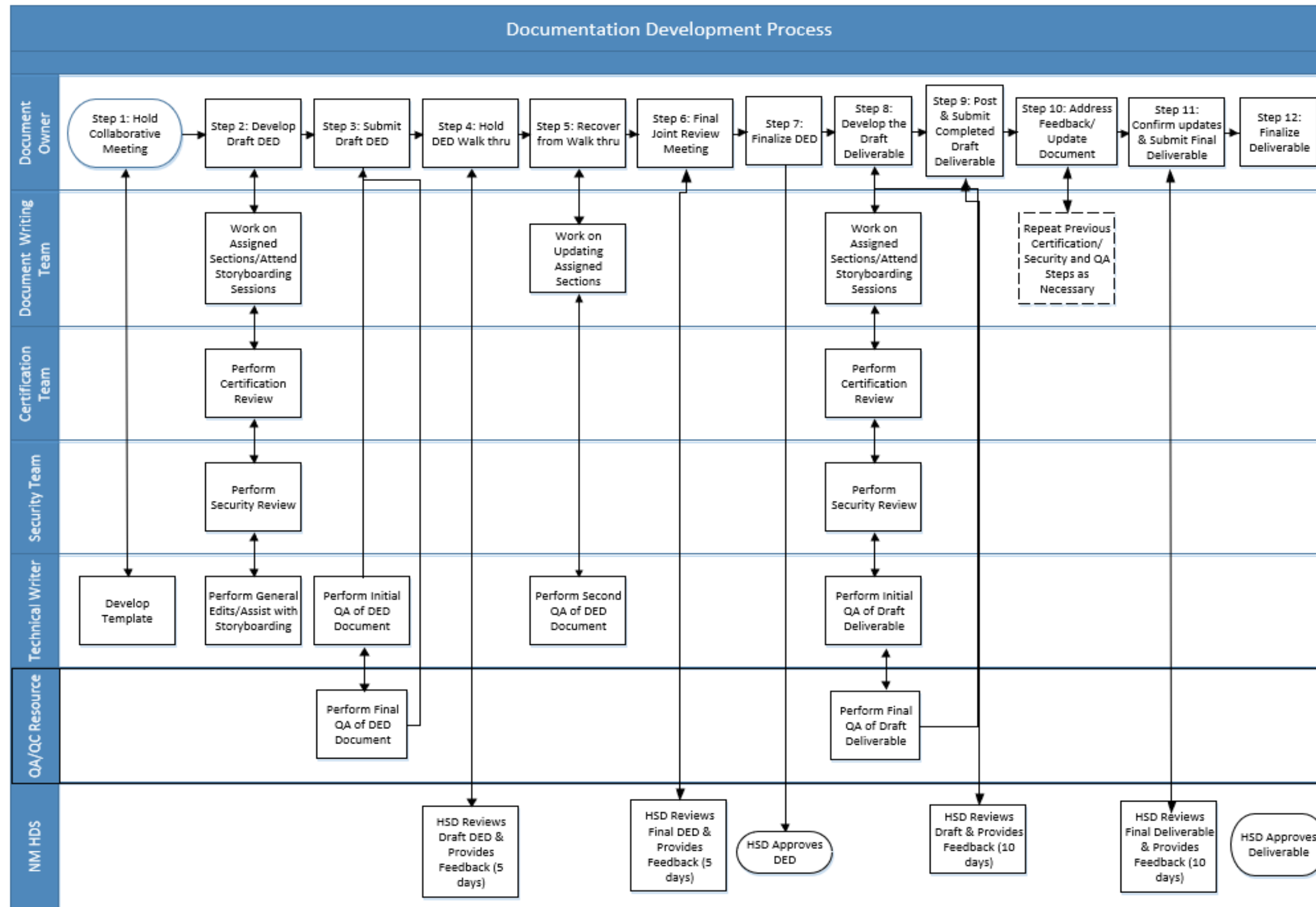
7.1.2 Development of Deliverables

It is strongly recommended, before the start of the deliverable development process, that each Module Contractor and State project team develop a DED and gain approval of it from HSD prior to submitting the actual deliverable. Module Contractors are required to use the Standard Checklist for specific styles related to deliverable development, to ensure consistency of deliverables across the project. A link to the Standard Checklist is included as part of the Paid and Non-Paid Deliverable Job Aid which can be found in the Referenced Document Links Table in Appendix C of this QMP.

For specific deliverable process steps, please refer to the DED and Deliverable templates. Links to these documents are contained in Appendix C.

If review dates and timeframes are not met by HSD, the Module Contractors are provided with a notification from NM HSD which typically includes a date by which review is completed from NM HSD. Additionally, a decision is logged to reflect the date change.

7.1.3 Deliverable Management Team

There are three (3) primary groups associated with the deliverables for the MMISR project. These groups include NM HSD, Module Contractors, and the IV&V team. Depending upon the deliverable, the EPMO may act as a reviewer and is considered part of the NM HSD team. The delineation of duties by group is provided in the RACI found in Table 5 below.

Table 5 - Deliverables RACI

Activity	NM HSD	Module Contractors	IV&V
Create Module Contractor deliverables	I	A, R	I
Conduct collaborative deliverable development meetings	I, C	A, R	I, C
Create DED, including security and certification sections	I, C	A, R	I, C
Review and provide feedback for Module Contractor DEDs	A, R	I, C	C
Provide disposition for Module Contractor DEDs	A, R	I, C	C
Create draft deliverables, including security and certification sections	I, C	A, R	I, C
Review and provide feedback for Module Contractor deliverables	A, R	C, I	I, C
Provide disposition for Module Contractor draft deliverables	A, R	I, C	C
Finalize Module Contractor deliverables	I, C	A, R	I, C
Review and provide feedback for Module Contractor final deliverables	A, R	I, C	C
Provide disposition for Module Contractor final deliverables	A, R	I, C	C

The legend for the RACI is provided in Table 6 below.

Table 6 - Deliverables RACI Legend

Abbreviation	Description
R	Responsible
A	Accountable
C	Consulted
I	Informed

The deliverable timeline outlines that collaboration meetings, work sessions, and drafts of the deliverable should occur prior to a contractual due date for a deliverable. The draft deliverable may undergo multiple work sessions prior to the submittal of the draft deliverable. Further, once submitted to HSD, the reviewers provide comments/improvements and suggestions to increase the likelihood of approval.

After receiving all HSD reviewer comments, the Module Contractor completes revisions as needed to address the HSD reviewer comments and updates the deliverable. The Module Contractor submits a final deliverable to HSD for review.

During the review cycle, there can be a checkpoint scheduled with HSD to evaluate the deliverable, HSD reviewers are polled to determine if rejection of the deliverable is a possibility. If yes, this rejection possibility is communicated to the Module Contractor so that they can begin remediation efforts as soon as possible. If not, HSD reviewers continue their review of the deliverable.

An additional checkpoint can also be conducted with HSD reviewers to confirm that the deliverable review is on track and progressing as expected. An acceptance or rejection of the deliverable is communicated at the end of that HSD Review cycle. If approved, Module Contractors finalize all edits, address any remaining comments or questions, and provide a final approved deliverable to NM HSD. If a deliverable is rejected, Module Contractors begin to address and remediate the items noted as deficiencies in the deliverable and re-submit a remediated deliverable within the established timeframe identified in the Paid Non-Paid Deliverable Job Aid. The review cycle continues until the deliverable is approved by HSD.

*Dates and timeframes are subject to change based on communications between module contractors/HSD and project needs.

7.1.4 Deliverable Standard Checklist

A deliverable standard checklist was established by NM HSD and is a first level of quality checklist which all deliverables are compared against prior to deliverables being reviewed for content, accuracy, and completeness. A link to the Standard Checklist is included as part of the Paid and Non-Paid Deliverable Job Aid which can be found in the Referenced Document Links in Appendix C of this QMP. The Deliverable Standard Checklist addresses quality issues such as required company information, information pages are correct and in conformance, tables, formatting, lists, and numbers are in conformance with the deliverable standard checklist items.

Module Contractors should leverage this deliverable standard checklist for all QA activities for project deliverables.

7.1.5 Enterprise Deliverable Tracker

NM HSD established an Enterprise Deliverable Tracker (EDT) which is maintained by the EPMO. EDT updates are shared via email with deliverable reviewers to communicate deliverables nearing due dates, upcoming deliverables that HSD reviewers should prepare for, and allow for discussion on status of all deliverables which require a review and approval from NM HSD. The EDT provides visibility into the stages of review, quality, and timeliness of deliverable activities.

All project deliverables are also tracked in the EPMO's EPS to provide visibility across the project into the due dates and timeliness of Module Contractors in meeting these milestones. A link to the EPS can be found in Appendix C of this QMP.

7.1.6 Module Contractor Deliverable Tracker and Annual Deliverable Review Process

It was determined that "living" deliverables should be reviewed at least annually or after a significant change / triggering event is made to ensure there is consistency between plans and changes that evolve throughout the lifecycle of the MMISR project. There are certain deliverables through the course of DDI that do not require annual review as they served a "one and done" for development (e.g., System Design Document).

The EPMO has developed an annual Deliverable Review process to be used for each contract deliverable and has posted the job aid to the MMISR Deliverables SharePoint document repository. Links to both the Deliverable Tracker and Annual Review Process can be found in the Referenced Document Links in Appendix C of this QMP.

In an effort to better align annual reviews, PMO plans are staggered for their annual updates. Dates for annual updates are based off the approved date from the previous years' submission.

Initial vendor submittals are required to meet their SOW obligations and be in adherence with EPMO Project Management Plans.

Finally, any "triggering event" that would cause a vendor deliverable to fall out of alignment with the PMO plans, is cause for immediate review and adjustment by vendor. The EPMO works with the HSD Contract manager and the module vendor to draft a decision related to the triggering event, and then the expected deliverable due date for the vendor's updated deliverable.

8.0   Quality Assurance & Quality Control

The focus of QA is on the processes used in the project. QA ensures that project processes are used effectively and consistently across the project according to the determined standards. "Assurance" is the activity of providing evidence to create confidence among all stakeholders that the quality-related activities are being performed effectively. Early identification of process deficiencies helps to quickly resolve compliance issues. QA is focused on project deliverables as well as software and work products delivered to support the project. It all relates to assuring all planned actions needed to provide adequate confidence that a product or service satisfies the stated requirements for quality. It involves the meeting of standards, continuously improving project work, and correcting project defects. Quality Control can be defined as part of quality management focused on fulfilling quality requirements. Sub-Section 8.4. addresses the Quality Control activities for fulfilling the indicated quality characteristics and documenting the defects identified during QA activities.

8.1 Assessments, Reviews, and Audits

Many assessments and processes occur over the course of the MMISR project's life cycle to maintain the established standards of quality. There are five (5) main areas of focus: deliverables, Software Development Life Cycle (SDLC) activities, project management processes, certification, and security activities.

1) The deliverable quality reviews aim to ensure that all deliverables meet the required standards.
2) The SDLC quality reviews aim to detect design, configuration, and programming errors in Module Contractor's offered solutions, services, and work products, as well as assure smooth transition to daily operations in Maintenance and Operations.

3) The project management process reviews aim to ensure Module Contractors adhere to established Project processes.
4) Certification reviews ensure that solutions and work products can show evidence to support Federal Partner and NM HSD certification requirements.
5) The security quality reviews aim to ensure that all security requirements and standards are met.

There are also assessment phases that occur, such as formal design reviews and peer reviews, expert opinions, software testing, and software maintenance.

8.1.1 Identify Processes and Work Products for Measurement

Each Module Contractor's processes and work products that are measured for quality are provided in the Processes and Work Products for Quality Checks table below.

Table 7 - Processes and Work Products for Quality Checks

Project Deliverables and Processes Components	Processes or Work Products for Quality Checks

Deliverable Quality Standards	▪ Deliverables listed in the Module Contractors SOW may include:
	  ▪ Project Management deliverables
	  ▪ System Design deliverables
	  ▪ Security deliverables
	  ▪ Release related deliverables
	  ▪ Business Process deliverables
	▪ Any other SOW deliverables

SDLC Process Quality Standards	▪ SDLC Release reviews including:
	  Release baseline review
	  Requirements review
	  Design review
	  Application development validation
	  Test plan review
	  Test case review
	  Test readiness review
	  Implementation readiness review
	▪ Activities related to SDLC DDI phase execution including:
	  Requirement elicitation
	  Design elicitation
	  Coding or configuration standards
	  Code complete determinations
	  Test plan, test case and mock data creation
	  Test execution results reports
	  Unit Testing
	  Security testing and audits
	  Performance testing
	  Functional testing
	  Integration testing
	  System Integration Testing (SIT)
	  User Acceptance Testing (UAT)
	  End to end testing
	  Parallel Testing (if applicable)
	  Testing Reporting

Project Deliverables and Processes Components	Processes or Work Products for Quality Checks

Project Management Processes Quality Standards	■ Adherence to project management process requirements by Module Contractors and NM HSD personnel including the following areas:
	  ■ Risk and issue management
	  ■ Status reporting (Weekly Status Reports and Monthly Status Reports)
	  ■ Schedule management
	  ■ Resource management
	  ■ Change management

Security Quality Standards	■ Compliance of all components to the Minimum Acceptable Risk Standards for Exchanges (MARS-E) Controls and applicable IRS security safeguards ■ Adherence to security processes outlined within the enterprise security documentation as well as all security requirements agreed to within contracts, SOWs, proposals, and amendments
Certification Quality Standards	■ NM HSD certification requirements ■ Federal Partner Certification requirements ■ Assessment of certification supporting evidence

The Quality Review Methods table below lists the deliverable reviews to occur and the methods for how each is reviewed.

Table 8 - Quality Review Methods

Deliverable Review	Review Methods
Module Contractors' SOW Deliverables Reviews	▪ A NM HSD PM reviews each deliverable by using the Deliverables Standard Checklist. ▪ Items on the deliverable standard checklist are reviewed to verify conformance to established standards and deliverable's requirements as defined in the SOW. ▪ Security and Certification team reviews are conducted as a part of every Module Contractor SOW deliverable reviews.
SDLC DDI Phase Release Reviews and Demonstrations	▪ A NM HSD PM attends each DDI phase release review meeting. ▪ The NM HSD PM member may use the Kanban board, JIRA list, or SOW as the checklist for the specific release relevant to the meeting. ▪ Items reviewed by HSD is relevant to the requirements for the DDI release and the SOW requirements and how closely they adhere to expected results.
SDLC DDI Phase Release Execution Activities (for Agile projects steps could be repeated)	▪ A NM HSD PM meets with the managers or technical leads responsible for each phase in progress to ask questions and obtain information. ▪ The NM HSD PM uses checklists designed for each phase based on the relevant enterprise plans that provide guidance (i.e., the testing phase checklist is based on the requirements for the release detailed in JAMA or in the Module Contractor's test plan and test cases).
Project Management Process Reviews	▪ Module Contractors attend all project management meetings deemed necessary by EPMO and/or NM HSD. ▪ Module Contractors review the project management plans and processes in place to ensure they are understood and can be executed as required, including supporting the annual review process. ▪ EPMO reviews and advises on adherence to risk & issue management, weekly status reporting, change control management, schedule management and resource management.
Security Processes Reviews	▪ NM HSD security leads work with the Module Contractor's security resources to determine all necessary security requirements for their offered solutions. ▪ Appropriate MARS-E Controls and applicable IRS security safeguards are reviewed with each Module Contractor to ensure adherence. ▪ NM HSD security leads generate and review security reports, interview the Module Contractor's security team to ensure security requirements are met, and ensure understanding of what security is in place or are implemented for the offered solution. ▪ Ensure third party assessments are available and conducted prior to go live.

Deliverable Review	Review Methods
Certification Evidence Reviews	▪ NM HSD certification team collaborates with the Module Contractors' certification teams to determine all necessary certification-related evidence is collected and available for their offered solutions to support MMISR certification.

8.2 Quality Analysis

QA reviews are conducted by the NM HSD resources which include HSD PMO, HSD Divisions, and members of the technical teams during the deliverable or work product review cycle. NM HSD compares actual activities and processes against the established standards. Table 9 below lists the project deliverables and processes which require quality evaluations. Table 10 lists the methods and measures used to evaluate those deliverables and processes.

Table 9 - Project Deliverables and Processes Requiring Quality Evaluations

Project Deliverables and Processes	Key Project Deliverables / Processes Subject to Quality Review
Deliverable Quality Standards	▪ The quality standards by which deliverables are measured ▪ The completeness and correctness criteria are defined in the SOW or work proposal, and must be met before a deliverable can be formally accepted by the State ▪ Evidence of security and certification activities, as it relates to security and certification sections of specific deliverables
Process Quality Standards	▪ The quality standards are the measures used to determine if project work processes are being followed ▪ Stakeholder expectations outline requirements for acceptability of a project process and should be in compliance with the SOW and Service Level Agreements (SLAs)
Project Management Processes Quality Standards	▪ The quality standards are the measures used to determine if project management processes are being followed
Process Quality Oversight Quality Standards	▪ The quality standards are the measures used to determine if the Module Contractor or State project team processes are completed in compliance with the enterprise level processes and requirements
Security Quality Standards	▪ The quality standards are the measures used to determine if security standards and requirements are being met ▪ The Security Documents provide the basis for security compliance quality measures

Table 10 - Quality Evaluation Methods and Measures for Project Components

Objects of Quality Review	Quality Measure	Quality Evaluation Methods
Project Deliverables	▪ Deliverable quality standards ▪ Customer satisfaction (HSD scorecard) ▪ SOW requirements ▪ SLA requirements ▪ Key Performance Indicators (KPIs)	Quality Control Activities

Objects of Quality Review	Quality Measure	Quality Evaluation Methods
Project Processes	▪ Process quality standards ▪ Stakeholder expectations ▪ SOW requirements ▪ SLA requirements	Quality Assurance Activities
Project Management Processes	▪ Stakeholder expectations ▪ SOW requirements ▪ Management quality standards ▪ SLA requirements	Quality Assurance Activities
Project Oversight	▪ Stakeholder expectations ▪ SOW requirements ▪ SLA requirements ▪ Enterprise oversight including EPMO and IV&V	Quality Assurance Activities
Security	▪ MARS-E controls and IRS security safeguards ▪ SOW requirements ▪ SLA requirements ▪ Stakeholder expectations ▪ Enterprise security requirements ▪ IRS Pub 1075 and CFM 42 Part 2	Quality Assurance Activities
Certification	▪ Outcomes-Based Certification (OBC) Criteria ▪ OBC checklists ▪ SOW requirements ▪ SLA requirements ▪ Stakeholder expectations	Quality Assurance Activities

8.2.1 Measuring Project Execution Processes

Project processes refer to the quality-related processes during the execution of the project. The execution phase processes within the SDLC include requirements gathering, design activities, development, testing, implementation, and post-implementation. Each process subject to quality review has the following elements described:

▪ Identify and describe the critical project processes subject to quality review
▪ Identify the evaluation standards by which the quality of the project process is measured
▪ Identify stakeholder expectations for the project process
▪ Identify the Subject Matter Experts (SMEs) responsible for the process
▪ Describe the QA activities being conducted to ensure compliance with quality standards for project processes
▪ Determine how often QA activities are performed (timeframe or recurring frequency)

Each project deliverable or process component listed in the table below has specific processes or work products measured for quality. The parties responsible for doing the identification listed above and performing the quality oversight of processes and work products are listed in Section 4.0.

Table 11 - Process Quality Oversight and Standards

Project Deliverables and Processes Components	Processes or Work Products for Quality Checks

Deliverable Quality Standards	▪ Deliverables listed in the Module Contractor SOW or State project team charter including:
	  ▪ Release related deliverables
	  ▪ Security related deliverables
	  ▪ Any other SOW deliverables

Process Quality Standards	▪ SDLC Phase Releases including:
	  ▪ Release baseline review
	  ▪ Requirements review
	  ▪ Design review
	  ▪ Application development validation
	  ▪ Test readiness review
	  ▪ Implementation readiness review
	▪ Activities related to SDLC phase execution and project execution processes as identified below:
	  ▪ Requirement elicitation
	  ▪ Design elicitation
	  ▪ Coding standards
	  ▪ Unit testing
	  ▪ Code complete determinations
	  ▪ Test case and data creation
	  ▪ SIT
	  ▪ UAT
	  ▪ Defect Reporting
	  ▪ Testing Reporting

Project Management Processes Quality Standards	▪ Adherence to project management process requirements including the following areas:
	  ▪ Risk and issue management
	  ▪ Status reporting - Weekly and Monthly
	  ▪ Schedule management
	  ▪ Resource management
	  ▪ Change management

Security Quality Standards	▪ Compliance of all components to the MARS-E controls and IRS security safeguards ▪ Security processes outlined within the enterprise security documentation
Certification Quality Standards	▪ NM HSD certification requirements ▪ Federal Partner Certification requirements including: OBC for Centers for Medicare and Medicaid Services (CMS)

Process Quality Oversight Standards	▪ New Module Contractor adherence to enterprise standards including:
	  ▪ HSD processes
	  ▪ SDLC processes
	  ▪ SOW deliverables

Quality Review Methods are listed in the table below.

Table 12 - Quality Review Methods

Deliverable Review	Review Methods
Module Contractors and State project teams SOW Deliverables Reviews	▪ NM HSD reviews each deliverable version by using the deliverable review checklist ▪ Items on the checklist are reviewed to ensure that requirements are met for the deliverable as stated in the SOW
SDLC Release Planning Reviews	▪ NM HSD attends each release planning review meeting ▪ NM HSD uses the appropriate stage gate review checklist ▪ Items on the checklist are relevant to the requirements for the phase gate and the SOW requirements
SDLC Phase Execution Activities Reviews	▪ NM HSD meets with the managers or technical leads responsible for each phase for status of progress ▪ NM HSD uses the checklist designed for the appropriate stage gate based on the enterprise plan that provides guidance (e.g., the testing phase checklist is based on the enterprise requirements detailed in the PMO14 Test Management Plan [TMP])
Project Management Reviews	▪ NM HSD attends any project management meeting determined to need quality review ▪ NM HSD reviews the project management processes in place to ensure they are being executed as required and comply with quality standards ▪ NM HSD uses the appropriate checklist created for each meeting or process to document the level of compliance with quality requirements
Oversight Reviews	▪ NM HSD meets with the Module Contractor or State project team resources to review the project phase activities, project management activities, and any other activities requiring review ▪ NM HSD attends each SDLC stage gate review ▪ Checklists are created for oversight activities that NM HSD uses in reviewing the quality compliance for each stage gate or process review
Security Processes Reviews	▪ The Module Contractor security lead works with the HSD security group to determine the necessary security requirements ▪ Quality checklists are created based on the requirements determined in conjunction with the security team ▪ The Module Contractor team reviews security reports in conjunction with the security team and compare them against appropriate quality checklists to ensure security requirements are met
Certification Reviews	▪ The Module Contractor certification lead works with the HSD certification team to determine the necessary OBC items for the Module Contractors offered solution ▪ OBC evidence is collected based on the required documentation determined in conjunction with the Certification team

Quality Reporting (Section 10) describes the thresholds used for evaluation of Module Contractor performance assessments. The evaluation is a subjective review completed by the EPMO and contains an assessment of the Module Contractor based upon trends and patterns identified from their work performance each month. Based upon assessments, the EPMO may offer additional checklists or guidance.

If quality standards for deliverables or any of the associated work products are not met on a continuous basis and frequent, repeated remediation of deliverables is necessary, and/or the remediations do not yield the expected level of quality improvements, NM HSD make themselves available for the contractual remedies available and the remediation or corrective action moves out of the PMO process and is handled by NM HSD contract management.

8.3 Methods and Tools

There are several methods and tools for quality determined within the HHS 2020 and MMISR enterprise project management plans during this DDI Phase of the MMISR Project. These documents provide the standards and requirements for quality as well as the methods for determining and monitoring quality. Additional tools and methods used for Quality Review are provided in the table below.

Table 13 – Quality Methods and Tools

Quality Tool	Description
Benchmarking	**For Quality Assurance.** Compares current project processes to comparable projects.
Communications Matrix	**For Quality Assurance and Control.** Documents the communication contacts for each area where quality management is conducted.
Cost-Benefit Analysis	**For Quality Control.** Compares the cost of the quality process to the expected benefit.
Issues Log	**For Quality Assurance.** Documents the issues on the project including quality issues.
Process Analysis	**For Quality Assurance.** Planned continuous improvement of processes.
Quality Audits	**For Quality Assurance.** Compliance with policies, standards, and processes.
Risk Log	**For Quality Assurance.** Documents the risks on the project including risks to quality.
Root Cause Analysis	**For Quality Assurance and Control.** Assists with determining the cause of a quality issue to prevent recurrence.

8.4 Quality Control

Quality Control addresses fulfilling the indicated quality characteristics and documenting the defects identified during QA activities. Inspection and comparison of delivered software code or data is an important activity of QC, and the subprocess of noting the defects that were detected during the QA subprocess, comparing those defects to quality requirements and critical quality characteristics, subsequent documentation of defects, reporting on, and prioritization of defects is all handled through the Defect Management Plan. The Defect Management Plan is an appendix of the Test Management Plan (PMO14) and is part of the non-contractual deliverables. A link to the Defect Management Plan can be found in Appendix C.

8.5 Data Validation

The success of the MMISR and HHS 2020 Project depends on our ability to effectively identify, migrate, convert, transform, and use data that is well defined, accurate, and correct. The process of moving the data from the original source systems to new systems which provide services to the State of New Mexico's employees, residents, researchers, and government entities requiring information requires extensive testing and validation to ensure that the data is accurate and is being used correctly. Data Validation is unique in the quality assurance realm because all the other quality processes focus solely on 'process' – data validation needs a quality assurance component in that the data must absolutely be correct because if it is not, none of the other quality assurance processes that are completed mean anything until the data is right. The Data Quality Plan is included in Appendix C and is a critical component of data ownership/accountability, quality management, test management, and defect management.

The process of real-time sharing of data between modules will facilitate the State's ability to deliver a cohesive and comprehensive experience regardless of program including no wrong door service, one stop shop, and client self-service. The process of integrating data from disparate modules will create a 360-degree view of the client to support design and enhancement of programs to better meet clients' needs, provide comprehensive and collaborative case management, evaluate and monitor program outcomes to support future program development and enhancements, and used in developing algorithms for the likes of Social Determinants of Health to remove inequality, improve equality, promote equity and use as an exponent of justice to fix the system to offer equal access to both tools and opportunities to State clients.

9.0   Continuous Process Improvement Activities

QI is a formal systematic set of practices and procedures that include tasks and activities to address the analysis and evaluation of outcomes and performance to generate a higher valued product that meets or exceeds expectations. QI occurs through both formal and informal mechanisms during the lifecycle of the MMISR project including both DDI and M&O phases.

QI necessarily is a data driven approach to identifying operational and functional process improvement opportunities and executing the tasks and steps to introduce, implement, and sustain QI initiatives. To successfully improve results over the long term, project managers must develop a continuous improvement mind-set and seek to exercise it on all project activities.

9.1 Informal Quality Improvement

Informal QI occurs on a daily basis via the processes involved in the project. Daily improvements come through a variety of activities through working and performing all of the quality management activities used on the project. An example of informal quality improvement activity is the capture, review, and publishing of meeting notes by EPMO Project Coordinators. Once the initial meeting notes are prepared, the notes are shared with 1-2 key members of the meeting for review, comment, and feedback, before finalization, publishing, and distribution to all meeting attendees. Appropriate SharePoint logs are updated concurrently with the meeting minute generation. This timely and frequent feedback enables improved quality of meeting notes and accurate logging of project issues and statuses.

Project team members are encouraged to identify improvements in the project activities. Such improvements should be evaluated by the project team and project activity adjustments made in accordance with the findings. Informal Quality Improvement is the responsibility of all project team

members and is an ongoing process through the life of the project. The bi-monthly HSD PMO meeting is the place that process improvement ideas are initiated and ultimately acts as the approval body for identified PMO process changes.

9.2 Formal Quality Improvement

Formal QI activities occur as a result of Module Contractor deliverable reviews and HSD evaluation of those deliverables, software release milestones and demonstrations, and project work products.

When a deliverable or work product evaluation does not meet the target for quality and content standards, Module Contractors are expected to incorporate feedback from reviewers and IV&V to strengthen their deliverables and work products. Module Contractors are responsible for assessing the evaluation findings and developing a plan to execute a Quality Improvement plan for the deliverable or work product. The formal Quality Improvement process is performed in accordance with the following activities:

- Assess the results of the deliverable review evaluation
- Confirm the deliverable comments and results of the evaluation
- Develop a plan for improvement and addressing the comments
- Address the comments and improve the quality of deliverable or work product
- Perform follow-up collaboration meetings, if necessary, in conjunction with the HSD Deliverable owner to confirm all areas identified for improvement are addressed
- Resubmit the final deliverable
- Confirm demonstration of improvement

Examples of formal quality improvement activities include processes such as:
- DED process to review planned deliverables under development
- Utilization of a deliverable standard checklist to ensure content and format meet established standards

Other examples of formalized quality improvement activities are:
- Conducting bi-monthly or quarterly Lessons Learned meetings
- Documenting lessons learned on a SharePoint Lessons Learned Register and ensuring the outcomes or output is captured into appropriate project processes and work activities
- Logging Decisions in the SharePoint Decisions log as a result of a documented lesson learned

The Lessons Learned Register is posted on NM HSD SharePoint and contains all documented lessons learned. A link to the lessons learned register is included in the Referenced Document Links Table in Appendix C of this QMP.

The bi-monthly HSD PMO meeting is a forum for sharing recently logged decisions, best practices, lessons learned, and the outcomes or recent activities from Change Control Board (CCB), Architecture Review Board (ARB), and other project workgroup updates. This bi-weekly forum was created as a means to share information and communicate widely about changing processes and is a "living" example of continuous quality improvement activity.

10.0 Quality Reporting

The EPMO team develops, implements, maintains, monitors, and reports on quality measures and quality requirements adherence of the Module Contractors. Reporting is accomplished via the reports produced monthly and listed below:

Table 14 - Reporting Types and Frequency

Report	Description	Audience	Frequency
Enterprise MMISR Monthly Status Report	Written monthly report summarizing work progress of all Module Contractors and assessing Module Contractors work progress and providing a scored evaluation of each Module Contractor	NM HSD Leadership	Monthly
Executive Steering Committee monthly presentation	An executive level presentation deck that highlights monthly MMISR metrics, provides the Enterprise Project Schedule, Risks, and Issues dashboard, and EPMO and IV&V monthly reports	Executive Steering Committee for HHS 2020 project	Monthly
Legislative Finance Committee (LFC) report	Written presentation and summary of HHS 2020 enterprise project progress and activities	Legislators, legislative staff, becomes a public record document	Annual
Situational Report	Multiple options, pros and cons. Supports a decision for Executive Leadership.	Cabinet Secretary, Deputy Cabinet Secretary, and executive agency leadership	As Needed
MMISR APD Quarterly Status Report	Written quarterly status report submitted to Federal Partners summarizing work progress completed on the MMISR project, including challenges, key risks and issues, certification progress and status of budget expenditures.	Federal Partner regional officers	Quarterly
Weekly Status Reports	Written weekly status reports submitted to NM HSD providing a Module Contractors assessment of progress and accomplishments and issues encountered each week	NM HSD Leadership and other Module Contractors	Weekly
Defect Reports	Defect reports are developed in JIRA for each Module Contractors' use and for HSD's review and monitoring of defect resolution. Examples of defect reports available may be a dashboard indicating average aging of defects, assignments to individual, and status of completion may be desired for each Module Contractor. Module Contractors may have specific defect reports that can be provided to NM HSD.	NM HSD Data Manager, Module Contractors, HSD QA Team	Weekly, Monthly, and as Needed

All of these report examples are provided to NM HSD leadership and used for HSD's reporting to the Legislative Finance Committee (LFC) and other external stakeholders to which they are accountable.

The examples of quality reporting are as listed today during the MMISR and HHS 2020 enterprise's DDI phase. As each Module Contractor reaches their M&O phase, and as the enterprise moves from each DDI to the M&O phase, the quality reporting evolves to match the appropriate project phase. For instance, each Module Contractor has SLA standards in their specific scope of work. Verifying how each Module Contractor intends to report upon their SLAs is an activity that occurs prior to the M&O phase, and as part of operational readiness prior to a module's go live.

During the time of DDI phase for the project, the EPMO developed CIO dashboards, enterprise monthly status reports, and scoring by project components are the primary method of quality measures that occurs during this phase. As the project matures, certification reports covering OBC are added in the future as well.

Below are listed examples of the quality metrics, definitions, scoring table used to support the scoring, assessments and forecast metric used within the Enterprise Monthly Status Report. An example of the CIO dashboard and Enterprise Monthly Status Report are included below as an example of the quality reporting used on the MMISR and HHS 2020 enterprise project and applied to the Module Contractors.

Table 16 – Definition of Metrics used for Evaluation

Metric	Definition
Overall	The culmination of the metrics below and the EPMO's observation of project and Module Contractor progress
Scope	The work that needs to be accomplished to deliver a product, service, or result with the specified features and functions
Quality	A set of inherent characteristics fulfills requirements and a planned, systemic approach to ensuring project team's ability to produce high-quality work products and deliverables
Resources	The people, capital, and/or material goods required for the successful execution and completion of a project
Time	Oversight for the timely completion of the project, including project schedule, work tasks, dependencies, and overall schedule management
Budget	The status of financial standing

Within each of the areas noted as the key metrics in the above table, the EPMO completes the monthly Enterprise Status Report and performs an evaluation upon Module Contractor's work progress each month relative to scope, quality, resources, and time, and then assigns an overall score. The criteria used to rank scope, quality, resources, and time is driven by the metrics this plan documents and is defined in our criteria ranking. The compilation of the scores for scope, quality, resources, and time rolls up to an overall score for the Module Contractor. A sample section of a Module Contractor's report dashboard is included in the Figure below.

Figure 3 - Example Dashboard

Metric	Current Period	Prior Period	Forecast	Status Specifics
Overall	5	4	⬆	▪ Executive Steering Committee (ESC) approved the proposed option for the replacement of the SI by RFQ ▪ CCSC achieved their aggressive Go-Live date of 6/29/20 for Child Support Enforcement Division (CSED) ▪ MMISR Overall timeline created from EPS as a result of new SI RFQ and vendor schedules
Scope	4	4	⬆	▪ The SI Replacement RFQ in final revisions for a 7/1/20 release ▪ DS is still in discussions with HSD on defined scope within the re-baselined schedule ▪ PCR #74 in final stages of approval with a CCB vote expected in early July, which will contribute towards resolution of Issue #112
Quality	6	5	➡	▪ EPMO received final approval of the State Project Team Onboarding Plan (PMO17) ▪ CCSC received approval of several deliverables and deliverable expectation documents ▪ DS blocking data defects resolved using the short-term contract, ended 6/30/20
Resources	7	6	➡	▪ Statewide hiring freeze due to COVID19 pandemic may have a negative impact on HSD and MAD staffing of key positions ▪ HSD added testing resources ▪ EPMO onboarded new Project Manager 6/1/20 to serve as Change Manager, assist with project Quality metrics, and support SI replacement activities
Time	4	3	⬆	▪ EPMO created timelines for SI Continuation Plan and revised the EPS for re-baselining ▪ The RFQ and associated timelines provide the additional time needed to finalize selection and on boarding of future vendors ▪ DS schedule approved for re-baselining ▪ MMISR Overall timeline created from EPS as a result of new SI RFQ and vendor schedules
Budget*	7	8	➡	▪ The initial estimates for the project have increased and need further evaluation for impact and options and leadership are addressing this

The scoring offered in the table above carries through and aligns to the Scoring in Figure 5 and Figure 6 that the EPMO uses in the Enterprise Monthly Status Report for each module contactor. The scoring table and thresholds have been established (originally by the SI contractor, later modified by EPMO) in consultation with NM HSD Leadership and used for enterprise monthly status reports. High priority risks and issues, as noted in the EPMO weekly status reports are routinely brought to project leadership's attention. These same risks and issues are then included in the enterprise monthly status report.

Figure 4 - Example Scoring

Scoring	
Status	**Represents:**
8 - 10	On track. Scope and schedule do not exceed +/- 20%. Budget within +/- 10%. No medium or high priority risks/issues. **No escalation required**
5 - 7	May be at risk if issues are not addressed. One or more medium priority risks/issues; scope and schedule do not exceed +/- 20%.
1 - 4	At risk to miss a schedule completion date. Scope and schedule may exceed +/- 20%. Budget not within +/- 10%. High priority risks/issues. **Immediate management action required**

Figure 5 - Example Forecast Trend

Forecast	Represents:
⬆	A positive, upward direction is forecasted for the future months
➡	No change is anticipated, forecasted to remain in a neutral direction for the future months
⬇	A negative, downward direction is forecasted for the future months
NOTE: Forecast is defined as a view of current period and the direction to next period. It is not a reflection of the variance between prior and current periods. It is the expected	

The summary components listed above are the reporting metrics used in the Enterprise Monthly Status Report. In addition, other data and graphs are supplied that document risks/issues, change requests, resources, key decisions, upcoming schedule highlights from the Enterprise Project Schedule, and other project milestones and reports from other agency partners.

The Weekly Status Report is submitted to NM HSD one (1) day prior to the Bi-Monthly MMISR Module Status Update and provides a Module Contractors assessment of progress and accomplishments and issues encountered each week.

For Weekly Status Reports, Module Contractors use the following criteria for tracking trends and status:

Figure 6 - Example Prior Monthly Status

Status Item	Prior Monthly Status	Weekly Trend	Comments
Overall Project Status	GREEN		The EPMO remains green. EPMO continues work on the project diagnostic work for resources and schedule.
Scope	GREEN		All EPMO Plans have received approval, and some are undergoing their annual updates.
Quality	YELLOW	→	Requirements Traceability Matrix is complete but pending RMP final approval of most recent changes.
Resources	GREEN		Fully staffed
Schedule	YELLOW	↑	As of 4/1/21, the diagnostic schedule is published as the new EPS and is being updated weekly. All schedule metrics are coming from the new schedule.

11.0 Quality Monitoring

As stated earlier in this Plan, quality is everyone's responsibility and ensuring that there is a focus on quality in deliverables, work products, demonstrations of software functionality, testing and in the operation of project processes. Further, it is also everyone's role to offer suggestions, recommendations, lessons learned, and identify project areas that need improvement. In the MMISR project, the role of the IV&V team on the MMISR project for the HHS 2020 Enterprise is to essentially act as the "eyes and ears" into the inner workings of the project for the State and the Federal Partners and the effort to modernize the Medicaid system for the State of New Mexico. The EPMO performs their monitoring and assessment throughout the monthly Enterprise Status Report provided to NM HSD Leadership and presented to the Executive Steering Committee. NM HSD state agency quality monitoring comes through the deliverable reviews, review of software demonstrations, and work with Module Contractors on their SOW activities. Module Contractors have their own internal quality monitoring processes for their work products that occur prior to submittal to NM HSD.

The work activities used to observe, monitor, and ensure that project objectives and standards are being achieved include the following as shown in Table 15. For purposes of clarifying the work activities that are used to perform quality monitoring the table has been updated to list each work activity, responsible party, the role for the quality monitoring (owner or observer), further definition of the role of each party in the work activity (where there are multiple participants) and the method of monitoring used.

Table 15 - Quality Monitoring Criteria

Work Activity	Responsible Party for performing the work activity	Role for Quality Monitoring	Role in the work activity and Method of Monitoring
Monthly Assessment Reports	IV&V EPMO	Owner Owner	Monthly Assessment report of new, active, in-progress or closed observations (IV&V) Enterprise MMISR monthly Status Report (see Section 10 Quality Reporting) (EPMO)
Executive Steering Committee presentation	EPMO IV&V	Owner Owner	Presentation of the enterprise MMISR monthly status report (EPMO) Presentation to Executive Steering Committee of new, active, in-progress or closed observations (IV&V)
Observation Meetings or Pre-Observation meetings –	IV&V	Owner	Meeting (biweekly) - forum for discussion between IV&V, NM HSD, and Module Contractors to discuss potential observations and obtain information from affected or responsible party before opening a new observation
Observation Extracts	IV&V	Owner	Maintenance of IV&V Observation log on SharePoint site and email distribution to key project personnel each month
Risks & Issues meeting	EPMO	Owner	EPMO facilitates weekly meetings Module Contractors and NM HSD attend and participate IV&V attends and observes weekly meetings; provides input into monthly report or observation meetings
MMISR Module Status Report update meeting	EPMO	Owner	EPMO facilitates bi-weekly meetings Module Contractors and NM HSD attend and participate IV&V attends and observes bi-weekly meetings; provides input into monthly report or observation meetings
Certification Team meetings	NM HSD	Owner	NM HSD certification team facilitates weekly or monthly meetings EPMO attends and provides project coordination responsibilities Module Contractors attend and participate IV&V attends and observes weekly meetings; provides input into monthly report or observation meetings
CCB/Technical Change Review	EPMO and NM HSD	Owner	EPMO facilitates weekly meetings for CCB and TCRB

Work Activity	Responsible Party for performing the work activity	Role for Quality Monitoring	Role in the work activity and Method of Monitoring
Board (TCRB)/ARB governing body meetings			NM HSD facilitates ARB and DGC meetings; EPMO facilitates CCB and TCRB. EPMO attends and provides project coordination responsibilities for all. IV&V attends and observes weekly meetings; provides input into monthly report or observation meetings
All other MMISR project meetings	EPMO and NM HSD	Owner	IV&V attends and observes weekly meetings; provides input into monthly report or observation meetings
Deliverable Reviews	NM HSD	Owner	NM HSD reviews Module Contractors' deliverables for completeness, quality, and adherence to the contractor's SOW IV&V review Module Contractor deliverables for quality and content, and completes a comment log with identified areas of improvement

12.0 Templates

As mentioned in Section 5.0 Quality Planning and Section 6.0 Project Quality, there are multiple templates that support, and/or, are included within the deliverables associated with the MMISR project to support the work activities of the HHS 2020 project. This section contains information on all of these templates, as well as information regarding MMIS Certification reviews of each deliverable. Each of the following templates are available on the NM HSD SharePoint site. The purpose for establishing templates for all work activities is to enforce overall consistency by having a predetermined structure and layout which simplifies document creation and ensure required components are included in all documents.

12.1 Templates

The following subsections include templates for the various deliverables associated with the MMISR project. These templates are to be used by all components of the MMISR project in the creation of deliverables. NM HSD must approve any deviation from the templates prior to deliverable submission. A link to the HSD approved templates can be found in Appendix C of this QMP.

12.1.1 DED Template

The DED is utilized at the beginning of the deliverable workflow process to establish a high-level outline of what the final deliverable contains. A typical DED is 10-20 pages in length and is submitted to NM HSD for review as a Microsoft Word document through the NM HSD SharePoint site.

12.1.2 Final Deliverable Template

The final deliverable template stems from the DED template, except for the DED-only components (i.e., the DED Record of Changes, DED Introduction, etc.). It must be in accordance with the project NM MMISR Deliverable Standard Checklist; therefore, all final deliverables must be derived from the DED template. Final deliverables can vary in length based on the content involved and are submitted to NM HSD for review as a Microsoft Word document through the NM HSD SharePoint site.

12.1.3 Addendum Template

Addendums are created when new information needs to be added to a deliverable that has already been approved by NM HSD. Addendums are typically 2-10 pages in length, do not have a table of contents, and generally do not contain any appendices. An addendum must be submitted to NM HSD for review as a Microsoft Word document through the NM HSD SharePoint site.

12.1.4 Meeting Agenda/Meeting Notes Template

Agendas are required for all meetings between any Module Contractor and NM HSD, as well as any other parties that are included in the discussions. Agendas should be attached to all meeting invites and should be pre-populated with the names of the relevant parties prior to the start of the meeting. The agenda should clearly indicate if a decision is being sought on a topic. The agenda contains a section for meeting notes, which should be filled out during the meeting. Meeting notes must be sent out to all relevant parties within forty-eight (48) hours of the meeting's conclusion.

12.1.5 Weekly Status Report (WSR) Template

The WSR is an enterprise-level document that includes inputs from all components of the MMISR project. Individual Module Contractor WSRs are to be posted to SharePoint by end of day (EOD) on Wednesdays. WSRs are reviewed during the MMISR Weekly Module Status Update that occurs each Friday. WSRs are submitted to NM HSD for review as Microsoft Word documents through the NM HSD SharePoint site.

12.1.6 Monthly Status Report (MSR) Template

The MSR is an enterprise-level document that includes inputs from all components of the MMISR project. Individual component inputs are due five (5) working days following the previous month. The typical length of the MSR varies from 25-100 pages based on the number of components involved and must be submitted to NM HSD for review as a Microsoft Word document via the NM HSD SharePoint site. Each Module Contractors MSR is specific to their SOW and adheres to all elements required in the SOW.

12.1.7 Test Case Template

A test case is necessary to describe how a specific software or system event is executed. These documents detail the execution of the test functions that constitute a given test plan and the expected results for each execution step. Test cases are documented in Jira and test execution results and evidence is uploaded or attached to each test case in Jira.

12.1.8 Test Plan Template

A test plan provides a high-level overview of how a system or software function is executed, which is then greatly expanded upon within the related test case deliverables. The typical length of a test plan varies from 25-100 pages based on the number of components involved and must be submitted to NM HSD for review as a Microsoft Word document through the NM HSD SharePoint site.

12.1.9 Record of Changes Template

The Record of Changes is a table that includes information on each version of the deliverable as it is modified over the course of the deliverable workflow process. It is essential for maintaining version control over each deliverable. It has columns for the version number, the date on which the change was made, the author of the change and/or deliverable, and a high-level description of the changes made for that specific iteration of the deliverable. Versioning is used to identify when new updates to plans are submitted for review (e.g., V1.0 used for first submission of a plan; V1.1 used as versioning for updates back and forth via the Module Contractor and HSD. Upon Annual Review of a plan, the version would be updated to V2.0). The figure below shows an example of the Record of Changes tables found in all plans.

Figure 7 - Example Record of Changes

Version Number	Date	Author/Owner	Description of Change
v0.1	3/30/20	John Nieto	Original draft
v0.2			
v0.3			

12.1.10 Referenced Documents Template

The referenced documents section of each deliverable provides links to each document that is mentioned in a deliverable. The referenced document section is important for the MMISR project, as it provides a quick reference to documents mentioned in the plan in one (1) convenient location rather than spread throughout the deliverable. An example of the referenced document figure is shown below.

Figure 8 - Example Referenced Document Links Table

Document	Link
Project Glossary	Project Glossary
MMISR Communication Matrix	MMISR Communication Matrix
CCB Meeting Minutes	CCB Meeting Minutes
TCRB Meeting Minutes	TCRB Meeting Minutes
CCMP monthly report	CCMP Monthly Report
Governance Charts	Governance Charts
Governance Council - ARB	ARB Charter
Governance Council - BTC	
Governance Council - CCB	CCB Charter
Governance Council - DGC	DGC Charter
Governance Council - MMISR PMO	MMISR Charter
Governance Council - TCRB	

12.1.11 List of Acronyms Template

The list of acronyms refers to the table containing the acronyms, along with their respective definitions, that are specific to the deliverable that the list is included within. Each deliverable's acronyms list only contains the acronyms specific to that deliverable and will not contain acronyms from other deliverables. However, there is a master MMISR project-wide List of Acronyms available via the NM HSD SharePoint site. A link to this MMISR project-wide List of Acronyms can be found in Appendix C. Acronyms must be listed in alphabetical order, not the order in which they appear within the document. The following figure provide an example of the Acronym List tables found in all plans.

Figure 9 - Example Acronym List Table

Acronym	Definition
DED	Deliverable Expectation Document
HSD	Human Services Department
NM	New Mexico

13.0 Process Diagram

The diagram below, first outlined in the Quality Management Plan Approach, Section 3.0, is repeated here. All of the quality planning, quality assurance and quality control activities have separate workflows and processes. This high-level graphic is the best representation of the continuous nature of quality management. The planning work – establishing standards, documenting the project's governance approach in project management plans that are then used and executed against during the DDI phase, producing artifacts, deliverables and work products that are reviewed and inspected through quality control and quality assurance activities, leading to improvements, lessons learned through continuous process improvement leading to Plan updates.

Figure 10 - Quality Management Process Diagram

14.0 Federal Partners Certification

Demonstrating compliance with the Federal Partners certification requirements (OBC) are an essential part of the overall MMISR project. The MMIS Certification process ensures that the MMISR Enterprise Solution and its related modules meet Certification requirements. The QMP is a supporting component of the Project Management Plan and is required as part of the Certification process.

As a project, MMISR logged Decision 292 reflecting the transition from the MECT to OBC certification method. At a minimum the structure is based on these key components each requiring quality checks on produced artifacts:

Outcome Statement
- Outcomes Statements are broad, overarching goals HSD wants the solution to accomplish
- Each Outcome Statement is only associated to one module, reducing cross-module effort and confusion
- Outcomes Statements guide all other elements of OBC

Evaluation Criteria
- Evaluation Criteria are more specific, direct, and defined than the Outcomes Statements
- Evaluation Criteria provide the requirements framework
- Roughly align to business requirements, focused on what CMS is reviewing

Required Evidence
- Lowest level, most specific items in OBC
- Elements of the solution are given at this level, down to specific field or process functionality expected in the final product
- Detail specific elements that Federal Partners wishes to see in evidence documentation

Key Performance Indicators
- Not part of the "build" itself, but rather metrics by which the build is judged
- All are established either quarterly or annually and reflect performance of the solution
- Should be a simple ratio of successful events (or negative, if the measurement is of something to be avoided) compared to total events
- Ongoing through maintenance and operations for the life of the module

These elements are delivered in two stages:
- Operational Readiness Review (ORR) before go-live
- Certification Review (CR) six (6) months after go-live

Additionally, the APPENDIX B: FEDERAL PARTNER-REQUIRED OUTCOMES FOR SPECIFIC MES – MODULES document provides overarching indication as to sources of evidence and quality the MMIR project needs to demonstrate. A link to this document can be found in Appendix C.

When increasing the MITA Maturity from Level 1 and Level 2 (a highly manual state) to a MITA Maturity Level of 4 (a highly automated state), as MMISR is expected to do, the products produced by the MMISR are expected to be of high quality.

15.0 HHS 2020 Applicable Industry Standards

The applicable standards section of this deliverable covers the standards expected to be used during the work on this project. Below is a list of the relevant standards:
- Project Management Body of Knowledge (PMBOK 6 Edition)
- International Standards Organization/International Electrotechnical Commission/Institute of Electrical and Electronics Engineers (ISO/IEC/IEEE) 16326 (First Edition 2009-12-15) - ISO/IEC/IEEE International Standard – Systems and Software Engineering – Life Cycle Processes – Project Management
- ISO 9001:2015 - Quality Management
  Standard for 'Software and System Test Documentation' it is IEEE 829-2008
  Standard for 'Software Quality Assurance' (latest) is IEEE 730-2014
- Section 508 compliance requirements standards. Section 508" refers to Section 508 of the Rehabilitation Act (29 U.S.C. 794d) as amended by the Workforce Investment Act of 1998 (P.L. 105-220) of August 7, 1998

16.0 Assumptions / Constraints / Risks

The initial assumptions, constraints, and risks associated with this deliverable are documented in this section. As updates are made to the plan, additional assumptions and constraints are added to this section.

16.1 Assumptions

- The PMO team has enough access to the required NM HSD resources to execute and complete processes contained within this plan.
- The PMO team has ready access to any documents and information required to execute and complete processes contained within the Change Control Management Plan.
- NM HSD team members have adequate time to perform project tasks which include, but are not limited to:
    - Meeting with the PMO Team members
    - Participating in phone/virtual conversations
    - Responding to e-mail messages
    - Providing answers to questions and explanations of processes, materials and change requests as needed
- Proposed changes are approved or denied within the time limits outlined in the Change Management Plan and/or Change Request Documentation.
- Evaluation standards are agreed upon among the PMO, business leadership and Information Technology (IT) leadership.
- Project quality objectives as defined in the Project Management Plan are defined in the project charter.

16.2 Constraints

This QMP does not cover or address quality management and monitoring during the M&O phase, except to indicate that quality management is needed in both DDI and M&O phases. This Plan will go through the annual deliverable review process and as module vendors' M&O deliverables are submitted and approved by NM HSD, this QMP will undergo a review and update for M&O to be inclusive of those approved plans.

16.3 Risks

All project risks are updated and managed in accordance with the Risk Management Plan. All risks regarding quality management are logged in the Risk Register in alignment with the Risk Management Plan, included in Appendix C.

17.0 Deliverable Development

17.1 Deliverable Acceptance Criteria

The table below lists the Deliverable Acceptance Criteria.

Table 16 - Deliverable Acceptance Criteria

Item #	Description
1	Deliverable meets quality checklist, including deliverable standard checklist items
2	Deliverable meets requirements and description of the contract Statement of Work
3	Deliverable meets the details of this DED
4	Deliverable meets Federal Partner guidance

18.0 Appendices

18.1 Appendix A: Deliverable Record of Changes

The deliverable includes a record of changes in the following form:

Table 17 - Deliverable Reference of Changes

Version Number	Date	Author/Owner	Description of Change
V1.0	10/25/2020	Carla Monroe	Submission of V1.0
V2.0	08/21/2020	Dawn Gelle	First draft after approved DED from HSD on 7/20/2020
V2.1	9/21/2020	Dawn Gelle	Edits incorporated from HSD feedback received on 9/4/2020
V2.2	10/15/2020	Dawn Gelle	Edits incorporated from final HSD review received on 10/5/20
V3.0	5/26/2021	Craig Walendziak	Annual Review and updates
V4.0	07/31/2022	Wendy Burger	Annual Review and updates
V5.0	10/02/2023	Tabatha Anderson	Annual Review and updates

18.2 Appendix B: List of Acronyms

A list of project-specific acronyms are maintained on the MMISR SharePoint site.

Table 18 - List of Acronyms

Acronym	Definition
ARB	Architectural Review Board
BPA	Business Process Assessment
BPO	Business Process Outsourcing
CCB	Change Control Board
CCSC	Consolidated Customer Support Center
CIO	Chief Information Officer
DC	Data Conversion
DDI	Design, Develop, and Implementation
DED	Deliverable Expectation Document
DGC	Data Governance Council
DMW	Data Management Workgroup
EOD	End of Day
EPMO	Enterprise Project Management Office
HHS	Health and Human Services
HSD	Human Services Department

Acronym	Definition
ISO/IEC/IEEE	International Standards Organization/International Electrotechnical Commission/Institute of Electrical and Electronics Engineers
IT	Information Technology
IV&V	Independent Verification and Validation
LFC	Legislative Finance Committee
M&O	Maintenance and Operation
MAD	Medical Assistance Division
MARS-E	Minimum Acceptable Risk Standards for Exchanges
MECL	Medicaid Enterprise Certification Lifecycle
MECT	Medicaid Enterprise Certification Toolkit
MITA	Medicaid Information Technology Architecture
MMISR	Medicaid Management Information System Replacement
MSR	Monthly Status Report
NM	New Mexico
OBC	Outcomes Based Certification
PDCS	Plan, Do, Check, Act
PMBOK	Project Management Body of Knowledge
PMO	Project Management Office
PMP	Project Management Plan
QA	Quality Assurance
QC	Quality Control
QI	Quality Improvement
QM	Quality Management
QMP	Quality Management Plan
QP	Quality Planning
RACI	Responsible, Accountable, Consulted, and Informed
RFP	Request for Proposal
SDLC	Software Development Life Cycle
SIT	System Integration Testing
SLA	Service Level Agreements
SME	Subject Matter Experts
SOW	Statement of Work
TCRB	Technical Change Review Board
TMP	Test Management Plan
TMS	Technical Management Strategy
UAT	User Acceptance Testing
WSR	Weekly Status Report

18.3 Appendix C: Referenced Documents

The following is a list of documents references in this plan. Access to the links are based on SharePoint permissions.

Table 19 - Referenced Document Links

Document	Link
Acronym and Definition List	Acronym and Definition List
Annual Deliverable Review Process	Paid and Non-Paid Deliverable Job Aid
APPENDIX B: FEDERAL PARTNER-REQUIRED OUTCOMES FOR SPECIFIC MES – MODULES	Attachment #9 - Outcomes Based Statements and Metrics
DED and Deliverable Templates	DED and Deliverable Templates
Agenda, Notes, and PPT Templates	Agenda, Notes, and PPT Templates
Data Quality Plan	Data Quality Plan
Data Validation Process	Data Development and Validation Process (draft)
Defect Management Plan	Defect Management Plan
Deliverable Tracker Process/Job Aid	Paid and Non-Paid Deliverable Job Aid
Enterprise Deliverable Trackers	Enterprise Deliverable Tracker
Governance Council – ARB	ARB Charter
Governance Council – CCB	CCB Charter
Governance Council – DGC	DGC Charter
Governance Council – MMISR PMO	MMISR Charter
Governance Council – TCRB	TCRB Charter
HHS2020 Risk Log	HHS2020 Risk Log
Lessons Learned Register	Lessons Learned
New Mexico HHS 2020 MITA Technical Management Strategy (TMS)	Technical Management Strategy
PMO1 Project Management Plan	PMP
PMO6 Schedule Management Plan	Schedule Management Plan
PMO7 Risk Management Plan	Risk Management Plan
PMO10 Change Control Management Plan	Change Control Management Plan
PMO14 Test Management Plan	Test Management Plan
Paid and Non-Paid Deliverable Job Aid	Paid and Non-Paid Deliverable Job Aid
Section 508 Compliance	CMS Section 508 Policy