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DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES | *KA 'OIHANA LOIHELU A LAWELAWE LAULĀ*

OFFICE OF ENTERPRISE TECHNOLOGY SERVICES | *KE'ENA HO'OLANA 'ENEHANA*

P.O. BOX 119, HONOLULU, HAWAII 96810-0119

October 17, 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 Health, BHA Integrated Case Management System Project.

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

Sincerely,

Christine M. Sakuda
Chief Information Officer
State of Hawai'i

Attachments (2)

Hawaii BHA Integrated Case Management System Project – *Phase 4*

IV&V Report for the period of

September 1 – September 30, 2024

Final Submitted: October 16, 2024

PUBLIC CONSULTING GROUP

Solutions that Matter

Agenda

Executive Summary

IV&V Findings & Recommendations

Appendices

- A – Rating Scales
- B – Inputs
- C – Project Trends

Executive Summary

The Go-Live for Release 4.8 has been postponed from October 3, 2024, to October 7, 2024. This delay was caused by a Microsoft (MS) fix related to a previously raised Behavioral Health Services Administration (BHA) ticket, which introduced issues in the Provider Portal during System Integration Testing (SIT), halting manual regression testing. Microsoft rolled back the changes, allowing manual regression testing to resume. As of September 30, 2024, manual regression testing was scheduled to be completed on October 2, 2024, and the new Go-Live date was set for October 7, 2024.

The SI vendor deployed a fix for the Calculator production defect related to deleting service details. The SI has recently began providing the project with the total number of production defects. There are currently a total of 19 defects in the production system including 2 classified as 'high' severity and the remaining 17 as 'medium' severity. IV&V remains concerned about ongoing code quality issues and their continued impact on users due to post-production defects.

During this reporting period, BHA reported Provider Portal and the Calculator system performance problems. Microsoft conducted performance testing in June, however, the Developmental Disabilities Division (DDD) application was excluded due to the extensive size of the test script. Microsoft has reported testing of the DDD application will begin once Child & Adolescent Mental Health Division (CAMHD) and Portal application testing is complete. The performance test should help validate whether the INSPIRE system meets required performance standards and can effectively handle expected loads.

IV&V has closed one project schedule issue (Finding #36) and identified two new findings, both issues: one regarding the project's failure to adhere to the defect management process (Finding #46) and another concerning the absence of a documented governance process for restarting production systems (Finding #47). IV&V is concerned that disregarding the defect management process could lead to, among other things, defects that don’t get fully resolved, while the lack of a documented governance process for system restarts may result in extended system downtimes.

Fast Healthcare Interoperability Resources (FHIR) development and testing are still ongoing. BHA has observed some of the FHIR functionality during testing. However, the project has not yet implemented regular Sprint Demos as part of Sprint Reviews. IV&V remains concerned that the absence of regular Sprint Reviews and Demos poses several potential risks to the project, including delayed stakeholder feedback, design misunderstandings, poor system designs, and unnecessary rework.

Although MedQuest is working with BHA to provide claims data for the AER Analytics project, the September 15, 2024, deadline for receiving historical and automated monthly claims data has passed. This delay may impact the planned Go-Live date in January 2025.

Executive Summary

July	Aug	Sep	Category	IV&V Observations
Y	Y	Y	**Sprint Planning**	FHIR development and testing is ongoing. IV&V recommends the project establish regular Sprint Reviews and that BHA create a RACI matrix, to ensure Sprint Reviews and product backlog reviews include all appropriate stakeholders. IV&V will continue to discuss how best to use and integrate the RACI matrix in project work for Sprint Reviews and product backlog reviews. CAMHD has indicated that they conduct dedicated product backlog meetings monthly. IV&V recommends that BHA leverage the CAMHD process to review product backlogs.

Executive Summary

July	Aug	Sep	Category	IV&V Observations
G	G	G	**User Story (US) Validation**	There are no active findings in the User Story (US) Validation category, which remains Green (low criticality) for the September reporting period. IV&V will continue to monitor the US development and validation process in upcoming reporting periods.
Y	Y	Y	**Test Practice Validation**	Microsoft updated object properties in the Dynamics application, which broke the automated regression testing scripts, requiring manual regression testing. A Microsoft fix caused issues in the Provider Portal, halting testing. Microsoft later rolled back the changes, allowing manual regression testing to resume. As of September 30, 2024, manual regression testing was scheduled to be completed on October 2, 2024, and the new Go-Live date was set for October 7, 2024. IV&V continues to recommend the development and use of a RACI matrix to identify stakeholders who need to be involved in testing. BHA and IV&V reviewed the RACI matrix, with IV&V providing feedback. BHA is refining the matrix to clearly define roles and involve the right stakeholders for successful project outcomes. The SI vendor tracks test coverage manually using Excel, missing out on Azure DevOps capabilities for tracking test coverage and requirements traceability. Performance testing was originally conducted from June 4 to June 12, 2024. However, the Developmental Disabilities Division (DDD) application was excluded from the testing scope due to the extensive size of its test script. Microsoft has reported that testing of the DDD application will begin once CAMHD and Portal application testing is completed.
Y	Y	Y	**Release / Deployment Planning**	The development of the improvements will commence once a SharePoint resource is available. The SI vendor deployed a fix for the Calculator defect related to the deletion of service details, with no other deployments in September 2024. The R4.8 Go-Live was rescheduled from Thursday, 10/3/2024, to Monday, 10/7/2024, and IV&V will monitor the quality of the deployment.

Executive Summary

July	Aug	Sep	Category	IV&V Observations
G	G	G	**On-The-Job-Training (OJT) and Knowledge Transfer (KT) Sessions**	This category remains Green (low criticality) for the September reporting period with no active findings.
G	G	G	**Targeted KT**	This category remains Green (low criticality) for the September reporting period. IV&V will continue to monitor.
G	G	G	**Project Performance Metrics**	There are no project performance metrics to report for the September reporting period. IV&V will keep this category's criticality rating Green (low criticality) and will continue to monitor.
G	G	G	**Organizational Maturity Assessment (OMA)**	This category remains Green (low criticality) for the September reporting period. There are no outstanding findings in this category, and IV&V will continue to monitor.

Executive Summary

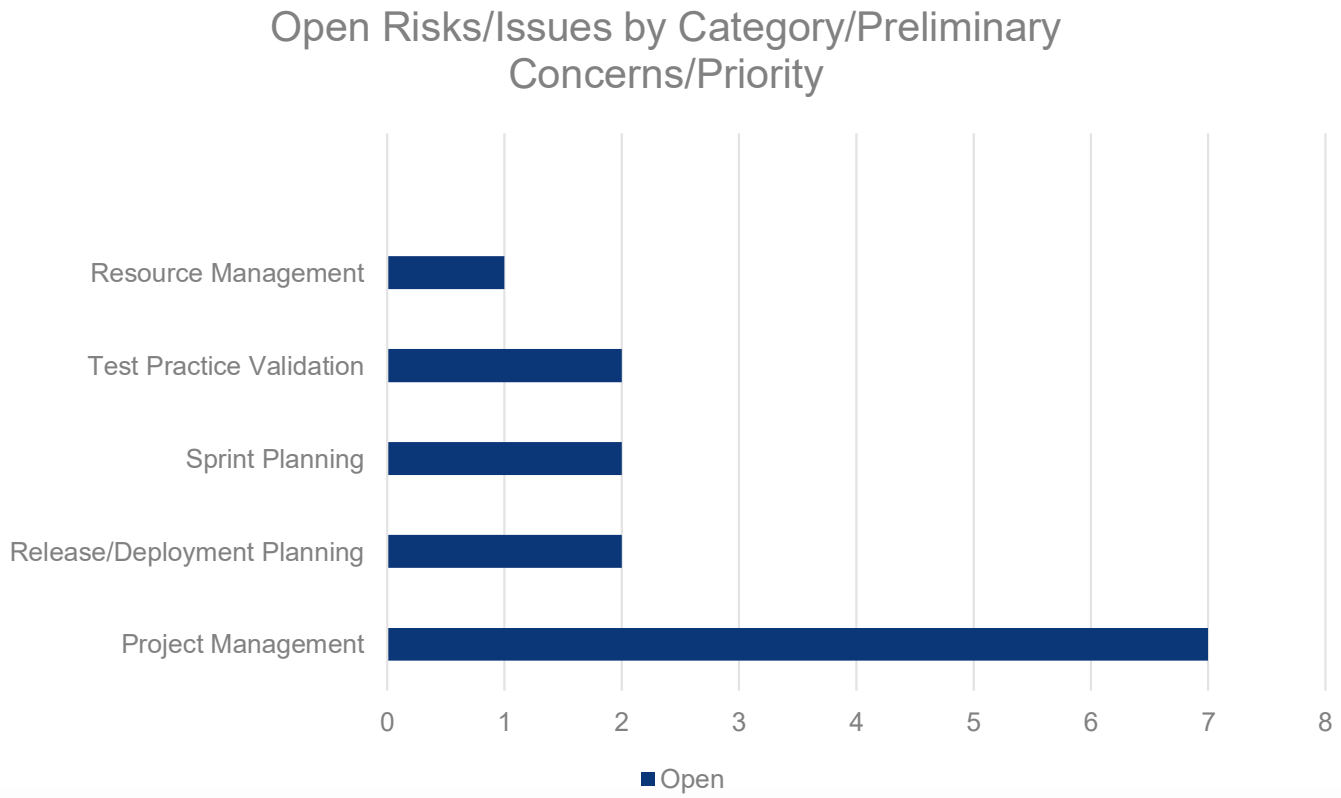
July	Aug	Sep	Category	IV&V Observations
Y	Y	Y	**Project Management**	The SI vendor has fixed the Calculator production defect related to deleting service details. As of 9/30/2024, there are a total of 19 defects in the production system including 2 classified as 'high' severity and the remaining 17 as 'medium' severity. IV&V will assess how the project defines and applies severity and priority classifications, providing recommendations aligned with best practices. At BHA's request, IV&V is also reviewing the draft SLA and will offer recommendations based on industry standards. The SI vendor added a column to the daily scrum file to indicate the environment where each defect was found. IV&V remains concerned about code quality issues impacting the project and user frustration with post-production defects. The AER Analytics project is currently in the Data Preparation and Modeling stages of development and is progressing as expected. Although MedQuest is collaborating with BHA to provide claims data, the 9/15/2024 deadline for receiving historical and automated monthly claims data has passed, potentially affecting the planned January 2025 Go-Live. IV&V is concerned that there are delays in the data delivery resulting in negative impacts or delays to schedule. Some communication challenges remain between stakeholders on project aspects such as defect tracking and reporting and tracking and monitoring costs related to Big Rock functionalities. IV&V recommends that project teams maintain collaboration and information sharing across stakeholder groups to ensure a shared understanding in key project areas.

Executive Summary

July	Aug	Sep	Category	IV&V Observations
Y	Y	Y	**Project Management (cont'd)**	IV&V has provided options for BHA to track costs for large functionalities like the Provider Portal, and FHIR, along with tracking User Story Point (USP) allocation across categories. IV&V is concerned that overutilizing USPs for large functionalities, could lead to removing or reducing planned features, potentially impacting system effectiveness, user engagement, and expectations.
Y	Y	Y	**Resource Management**	BHA has included a request for an IT Band B System Analyst position in the Biennium Budget for the next Legislative Session to strengthen Help Desk resources. IV&V remains concerned that the ongoing resource shortage and the lack of new additions to the DDD team over the past five months will continue to adversely affect the project. IV&V will continue to explore roles and tasks with BHA and make recommendations for staffing coverage.

Executive Summary

As of the September 2024 reporting period, three (3) new findings were opened, i.e., (2) Medium issues and one (1) Preliminary Concern, and eleven (11) open findings were updated – seven (7) Medium Issues, two (2) Medium Risks, one (1) Low Issue, and one(1) Preliminary Concern spread across the Release/Deployment Planning, Test Practice Validation, Sprint Planning, Project Management, and Resource Management assessment areas are currently open.



IV&V Findings & Recommendations

IV&V Findings & Recommendations

Assessment Categories

Throughout this project, IV&V verifies and validates activities performed in the following process areas:

- Sprint Planning
- User Story Validation
- Test Practice Validation
- Release / Deployment Planning
- On-the-Job Training (OJT) and Knowledge Transition (KT) Sessions
- Targeted Knowledge Transition (KT)
- Project Performance Metrics
- Organizational Maturity Assessment
- Project Management
- Resource Management

IV&V Findings & Recommendations

Sprint Planning

#	Key Findings	Criticality Rating
31	**Medium Risk:** A lack of regular Sprint Reviews and Sprint Demos will likely lead to misalignments between delivered work and stakeholder needs. **Finding Update:** FHIR development and testing is currently on-going; BHA has seen some of the FHIR functionality during testing. The project is yet to have regular demos as part of Sprint Reviews. IV&V's recommendation continues to be that the project work to establish a regular cadence for Sprint Reviews.	M

Recommendations	Status
According to Agile Best Practices, IV&V recommends including Sprint Reviews and Demos in future releases (R4.2 and onwards). At the end of each sprint, conduct a sprint review meeting to demonstrate the completed work to stakeholders and gather feedback. Use this feedback to refine and reprioritize the product backlog. For a two-month sprint, IV&V recommends having more than one (1) demo during the sprint.	In Progress
Create a stakeholder register to identify all stakeholders. List their identification, assessment, and classification. Review the register regularly to plan appropriate stakeholder engagement.	In Progress
Foster active participation from users and stakeholders during both Sprint Reviews and Sprint Demos. Emphasize the value of iterative feedback to guide development and ensure that user needs are consistently met.	In Progress

IV&V Findings & Recommendations

Sprint Planning (cont'd)

Recommendations	Status
Establish standardized communication protocols for both Sprint Reviews and Sprint Demos. Encourage teams to deliver concise and informative progress reports, including achievements, challenges, and plans. This will enhance stakeholder engagement and project transparency.	In Progress
Institute a structured documentation process for Sprint Reviews and Sprint Demos. Document key decisions, action items, and insights from each session to ensure accountability and to support ongoing process improvement.	In Progress

IV&V Findings & Recommendations

Sprint Planning (cont'd)

#	Key Findings	Criticality Rating
41	**Medium Risk:** The absence of separate dedicated product backlog review meetings can pose several challenges for a project team. **Finding Update**: IV&V continues to recommend the development and use of a RACI matrix to identify stakeholders who need to be involved in Sprint Reviews and product backlog reviews. BHA and IV&V reviewed the RACI matrix, with IV&V providing feedback. BHA continues to refine and develop the RACI matrix to clearly define the roles and involve the right stakeholders for successful project outcomes. IV&V will continue to discuss ways to use the RACI matrix in project work for product backlog reviews. CAMHD has indicated that they conduct dedicated product backlog meetings monthly. IV&V recommends that BHA leverage the CAMHD process to review product backlogs.	M

Recommendations	Status
Separate dedicated product backlog review meetings (during Sprints) would allow clarifying any ambiguities or uncertainties, re-prioritization, estimation and refinement of backlog items. This would allow the project team to avoid situations where decisions about including items mid-Sprint would have to be taken.	Open
IV&V recommends scheduling separate dedicated product backlog review meetings (during Sprints) where all relevant stakeholders are invited to review the product backlog and scheduled at the appropriate time(s) such that there is sufficient time to plan the design, development, and implementation (DDI) of the next release(s).	Open

IV&V Findings & Recommendations

Test Practice Validation

#	Key Findings	Criticality Rating
2	**Medium Issue:** As a result of automated regression testing not being comprehensively performed, production releases are breaking existing functionality in the production environment. **Finding Update:** Microsoft updated object properties in the Microsoft Dynamics application. According to Tricentis' research, the regression test scripts will need to be re-recorded to enable automated regression testing. As a result, the R4.8 regression testing, which began on 9/23/2024, is being conducted manually. Additionally, in a separate incident, a Microsoft fix related to a previously raised BHA ticket caused issues in the Provider Portal within the System Integration Testing (SIT) environment, halting manual regression testing. BHA escalated the outstanding MS ticket to Severity A, leading Microsoft to roll back the changes and allow manual regression testing to resume. As of September 30, 2024, manual regression testing was scheduled to be completed on October 2, 2024, and the new Go-Live date was set for October 7, 2024.	M

Recommendations	Status
Having board(s) in Azure DevOps or a document on SharePoint that provides information about the status of regression testing automation, to facilitate visibility and transparency to BHA project personnel and stakeholders.	In Progress
Schedule priorities should be reevaluated by distributing the work according to the resource bandwidth. This will ensure that the schedule is not impacted and that the work is done efficiently between regression testing and Golden Record (GR) tasks.	In Progress
Pursue and complete additional formal training in Azure DevOps and Tricentis for test automation as soon as possible and complete efforts to automate the two primary regression test scripts.	In Progress
Determine if current regression testing timeframes are adequate, and if not, add more time to the pre-production regression test efforts for all release deployments.	In Progress

IV&V Findings & Recommendations

Test Practice Validation (cont'd)

#	Key Findings	Criticality Rating
40	**Medium Issue:** Improvements to the testing process are needed to ensure adequate CAMHD participation and comprehensive testing of functionality prior to production deployment. **Finding Update:** BHA and IV&V reviewed the RACI matrix, with IV&V providing feedback. BHA continues to refine and develop the RACI matrix to define the roles clearly and involve the right stakeholders for successful project outcomes. The SI vendor currently tracks test coverage manually using Excel worksheets, missing out on the capabilities of Azure DevOps for tracking test coverage and requirements traceability.	M

Recommendations	Status
IV&V has requested an overview of the testing process, with a focus on process such as tracking test coverage and requirements traceability.	In Progress
A Stakeholder Register helps identify and understand all project stakeholders, ensuring their needs are met and risks are managed through effective communication. A RACI clarifies roles and responsibilities, improving collaboration, decision-making, and resource management, which are all critical for the success of IT projects.	In Progress
Identify stakeholders (output is Stakeholder Register) and develop a RACI matrix for testing.	In Progress
Review the overall testing process and implement any needed improvements identified.	Open

IV&V Findings & Recommendations

Release / Deployment Planning

#	Key Findings	Criticality Rating
43	**Medium Issue:** The execution time for the process for updating DDD SharePoint folders is unsatisfactory. **Finding Update:** The development of the improvements will commence once a SharePoint resource is available.	M

Recommendations	Status
IV&V recommends doing an impact analysis, e.g., downstream impact.	Open
IV&V recommends that DDD puts on hold any development utilizing Power Automate for the performance issue encountered in production (marked "TBD" in finding #14 related to "SharePoint Bulk Flows still running") and related User Stores, e.g., "Changes to DDD folders," and defects.	Open
IV&V recommends evaluating other feasible options, e.g., leveraging SharePoint tools and best practices.	Open
A project issue should be opened to identify and manage the resolution of this issue.	Open

IV&V Findings & Recommendations

Release / Deployment Planning (cont'd)

#	Key Findings	Criticality Rating
39	**Low Issue:** Due to ongoing deployment processes and technical execution issues, the project may continue to encounter defects and challenges, such as when releases are in production or in meeting projected timelines for production and non-production deployments. **Finding Update:** The SI vendor deployed a fix for the Calculator production defect related to the deletion of service details, with no other deployments in September 2024. The R4.8 Go-Live was rescheduled from Thursday, 10/3/2024, to Monday, 10/7/2024. As of September 30, 2024, manual regression testing was scheduled to be completed on October 2, 2024, and the new Go-Live date was set for October 7, 2024. IV&V will monitor the quality of the deployment.	L

Recommendations	Status
The project should consider automating deployments for resource savings, increased efficiency, consistency, faster time to market, improved collaboration and reliability, scalability, version control integration, and rollback capability.	Open
Ensure there are adequate and qualified resources to support the current deployment processes. This may require support from RSM resources to provide assistance and knowledge transfer for some more complex deployment components.	Open
As appropriate, consult with RSM on best practices that BHA could employ to support deployment.	Open

IV&V Findings & Recommendations

Release / Deployment Planning (cont'd)

Recommendations	Status
Request the assistance of the RSM Solution Architect in reviewing and correcting issues associated with the consistency of configurations across environments, ensuring that the test environment is capable of testing ALL functions of any given release without the need for using multiple test environments.	Open
Request assistance from the RSM Solution Architect in reviewing deployment scripts to double-check for accuracy and completeness before commencing deployment activities.	Open
The Project Team should consider evaluating potential changes to improve/enhance existing processes and communications to address current release/deployment shortfalls.	Open
IV&V recommends performing a Root Cause Analysis (RCA) in collaboration with RSM for the continued concerns surrounding environment differences.	Open
IV&V recommends updating the Project's Configuration Management Plan to address the current needs of the Project. This should include specific checklists geared at ensuring repeatable promotional processes by DOH.	Open
Look at implementing 'hard' code freeze dates as well as test environment deployment dates to ensure that testing and deployment activities are not rushed.	Open
Ensure an operational and fully functional test environment is available to effectively conduct end-to-end regression testing prior to deploying a release to production.	Open
Develop a plan to institutionalize the execution of smoke testing for promotions to non-production and production environments. This will help to ensure that all components needed to test have been properly deployed prior to the actual execution of test activities.	Open

IV&V Findings & Recommendations

Project Management

#	Key Findings	Criticality Rating
44	**Closed Preliminary Concern:** Delays in the posting of administrative claims are negatively affecting reimbursements. **Finding Update:** To address the delayed claims postings, there has been improved coordination and communication with all involved parties. Based on the improved process, this Preliminary Concern was closed in the July 2024 reporting period.	N/A
Recommendations		**Status**
BHA should continue research of this issue with MedQuest and PCG to identify any needed corrections.		Closed
BHA to present any needed corrections to CMS.		Closed

IV&V Findings & Recommendations

Project Management (cont'd)

#	Key Findings	Criticality Rating
14	**Medium Issue:** Due to multiple quality concerns, the project may continue to face impactful system defects. **Finding Update:** The SI vendor deployed a fix for the Calculator defect related to deleting service details. Based on IV&V's recommendation that the SI vendor provide the total number of defects in production and report these numbers regularly to BHA, as of 9/30/2024, the SI vendor reported a total of 19 defects in the production system including 2 classified as 'high' severity and the remaining 17 as 'medium' severity. IV&V will assess how the project defines and applies severity and priority classifications, providing recommendations aligned with best practices. At BHA's request, IV&V is also reviewing the draft Service Level Agreement (SLA) and will offer recommendations based on industry standards. Based on IV&V's recommendation, on 9/24/2024, the SI vendor added a column to the daily scrum file to indicate the environment where each defect was found. IV&V remains concerned that code quality issues continue to impact the project, and users continue to be impacted by post-production defects.	M

Recommendations	Status
The SI vendor add a "Found In" column to the daily scrum file to indicate the environment where each defect was identified.	In Progress
The SI vendor provides the total number of defects in production and reports these numbers regularly to BHA.	In Progress
Evaluate existing project staff skills and experience levels to ensure they meet BHA support requirements.	In Progress
Perform CAMHD revenue neutrality fiscal balance testing on a quarterly basis to ensure revenues are as expected.	In Progress

IV&V Findings & Recommendations

Project Management (cont'd)

#	Key Findings	Criticality Rating
33	**Medium Issue:** Performance bottlenecks with the INSPIRE production environment may result in low productivity and poor user experience. **Finding Update:** Performance testing was originally conducted from June 4 to June 12, 2024. However, the Developmental Disabilities Division (DDD) application was excluded from the testing scope due to the extensive size of its test script. The performance testing will include the DDD application as well. Microsoft reported that it is still testing the CAMHD and Portal applications. Once those tests are complete, testing of the DDD application will begin.	M

Recommendations	Status
IV&V recommends: BHA execute a performance test during the development of R4.6 (planned completion 5/20/2024), identifying test cases and scenarios that include both DDD and CAMHD functionality, transactions/functionality that are performance intensive, e.g., calculator functionality	In Progress
Conduct load and performance testing for each release that has significant new features/functionality, e.g., Calculator-related transactions.	Open
Create a plan for comprehensive performance testing and address any performance bottlenecks.	Open
Have the benchmark assessments done annually and implementation of Azure App Insights for Power Platform.	Open
Execute test scripts that measure the run-time for execution of long-running transactions. E.g., Calculator functionality/transactions and monitoring results over time.	Open

IV&V Findings & Recommendations

Project Management (cont'd)

#	Key Findings	Criticality Rating
36	**Medium Issue:** Lack of a comprehensive project schedule could lead to missed tasks, project delays, and cost overruns. **Finding Update:** The AER Analytics project is currently in the Data Preparation and Modeling stages, managed according to a defined project schedule. This schedule facilitates early identification and resolution of issues, such as delays in claims data, and allows for proactive planning and mitigation strategies. As a result, it reduces the likelihood of project delays and enhances transparency among stakeholders by offering clear visibility into project progress, thereby supporting informed decision-making. For these reasons, IV&V is closing this issue for the September 2024 reporting period.	N/A

Recommendations	Status
IV&V recommends that stakeholders discuss and agree on efficient processes for maintaining the project schedule for an agile project.	Closed
Establish a clear project schedule management plan that outlines roles, responsibilities, and accountability for schedule adherence.	Closed
Create and baseline a comprehensive project schedule for Phase 4 and future project phases in MS Project, Smartsheet, or a similar tool, containing tasks for both SI vendor and State, task dependencies, and resourcing.	Closed
Implement regular schedule reviews and updates to ensure alignment with project objectives and milestones.	Closed

IV&V Findings & Recommendations

Project Management (cont'd)

#	Key Findings	Criticality Rating
42	**Medium Issue:** Effective governance and communication is lacking are lacking on the project. **Finding update:** There remain some communication challenges between stakeholders on project aspects such as defect tracking and reporting, and tracking and monitoring costs related to Big Rock functionalities. IV&V recommends project teams maintain collaboration and information sharing across stakeholder groups to ensure shared understanding in key project areas.	M

Recommendations	Status
Create a Governance Structure: Implement a governance structure that defines decision-making processes, escalation procedures, and accountability mechanisms. Clarify how decisions will be made, who has authority, and how issues will be resolved.	Open
Develop a Stakeholder Registry, RACI Matrix, and Stakeholder Engagement Plan: Identify key stakeholders and develop a plan to engage them throughout the project lifecycle. Tailor communication strategies to address the needs and preferences of different stakeholders, ensuring their active involvement and support.	Open
Clearly Define Roles and Responsibilities: Clearly outlining the roles and responsibilities of each stakeholder involved in the project, would ensure that everyone understands their duties and how they contribute to the project's success.	Open

IV&V Findings & Recommendations

Project Management (cont'd)

Recommendations	Status
Encourage Open Communication and Feedback: Foster a culture of open communication and feedback where stakeholders feel comfortable sharing their thoughts, concerns, and suggestions. Encourage constructive dialogue and actively seek input to improve decision-making and problem-solving. Keep stakeholders informed about project progress, milestones, and key developments through regular updates and progress reports. Highlight achievements, challenges, and any changes to the project plan or scope.	Open
Resolve Conflicts Promptly: Address conflicts and disagreements among stakeholders promptly and professionally. Encourage dialogue, active listening, and compromise to find mutually acceptable solutions that support project goals.	Open
Manage Expectations: Manage stakeholders' expectations by setting realistic timelines, budgets, and deliverables. Foster a culture of transparency about project constraints and risks and	Open
Evaluate and Adapt: Continuously evaluate the effectiveness of governance and communication processes and adjust as needed. Solicit stakeholders' feedback to identify areas for improvement and continuously refine your approach.	Open

IV&V Findings & Recommendations

Project Management (cont'd)

#	Key Findings	Criticality Rating
45	**Preliminary Concern:** The current process does not allow BHA to track actual costs versus budgeted costs for large functionalities such as Provider Portal and Maui Wildfire Communication. By incorporating a clear process that would allow BHA to monitor costs of large functionality, BHA could maintain better financial records, and it would allow BHA to track actual versus budgeted costs. **Finding update:** IV&V has provided options allowing BHA to track the costs of large functionalities such as Provider Portal, Maui Wildfire Communication, and FHIR for BHA's consideration. These options also enable tracking the allocation of a release' fixed number of User Story Points (USPs) across various categories or buckets by utilizing tags in Azure DevOps (ADO). IV&V is concerned that the overuse of USPs for implementing large-scale functionalities, such as FHIR, leads to removing or reducing planned features, potentially diminishing system effectiveness, reducing user engagement, and frustrating long-awaited feature expectations.	N/A

IV&V Findings & Recommendations

Project Management (cont'd)

#	Key Findings	Criticality Rating
46	**Medium Issue:** Defect management process is not being followed. The project is not adhering to the defect tracking process outlined on page 8 of the BHA-ITS QA Test Plan Phase 1 Iteration 2 document, resulting in the failure to log all production defects. IV&V will work with BHA to create a plan to address the recommendations.	M

Recommendations	Status
IV&V recommends to: 1. Reinforce the process by conducting regular training for all team members on the defect management process, emphasizing its importance in quality assurance. 2. Establish clear guidelines: set specific guidelines for defect logging, including necessary details like severity, reproduction steps, and expected versus actual results. 3. Designate a defect management lead or champion responsible for overseeing adherence to the process. 4. Schedule regular meetings to review defect statuses, discuss challenges, and reinforce the importance of logging defects promptly. 5. Establish accountability measures for defect management, such as incorporating defect resolution metrics into performance evaluations. 6. Encourage Open Communication: promote collaboration between development, QA, and product teams to enhance understanding and commitment to defect resolution 7. Regularly assess compliance with the defect management process and adjust strategies as necessary. By implementing these recommendations, you can improve adherence to the defect management process and enhance the overall quality and success of the IT project.	Open

IV&V Findings & Recommendations

Project Management (cont'd)

#	Key Findings	Criticality Rating
47	**Medium Issue:** Documented governance process for restarting production systems. The lack of a documented governance process for restarting production systems can lead to several serious consequences such as increased downtime, compliance violations and data loss or corruption. IV&V will work with BHA to create a plan to address the recommendations.	M

Recommendations	Status
To address the lack of a governance process for restarting production systems, IV&V recommends BHA consider the following recommendations: 1. Establish Clear Policies and Procedures: Develop comprehensive documentation that outlines the policies for production restarts, including criteria for initiating a restart and roles involved. 2. Create a Governance Committee to oversee and approve production restarts. 3. Integrate the restart process into a broader change management framework. 4. Conduct Risk Assessments: Perform risk assessments prior to restarts to identify potential impacts and mitigation strategies. 5. Define Communication Protocols: Establish protocols for notifying all stakeholders about upcoming restarts, including timelines and expected impacts. 6. Automate Restart Procedures where possible. 7. Training and Awareness: Develop training programs for staff involved in the restart process to ensure they understand policies, procedures, and tools. 8. Compliance and Audit Trails: Ensure that all restart actions are documented, creating a clear audit trail that can be reviewed later and regularly review compliance with established policies and procedures, and adjust them as necessary. 9. Monitor and review to track the performance of production systems post-restart: Establish key performance indicators (KPIs) to monitor the performance of production systems after a restart. 10. Document Lessons Learned after each restart: Conduct a review after each restart to document what went well and what could be improved.	Open

IV&V Findings & Recommendations

Project Management (cont'd)

#	Key Findings	Criticality Rating
48	**Preliminary Concern:** Delays in the data delivery may result in negative impacts or delays to schedule. IV&V is concerned that there are delays in the data delivery resulting in negative impacts or delays to the project schedule.	M

IV&V Findings & Recommendations

Resource Management

#	Key Findings	Criticality Rating
34	**Medium Issue:** A shortage of BHA project resources could lead to reduced productivity and project delays. **Finding Update:** BHA is in the process of acquiring new staff to strengthen Help Desk resources. IV&V remains concerned that the ongoing resource shortage and the lack of new additions to the DDD team over the past five months will continue to adversely affect the project.	M

Recommendations	Status
BHA should explore options for offloading project team members' daily responsibilities to other staff.	In Progress
BHA should work quickly to backfill vacated project team member positions.	In Progress
BHA should identify tasks and duties that they can ask the SI to assume, as permitted by the contract, which are presently being handled by BHA members.	In Progress
BHA should explore the use of contractors to fill open project positions.	In Progress

IV&V Findings & Recommendations
Project Performance Metrics

Metric	Description	IV&V Observations	IV&V Updates
Velocity	• Review and validate the velocity data as reported by the project • Verify the project is on pace to hit the total target number of US/USP	**September: A** fix for the Calculator production defect related to deleting service details. There were no other deployments in September 2024.	Velocity Metric Trends:

Release	Planned velocity	Actual velocity	Percentage attained
R4.8	111	TBD	TBD

Phase 4 Releases Cumulative Variance

Release	Planned velocity	Actual velocity	Cumulative variance
R4.1	309	114	-195
R4.2	85	174	-106
R4.3	85	124	-67
Golden Record Mid-Sprint Deployment (MSD)	0	68	1
R4.4	240	225	-14
R4.5	95	76	-33
R4.6	84	103	-14
R4.7	111	50	-75
R4.8	111	TBD	TBD

IV&V Findings & Recommendations

Project Performance Metrics (cont'd.)

Metric	Description	.	IV&V Updates
Defect Metrics	Understand and track the following: • Defects by category (bug fixes) • USPs assigned to defects in a release vs. USPs assigned to planned US in a release	**September** - Other than a fix for the Calculator production defect related to deleting service details, there were no other deployments in September 2024.	NA

Note*: This defect percentage does not include defects under warranty that are assigned zero (0) User Story Points.

Appendix A: IV&V Rating Scales

Appendix A
IV&V Rating Scales

This appendix provides the details of each finding and recommendation identified by IV&V. Project stakeholders are encouraged to review the findings and recommendations log details as needed.

- See Findings and Recommendations Log (provided under separate cover)
- IV&V Assessment Category Rating Definitions

G	The assessment category is under control and the current scope can be delivered within the current schedule. The assessment category's risks and issues have been identified, and mitigation activities are effective. The overall impact of risk and issues is minimal. The assessment category is proceeding according to plan (< 30 days late).
Y	The assessment category is under control but also actively addressing resource, schedule or scope challenges that have arisen. There is a clear plan to get back on track. The assessment category's risk and/or issues have been identified, and further mitigation is required to facilitate forward progress. The known impact of potential risks and known issues are likely to jeopardize the assessment category. Schedule issues are emerging (> 30 days but < 60 days late). Project leadership attention is required to ensure the assessment category is under control.
R	The assessment category is not under control as there are serious problems with resources, schedule, or scope. A plan to get back on track is needed. The assessment category's risks and issues pose significant challenges and require immediate mitigation and/or escalation. The project's ability to complete critical tasks and/or meet the project's objectives is compromised and is preventing the project from progressing forward. Significant schedule issues exist (> 60 days late). Milestone and task completion dates will need to be re-planned. Executive management and/or project sponsorship attention is required to bring the assessment category under control.

Appendix A

Finding Criticality Ratings

Criticality Rating	Definition
H	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.
M	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 implemented as soon as feasible.
L	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.

Appendix B: Inputs

Appendix B
Inputs

This appendix identifies the artifacts and activities that serve as the basis for the IV&V observations.

Meetings attended during the August 2024 reporting period:

1. Daily Scrum Meetings
2. Daily Design Meetings
3. Twice Weekly RSM Issues Meeting
4. Weekly BHA-ITS Program Status Meeting
5. Bi-Weekly Check-in: CAMHD
6. Bi-Weekly Check-in: DDD
7. BHA (CAMHD & DDD) IV&V Joint Meeting
8. IV&V Draft IV&V Status Review Meeting with DOH
9. IV&V Draft IV&V Status Review Meeting with RSM and DOH
10. DOH BHA IT Solution Project – Steering Committee
11. US# Testing & Request Items
12. AER Analytics Bi-weekly Meeting

Artifacts reviewed during the August 2024 reporting period:

1. Daily Scrum Notes
2. Twice Weekly Issues Meeting Notes
3. Weekly BHA-ITS Program Status Report
4. Release 4.7 Relase Notes

Eclipse IV&V® Base Standards and Checklists

Appendix C: Project Trends

Appendix C
Project Trends

Process Area	December	January	February	March	April	May	June	July	August	September
User Story Validation										
Test Practice Validation										
Sprint Planning										
Release / Deployment Planning										
OJT and KT Sessions										
Targeted KT										
Project Performance Metrics										
Organizational Maturity Metrics										
General Project Management										
Resource Management										
Total Open Findings	10	11	12	11	12	13	13	12	12	14
Issue - high	2	5	12	0	0	0	0	0	0	0
Issue - medium	4	4	12	8	8	8	8	8	8	10
Issue - low	0	0	12	0	1	1	1	1	1	1
Risk - high	1	0	12	0	0	0	0	0	0	0
Risk - medium	1	1	12	2	2	2	2	2	2	2
Risk - low	0	0	12	0	0	0	0	0	0	0
Preliminary Concern	2	1	12	1	1	2	2	1	1	2

Solutions that Matter

ID	Finding	Finding Statement	Analysis and Significance	Recommendation	Finding Update	Category	Type	Priority	Status	Closed Date	Identified Date	Owner	
2	As a result of regression testing not being consistently performed, production releases are breaking existing functionality in the production environment.	R3.3 introduced a defect that deprecated features in production specific to Integrated Support and Life Trajectory functionality. DDD has informed IV&V that there are other examples of functionality being deprecated after a release, some of which are still being investigated. As of this report, IV&V has not evaluated the project's root cause analysis (RCA) process used to determine why such functionality was deprecated but will discuss further with BHA in January 2020.	Thorough vetting and validation of regression test cases are necessary to prevent defects when a release is pushed live. When defects occur in production, the project should follow a defined and repeatable process for determining the root cause of the problem.	1. Having board(s) in Azure DevOps or a document on SharePoint that provides information about the status of regression testing automation, to facilitate visibility and transparency to BHA project personnel and stakeholders. 2. IV&V recommends reevaluating the schedule priorities by distributing the work according to the resource bandwidth. This will ensure that the schedule is not impacted and that the work is done efficiently between regression testing and Golden Record (GR). 3. Pursue and complete additional formal training in Azure DevOps and Tricentis for test automation as soon and complete efforts to automate the two primary regression test scripts. IV&V recommends DDD and CAMHD to develop a common and consistent approach across divisions for performing regression testing. 4. Determine if current regression testing timeframes are adequate and if not, add more time to the pre-production regression test efforts for all release deployments. Updating the regression test scripts to ensure consistency with system configuration. Modifying release schedules to allow for regression testing timeframes Planning releases by functionality type to avoid unnecessary repetitive work being performed in any given section of the solution. Performing regression testing after every release, or possibly every other release, or potentially tying regression tests to full solution upgrade releases. In addition, consider alternating the DDD and CAMHD scripts every other release. Modifying regression test scripts to start AFTER case creation, limiting the time it takes to execute. (This recommendation was for a point in time and is no longer valid.)	9/30/24 - Microsoft updated object properties in the Microsoft Dynamics application. According to Tricentis' research, the regression test scripts will need to be re-recorded to enable automated regression testing. As a result, the R4.8 regression testing, which began on 9/23/2024, is being conducted manually. Additionally, in a separate incident, a Microsoft fix related to a previously raised BHA ticket caused issues in the Provider Portal within the System Integration Testing (SIT) environment, halting manual regression testing. BHA escalated the outstanding MS ticket to Severity A, leading Microsoft to roll back the changes and allow manual regression testing to resume. As of September 30, 2024, manual regression testing was scheduled to be completed on October 2, 2024, and the new Go-Live date was set for October 7, 2024. 8/31/2024 - BHA has raised a support ticket with Tricentis to resolve the ongoing issue that is causing failures in BHA's existing regression test scripts and is following up with Microsoft as well. Tricentis has scheduled a remote session on 9/5/2024 to research and resolve the issue. Delays in resolving this Tosca issue will require regression testing to be done manually until it's resolved. It is unclear whether BHA will need to modify the test scripts to address this issue. 7/31/2024 - R4.7 regression testing was done manually because Microsoft updated properties resulting in Tosca scripts being unable to execute - an issue is logged in Azure DevOps. The testing was completed and passed successfully. The fixes for bugs (2 from R4.7, 3 from R4.6) that resulted from the R4.7 and R4.6 regression testing will be deployed in future releases. R4.7 go-live is on track to be	Test Practice Validation	Issue	Medium	Open		12/31/2019	Gautam Gulvady	
14	Due to multiple quality concerns, the project may continue to face impactful system defects.	System defects identified in August that affected claims were due to multi-faceted quality issues were individually addressed during this reporting period. IV&V notes that there is one remaining defect still being evaluated that affects a limited number of claims. Overall, the Project Team has responded with a commitment to increase project quality and is in the process of identifying improvements to associated testing processes. These currently include: Performing Revenue Neutrality Testing to ensure expected revenue streams are largely unchanged from one period to the next. Conducting System Integration Testing, User Acceptance Testing, Performance Testing, and Regression Testing for Release 3.10. IV&V will continue to monitor the testing efforts throughout the balance of Release 3.10 and validate that enhanced quality processes, including industry standard regression testing, continue for Agile Release 3.11 forward. Finally, IV&V reviewed and provided feedback on the Help Desk and Semantic Layer design documents per request and found that both documents lacked design details.	The identified quality issues have negatively affected DOH billing processes and DOH has stated these are the most impactful defects discovered to date.	The SI vendor add a "Found In" column to the daily scrum file to indicate the environment where each defect was identified. The SI vendor provides the total number of defects in production and reports these numbers regularly to BHA. Evaluate existing project staff skills and experience level to ensure they meet BHA support requirements. Perform CAMHD revenue neutrality fiscal balance testing on a quarterly basis to ensure revenues are as expected. Assign dedicated resources to provide oversight of CAMHD Fiscal Processes. Monitor implemented improvements for effectiveness. IV&V recommends performing an RCA in collaboration with RSM after all future release deployments for continual quality improvement. BHA and RSM to collaborate on the necessary revisions to the submitted design deliverables to increase level of detail and quality. Perform typical project testing including System Integration, User Acceptance, Performance, and Regression Testing. Dedicate sufficient time in between releases for BHA and RSM to execute/implement RCA correction actions to reduce the volume of unplanned rework.	9/30/24 - The SI vendor deployed a fix for the Calculator defect related to deleting service details. Based on IV&V's recommendation that the SI vendor provide the total number of defects in production and report these numbers regularly to BHA, as of 9/24/2024, the SI vendor reported a total of 19 production defects. IV&V will assess how the project defines and applies severity and priority classifications, providing recommendations aligned with best practices. At BHA's request, IV&V is also reviewing the draft Service Level Agreement (SLA) and will offer recommendations based on industry standards. Based on IV&V's recommendation, on 9/24/2024, the SI vendor added a column to the daily scrum file to indicate the environment where each defect was found. IV&V remains concerned that code quality issues continue to impact the project, and users continue to be impacted by post-production defects. 8/31/2024 - IVV remains concerned that code quality issues continue to impact the project, and users continue to be impacted by post-production bugs. For example, DDD users encountered a major production Calculator bug involving the deletion of service details. DDD considered rolling back Calculator functionality to a previous build (Calculator 3.2); however, the SI vendor stated that rolling back would have re-introduced a timeout issue that BHA encountered at the end of 2022. Therefore, DDD agreed to have the SI develop a hotfix instead. R4.7 has one other critical post-production defect that the SI vendor is currently working on fixing. The SI vendor is also working on fixing a critical R4.7 defect and a high-priority defect from an earlier release. Once the fixes are completed, they will be deployed in a Mid-Sprint Deployment (MSD). IV&V recommends that BHA request	Project Management	Issue	Medium	Open		9/30/2020	Gautam Gulvady	

ID	Finding	Finding Statement	Analysis and Significance	Recommendation	Finding Update	Category	Type	Priority	Status	Closed Date	Identified Date	Owner	
31	Lack of regular Sprint Reviews and Sprint Demos will likely lead to misalignments between delivered work and stakeholder needs.	Earlier in the project, end-of-sprint demos were conducted. Sprint reviews/demos help to bring alignment across the team and stakeholders. They are essential building blocks for better software and teams. Sprint demos /reviews showcase the main functionality to stakeholders and incorporate their feedback. Currently, the project has joint testing involving the SI and BHA personnel. Per Agile Best practices, IV&V believes having Sprint demos/reviews during a sprint helps clarify and validate design prior to testing, steer the team in the right direction, and help to avoid big mistakes. This would also allow the testing team to focus solely on testing, which is beneficial.	Based on Agile Best Practices, Sprint Demos or reviews occur during a sprint with the development team, scrum master, and product owner and and gives all relevant stakeholders the opportunity to assess the completion of user stories, review important metrics and outcomes, and confirm if the Sprint goal has been achieved. This approach would also help prioritize and prepare the backlog for the next Sprint. Regular Sprint Reviews and demos strengthen the collaboration between development teams and stakeholders by enhancing communication channels and validating project objectives and ensuring that sprint deliverables remain consistent with stakeholder requirements. They are a great opportunity for the product owner, stakeholders, and the team to review what's being delivered and receive feedback. This way, the team can gauge responses and make observations earlier during development and not later during testing. Celebrating the team's accomplishments is also an essential part of these demos. Moreover, they are invaluable in steering the team in the right direction and avoiding big mistakes. It's interesting to note that the Sprint Demo could bring to light bugs such as R4.1 bug 34055 on the Portal, where the checkbox is on the left of the text.	According to Agile Best Practices, IV&V recommends including Sprint reviews and demos in future releases (R4.2 and onwards). 1. At the end of each sprint, conduct a sprint review meeting to demonstrate the completed work to stakeholders and gather feedback. Use this feedback to refine and reprioritize the product backlog. For a 2-month sprint, IV&V recommends having more than one (1) demo during the sprint. 2. Create a stakeholder register to identify all stakeholders. List their identification, assessment, and classification. Review the register regularly to plan appropriate stakeholder engagement. 3.Foster active participation from users and stakeholders during both Sprint Reviews and Sprint Demos. Emphasize the value of iterative feedback to guide development and ensure that user needs are consistently met. 4. Establish standardized communication protocols for both Sprint Reviews and Sprint Demos. Encourage teams to deliver concise and informative progress reports, including achievements, challenges, and plans. This will enhance stakeholder engagement and project transparency. 5. Institute a structured documentation process for both activities. Document key decisions, action items, and insights from each session to ensure accountability and to support ongoing process improvement.	9/30/24 - FHIR development and testing is currently on-going; BHA has seen some of the FHIR functionality during testing. The project is yet to have regular demos as part of Sprint Reviews. IV&V's recommendation continues to be that the project work to establish a regular cadence for Sprint Reviews. 8/31/2024 - The SI vendor demonstrated an overview of the Maui Wildfire communication functionality to stakeholders on 7/9/24, however, the project is yet to have regular demos as part of Sprint Reviews. Not having regular sprint demos as part of the Sprint Review process poses several risks, for example, delayed feedback, decreased stakeholder engagement, and increased risk of discovering critical issues too late in the process. BHA personnel have participated in FHIR testing, and a date for a FHIR demo has yet to be finalized. Product demos can provide an important feedback loop that helps ensure that the product meets user needs and expectations. 7/31/2024 - The SI vendor demonstrated the Maui Wildfire communication functionality to stakeholders on 7/9/24, and it seemed to be productive. The date for the FHIR demo is yet to be finalized. Although this is progress, the project is yet to demonstrate regular demos as part of the Sprint Review. 6/30/2024 - The SI vendor will demonstrate Maui Wildfire communication functionality to stakeholders on 7/9/24. The date for the FHIR demo is yet to be finalized. 5/31/2024 - Per discussions regarding new functionality/features in R4.6, the SI vendor will	Sprint Planning	Risk	Medium	Open		7/26/2023	Gautam Gulvady	
33	Performance bottlenecks with the INSPIRE production environment may result in low productivity and poor user experience.	Performance issues have been identified that have the potential to impact the system's functionality, user experience, and the overall reliability of the system. These performance issues warrant immediate attention and resolution. The last performance test was executed in June 2023 for Phase 3 releases (R3.x). ~800+ new User Story Points (USPs) have been developed since the last performance test execution.	Developmental Disability Division (DDD) personnel are encountering performance issues with re-assigning cases and opening the DDD – Contact Notes (Fiscal View – Complete) view. CAMHD has not reported performance issues.	IV&V recommends: BHA execute a performance test during the development of R4.6 (planned completion 5/20/2024), identifying test cases and scenarios that include both DDD and CAMHD functionality, transactions/functionality that are performance intensive, e.g., calculator functionality 2. Conduct load and performance testing for each release that has significant new features/functionality, e.g., calculator-related transactions. 3. Create a plan for comprehensive performance testing and address any performance bottlenecks. 4. Have the benchmark assessments done annually and implementation of Azure App Insights for Power Platform. 5. Execute test scripts that measure the run-time for execution of long-running transactions. E.g., calculator functionality/transactions and monitoring results over time.	9/30/24 - Performance testing was originally conducted from June 4 to June 12, 2024. However, the Developmental Disabilities Division (DDD) application was excluded from the testing scope due to the extensive size of its test script. The performance testing will include the DDD application as well. Microsoft reported that it is still testing the CAMHD and Portal applications. Once those tests are complete, testing of the DDD application will begin. 8/31/2024 - BHA requested Microsoft to conduct Performance Tests which were executed from June 4th to June 12th, 2024. Stakeholders are currently awaiting Microsoft's performance test report. The Performance Test report should validate whether the INSPIRE system meets required performance standards and can effectively handle expected and peak loads. 7/31/2024 - Microsoft executed the performance test Tuesday, 6/4/24, through Wednesday, 6/12/24; stakeholders expect Microsoft's performance test report in August 2024. Behavioral Health Administration (BHA) personnel reported no recent performance issues. 6/30/2024 - Microsoft executed the performance test from Tuesday, 6/4/24 – Wednesday, 6/12/24 - stakeholders are awaiting delivery of the report. 5/31/2024 - The performance test execution will commence on Tuesday, 6/4/24, and will end on Wednesday, 6/12/24. The scope of the performance test will align with the regression test cases. 4/30/2024 - BHA is continuing discussions with Microsoft	Project Management	Issue	Medium	Open		8/18/2023	Gautam Gulvady	

ID	Finding	Finding Statement	Analysis and Significance	Recommendation	Finding Update	Category	Type	Priority	Status	Closed Date	Identified Date	Owner	
34	Shortage of Behavioral Health Administration (BHA) project resources could lead to reduced productivity and project delays.	Key BHA project resources have reported constraints on how much time they can devote to the project. The departure of the Child and Adolescent Mental Health Division (CAMHD) System Management Office Manager and CAMHD Inspire Project Lead could further impact the project if DOH cannot acquire suitable resources. The lack of capacity of the DOH test script developer has slowed DOH's automated test script development.	If BHA is unable to fully staff the project and their existing resources continue to be constrained, the project could experience a reduction in productivity and project delays.	1. BHA should explore options for offloading project team members' daily responsibilities to other staff. 2. BHA should work quickly to backfill vacated project team member positions. 3. BHA should identify tasks and duties that they can ask the SI to assume, as permitted by the contract, which are presently being handled by BHA members. 4. BHA should explore the use of contractors to fill open project positions.	9/30/24 - BHA is in the process of acquiring new staff to strengthen Help Desk resources. IV&V remains concerned that the ongoing resource shortage and the lack of new additions to the DDD team over the past five months will continue to adversely affect the project. 8/31/2024 - The Business Analyst (BA) Position Description (PD) is under review. BHA is awaiting resolution of the Tosca (the automated testing tool) issue before adding an additional automated testing resource. 7/31/2024 - DDD is finalizing the position description (PD) for the Business Analyst. BHA is finalizing contractual options to add an automated testing resource. 6/30/2024 - DDD is currently evaluating options to add an automated regression testing resource. The State has approved the variance for a Business Analyst (BA) position. 5/31/2024 - DDD is planning to add an automated regression testing resource and is currently evaluating candidates. DDD plans to request one (1) business analyst position. No new update. 4/30/2024 - DDD is planning to add an automated regression testing resource and is currently evaluating candidates. DDD plans to request one (1) business analyst position. 3/31/2024 - No change since the February reporting period. 2/29/2024 - DDD plans to request one (1) business analyst position to address resource shortages.	Resource Management	Issue	Medium	Open		8/18/2023	Michael Fors	
39	Due to on-going deployment processes and technical execution issues, the Project may continue to encounter defects and challenges, e.g., when releases are in production or in meeting projected timelines for production and non-production deployments.	Several post-production bugs have been encountered in the Phase 4 release, R4.4.	Regarding the bug, "Human Services Research Institute (HSRI) flow is failing in production" (bug# 34886 https://dev.azure.com/DOHBHA/DOH%20BHA%20INSPIRE/_workitems/edit/34886), what is in development and deployed is vastly different from what was deployed to production. The root cause for these errors is currently being investigated. Repeatable documented release and deployment and resources experienced with deployments will help ensure that mistakes are minimized and that functionality is not mistakenly deprecated when deployments take place.	1. The Project should consider automating deployments for resource savings, increased efficiency, consistency, faster time to market, improved collaboration and reliability, scalability, version control integration, and rollback capability. 2. Ensure there are adequate and qualified resources to support the current deployment processes. This may require the support from RSM resources to provide assistance and knowledge transfer for some of the more complex deployment components. 3. As appropriate, consult with RSM on best practices that BHA could employ to support deployment. 4. Request the assistance of the RSM Solution Architect in reviewing and correcting issues associated with the consistency of configurations across environments, ensuring that the test environment is capable of testing ALL functions of any given release without the need for using multiple test environments. 5. Request the assistance of the RSM Solution Architect in review of deployment scripts as a double check for accuracy and completeness prior to commencing deployment activities. 6. The Project Team should consider evaluating potential changes to improve/enhance existing processes and communications to address current release/deployment shortfalls. 7. IV&V recommends performing an RCA in collaboration with RSM for the continued concerns surrounding environment differences. 8. IV&V recommends updating the Project's Configuration Management Plan to address the current needs of the Project. This should include specific checklists geared at ensuring repeatable promotional processes by	9/30/24 - The SI vendor deployed a fix for the Calculator production defect related to the deletion of service details, with no other deployments in September 2024. The R4.8 Go-Live was rescheduled from Thursday, 10/3/2024, to Monday, 10/7/2024. As of September 30, 2024, manual regression testing was scheduled to be completed on October 2, 2024, and the new Go-Live date was set for October 7, 2024. IV&V will monitor the quality of the deployment. 8/31/2024 - There were no deployment related bugs seen in the recent R4.7 release 7/31/2024 - One of the high-priority R4.6 post-production defects was deployment-related, the fix has been deployed in R4.7. IV&V will monitor the progress and quality of R4.7 and the MSD deployments. 6/30/2024 - Of the six (6) post-production defects (4 high and 2 medium priority), one (1) defect was determined to be deployment-related and one is a Microsoft defect. The root cause analysis (RCA) for the other defects is yet to be completed. CAMHD Provider Invoice Batch Printing was deployed to production on 6/5/24. A Mid-Sprint-Deployment (MSD) comprised of the Maui Wildfire set of work items is planned before the R4.7 go-live. Based on the ongoing FHIR User Acceptance Testing (UAT) sessions, the project anticipates that FHIR will be deployed in a release after R4.7. 5/31/2024 - R4.6 went live on 5/30/24. While smoke testing was executed successfully on 5/31/24, users encountered a significant problem with the Calculator where users were	Release/Deployment Planning	Issue	Low	Open		1/25/2024	Gautam Gulvady	

ID	Finding	Finding Statement	Analysis and Significance	Recommendation	Finding Update	Category	Type	Priority	Status	Closed Date	Identified Date	Owner	
40	Insufficient testing processes can lead to poor-quality software, project delays and extended user acceptance testing.	There is a limited understanding of the testing processes and the roles and responsibilities of those involved in the process. There is no formal process for the development, review, and approval of test scenarios, test cases, and test results to ensure adequate participation and approval from state staff.	When testing user stories 34564 and 34756 on 1/31/24, the test tasks did not reflect the real use cases to give stakeholders adequate confidence that the user story could be tested. As a result, time was expended by testing resources, testing was inadequate, and a user story may have been deemed to meet functionality when it did not.	IV&V has requested an overview of the testing process, with a focus on process such as tracking test coverage and requirements traceability. A Stakeholder Register helps identify and understand all project stakeholders, ensuring their needs are met and risks are managed through effective communication. A RACI clarifies roles and responsibilities, improving collaboration, decision-making, and resource management, which are all critical for the success of IT projects. 1. Identify stakeholders (output is stakeholder register) and develop a RACI matrix for testing. 2. Review the overall testing process and implement any needed improvements identified.	9/30/24 - BHA and IV&V reviewed the RACI matrix, with IV&V providing feedback. BHA continues to refine and develop the RACI matrix to define the roles clearly and involve the right stakeholders for successful project outcomes. The SI vendor currently tracks test coverage manually using Excel worksheets, missing out on the capabilities of Azure DevOps for tracking test coverage and requirements traceability. 8/31/2024 - BHA and IV&V to review the RACI matrix and Stakeholder Register to involve the right stakeholders in the testing process for successful project outcomes. The Stakeholder Register and the RACI matrix could help to involve the right stakeholders in the testing process, leading to more successful project outcomes. 7/31/2024 - No new updates. 6/30/2024 - IV&V shared the Stakeholder Register and RACI templates (based on best practices) with BHA in May 2024. BHA is working to populate information in the Stakeholder Register and RACI matrix. 5/31/2024 - IV&V has shared Stakeholder Register and RACI templates (based on Best Practices) for BHA to populate. 4/30/2024 - No new update. 3/31/2024 - CAMHD is populating the stakeholder registry and the RACI matrix to address adequate statewide participation and engagement in the testing process. 2/29/2024 - CAMHD is developing a Stakeholder registry	Test Practice Validation	Issue	Medium	Open		1/31/2024	Gautam Gulvady	
41	The absence of separate dedicated product backlog review meetings can lead to unclear priorities, misalignment with stakeholders, inadequate refinement, and increased risk of scope creep.	Currently, product backlog reviews are done during design meetings and/or weekly issues meetings. This can lead to, e.g., scattered focus, limited stakeholder engagement, difficulty in managing complexity, and delayed decision making.	A product backlog review is an essential part of agile project management, particularly in Scrum. It's a collaborative meeting where the Scrum team, including the Product Owner, Scrum Master, and development team members, inspect and adapt the product backlog. The product backlog review is an important Scrum ceremony that helps keep the backlog relevant, up-to-date, and aligned with the project's goals and priorities. Here's a summary of what typically happens during a product backlog review: 1. Inspecting Backlog Items: The team reviews the items on the product backlog. This involves discussing each item, understanding its priority, value, and acceptance criteria. 2. Ensuring Clarity: The team ensures that each backlog item is clear and well-understood. Any ambiguities or uncertainties are clarified at this stage. 3. Estimation: Estimation of backlog items may occur during the review. The team may use techniques like story points or relative sizing to estimate the effort required for each item. 4. Re-prioritization: Based on new insights, changes in requirements, or stakeholder feedback, the team may need to re-prioritize items in the backlog. 5. Removing or Adding Items: Items that are no longer relevant or necessary may be removed from the backlog. New items that emerge or are identified as important may be added. 6. Refinement: Backlog refinement may also occur during the review. This involves breaking down large items into smaller, more manageable ones, or adding more detail to items as needed. 7. Collaboration: The review is a collaborative effort involving the entire Scrum team. It's an opportunity for open discussion and sharing of ideas to ensure everyone is aligned on the goals	Separate dedicated product backlog review meetings (during sprints) would allow clarifying any ambiguities or uncertainties, re-prioritization, estimation, and refinement of backlog items. This would allow the project team to avoid situations where decisions about including items mid-sprint would have to be taken. IVV recommends scheduling separate dedicated product backlog review meetings (during sprints) where all relevant stakeholders are invited to review the product backlog and scheduled at the appropriate time(s) such that there is sufficient time to plan the design, development, and implementation (DDI) of the next release(s).	9/30/24 - IV&V continues to recommend the development and use of a RACI matrix to identify stakeholders who need to be involved in Sprint Reviews and product backlog reviews. BHA and IV&V reviewed the RACI matrix, with IV&V providing feedback. BHA continues to refine and develop the RACI matrix to clearly define the roles and involve the right stakeholders for successful project outcomes. IV&V will continue to discuss ways to use the RACI matrix in project work for product backlog reviews. CAMHD has indicated that they hold dedicated product backlog meetings, but IV&V has not yet been invited to attend or observe these sessions. 8/31/2024 - BHA has stated that before they change this process, they intend to utilize a RACI matrix to clearly define the roles. BHA and IV&V to review the RACI matrix and Stakeholder Register to involve the right stakeholders for successful project outcomes. 7/31/2024 - IV&V shared the Stakeholder Register and RACI matrix templates (based on best practices) with BHA in May 2024. BHA is working on populating the Stakeholder Register and RACI matrix. The SI vendor demonstrated the Maui Wildfire communication functionality to stakeholders on 7/9/24, and it seemed productive. The date for the FHIR demo is yet to be finalized. Although this is progress, the project is yet to demonstrate regular demos as part of the Sprint Review. 6/30/2024 - IV&V has shared the Stakeholder Register and RACI templates (based on best practices) for BHA to populate. Once the stakeholder registry and the RACI matrix are finalized, BHA plans to schedule product backlog	Sprint Planning	Risk	Medium	Open		1/26/2024	Gautam Gulvady	

ID	Finding	Finding Statement	Analysis and Significance	Recommendation	Finding Update	Category	Type	Priority	Status	Closed Date	Identified Date	Owner	
42	Effective governance and communication is lacking on the project.	Lack of effective governance and communication among stakeholders can have significant negative impacts on a project in several ways.	Ineffective governance and communication among stakeholders can significantly impact a project in several ways, e.g., stakeholder disengagement, misunderstandings, conflict and tension, misalignment of objectives, increased risks, unclear roles and responsibilities, and quality issues. An example on this project is the development and implementation of Golden Record/Master Data Management (MDM). The lack of effective governance and communication among stakeholders can result in project delays, budget overruns, and decreased quality. It's essential for project managers and stakeholders to prioritize clear communication and establish robust governance structures to ensure project success.	IVV recommends considering the following recommendations to establish effective governance and communication among stakeholders: 1. Create a Governance Structure: Implement a governance structure that defines decision-making processes, escalation procedures, and accountability mechanisms. Clarify how decisions will be made, who has authority, and how issues will be resolved. 2. Develop a Stakeholder Registry, RACI chart, and Stakeholder Engagement Plan: Identify key stakeholders and develop a plan to engage them throughout the project lifecycle. Tailor communication strategies to address the needs and preferences of different stakeholders, ensuring their active involvement and support. 3. Clearly define Roles and Responsibilities: clearly outlining the roles and responsibilities of each stakeholder involved in the project, would ensure that everyone understands their duties and how they contribute to the project's success. 4. Encourage Open Communication and Feedback: Foster a culture of open communication and feedback where stakeholders feel comfortable sharing their thoughts, concerns, and suggestions. Encourage constructive dialogue and actively seek input to improve decision-making and problem-solving. Keep stakeholders informed about project progress, milestones, and key developments through regular updates and progress reports. Highlight achievements, challenges, and any changes to the project plan or scope. 5. Resolve Conflicts Promptly: Address conflicts and disagreements among stakeholders promptly and professionally. Encourage dialogue, active listening, and compromise to find mutually acceptable solutions that support project goals. 6. Manage Expectations: Manage stakeholders' expectations by setting	9/30/24 - There remain some communication challenges between stakeholders on project aspects such as defect tracking and reporting, and tracking and monitoring costs related to Big Rock functionalities. IV&V recommends project teams maintain collaboration and information sharing across stakeholder groups to ensure shared understanding in key project areas. 8/31/2024 - There remain some communication challenges between stakeholders on project aspects such as defect tracking and reporting, and tracking and monitoring costs related to Big Rock functionalities. IV&V recommends project teams maintain collaboration and information sharing across stakeholder groups to ensure shared understanding in key project areas. 7/31/2024 - The divisions continue to collaborate on the security assessment exercise. The draft security assessment report is due in October 2024. 6/30/2024 - The divisions continue to collaborate on the security assessment and remediation exercise. 5/31/2024 - Collaboration between DDD and CAMHD on the security assessments is ongoing. 4/30/2024 - CAMHD and DDD continued to collaborate on the security assessments. 3/31/2023 - Division heads from three (3) divisions, the Developmental Disabilities Division (DDD), Child & Adolescent Mental Health Division (CAMHD), and Alcohol & Drug Abuse Division (ADAD), met in March 2024 to discuss	Project Management	Issue	Medium (low?)	Open		2/29/2024	Gautam Gulvady	
43	Execution time for the process for updating DDD SharePoint folders was unacceptable.	The existing DDD SharePoint documents and folders update process is intensive and the execution time was unacceptable - this process took 11 calendar days to execute in production with R4.4.	This process is part of several intense processes that update SharePoint documents and folders. The SI vendor recommended against doing this intensive process. However, no feasible alternative solutions were provided and this process was implemented. BHA has the flexibility to refine and alter their SharePoint directory structure. As a result, per the SI vendor, the process does not pick up continuously evolving permutations of folder structures in Production, nor can the execution time be estimated or benchmarked. Per discussions between the SI vendor and BHA over many months, this process was not going to complete 100% of the operations because of the different folder structures in Production. And this process/jobs has been updated many times to address different folder structures that were captured during testing, but there is no guarantee that it covers every possible scenario - some operations failed because the folder structure was not encountered during testing, which was an expected event. The folders in Production that were not picked up with Flow were supposed to be manually updated. The current solution utilizing Power Automate provided the necessary steps to automate this process , but it was never going to capture 100% of folders. And the process took 11 calendar days to execute in production.	IV&V recommends doing an impact analysis, e.g., downstream impact. IV&V recommends DDD puts on hold any development utilizing Power Automate for the performance issue encountered in production (marked "TBD" in finding #14 related to "SharePoint Bulk Flows still running"), related user stores, e.g., "Changes to DDD folders", and defects. IV&V recommends evaluating other feasible options, e.g., leveraging SharePoint tools and best practices. A project issue should be opened to identify and manage the resolution of this issue.	9/30/24 - The development of the improvements will commence once a SharePoint resource is available. 8/31/2024 - The SI vendor has completed the design and stated that development of the improvements will commence once a SharePoint resource is available. 7/31/2024 - The SI vendor and BHA finalized the Business Requirements Document (BRD). A new User Story has been created in Azure DevOps to commence design and development. 6/30/2024 - The SI vendor and BHA are finalizing the Business Requirements Document (BRD) and the design of the proposed solution. 5/31/2024 - The SI vendor has engaged a SharePoint Subject Matter Expert (SME) and is currently analyzing options. 4/30/2024 - Finding identified by IV&V.	Release/Deployment Planning	Issue	Medium	Open		4/30/2024	Gautam Gulvady	

ID	Finding	Finding Statement	Analysis and Significance	Recommendation	Finding Update	Category	Type	Priority	Status	Closed Date	Identified Date	Owner	
45	The current process does not allow BHA to track actual costs versus budgeted costs by feature/functionality.	The current invoices from the System Integrator (SI) vendor lack sufficient details that would allow BHA to track actual costs versus budgeted costs by, e.g., features such as Provider Portal, Maui Wildfire Communication, FHIR and Golden Record or by user story.	The current process does not allow BHA to track actual costs versus budgeted costs of large functionality such as Provider Portal, Maui Wildfire Communication, Fast Health Interoperability Resources (FHIR) or the Golden Record (GR). The absence of a clear process doesn't give insight into, e.g., how much of the budget has gone into developing functionality such as Provider Portal, Maui Wildfire Communication, FHIR or GR functionality. By incorporating a clear process that would allow BHA to monitor costs of large functionality, BHA can maintain better financial records and it would allow BHA to track actual versus budgeted costs and answer questions, e.g., "how much money has been spent on developing Provider Portal, Maui Wildfire Communication, FHIR or Golden Record (GR) functionality?"	IVV recommends that BHA Stakeholders should evaluate process options and agree on a process that would allow BHA to track actual costs versus budgeted costs of large large functionalities such as Provider Portal, Maui Wildfire Communication, FHIR and Golden Record. IV&V recommends that BHA stakeholders agree on the level of granularity, e.g., by user story or functionality, that would allow stakeholders to have reliable answers to important questions such as how much money has been spent on developing Provider Portal, Maui Wildfire Communication, Fast Health Interoperability Resources (FHIR) functionality or Golden Record (GR) functionality or on developing specific user stories.	9/30/24 - IV&V has provided options allowing BHA to track the costs of large functionalities such as Provider Portal, Maui Wildfire Communication, and FHIR for BHA's consideration. These options also enable tracking the allocation of a release' fixed number of User Story Points (USPs) across various categories or buckets by utilizing tags in Azure DevOps (ADO). IV&V is concerned that the overuse of USPs for implementing large-scale functionalities, such as FHIR, leads to removing or reducing planned features, potentially diminishing system effectiveness, reducing user engagement, and frustrating long-awaited feature expectations. 8/31/2024 - IV&V has provided options that would allow BHA to track costs of large functionalities such as Provider Portal, Maui Wildfire Communication, and FHIR for BHA's consideration 7/31/2024 - It is agreed that the project will report cases where the number of user story points (USPs) is going to exceed the budgeted number of user story points for "big rock" items such as Provider Portal and Maui Wildfire Communication. The process for reporting cases is being discussed and analyzed. 6/30/2024 - BHA Stakeholders plan to evaluate process options. See new IV&V recommendation below. 5/31/2024 - BHA Stakeholders to evaluate process options, e.g., through Azure DevOps.	Project Management	Preliminary Concern		Open		5/25/2024	Gautam Gulvady	
46	Defect management process is not being followed. The project is not adhering to the defect tracking process outlined on page 8 of the BHA-ITS QA Test Plan Phase 1 Iteration 2 document, resulting in the failure to log all production defects.IV&V will work with BHA to create a plan to address the recommendations			IV&V recommends to: Reinforce the process by conducting regular training for all team members on the defect management process, emphasizing its importance in quality assurance. Establish clear guidelines: set specific guidelines for defect logging, including necessary details like severity, reproduction steps, and expected versus actual results. Designate a defect management lead or champion responsible for overseeing adherence to the process. Schedule regular meetings to review defect statuses, discuss challenges, and reinforce the importance of logging defects promptly. Establish accountability measures for defect management, such as incorporating defect resolution metrics into performance evaluations. Encourage Open Communication: promote collaboration between development, QA, and product teams to enhance understanding and commitment to defect resolution Regularly assess compliance with the defect management process and adjust strategies as necessary. By implementing these recommendations, you can improve adherence to the defect management process and enhance the overall quality and success of the IT project.		Project Management	Issue	Medium	Open		9/30/2024	Gautam Gulvady	

ID	Finding	Finding Statement	Analysis and Significance	Recommendation	Finding Update	Category	Type	Priority	Status	Closed Date	Identified Date	Owner	
47	Lack of a documented governance process for restarting production systems can lead to increased downtime, user frustration, compliance violations, and data loss or corruption. IV&V will work with BHA to create a plan to address the recommendations	Lack of a documented governance process for restarting production systems can lead to increased downtime, user frustration, compliance violations, and data loss or corruption.IV&V will work with BHA to create a plan to address the recommendations		To address the lack of a governance process for restarting production systems, IV&V recommends BHA consider the following recommendations: Establish Clear Policies and Procedures: Develop comprehensive documentation that outlines the policies for production restarts, including criteria for initiating a restart and roles involved. Create a Governance Committee to oversee and approve production restarts. Integrate the restart process into a broader change management framework. Conduct Risk Assessments: Perform risk assessments prior to restarts to identify potential impacts and mitigation strategies. Define Communication Protocols: Establish protocols for notifying all stakeholders about upcoming restarts, including timelines and expected impacts. Automate Restart Procedures where possible. Training and Awareness: Develop training programs for staff involved in the restart process to ensure they understand policies, procedures, and tools. Compliance and Audit Trails: Ensure that all restart actions are documented, creating a clear audit trail that can be reviewed later and regularly review compliance with established policies and procedures, and adjust them as necessary. Monitor and review to track the performance of production systems post-restart: Establish key performance indicators (KPIs) to monitor the performance of production systems after a restart. Document Lessons Learned after each restart: Conduct a review after each restart to document what went well and what could be improved.		Project Management	Issue	Medium	Open		9/30/2024	Gautam Gulvady	
48	Delays in acquiring data from external partners could lead to project schedule delays.	Some AER project requirements are reliant on data provided by external partners (e.g., Dept. of Human Services (DHS)).	Delays in the delivery of this data could lead to project delays and potentially increased costs.			Project Management	Preliminary Concern	Medium	Open		9/30/2024	Gautam Gulvady	