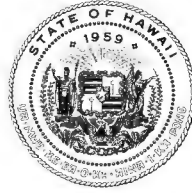


JOSH GREEN, M.D.
GOVERNOR



DOUGLAS MURDOCK
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March 22, 2024

The Honorable Ronald D. Kouchi
President of the Senate
and Members of the Senate
Thirty-Second State Legislature
State Capitol, Room 409
Honolulu, Hawai'i 96813


The Honorable Scott K. Saiki
Speaker and Members of the
House of Representatives
Thirty-Second State Legislature
State Capitol, Room 431
Honolulu, Hawai'i 96813

Aloha Senate President Kouchi, Speaker Saiki, and Members of the Legislature:

Pursuant to HRS section 27-43.6, which requires the Chief Information Officer to submit applicable independent verification and validation (IV&V) reports to the Legislature within ten days of receiving the report, please find attached the report the Office of Enterprise Technology Services received for the State of Hawai'i, Department of Human Services, Med-QUEST Division, Health Analytics Program.

In accordance with HRS section 93-16, this report may be viewed electronically at <http://ets.hawaii.gov> (see "Reports").

Sincerely,


Douglas Murdock (Mar 22, 2024 15:24 HST)

Douglas Murdock
Chief Information Officer
State of Hawai'i

Attachment



Hawai'i Department of Human Services Med-QUEST Division Health Analytics Program

IV&V Monthly Status Report (Draft)
for February 2024

Report Date: February 29, 2024

Overview



- [Executive Summary](#)
- [IV&V Findings and Recommendations](#)
- [IV&V Engagement Status](#)
- [Appendices](#)
 - [A – IV&V Criticality Ratings](#)
 - [B – Risk Identification Report](#)
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Solutions that Matter

The background is a solid dark blue color. It is decorated with several abstract geometric shapes in lighter shades of blue. These include squares and rounded rectangles, some of which are outlined in white, while others are solid. The shapes are scattered across the page, with a higher concentration on the left side. The text 'Executive Summary' is centered horizontally and positioned in the lower-left quadrant of the page.

Executive Summary

Executive Summary



Overview: In February 2024, the State of Hawai'i Health Analytics Program (HAP) Integrated Data and Analytic Platform (IDAP) Project worked towards finalizing the scope of the Minimal Viable Product (MVP). The Project made progress with Data Governance (DG), Key Performance Indicator (KPI) work sessions, building workflows, and planning Workflow Palooza work sessions. The Project is finalizing the User Acceptance Test (UAT) Test Plan and use case creation. The final batch of Flags and Indicators were delivered to the State by University of Hawaii resources.

Business Intelligence (BI), Security, Training and Purview design sessions were ongoing. Data quality issues were raised to the State with the "All Things Data" procedures. The Design, Development & Implementation (DDI) vendor presented the results of the Optum Symmetry Preliminary Run, e.g., comparing results with nationwide benchmarks. The Project started to evaluate whether Snowflake and Virtual Desktop Infrastructure (VDI) can address HAP's advanced analytics needs.

Scope, Schedule & Cost: Delays in the delivery of business rules for Flags and Indicators to support data modeling activities have impacted the project schedule.

Eleven Change Requests (CRs) have been presented to DHS for review. Three CRs were approved in accordance with the State's revised CR process. Of those, two were priced at approximately \$570,000 and the 3rd CR had no budget impact. Without knowing the cost associated with the remaining eight CRs that are currently under review, there is a possibility that the remaining CRs, if approved, could impact the project budget.

Since project inception, the State has paid the DDI Vendor roughly \$400,000 for DDI activities budgeted at approximately \$8.8 million. IV&V recommends using tools, e.g., dashboards that would give stakeholders visibility into project costs, scope and schedule.

Findings: The February 2024 IV&V Report includes nine findings (2 Issues, 5 Risks, and 2 Preliminary Concerns) regarding insufficient project resources, the absence of a baselined schedule, delays in the review of Data Quality (DQ) Rules and delivery of data definitions, and the planned use of different project management tools to support the Project. The report also cites IV&V's concerns about the delayed go-live date of the IDAP solution (pushed to the end of calendar year 2024) and the possibility of CRs impacting the project schedule, scope and cost. Finally, IV&V closed a Preliminary Concern (finding #9).

This report represents PCG's last IV&V report in the transition to providing Technical Assistance (TA) services on the HAP IDAP Project to avoid conflict of interest concerns.

Project Health



Dec	Jan	Feb	Category	Health	IV&V Observations
			Project Management		<p>The University of Hawai'i (UH) Project Manager (PM) position needs to be backfilled. Lack of training and testing resources may negatively impact the overall system UAT.</p> <p>There is no Integrated Master Schedule (IMS) for the Project. Go-live has been delayed from February 2024 to late 2024, with no defined date.</p> <p>CRs could result in schedule, cost and scope impacts.</p>
N/A			Quality Management		<p>Data quality (DQ) issues identified via data modeling, ETL and testing activities continue to be identified to the HAO in accordance with the "All Things Data" procedures.</p> <p>Delays in the review and feedback of DQ Rules could result in a schedule impact.</p>
N/A			Requirements Management		<p>The Project has developed a high-level Requirements Management Plan. Requirements have been defined and documented. There is a Requirements Traceability (RT) Process.</p>
N/A	N/A		Operating Environ.	--	<p>The DDI vendor changed its default ticketing system from ServiceNow to JIRA.</p>
N/A			Development Environment		<p>Weekly design sessions have been ongoing. The project is evaluating if Snowflake and Virtual Desktop Infrastructure (VDI) can address HAP's advanced analytics' needs.</p>
			Software Development		<p>UH delivered the last batch of Flags and Indicators. Delays in the delivery of the business rules for Flags and Indicators have impeded the DDI vendor from completing the dashboard designs, data modeling activities and have impacted the project schedule.</p>
N/A			System & Accept. Testing		<p>The Project continued with User Acceptance Test (UAT) use case creation and with finalizing the UAT Test Plan. The lack of testing resources may negatively impact the overall system UAT.</p>
			Data Management		<p>While the HAP Data Governance framework is not yet established, the Project is making significant strides towards the DG Framework creation, updating DG policies, building workflows, and developing MVP changes to the DG Orientation Program, DG Handbook and Key Performance Indicators (KPIs).</p>
N/A	N/A	N/A	Operations Oversight	--	<p>There are no IV&V observations for this category due to the Project's current phase in this reporting period.</p>
N/A	N/A	N/A	CMS Streamlined Modular Certification	--	<p>There are no IV&V observations for this category due to the Project's current phase in this reporting period.</p>

IV&V Findings and Recommendations

IV&V Findings and Recommendations



Project Management

Finding 3 – Issue: The lack of all required HAP Project and program staff may cause delays in the HAP start-up/planning and execution phases.

Criticality Rating*

Significance:

Having limited resources to support HAP planning and execution phases could delay critical requirements gathering and validation processes, which could impact the effectiveness of the resulting solution. Also, stretching existing resources could put a strain on the quality of work required to maintain project efficiencies and execution.

The Implementation Advanced Planning Document (IAPD) identifies several project resources that have yet to be secured, including positions within the HAO, the University of Hawaii (UH), and the Arizona Health Care Cost Containment System (AHCCCS). This may have a negative impact on the program and subsequent projects. Without available resources, the project schedule may be impacted.

February 2024 Status Update: The Project Manager (PM) from University of Hawai'i (UH) transitioned into a new position. This position needs to be backfilled. Lack of training and testing resources may negatively impact the overall system UAT. The Project will need more "hands-on" resources (staff to do the work) in order to achieve the Project objectives within the projected timeline.



Recommendations

Progress

- IV&V recommends continuing with hiring the required staff and/or contractors to fill open positions and roles
- If required work is postponed as priorities are established, IV&V recommends planning for the possibility of short- or longer-term additional resource needs to avoid downstream delays.

In Progress


In Progress

* Refer to Slide 21 for Definitions on IV&V Findings Criticality Ratings

IV&V Findings and Recommendations



Project Management

Finding 10 – Risk: Lack of an Integrated Master Schedule may expose the Project to unpredicted risks and cost overruns.	Criticality Rating
<p>Significance:</p> <p>The lack of a baselined Integrated Master Schedule (IMS) for the HAP Project could create challenges in accurately defining the updated scope, resulting in ambiguity of the deliverables and timelines, and difficulty in tracking project progress.</p> <p>February 2024 Status Update: HAP has yet to create an Integrated Master Schedule (IMS). PMO has indicated that the baseline IMS will be created once the Minimal Viable Product (MVP) is finalized.</p>	
Recommendations	Progress
IV&V recommends that the PMO creates the Integrated Master Schedule (IMS) and baseline the schedule to account for the increased scope and clearly delineate ongoing and upcoming tasks and to baseline the IMS.	In Progress

IV&V Findings and Recommendations



Requirements Management

Finding 9 – Preliminary Concern: Lack of early formal Stakeholder identification in the DDI phase, may result in low-end user adoption and increased end user error.

Significance:

The lack of a formal stakeholder matrix that identifies user types like Super Users, Change Champions/Change Catalysts early in the DDI phase, before the JPAS/JAD sessions, may result in low end user utilization/adoption rates and increased probability of end user error rates in production. Having the right stakeholders in the JAD/JPAS sessions will encourage more comprehensive elicitation sessions and business requirements.

February 2024 Status Update: HAP has a Stakeholder Registry with, e.g., defined stakeholder groups, Stakeholder roles and Stakeholder contact information. HAP has continued to engage Stakeholders. IV&V has closed this Preliminary Concern.

Recommendations	Progress
IV&V recommends identifying end user types and including these types in the requirements and design sessions so that the resulting Solution addresses their needs and supports high-quality user experiences.	Closed
IV&V recommends updating the Organizational Change Management (OCM) plan to include more detail in how change will be communicated with a communication matrix and schedule for OCM activity execution. The plan should also include how end users will be engaged during DDI through to M&O.	Closed

IV&V Findings and Recommendations




Operating Environment

Finding 11 – Preliminary Concern: The State and DDI vendor are using different tools to manage the system development life cycle of the HAP Project.	Criticality Rating
<p>Significance:</p> <p>A decision was made that JIRA would serve as the ticket management system for IDAP instead of ServiceNow. The DDI vendor will be using Micro Focus Application Lifecycle Management (ALM) for managing, developing, and tracking requirements, requirements traceability, test cases and defects. JIRA is a proven platform for managing the entire development lifecycle. Using two separate tools like JIRA and Micro Focus ALM can have disadvantages, e.g., integration challenges, duplication efforts, and increased costs. It's essential to consider the potential drawbacks and challenges associated with using multiple tools simultaneously.</p> <p>February 2024 Status Update: No changes.</p>	N/A
Recommendations	Progress
<ul style="list-style-type: none"> Assess if the project can standardize and use one tool (e.g., JIRA) instead of two (JIRA and Micro Focus ALM). 	New
<ul style="list-style-type: none"> IV&V recommends new IV&V Vendor assesses and closely tracks this Preliminary Concern. 	New



IV&V Findings and Recommendations


Data Management

Finding 6 – Risk: A Data Governance framework is not yet established.	Criticality Rating
<p>Significance:</p> <p>The Data Governance (DG) Framework is a foundational deliverable, essential to informing most of the DG work in progress. Without an approved DG framework, there may be rework required to align the work that is in progress to the DG framework once it is approved.</p> <p>February 2024 Status Update: HAP continued to make progress on Data Governance (DG) in the areas of updating DG policies, delivering the final batch of Flags and Indicators on 02/23/2024 as part of Task Order 1 (TO1), and continuing to develop MVP changes to the DG Orientation Program, DG Handbook and Key Performance Indicators (KPIs).</p>	
Recommendations	Progress
<ul style="list-style-type: none">• IV&V recommends developing a DG Framework, policies, processes, practices, and tools.	In Progress
<ul style="list-style-type: none">• IV&V recommends communicating the DG structure to all key and impacted (internal and external) stakeholders.	In Progress



IV&V Findings and Recommendations


Data Management

Finding 8 – Risk: The lack of an existing business rules glossary and designated data stewards could negatively impact data quality and reduce confidence in the accuracy and reliability of the data warehouse.	Criticality Rating
<p>Significance:</p> <p>Having foundational data dictionaries, rules, and workflow documentation could prevent delays or ineffective resolution of data quality issues. Delays in unresolved data quality could lead to decreased confidence in the accuracy and reliability of the data warehouse.</p> <p>February 2024 Status Update: UH delivered Flags and indicators as part of Task Order 1 on 2/23/2024 and is clarifying the State’s questions.</p>	
Recommendations	Progress
<p>To mitigate this risk, it is essential to establish clear and comprehensive documentation of business glossary rules and designate data stewards to oversee the process. This approach will help to ensure that the IDAP vendor can quickly and effectively address any data quality issues that arise and maintain a high level of confidence in the accuracy and reliability of the data warehouse. Additionally, as data stewards are identified, it is important to document and communicate the level of effort, time commitment, and responsibilities of the data steward.</p>	In Progress



IV&V Findings and Recommendations


Data Management

Finding 12 – Risk: The lack of data definition needed for IDAP data modeling could impact data quality and cause project schedule delays.	Criticality Rating
<p>Significance:</p> <p>Delays in the delivery of KOLEA field definitions, Interface Control Document (ICD), data documentation, and data dictionaries needed for IDAP data modeling could result in delays in creating necessary data models, potentially impacting Extract, Transfer and Load (ETL) efforts and the overall project schedule. Also, Incomplete or inaccurate data models could lead to inconsistency and poor data quality.</p> <p>February 2024 Status Update: IV&V created a new finding.</p>	
Recommendations	Progress
IV&V recommends that the KOLEA SMEs and Stakeholders engage to validate the accuracy and completeness of data dictionaries and ensure missing information is identified and addressed in a timely manner	New



IV&V Findings and Recommendations

Data Management


Finding 13 – Issue: The lack of a timely review and feedback of Data Quality Rules by the state will have a schedule impact	Criticality Rating
<p>Significance:</p> <p>The DDI Vendor dashboard mockups are based on 8 dimensions, of which rules are classified into these 8 dimensions. The DDI vendor needs feedback on the Data Quality rules. The delays in the review and lack of feedback of Data Quality Rules could result in schedule impact.</p> <p>February 2024 Status Update: IV&V created a new finding.</p>	

Recommendations	Progress
<p>IV&V recommendations to complete their review of the data quality rules without impacting the project schedule include:</p> <ol style="list-style-type: none">1. Create a plan: The State should develop a plan/process(es) to support the review of the Data Quality rules on a timely basis.2. Prioritize Rules: Prioritize the rules based on their impact on the business and project's objectives. Focus on reviewing the most crucial rules first to ensure that essential data quality aspects are addressed promptly.3. Establish Clear Criteria: Define clear criteria for evaluating each rule. Having predefined criteria streamlines the review process and minimizes the time spent deliberating over each rule. Criteria may include relevance to the business, project objectives, impact on data integrity, and feasibility of implementation.4. Collaborate with Stakeholders: Involve relevant stakeholders in the review process to gain insights into the importance of each rule and any potential trade-offs. Such collaboration ensures the review focuses on rules that align with business and project priorities and minimizes unnecessary delays caused by disagreements or misunderstandings.	New

IV&V Findings and Recommendations



Project Management

Finding 14 – Risk: New Change Requests (CRs) may have schedule, cost and scope impacts	Criticality Rating
<p>Significance:</p> <p>Eleven Change Requests (CRs) have been presented to DHS for review. While three CRs were approved in accordance with the State’s revised CR process, two were priced at approximately \$570,000 (the 3rd CR had no budget impact). Without knowing the cost associated with the remaining eight CRs that are currently under review, there is a possibility that the remaining CRs, if approved, could impact the project schedule, scope and budget.</p> <p>February 2024 Status Update: IV&V created a new finding.</p>	

Recommendations	Progress
<ul style="list-style-type: none"> CRs have the potential to alter the project's scope, cost, and schedule, either positively or negatively. Effective change management processes, including thorough impact assessments and stakeholder communication, are essential for mitigating risks and ensuring successful project outcomes. 	New
<ul style="list-style-type: none"> IV&V recommends using tools (e.g., dashboards) for tracking project costs. Dashboards offer several benefits by providing, e.g., real-time visibility, data visualization, centralized information, customization options, forecasting capabilities, cost control mechanisms, improved communication, risk management support and resource allocation optimization. 	New

IV&V Findings and Recommendations









Closed Findings

Finding #	Category	Finding Statement	Finding Type	Reason for Closing	Resolution Date
1	Project Management	The HAP Sponsor and team are visible and provide dedicated leadership to the Program.	Positive Finding	Expired*	5/31/2022
2	Project Management	The PMO is planning to begin OCM earlier than planned.	Positive Finding	Expired*	5/31/2022
5	Project Management	Lack of a centralized program-level document repository may cause rework and delays by the project team to find the information needed to perform their activities.	Preliminary Concern	The PMO Vendor established a SharePoint site for all project aspects (State and Vendor) to share	6/30/2022
7	HAP Annual Conference	The HAP Annual Conference promoted a sense of coordination and collaboration in a multi-vendor environment prudent for the success of the HAP.	Positive Finding	Expired*	4/30/2023






IV&V Status

IV&V Engagement Status

IV&V Engagement Area	Feb	Comments
IV&V Budget		No changes to the IV&V budget.
IV&V Schedule		No IV&V schedule updates in this reporting period.
IV&V Deliverables		The February 2024 report is PCG's last IV&V Report for the HAP Project.
IV&V Staffing		IV&V began reassigning resources from team to support HAO technical assistance request.
IV&V Scope		HAO discussing PCG IV&V scope change to leverage expertise for HI HAP technical assistance.
CMS Streamlined Modular Certification		The HAO regularly reports to CMS on project activities and continues discussions with CMS.

Engagement Status Legend

 The engagement area is within acceptable parameters.	 The engagement area is somewhat outside acceptable parameters.	 The engagement area poses a significant risk to the IV&V project quality and requires immediate attention.
--	--	--

IV&V activities in the February reporting period:

- Continue attending project meetings
- Begin HI HAP technical assistance
- Assess project documentation and activities
- Finalize February IV&V Monthly Status Report
- Develop draft February IV&V Monthly Status Report

Deliverables and Artifacts Reviewed



The following are a list of documents and artifacts reviewed during this period:

#	Documents/ Artifacts	Dates
1	Change Requests	
2	MDM_Data Source to Data Elements_Draft_2024-01-20.ppt	
3	HAP_DDI - Bi-Weekly Status Report - 01.09.2024 thru 01.23.2024.pptx (sharepoint.com)	
4	MDM requirements excel.	
5	Recipient DM Validation Tracker.xlsx (sharepoint.com)	
6	Design Session 2 - Optum Data Governance Purview design presentation	
7	HI HAP Business Processes	
8	HAP Day 1 Tasks and Workflows- MVP - 1.12.2024.pptx Data Quality Items.	



Additional Inputs




The following are a list of meetings IV&V attended during this period:

#	Meetings and Work Sessions Attended	Date
1	HAP_IDAP_Hawaii Dashboard Design Meetings (RACI: BUSINESS INTELLIGENCE)	2/15/2024
2	HAP_IDAP_Purview Design Session (RACI: Data Governance)	2/20/2024
3	HAP DDI All Data	2/6/2024 2/12/2024 2/20/2024
4	HAP_IDAP - Security Design Session - Weekly	2/21/2024
5	HAP_IDAP_Snowflake and VDI Validation Exercise Checkpoint (RACI: DATA MANAGEMENT)	2/12/2024 2/14/2024 2/22/2024
6	HAP_PMO - RAID - Topic Week	2/12/2024 2/26/2024
7	HAP IDAP Symmetry Design Session	2/27/2024
8	HAP_IDAP_Snowflake and VDI Proof of Concept (RACI: DATA MANAGEMENT)	2/12/2024 2/20/2024 2/27/2024
9	HAP_IDAP_Hawaii Training Matrix	2/29/2024

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Appendices

Appendix A – IV&V Criticality Ratings

Criticality Rating	Definition
	<p>A high rating is assigned if there is a possibility of substantial impact to product quality, scope, cost, or schedule. A major disruption is likely, and the consequences would be unacceptable. A different approach is required. Mitigation strategies should be evaluated and acted upon immediately.</p>
	<p>A medium rating is assigned if there is a possibility of moderate impact to product quality, scope, cost, or schedule. Some disruption is likely, and a different approach may be required. Mitigation strategies should be evaluated and implemented as soon as feasible.</p>
	<p>A low rating is assigned if there is a possibility of slight impact to product quality, scope, cost, or schedule. Minimal disruption is likely, and some oversight is most likely needed to ensure that the risk remains low. Mitigation strategies should be considered for implementation when possible.</p>

Appendix B – Findings Log

The complete IV&V Findings Log for the DHS Health Analytics Project is provided in a separate file with the Quarterly Assessment Reports.

Appendix C – Acronyms and Glossary

Acronym	Definition
AHCCCS	Arizona Health Care Cost Containment System
APD	Advance Planning Document
BAA	Business Associate Agreement
CFR	Code of Federal Regulations
CM	Configuration Management
CMMI	Capability Maturity Model Integration
CMS	Center for Medicare and Medicaid Services
CR	Change Request
DDI	Design, Development and Implementation
DED	Deliverable Expectation Document
DCCA	Hawaii Department of Commerce and Consumer Affairs
DHS	Hawaii Department of Human Services
DLIR	Hawaii Department of Labor and Industrial Relations

Appendix C – Acronyms and Glossary

Acronym	Definition
DOTAX	Hawaii Department of Taxation
EA	Enterprise Architecture
EFT	Electronic Funds Transfer
EPHI	Electronic Protected Health Information
ETS	State of Hawaii Office of Enterprise Technology Services
FAR	Federal Acquisition Regulation
HAR	Hawaii Administrative Rules
HHDC	Hawaii Health Data Center
HHS	U.S. Department of Health and Human Services
HIPAA	Health Information Portability and Accountability Act of 1996

Appendix C – Acronyms and Glossary

Acronym	Definition
HPMMIS	Hawaii Pre-paid Medical Management Information System
HRS	Hawaii Revised Statutes
HST	Hawaii Standard Time
IDAP	Integrated Data And Analytic Platform
IEEE	Institute of Electrical and Electronic Engineers
IRS	Internal Revenue Service
ITIL	Information Technology Infrastructure Library
IV&V	Independent Verification and Validation
KOLEA	Kauhale On-Line Eligibility Assistance
M&O	Maintenance & Operations
MQD	Hawaii Department of Human Services MedQuest Division
NIST	National Institute of Standards and Technology

Appendix C – Acronyms and Glossary

Acronym	Definition
OBC	Outcomes Based Certification
OE	Operating Environment
OIT	Department of Human Services Office of Information Technology
PHI	Protected Health Information
PIP	Performance/Process Improvement Plan
PMBOK®	Project Management Body of Knowledge
PMI	Project Management Institute
PMO	Project/Program Management Office
PMP	Project Management Plan
QA	Quality Assurance
QM	Quality Management

Appendix C – Acronyms and Glossary

Acronym	Definition
RMP	Requirements Management Plan
RTM	Requirements Traceability Matrix
SEI	Software Engineering Institute
SLA	Service-Level Agreement
SMC	Streamlined Modular Certification
SME	Subject Matter Expert
SOW	Statement of Work, Scope of Work
VVP	Software Verification and Validation Plan
XLC	Expedited Life Cycle

HI DHS Health Analytics Program

The State of Hawaii through the Department of Human Services (DHS) is building a health analytics program by developing an integrated data and analytics platform to consolidate multiple data sources into a single integrated analytic platform, evolving its capacity for advanced analytics, and maturing the data governance processes of Medicaid data sources that will contribute data to the platform.

Health Analytics IV&V Project

IV&V performs objective assessments of the project beginning with the oversight and evaluation of the design, development, and implementation (DDI) phase of the establishment of the health analytics project. IV&V will support DHS in developing an evaluation framework that will endure beyond the scope of the DDI phase of the project, into future maintenance and operations (M&O) phases. This project shall establish an evaluation strategy and structure that continues to facilitate the growth, evolution, optimal operations and maturity of DHS' health analytics project.

The six key areas of the IV&V scope of work are:

1. Planning
2. Implementation
3. Recommendations
4. Evaluation
5. Reporting
6. Other Requirement

What is Independent Verification and Validation (IV&V)?

- Oversight by an independent third party that assesses the Project against industry standards to provide an unbiased view to stakeholders
- The goal of IV&V is to help the State get the solution they want based on requirements and have it built according to best practices
- IV&V helps improve design visibility and traceability and identifies (potential) problems early
- IV&V objectively identifies risks and communicates to project leadership for risk management

PCG's Eclipse IV&V® Technical Assessment Methodology

- Consists of a 4-part process made up of the following areas:
 1. **Discovery** – Discovery consists of reviewing documentation, work products and deliverables, interviewing project team members, and determining applicable standards, best practices and tools.
 2. **Research and Analysis** – Research and analysis is conducted in order to form an objective opinion.
 3. **Clarification** – Clarification from project team members is sought to ensure agreement and concurrence of facts between the State, the Vendor, and PCG.
 4. **Delivery of Findings** – Findings, observations, and risk assessments are documented in this monthly report and the accompanying Findings and Recommendations log. These documents are then shared with project leadership on both the State and Vendor side for them to consider and take appropriate action on

Logic Model Approach

PCG will leverage the Eclipse Assessment Methodology described above to perform traditional IV&V activities and blend it with a project logic model to focus on project outcomes (answering the question, “Is the integrated data and analytic platform and Data Governance Program helping DHS’ Medicaid program achieve its desired outcomes?”) with the underlying objective of achieving CMS certification through the OBC process. Using this blended approach, we will evaluate the inputs, activities, outputs, short-term outcomes, intermediate outcomes, and long-term outcomes of the project and will inform project stakeholders of significant risks or issues as the Health Analytics Project is planned, developed and deployed.

IV&V Assessment Categories for the Health Analytics Project:

- Project Management
- Quality Management
- Training
- Requirement Management
- Operating Environment
- Development Environment
- Software Development
- System and Acceptance Testing
- Data Management
- Operations Oversight



Solutions that Matter

ID	Title	Finding Statement	Created By	Owner	Finding Type	QAR	Date Identified	Origin	Supporting Analysis	PCG Recommendation	Impact	Probability	Priority	Event Horizon	Status	Finding Update	Actual Resolution Date	Expected Resolution Date	Created	Closure Reason
1	Project Management	The HAP Sponsor and team are visible and provide dedicated leadership to the Program.	Strand, Jolene	HAO	Positive Finding	QAR 1	4/25/2022	Needs Assessment	The importance of HAO leadership during the planning phase should not be underestimated. It is critical all vendors and program/project team members align to the same vision and expectations of DHS/HAO. This requires commitment and dedication by the HAO to communicate effectively and often and is clearly being demonstrated.	IV&V recommends that the HAO continue to communicate and include the leadership team.	N/A	N/A	N/A	4/30/2023	Closed	During the interviews, the IV&V team consistently heard that the HAP Sponsor and Team effectively communicate the HAP vision and are available to answer questions and set the direction. The importance of HAO leadership during the planning phase should not be underestimated. It is critical all vendors and program/project team members align to the same vision and expectations of DHS/HAO. This requires commitment and dedication by the HAO to communicate effectively and often and is clearly being demonstrated.	5/31/2022	4/30/2022	4/26/2022 11:56	Positive Finding
2	Project Management	The PMO is planning to begin OCM earlier than planned.	Strand, Jolene	PMO	Positive Finding	QAR 1	4/26/2022	Needs Assessment	Starting OCM activities early establishes a foundation for the Program activities and keeps stakeholders engaged and informed, which encourages early adoption.	The IV&V team fully supports this approach as it should promote the change process by providing the project team with the necessary skills and tools.	N/A	N/A	N/A	4/30/2023	Closed	The HAO acquired Organizational Change Management (OCM) services from the Data Governance and Program Management Office (PMO) vendors. As the PMO onboarded, they recognized the need to begin OCM services earlier than planned and are currently working with the HAO to organize and begin OCM. The IV&V team fully supports this approach as it should promote the change process by providing the project team with the necessary skills and tools.	5/31/2022	4/30/2022	4/26/2022 12:24	Positive Finding
3	Project Management	The lack of all HAP project and program staff may cause delays in the HAP start-up/planning and execution phases.	Strand, Jolene	HAO	Issue	QAR 1	4/25/2022	Needs Assessment	Having limited resources to support HAP planning and execution phases could delay critical requirements gathering and validation processes, which could impact the effectiveness of the resulting solution. Also, stretching existing resources could put a strain on the quality of work required to maintain project efficiencies and execution.	1. Continue to take the actions already in progress to hire the required staff. 2. Consider filling open positions with Contractors. 3. As the IDAP vendor is planned to onboard in October, prioritize the work for the other vendors to be as prepared as possible for when the IDAP vendor onboards. 4. If any required work is post posted due to activity 3, identify the plan to include possible new resource needs to bring all project aspects back on-track.	Medium	Medium	Medium	4/25/2022	Open	2/29/2024: The Project Manager (PM) from University of Hawai'i (UH) transitioned into a new position. This position needs to be backfilled. Lack of training and testing resources may negatively impact the overall system UAT. The Project will need more "hands-on" resources (staff to do the work) in order to achieve the Project objectives within the projected timeline. IV&V commends the project continue to take the actions already in progress to hire the required staff. 01/31/2024: Resource needs continue; the Health Analytics Office (HAO) continues to seek positions to fill key resource gaps. 12/31/2023: HAO continues to procure for key resource gaps 11/30/2023: HAO continues to procurement efforts for key resource gaps. IV&V will examine in the next reporting period whether sufficient resource coverage is attained to close this finding. 10/31/2023: The project onboarded a new Test Manager, UAT Manager, and 3 Data Management Analysts. 9/30/2023: The project announced the onboarding of a new Test Manager. 8/31/2023: The project continues to leverage existing vendors for key resource gaps while moving forward to procure vendors or staff to fill positions. 7/30/2023: The critical resource roles are identified and supported by existing stakeholders. IV&V will continue to monitor the project's ability to manage resource needs. 6/30/2023: The critical resource roles are identified and supported by existing stakeholders. IV&V will review existing project activities and artifacts to determine whether this finding can be closed within the next reporting period. 5/31/2023: no change 4/30/2023: IV&V reduced the severity to Medium due to the hiring strategy	N/A	N/A	4/26/2022 12:46	N/A
4	Project Management	Lack of program roles and responsibilities may cause rework or gaps in planned activities and tasks.	Strand, Jolene	HAO	Preliminary Concern	QAR 1	4/25/2022	Needs Assessment	Roles and Responsibilities: The HAP is comprised of several vendors providing specific services to support the program, requiring close communication and coordination of the activities and tasks in all phases of the HAP. Initially, as the roles and responsibilities are developed, gaps may be identified that require attention. The earlier gaps are identified and addressed, the risk to the program decreases. Additionally, the roles and responsibilities may also aid the program team to think/act holistically and cohesively avoiding work compartmentalized by silos. The HAO required each vendor to develop a Project Management Plan which should include the generation of the roles and responsibilities. Once established IV&V will validate it includes the level of detail and cross-functional aspects that are necessary to minimize risk.	Clearly documented roles and responsibilities should be established to ensure that the integration points and decision-makers are identified, and each vendor performs to their respective expectations.	N/A	N/A	N/A	11/1/2023	Closed	6/30/2023: PMO built out the Stakeholder roles and responsibilities in the HI HAP Repository, therefore IV&V will close this finding. 5/31/2023: no change 4/30/2023: During this period, the Technical Sponsor RACI has been updated with recent roles and responsibilities to reflect task assignments and newly onboarded vendors. IV&V recommends reviewing the Technical Sponsorship Charter and updating the document with any relevant changes, as well as expanding the RACI to include non-State Technical Sponsor roles and responsibilities like IDAP vendor roles and responsibilities within the SDLC and Certification Management activities. IV&V reduced this finding to Low severity due to established roles and responsibilities and associated processes and documentation. 3/31/2023: Since February, positive progress was observed with the identification of roles, the development of a RACI chart, and cross-functional communications through meetings and tools. IV&V reduced the criticality to Medium. IV&V will evaluate project activities related to this preliminary concern to determine at which point IV&V may close this finding. 2/28/2023: Positive progress was observed in February during the HAP Annual Conference sessions and onboarding activities with the IDAP vendor. During the HAP Annual Conference each vendor presented their approach to meet contract requirements which included the high-level identification of dependencies and collaboration needed with the vendors and HAO. The IDAP vendor scheduled and conducted several Joint Product Alignment Sessions (JPAS) to align the requirements and expectations. These sessions are intended to discuss and refine the 'who' and 'what' for each activity/task. IV&V will continue to monitor this finding throughout these sessions. 1/31/2023: Continued progress was made with the Technical SME's. The project has sponsors for most of the technical areas, and agreements are	6/30/2023	12/1/2022	4/26/2022 12:50	Resolved

5	Project Management	Lack of a centralized program-level document repository may cause rework and delays by the project team to find the information needed to perform their activities.	Strand, Jolene	PMO	Preliminary Concern	QAR 1	4/25/2022	Needs Assessment	Document Repository: Lack of a centralized program-level document repository. As a best practice for any Program, all deliverables and key project artifacts to support the program and individual projects should be accessible to approved project personnel. This repository will support the multi-vendor solution, allow the project teams access to the information they need to perform their responsibilities, and support the CMS requirements for a single repository of the key projects and program data. Having a document repository is not only critical to the DDI phase but as the HAP moves into the Operations and Maintenance (O&M) Phase as many of the deliverables/artifacts should be maintained to ensure a smooth transition and ability for the O&M team to efficiently manage the HAP. Currently, the HAO and PMO are researching options to provide the Document Repository.	IV&V recommends developing a centralized program-level document repository.	N/A	N/A	N/A	N/A	Closed	6/30/2022: The PMO Vendor established a SharePoint site for all project aspects (State and Vendor) to share deliverables and documents as a temporary solution. Once the IDAP Vendor is onboarded the project will establish and implement the long term document repository. IV&V is retiring this finding. 05/31/2022 - The PMO Vendor is actively pursuing options to create/maintain a HAP document repository. Until the solution is fully defined and adopted by the HAP, a workaround has been established for the IV&V team to gain access to program and project documents. Document Repository: Lack of a centralized program-level document repository. As a best practice for any Program, all deliverables and key project artifacts to support the program and individual projects should be accessible to approved project personnel. This repository will support the multi-vendor solution, allow the project teams access to the information they need to perform their responsibilities, and support the CMS requirements for a single repository of the key projects and program data. Having a document repository is not only critical to the DDI phase but as the HAP moves into the Operations and Maintenance (O&M) Phase as many of the deliverables/artifacts should be maintained to ensure a smooth transition and ability for the O&M team to efficiently manage the HAP. Currently, the HAO and PMO are researching options to provide the Document Repository.	6/30/2022	7/31/2022	4/26/2022 12:52	The PMO Vendor established and implemented a SharePoint site as a temporary solution. The long-term solution will be implemented after the IDAP vendor is onboard.
6	Data Management	A Data Governance framework is not yet established.	Grieco, John	HAO	Risk	QAR 2	12/5/2022	General IV&V Activity	The DG Framework is a foundational deliverable, essential to informing most of the DG work in progress. Without an approved DG framework, there may be rework required to align the work that is in progress to the DG framework once it is approved.	Ensure that the scope of the data governance support team is clear and prioritizes the Data Governance framework as a key deliverable within the first month on onboarding. IV&V recommends identifying the root cause of the delays to the completion of the DG Framework and to continue collaboration between Med-QUEST staff and the DG vendor to complete and approve the DG Framework. As part of the Freedman Healthcare close down activities, request Freedman Healthcare to upload all HAP project artifacts and deliverables (regardless of the status) to the HAP Program Repository. Using the procurement options available to the HAO, procure for Data Governance services as soon as possible. Working with the DHS leadership, identify if there are any options for a short-term solution to avoid disruption to the overall HAP program.	Medium	Medium	Medium	N/A	Open	2/29/2024: HAP continued to make progress on Data Governance (DG) in the areas of updating DG policies, delivering the final batch of Flags and Indicators on 02/23/2024 as part of Task Order 1 (TO1), and continuing to develop MVP changes to the DG Orientation Program, DG Handbook and Key Performance Indicators (KPIs). IV&V recommends identifying the root cause of the delays to the completion of the DG Framework and to continue collaboration between Med-QUEST staff and the DG vendor to complete and approve the DG Framework. 01/31/2024: Purview design sessions are ongoing. The DDI Vendor focused on configuring Purview within the IDAP Azure environment and Purview Collection and continues to develop the project plan for the next steps in Purview implementation. It was decided that the Purview MVP will be comprised of approximately 125 assets. The Project has updated the DG Orientation Program and DG Handbook and the State provided feedback (cost concerns) on the DDI Vendor's proposal submitted in December 2023 for the MDM tool. 12/31/2023: The DDI Vendor worked to install and configure Purview within the IDAP Azure environment and identified the next steps for Purview: a) designing Purview collections that align with Security profiles; b) developing classifications within Purview; and c) developing the plan to begin IDAP data scans d) developing the project plan for the next steps in Purview implementation. The DDI Vendor and PMRS team have been developing DG glossary for IDAP and Purview specific terms. 11/30/2023: The PMO Related Services (PMRS) team has established a base data governance framework, a data governance charter and is creating policies and working with the state and partners to help resolve data quality issues. A new PMRS Data Management team of 7 members is forming to	N/A	N/A	12/5/2022 11:14	N/A
7	HAP Annual Conference	The HAP Annual Conference promoted a sense of coordination and collaboration in a multivendor environment prudent for the success of the HAP. The IDAP vendor invested their resources to host the conference and based on the participant feedback it was worth the time and expense. Lastly, the conference provided an opportunity for Med-QUEST and HAO to share their vision of the HAP... to improve the healthcare quality of Medicaid & Medicare residents of Hawaii.	Strand, Jolene	HAO	Positive Finding	QAR 2	2/9/2023	General IV&V Activity	The HAP Annual Conference promoted a sense of coordination and collaboration in a multivendor environment prudent for the success of the HAP. The IDAP vendor invested their resources to host the conference and based on the participant feedback it was worth the time and expense. Lastly, the conference provided an opportunity for Med-QUEST and HAO to share their vision of the HAP to improve the healthcare quality of Medicaid & Medicare residents of Hawaii.	IV&V recommends continuing coordination and collaboration among all stakeholders throughout and beyond the project life cycle.	N/A	N/A	N/A	3/31/2023	Closed	4/30/2023: IV&V closed this finding due to positive findings expiring at the end of the reporting period. 3/31/2023: During this reporting period, IV&V witnessed quality communication among Project Sponsors, key stakeholders, project resources, and vendor teams. IV&V observes continued quality coordination and collaboration in the multi-vendor environment. This finding will remain open until the next quarterly reporting period. 2/28/2023: The HAP Annual Conference conducted in Honolulu February 6th through February 9th was successful on many fronts: It set the foundation for the development of the HAP with the Stakeholders including DHS, Med-QUEST, ETS, UH and the HAP vendors The Executives from the lead and supporting organizations demonstrated their commitment to the Health Analytic Program The HAO provided the attendees with the history of the program and planned impact to the citizens of Hawaii The project team met face-to-face, which aids in developing strong working relationships Each HAP vendor presented an overview of their HAP responsibilities and discussed the many touchpoints between the organizations and vendors (integration points) along with initial expectations.	4/30/2023	3/31/2023	2/23/2023 10:53	Positive Finding

8	Data Management: The lack of existing business glossary rules and designated data stewards	Delayed or ineffective resolution of data quality issues, leading to decreased confidence in the accuracy and reliability of the data warehouse. Increased costs and resources required to identify and address data quality issues due to the lack of clear documentation. Impaired ability to ensure compliance with data governance regulations and guidelines, which can result in legal and financial consequences. Reduced adoption and utilization of the data warehouse by end-users due to concerns about data quality and reliability.	Grieco, John	HAO	Preliminary Concern	QAR 2	2/28/2023	General IV&V Activity	Having foundational data dictionaries, rules and workflow documentation could prevent delays or ineffective resolution of data quality issues, leading to decreased confidence in the accuracy and reliability of the data warehouse. Increased costs and resources required to identify and address data quality issues due to the lack of clear documentation. Impaired ability to ensure compliance with data governance regulations and guidelines, which can result in legal and financial consequences. Reduced adoption and utilization of the data warehouse by end-users due to concerns about data quality and reliability.	To mitigate this risk, it is essential to establish clear and comprehensive documentation of business glossary rules and designate data stewards to oversee the process. This approach will help to ensure that the IDAP vendor can quickly and effectively address any data quality issues that arise and maintain a high level of confidence in the accuracy and reliability of the data warehouse. Additionally, as Data Stewards are identified, it is important to communicate the time commitment needed to be a data steward, and roles and responsibilities for success.	High	High	High	N/A	Open	2/29/2024: UH delivered Flags and Indicators as part of Task Order 1 on 2/23/2024 and is clarifying the State's questions. IV&V recommends that the project continues to clarify any questions in relation to the Flags and Indicators. 01/31/2024: Flags and Indicators are a basis for the business rules. UH partially delivered and rescheduled delivery dates for different categories of Flags and Indicators. The due date slipped from 11/30/2023 to 02/23/2024, representing a scope and schedule impact. Delays in getting the business rules for Flags and Indicators have precluded the DDI Vendor from completing the design of any dashboards. IV&V is concerned about the impact on the total cost of the project. 12/31/2023: UH provided a schedule for "High" flags and indicators indicating that rules for the first 10 were provided on 12/06/23 and 10 more would be provided every 2 weeks thereafter. This represents a schedule impact. UH is developing flags & indicators documentation for HAP review. UH is finalizing the templates for reference tables and business logic to be provided. 11/30/2023: Flags & Indicators, e.g., are a basis for the business glossary and business rules. University of Hawaii (UH) delivered a list of 300 Flags & Indicators on August 14th, 2023, which the DDI Vendor is building into the data model and must deliver as part of Task Order 1 and is mapping Flags & Indicators to dashboards. UH is currently delivering, e.g., the logic for 10 Flags & Indicators to the DDI Vendor every two (2) weeks. IV&V will continue to monitor the progress over the next few months to determine any potential risks or issues. The HAO has communicated that the go-live date is going to be postponed, IV&V will reduce the severity to low. 10/31/2023: The IDAP DDI Project continue to test for data ingestion, have	N/A	N/A	3/1/2023 11:44	N/A
9	Requirements Management (previously Organizational Change Management)	Lack of a formal Stakeholder matrix to identify Super Users, Change Champions/Change Catalysts early in the DDI phase, before the JPAS/JAD sessions, may result in missing out on primary stakeholders in those sessions resulting in a risk of low-end user utilization/adoption rate and increased probability of end-user error rate during the Operation phase of the project. Lack of presence of the right stakeholders in the JAD/JPASS sessions may lead to incomplete elicitation of business requirements that can negatively impact the project scope leading to triple constraints to the project (time, cost, and resources), affecting the overall health of the project in the long run.	Adnan, Asma	PMO	Preliminary Concern	QAR 2	2/22/2023	General IV&V Activity	Lack of a formal Stakeholder matrix to identify Super Users, Change Champions/Change Catalysts early in the DDI phase, before the JPAS/JAD sessions, may result in missing out on primary stakeholders in those sessions resulting in a risk of low-end user utilization/adoption rate and increased probability of end-user error rate during the Operation phase of the project. Lack of presence of the right stakeholders in the JAD/JPASS sessions may lead to incomplete elicitation of business requirements that can negatively impact the project scope leading to triple constraints to the project (time, cost, and resources), affecting the overall health of the project in the long run.	1- Document the stakeholder matrix and identify Super Users, Change Champions, and Change catalysts. 2- Create a Stakeholder affinity matrix and Power/Interest Grid for Stakeholder prioritization. 3- Ensure early communication with the key stakeholders and their presence at JPASS sessions. 4-Ensure they are selected first for training sessions and actively involved in User Acceptance Testing.	Medium	Medium	Medium	N/A	Closed	2/29/2024: HAP has a Stakeholder Registry with, e.g., defined stakeholder groups, Stakeholder roles and Stakeholder contact information. HAP has continued to engage Stakeholders. IV&V has closed this Preliminary Concern. 1/31/2024: The Project continues to keep stakeholders informed and includes key stakeholders in critical design sessions. IV&V will close this item within the next reporting period due to consistent communication to stakeholders. 12/31/2023: The Project continues to keep stakeholders informed and includes key stakeholders in critical design sessions. IV&V will close this item within the next reporting period due to consistent communication to stakeholders. 11/30/2023: The Project continues to keep stakeholders informed and includes key stakeholders in critical design sessions. IV&V will determine at which point this finding may be closed. 10/31/2023: The OCM team continues to socialize the language around the HI HAP IDAP to its stakeholders. IV&V will continue to examine the OCM activities, specifically around the goals for each user type. 9/30/2023: The Project continues to successfully produce and distribute newsletters and bring ongoing awareness to stakeholders as part of their OCM effort. IV&V will continue to examine the OCM activities, specifically around the goals for each user type. 8/31/2023: The Project continues to successfully produce and distribute newsletters as part of their OCM effort. IV&V will continue to examine the OCM activities, specifically around the goals for each user type. 7/30/2023: Six personas were identified. IV&V will examine the user types and the project's OCM plans for activities for user readiness. The OCM	2/29/2024	4/17/2023	3/9/2023 11:17	HAP has a Stakeholder Registry with, e.g., defined stakeholder groups, Stakeholder roles and Stakeholder contact information. HAP has continued to engage Stakeholders. IV&V has closed this preliminary concern.
10	Project Management	Lack of an Integrated Master Schedule may expose the Project to unpredicted risks and cost overruns.	Ugoji, Chizoma	PMO	Risk	QAR 2	2/7/2024	General IV&V Activity	IMS allows the project to identify the critical path, consisting sequence of activities that determines the duration for project completion. Without this clear roadmap, it becomes difficult to prioritize tasks and allocate resources efficiently. Consequently, delays in critical activities can cascade throughout the project timeline, leading to missed deadlines and cost overruns	IV&V recommends that the PMO creates the Integrated Master Schedule (IMS) and baseline the schedule to account for the increased scope and clearly delineate ongoing and upcoming tasks and to baseline the IMS.	Medium	Medium	Medium	N/A	Open	2/29/2024: HAP has yet to create an Integrated Master Schedule (IMS). PMO has indicated that the baseline IMS will be created once the Minimal Viable Product (MVP) is finalized. IV&V recommends that the PMO creates the Integrated Master Schedule (IMS) and baseline the schedule to account for the increased scope and clearly delineate ongoing and upcoming tasks and to baseline the IMS.	N/A	N/A	2/23/2024 13:03	N/A
11	Operating Environment	A decision was made that JIRA would serve as the ticket management system for IDAP instead of ServiceNow. The DDI vendor will be using HP Application Lifecycle Management (ALM) for managing, developing, and tracking requirements, requirements traceability, test cases and defects. JIRA is a proven platform for managing the entire development lifecycle. Using two separate tools like JIRA and Micro Focus ALM can have disadvantages, e.g., integration challenges, duplication efforts, and increased costs. It's essential to consider the potential drawbacks and challenges associated with using multiple tools simultaneously.	Ugoji, Chizoma	HAO	Risk	QAR 2	2/7/2024	Needs Assessment	Duplication of Efforts: Using separate tools for ticket management and requirement management could result in duplication of efforts, leading to inefficiencies and increased work load	Assess if the project can standardize and use one tool (e.g., JIRA) instead of two (JIRA and HP ALM).	Medium	Medium	Medium	N/A	Open	2/29/2024: No Changes IV&V recommends Assessing if the project can standardize and use one tool (e.g., JIRA) instead of two (JIRA and HP ALM).	N/A	N/A	2/23/2024 13:55	N/A

12	Data Management	Delays in the delivery of data definition needed for IDAP data modeling could result in delays in creating necessary data models, potentially impacting ETL efforts and the overall project schedule.	Ugoji, Chizoma	HAO	Risk	N/A	2/15/2024	General IV&V Activity	The data modeling issues could impact data profiling, Extract Transfer, and Load ETL efforts. Incomplete or inaccurate data models could lead to inconsistency and poor data quality, which could result in errors during the ETL process, creating data integrity issues and anomalies. Optum Team requires data field definitions for all data columns before data modeling can begin by the end of December 2023 - final KOLEA list of data files contain 4,207 data columns, current data dictionaries provide definitions for ~ 550 data fields. Additional information for field descriptions that are missing or lacking in clarity or detail are needed. Without the information, this will create an added burden to the data modeling, data profiling and ETL efforts, and extend the schedule for these activities.	IV&V recommends that the KOLEA SMEs and Stakeholders engage to validate the accuracy and completeness of data dictionaries and ensure missing information is identified and addressed in a timely manner	Medium	Medium	Medium	N/A	Open	2/29/2024: New-IV&V recommends that the KOLEA SMEs and Stakeholders engage to validate the accuracy and completeness of data dictionaries and ensure missing information is identified and addressed in a timely manner	N/A	N/A	2/15/2024 0:00	N/A
13	Data Management	The lack of a timely review and feedback of Data Quality Rules by the state will have a schedule impact.	Gulvady, Gautam	HAO	Issue	N/A	2/15/2024	General IV&V Activity	Optum dashboard mockups are based on 8 dimensions, rules are classified into these 8 dimensions. Optum needs feedback from the State on the Data Quality (DQ) rules (that Optum applied to data) that Optum included all the business rules the State is expecting, e.g., State feedback would be adding some additional rules that the business cares about, important rules that can be built; Output is a report, dashboard.	IV&V recommendations to achieve reviewing data quality rules without impacting the project schedule: 1. The State develops a plan to conduct review of the Data Quality rules 2. Prioritize Rules: Prioritize the rules based on their impact on the business and project's objectives. Focus on reviewing the most crucial rules first to ensure that essential data quality aspects are addressed promptly. 3. Establish Clear Criteria: Define clear criteria for evaluating each rule. Having predefined criteria streamlines the review process and minimizes the time spent deliberating over each rule. Criteria may include relevance to the business, project objectives, impact on data integrity, and feasibility of implementation. 4. Collaborate with Stakeholders: Involve relevant stakeholders in the review process to gain insights into the importance of each rule and any potential trade-offs. Such collaboration ensures the review focuses on rules that align with business and	High	High	High	N/A	Open	2/29/2024: IV&V recommends the State develops a plan to conduct a review of the Data Quality rules	N/A	N/A	2/15/2024	N/A
14	Project Management	The new Change Requests (CRs) will have schedule, cost and scope impact	Gulvady, Gautam	HAO	Risk	N/A	2/15/2024	General IV&V Activity	The project has raised eleven (11) CRs: three (3) have been approved of which two (2) have been priced (approx. half a million US\$ additional cost for two CRs), and the remaining eight (8) are being assessed. CRs can have significant impacts on the scope, cost, and schedule of a project. 1. Scope expansion: The new CRs involve adding new features or functionalities, and will expand the project scope. This may require additional resources, time, and effort to accommodate the new requirements. 2. Cost increase: CRs often lead to increased costs, especially if they require additional resources, to implement. For example, accommodating new requirements may require hiring more staff or investing in specialized training. 3. Schedule extension: Implementing CRs typically takes time, which can extend the project schedule. This is especially true if the changes are substantial or if they require rework of existing work.	CRs have the potential to alter the project's scope, cost, and schedule, either positively or negatively. Effective change management processes, including thorough impact assessments and stakeholder communication, are essential for mitigating risks and ensuring successful project outcomes.	Medium	Medium	Medium	N/A	Open	2/29/2024: IV&V recommends that effective change management processes, including thorough impact assessments and stakeholder communication, to mitigating risks and ensuring successful project outcomes.	N/A	N/A	2/15/2024 0:00	N/A