STATE OF HAWAI'I | KA MOKU'ĀINA O HAWAI'I 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

September 22, 2025

The Honorable Ronald D. Kouchi President of the Senate and Members of the Senate Thirty-Third State Legislature State Capitol, Room 409 Honolulu, Hawai'i 96813 The Honorable Nadine K. Nakamura Speaker and Members of the House of Representatives Thirty-Third State Legislature State Capitol, Room 431 Honolulu, Hawai'i 96813

Aloha Senate President Kouchi, Speaker Nakamura, 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

August 1 – August 31, 2025

Final Submitted: September 11, 2025



Agenda

Executive Summary IV&V Findings & Recommendations

Appendices

- A Rating Scales
- B Inputs
- C Project Trends
- D Acronyms and Definitions
- E List of Production Defects





The project continues to make progress with the next system release scheduled for 10/1/2025.

The project continues to analyze and document the root cause of high-priority defects to identify common development problem areas and reduce recurring defects.

BHA continues to actively recruit for a supervisory role for the project team. This may help alleviate the workload of team members and enhance overall productivity on project tasks.

The project continues to strengthen regression testing by enhancing automated scripts and supporting DDD's transition to owning test script maintenance. Now that BHA's Tosca license has been renewed, the Tosca SME has resumed automation efforts, rebuilt the work lost during the renewal process, and is nearing completion of six additional modules.

IV&V has closed three findings: the Lack of Governance Process (finding #47), which BHA has addressed and for which they are satisfied with the feedback received; the Tosca license (finding #54), which has been renewed; and the audit compliance risk (finding #53), which BHA is actively tracking through an existing ticket.



Jun	Jul	Aug	Category	IV&V Observations	
L	L	•	Sprint Planning	BHA has initiated a redistribution of development responsibilities across the team to reduce workload concentration and maintain project momentum. The team has addressed the bottleneck, and access provisioning for additional members is in progress to support this transition. Some development activities may be experiencing delays, potentially related to known issues that are actively being addressed through existing support channels.	
L	L	•	User Story (US) Validation	There are no active findings in the User Story (US) Validation category, which remains Green (low criticality) for this reporting period. IV&V will continue to monitor the US development and validation process in upcoming reporting periods.	
M	M	M	Test Practice Validation	The project continues to strengthen regression testing by enhancing automated script and supporting DDD's transition to owning test script maintenance. Now that BHA's Tosca license has been renewed, the Tosca SME has resumed automation efforts. BHA could strengthen its quality assurance efforts by identifying high-risk areas that would benefit from enhanced test coverage.	



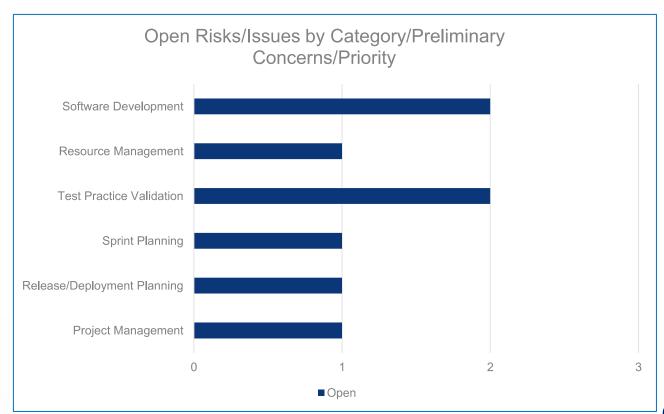
Jun	Jul	Aug	Category	IV&V Observations	
M	M	M	Release / Deployment Planning	The project continues to make progress with analyzing and documenting the root cause of high-priority defects in an effort to identify common development problem areas and reduce recurring defects.	
•	•	L	On-The-Job- Training (OJT) and Knowledge Transfer (KT) Sessions	This category remains Green (low criticality) for the August reporting period with no active findings.	
	L		Targeted KT	This category remains Green (low criticality) for the August reporting period. IV&V will continue to monitor.	
L	L	0	Project Performance Metrics	There are no project performance metrics to report for the August reporting period. IV&V will keep this category's criticality rating Green (low criticality) and will continue to monitor.	
	L	1	Organizational Maturity Assessment (OMA)	This category remains Green (low criticality) for the August reporting period. There are no outstanding findings in this category, and IV&V will continue to monitor.	



Jun	Jul	Aug	Category	IV&V Observations
•		•	Project Management	The project continues to make progress with the next system release scheduled for 10/1/2025. The project continues to prioritize Help Desk and defect management processes. BHA is actively reviewing the submitted Help Desk documentation to assess the adoption and enforcement of documented defect management procedures.
M	M	M	Resource Management	BHA is in the process of recruiting for a supervisory role to help balance workload and support various team functions, including security-related responsibilities. In the interim, existing staff will continue to manage certain security coordination tasks. This gap may impact the timeliness and coverage of security-related activities until dedicated resources are in place.



As of the August 2025 reporting period, Eight (8) open findings. Four (4) Medium Issues, one(1) Low Risks, Two (2) Low Issues, and One (1) Preliminary Concern, spread across the Release/Deployment Planning, Test Practice Validation, Sprint Planning, Project Management, Resource Management, assessment areas are currently open.





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



Sprint Planning (cont'd)

#	Key Findings	Criticality Rating
41	Low Risk: The absence of separate dedicated product backlog review meetings can lead to unclear priorities, misalignment with stakeholders, inadequate refinement, and an increased risk of scope creep. Update: BHA has initiated a redistribution of development responsibilities across the team to reduce workload concentration and maintain project momentum. The team has addressed the bottleneck, and access provisioning for additional members is in progress to support this transition. Some development activities may be experiencing delays, potentially related to known issues that are actively being addressed through existing support channels.	D

Recommendations	Status
BHA continues to conduct these meetings regularly and mature the practice over time, as they provide tangible value in sustaining project velocity and reducing rework.	Open
CAMHD and DDD implement a structured feedback management process with a prioritization framework to ensure that all new requests are thoroughly evaluated and aligned with project goals before being added to the backlog.	Open
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



Test Practice Validation

#	Key Findings	Criticality Rating
2	Medium Issue: The lack of comprehensive automated regression testing has likely led to post-production defects, causing user frustration. Finding Update: Regression testing for Release 4.14 is scheduled for 9/22/25 – 9/30/25, with go live planned for 10/1/25. The mid-month renewal of Tosca licenses by BHA enabled the Tosca Automation Regression Testing SME to resume development of automated DDD test scenarios and allows CAMHD to restart the execution of automated test scripts.	M

Recommendations	Status
To ensure effective Tosca testing, it is crucial for both divisions to align on a unified resource allocation strategy. Given the limited availability of resources, open communication and consensus-building are essential for optimizing tester utilization. By collaborating to prioritize testing efforts, share critical test cases, and identify overlapping areas, the divisions can achieve comprehensive regression testing without overburdening a single resource. This collaborative approach will balance workloads, streamline processes, and enhance test coverage, minimizing delays and bottlenecks. Ultimately, it will enable both divisions to efficiently meet their testing objectives.	Open
A balanced approach that combines manual and automated regression testing to ensure broad test coverage and flexibility.	In-Progress



Test Practice Validation (cont'd)

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
IV&V recommends DDD and CAMHD to develop a common and consistent approach across divisions for performing regression testing.	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



Test Practice Validation (cont'd)

#	Key Findings	Criticality Rating
40	Medium Issue: Limited testing processes can lead to poor-quality software, project delays, and extended user acceptance testing. Finding Update: In addition to the ongoing automated regression test development for DDD and the annual performance testing, IV&V recommends that BHA identify high-risk areas where enhanced test coverage would be beneficial. This should be pursued through a phased approach, gradually expanding new and/or existing testing processes while working within resource constraints.	M

Recommendations	Status	
IV&V recommends enhancing testing scripts to better align with high-risk and business-critical workflows. This may include incorporating a broader range of testing techniques such as negative testing (e.g., invalid inputs or edge cases), boundary testing, role-based scenario testing, and end-to-end workflow validation. Expanding the scope of testing in this way will help uncover hidden defects, improve system robustness, and reduce the likelihood of post-deployment issues.		
As part of this effort, it may be helpful to review recent production defects to identify areas where test coverage could be improved. Expanding smoke test scenarios to include key functional paths with a history of defects, along with exploring opportunities for automation, can contribute to more efficient and consistent post-deployment validation. These enhancements are intended to support stronger release readiness and help minimize the risk of post-deployment issues.	In Progress	



Test Practice Validation (cont'd)

Recommendations	Status
Make efforts to implement a streamlined Root Cause Analysis (RCA) process to identify the causes of defects and prevent recurrence. Due to project resource constraints, propose timeboxing RCA efforts for each defect introduced into production. Timeboxing involves allocating a fixed period (e.g., 1-2 hours per defect or a set number of hours per week) for focused Root Cause Analysis (RCA) activities. These activities may include quickly gathering defect context, analyzing potential causes, and proposing corrective actions, all within the specified timeframe. Project PM(s) can oversee the tracking of corrective actions to ensure completion.	In Progress
IV&V recommends that, after fixing a defect, the SI incorporate relevant test cases to validate these fixes in subsequent releases.	In Progress
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 needs are met and risks are managed through effective communication. A RACI matrix 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



Release / Deployment Planning (cont'd)

#	Key Findings	Criticality Rating	
39	Low Issue: 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. Finding Update: Following the R4.13 deployment, one (1) critical and three (3) high-severity production defects remain unresolved. The project team has completed root cause analysis (RCAs) for these four (4) defects, and none are related to the deployment. IV&V recommends the team continue performing RCAs to determine root causes. IV&V will continue to monitor release outcomes and the project's progress toward a mature, systemic approach to defect management and deployment.		
Reco	ommendations	Status	
inclu stake RCA	project team is recommended to develop and document a formal Root Cause Analysis (RCA) protocol that des defined triggers for initiating an RCA such as severity 1 or 2 production defects, recurring issues, or eholder-reported impacts. The protocol should also establish clear roles and responsibilities for conducting s and reviewing outcomes, along with setting timeframes for completing RCAs following defect identification lease.	In Progress	
corre moni pract	itionally, incorporating standardized templates or tools for documenting RCA findings and associated ective actions, as well as implementing a tracking mechanism to ensure those actions are carried out and nitored for effectiveness, will strengthen the process. Formalizing these elements will help ensure RCA ctices are applied consistently, improve visibility into root causes, and support long-term defect reduction loss future releases, including those related to FHIR, MSDs, and AER.		



Release / Deployment Planning (cont'd)

Recommendations	Status
Implement a streamlined Root Cause Analysis (RCA) process to identify deployment causes and prevent recurrence. To manage resource constraints, consider timeboxing RCA efforts—e.g., 1–2 hours per defect or a set number of hours weekly. Within this timeframe, focus on gathering context, analyzing causes, and proposing corrective actions. Project PMs can track these actions to ensure follow-through.	In Progress
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 SI resources to provide assistance and knowledge transfer for some more complex deployment components.	Open
As appropriate, consult with the SI on best practices that BHA could employ to support deployment.	In Progress
Request the assistance of the SI's 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.	In Progress
Request assistance from the SI's Solution Architect in reviewing deployment scripts to double-check for accuracy and completeness before commencing deployment activities.	In Progress



Release / Deployment Planning (cont'd)

Recommendations	Status
The Project Team should consider evaluating potential changes to improve/enhance existing processes and communications to address current release/deployment shortfalls.	In Progress
IV&V recommends performing a Root Cause Analysis (RCA) in collaboration with SI for the continued concerns surrounding environment differences.	In Progress
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.	In Progress
Look at implementing 'hard' code freeze dates as well as test environment deployment dates to ensure that testing and deployment activities are not rushed.	In Progress
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.	In Progress
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.	In Progress

#	Key Findings	Criticality Rating
46	Low Issue: Lack of oversight of the established defect management process could lead to lost/forgotten defects and user frustration and could slow the resolution of similar defects in the future. Finding Update: IV&V notes continued progress in adhering to established Help Desk and defect management processes, as demonstrated by the logging and active tracking of high- and critical-severity defects. This indicates the project team is effectively capturing and managing issues through formal channels. IV&V encourages continued attention to field-reported issues, such as those involving the Provider portal, to further support continuous improvement and enhance end-user satisfaction.	L
Rec	ommendations	Status
ADC	project records the history of a defect's severity in the corresponding ticket's description/notes section in 0. For example, when a hotfix is deployed to mitigate a defect initially classified as "Critical," the cription/notes section should document that the defect originally had a "Critical" severity rating.	Open
	ed on Best Practices, updating the defect management documentation and having regular refresher training ne defect management process.	In Progress
	d communications to the project stakeholders to clarify the defect management process and the importance gging all defects.	Open
Take	e steps to assure current and new users understand how to report and/or log defects.	In Progress
	sider designating a defect management lead or champion to oversee adherence to the process and assure efects are logged.	Open
	o stakeholders informed about defect status, priority, impacts, and resolution timelines. This could increase reness of the importance of logging defects.	In Progress

Recommendations	Status
Discuss ways to improve the defect logging and management process with the SI and come up with a plan to improve.	In Progress



#	Key Findings	Criticality Rating
47	Medium Issue: The lack of a governance process for restarting production systems can impact service availability and frustrate end-users and hinder accountability.	Closed
	Finding Update: BHA is satisfied with IV&V's feedback to the updated Production System Restart Communication Protocol document. As there are no open issues, IV&V is closing this finding.	

Recommendations	Status
Develop standard procedures for system restarts, including pre-checks, step-by-step instructions, and post-restart verifications.	In Progress
Require formal approvals before initiating a restart, especially for INSPIRE, and document all actions in a centralized system.	In Progress
Define clear escalation paths for when restarts do not go as planned, including identifying contacts for technical support and management approval for additional interventions.	Open
Automate Restart Procedures where possible.	Open
The governance process is established it should be effectively communicated to the project team.	Open
Provide stakeholders with a clear explanation of the reason for the restart and the lessons learned, while documenting the restart details in the defect record.	Open



Resource Management

#	Key Findings	Criticality Rating
	Medium Issue: A shortage of BHA project resources could lead to reduced productivity and project delays.	
34	Finding Update: BHA is in the process of recruiting for a supervisory role to help balance workload and support various team functions, including security-related responsibilities. In the interim, existing staff will continue to manage certain security coordination tasks. This gap may impact the timeliness and coverage of security-related activities until dedicated resources are in place.	M

Recommendations	Status
Consider identifying key security-related activities such as policy development, monitoring, or access oversight that could benefit from additional support. This could help provide clarity for discussions regarding the potential adjustment of existing roles or exploration of alternative solutions. A high-level overview of these activities may assist leadership in evaluating and addressing any potential gaps over time.	Open
BHA implement a structured knowledge transfer process when key personnel retire, including cross-training and documenting critical knowledge in the Dynamics Help Desk system. Regular updates to the knowledge base will maintain its accuracy, preserve essential information, and support smooth operational continuity.	Open
Utilizing peer-to-peer knowledge sharing, allowing experienced team members to informally share their expertise during team meetings. Additionally, creating internal documentation that outlines best practices and processes for developing security policies would serve as a self-service resource for the team.	In Progress



Resource Management (cont'd)

Recommendations	Status
DDD and CAMHD have further discussions to optimize resource utilization between the two divisions.	Open
BHA should explore options for offloading project team members' daily responsibilities to other staff.	In Progress
BHA should work quickly to create new positions and receive State approval.	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 fulfill the functions for open project positions.	In Progress



Software Development

#	Key Findings	Criticality Rating
14	Medium Issue: Due to multiple quality concerns, the project may continue to face impactful system defects. Finding Update: As of this reporting period, one (1) critical and three (3) high-severity production defects remain unresolved and are actively being addressed by the project team. While progress continues on higher-priority defect remediation (see Appendix E), resolution of lower-severity issues remains deferred due to ongoing resource focus. IV&V continues to monitor code quality closely, with particular attention on the resolution of remaining R4.13 defects, upcoming release readiness, and any Mid-Sprint Deployments (MSDs).	M
Recor	nmendations	Status
	collaboration between divisions to review reported defects, ensuring a shared understanding and ent, particularly regarding the severity and priority of production defects.	Open
	der exploring tools and practices that support continuous code quality improvements that could help to sh quality standards and assure high-quality code that is secure and can be easily maintained.	In Progress
•	roject increases comprehensive testing prior to joint testing to reduce the burden on BHA testers and e post-production defects.	Open
	vendor add a "Found In" column to the daily scrum file to indicate the environment where each defect entified.	In Progress
The S	vendor provides the total number of defects in production and reports these numbers regularly to BHA.	In Progress
Evalua	ate existing project staff skills and experience levels to ensure they meet BHA support requirements.	In Progress

Recommendations	Status
Perform CAMHD revenue neutrality fiscal balance testing on a quarterly basis to ensure revenues are as expected.	In Progress
The project monitor implemented improvements for effectiveness.	In Progress
Performing an RCA in collaboration with the SI after all future release deployments for continual quality improvements.	In Progress
BHA and the SI collaborate on the necessary revisions to the submitted design deliverables to increase level of detail and quality.	In Progress

Software Development

	#	Key Findings	Criticality Rating
ţ	52	Preliminary Concern: BHA does not currently have a streamlined report to identify active AER analytics users in production. Finding Update: The project team has finalized requirements related to this user request. The plan is to commence with the design.	

Software Development

#	Key Findings	Criticality Rating
	Low Risk: User activity tracking for viewing records is limited across systems, which may affect transparency and raise potential compliance concerns. Finding Update: BHA already has a ticket to track this finding. Since the core issue involves the	
53	availability of security resources, IV&V will continue to monitor it under the existing resource finding. While certain tools and solutions are part of the long-term strategy, they are not a current priority. As this risk is now being actively tracked and integrated into broader resource tracking, IV&V will proceed to close this finding.	Closed

Recommendations	Status
Evaluate and prioritize Microsoft Purview through a cost-benefit and feasibility analysis, and initiate discussions with Microsoft to confirm Copilot licensing, integration feasibility, and an implementation roadmap to enhance efficiency and compliance.	Open
Develop and formalize policies and procedures for both automated and manual audit processes, including random audits, to enhance oversight and reduce risks.	Open

Project Management

#	Key Findings	Criticality Rating
54	Medium Risk: The expiration of the Tosca automation license resulted in a temporary pause in automated regression testing for the BHA team, affecting testing efficiency and coverage. Findings Update: This risk is resolved, with the Tosca automation license renewed. Additionally, the Tosca SME now has the necessary access to manage and support automated testing activities.	Closed

Recommendations	Status
Ensure the Tosca automation license is renewed in advance to avoid disruptions to automated regression testing.	Open
Implement a tracking and notification system for license expiration dates to support timely renewals.	Open
Develop a documented backup plan to manage regression testing coverage through prioritized manual or alternative automated methods during any future tool outages.	Open

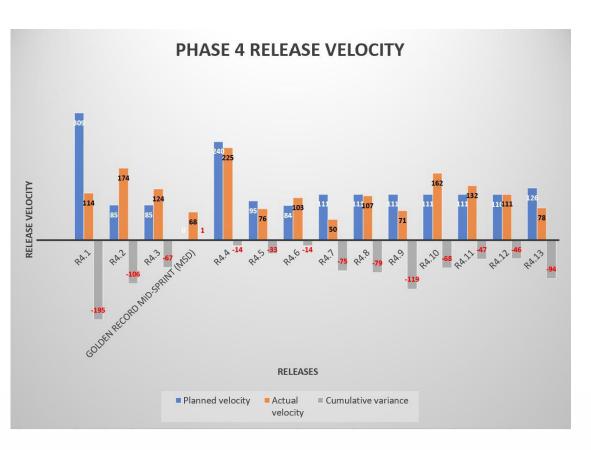
Project Performance Metrics

Metric	Description	IV&V Observations		IV&V Updates					
	Review and validate the velocity data as		Velocity Metric Trends:						
Velocity	reported by the project	August: There were no deployments in August 2025. R4.14 is planned for production deployment	Release	Planned velocity	Actual velocity	Percentage attained			
Velocity	 Verify the project is on pace to hit the 	on 10/1/2025.	R4.14	126	-	-			
	total target number of US/USP								

IV&V Findings & Recommendations Project Performance Metrics

Phase 4 Releases Cumulative Variance

			I.
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 (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	107	-79
R4.9	111	71	-119
R4.10	111	162	-68
R4.11	111	132	-47
R4.12	110	111	-46
R4.13	126	78	-94



Note: The SI has been working on areas not currently reflected in the velocity numbers shown in the table above. Once the SI provides those velocity figures, IV&V can incorporate them into the table.

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Project Performance Metrics (cont'd.)

Metric	Description	IV&V Observations	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 	August – There were no deployments in August 2025. R4.14 is planned for production deployment on 10/1/2025.	N/A

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 AIV&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

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).

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.

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.



R

Appendix A

Finding Criticality Ratings

Criticality Rating	Definition
B	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

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

Meetings attended during the August 2025 reporting period:

- 1. Daily Scrum Meetings
- 2. Daily Design Meetings
- 3. Twice-Weekly Project Issues Meetings
- 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
- DOH BHA IT Solution Project Steering Committee
- 10. Incident Management Discovery
- 11. Discovery Management Solution Discovery Sessions

Eclipse IV&V® Base Standards and Checklists



Artifacts reviewed during the August 2025 reporting period:

- 1. Daily Scrum Notes
- 2. Twice Weekly Issues Meeting Notes
- 3. Weekly BHA-ITS Program Status Report
- 4. Release 4.7 Release Notes
- 5. BHA Production System Restart Communication Protocol IV&V reviewed and provided recommendations.
- 6. Conducted IV&V Interviews.

Appendix C: Project Trends

Appendix C Project Trends

	November	December	January	February	March	April	May	June	July	August
User Story Validation										
Test Practice Validation Sprint Planning										
Release / Deployment Planning										
OJT and KT Sessions										
Targeted KT										
Project Performance Metrics										
Organization al Maturity Metrics										
General Project Managemen t										
Resource Managemen t										
Total Open Findings	14	14	14	11	10	9	10	10	10	8
Issue - high	0	0	0	0	0	0	0	0	0	0
Issue - medium_	10	10	10	7	9	7	7	7	7	4
Issue - low	1	1	1	3	0	0	0	0	0	2
Risk - high	0	0	0	0	0	0	0	0	0	0
Risk - medium	2	2	2	1	1	1	0	0	0	0
Risk - low	0	0	0	0	0	1	1	1	1	1
Preliminary Concern	2	2	2	0	0	0	1	2	2	1

Appendix D Acronyms and Definitions

Acronyms	Definition
DOH	Department of Health
ВНА	Behavioral Health Services Administration
CAMHD	Child & Adolescent Mental Health Division
FHIR	Fast Healthcare Interoperability Resources
DDI	Design Development Implementation
DDD	Developmental Disabilities Division
SI	System Integrator
USP	User Story Points
SME	Subject Matter Expert
SIT	System Integration Testing
MS	Microsoft
MSD	Mid Sprint Deployment
ADO	Azure DevOps
SLA	Service Level Agreement
RCA	Root Cause Analysis
UAT	User acceptance testing
OJT	On-the-Job Training
KT	Knowledge Transition
SFTP	Secure File Transfer Protocol
IV&V	Independent Verification and Validation
MQD	Med-QUEST Division
CMS	Centers for Medicare & Medicaid Services
AER	Adverse Events Report



Appendix E List of Production Defects

ID - Wo	ork Item Type *	Division *	Title	State	▼ Priority ▼	Severity *	Found In .T	Created Date	RCA Categories	▼ RCA Description ▼	Bug Type	Iteration Path	▼ Tags ▼	Area Pa Feature	Created By
34242 Bu	g	DDD	Bug - Case Merge - Contact Notes not merging: Permissions error	New	3	3 - Medium	PROD	8/17/2023 8:44				DOH BHA INSPIRE\Phase 4\CCB		DOH BHAII Case Man	a Andrew Obiano < Andrew. Obiano.consultant@doh. hawaii.gov>
										<ahre-plow 254-3;display-inline<br="" 255,="" aput-courier="" assuming="" capan="" monospace-background-color:rgb="" newfapour,="" style—"fort-tamily-consolar,="" subfolder-bottery,="" the="" was="">limporator," > CTEIndaps_Referenals.nbsp;and8.nbsp;Recommendations' -/ppan> for the Customer existed. Athorp; for whatever reason in didn't exist, it was not set up to account for that. Achiego; "dno-'eds style—"color:#000000;bickground-color:#ffffeor/indamily-Consolar, South New , monospace-front-tamily-consolar, south New , monospace-front-t</ahre-plow>					
37791 Bu	ď	DDD	DDD - CIT Referral: Create Document Location Flow Failures	Ready To Test	2	3 - Medium	PROD	2/10/2025 9:30	Design Errors	weight:normal;*>chr>	operated this way prior to last release.	DOH BHA INSPIRE\Phase 4\R4.14	DDD; DD0	DOH BHA INSPIRE	Taylor Allen <taylor.allen.consult@doh.hawaii.gov></taylor.allen.consult@doh.hawaii.gov>
37793 Bu	ıg	DDD	DDD - ISP Report Generation Issues	New	2	3 - Medium	PROD	2/10/2025 10:06			Found in PROD, something that has operated this way prior to last release.	DOH BHA INSPIRE\Phase 4\R4.14	DDD; DD0	DOH BHA INSPIRE	Taylor Allen <taylor.allen.consult@doh.hawaii.gov></taylor.allen.consult@doh.hawaii.gov>
40765 Bu		CAMHD	CAMHD - Voided Provider Invoice Report not calculating correctly	Ready To Test	1	2 - High	PROD	8/5/2025 11:19	Coding Errors	<dho-repeating affect="" control="" document="" for="" in="" most<br="" templates="" the="" was="" word="">recent update to the template. Formatting for total amount (parentheses indicating negative) potentially affected in most recent update, or not included in original build.</dho-repeating>	Found in PROD, new bug as of prior Release, attributable to new code that broke				Standzicki.consult, Alex < Alex.Standzicki.consult@doh.hawaii.goy>
40766 Bu			CAMHD - Provider Invoices picking up wrong progress notes (Audio	D		0.154	2000	0.00.000.000.000	0.4-15	<div>FetchXML was using an Outer join instead of an inner join allowing wrong contract notes to be included. FetchXML was also not updated for</div>	something else or was not adequately tested		0.000	20012014180000	
40700 Buj	16	CAMHD	Only)	Ready To Test	,	2 - High	PROD	8/6/2025 2:20	Coding Errors	filtering out stale notes on the Audio Only Fetchxml.	itself before going to PROD. Found in PROD, new bug as of prior Release, attributable to new code that broke something else or was not adequately tested		CAMHD; C	DOH BHA INSPIRE	Standzicki.consult, Alex <alex.standzicki.consult@doh.hawaii.gov></alex.standzicki.consult@doh.hawaii.gov>
40816 Bu	lg .	DDD	AER - AER Dashboard Issues DDD - Calculator 3.0 - Users able to schedule service past ISP end	New	2	3 - Medium	PROD	8/14/2025 10:04			itself before going to PROD.	DOH BHA INSPIRE\Phase 4\R4.14	Analytics;	DOH BHA II AER Analy	ti Soltys.consult, Katianne <katianne.soltys.consult@doh.hawaii.gov></katianne.soltys.consult@doh.hawaii.gov>
33841 Bu	ıg	DDD	date again	Approved	3	3 - Medium	PROD	5/17/2023 8:22				DOH BHA INSPIRE\Phase 4\R4.14	Cat3.0; Co	C DOH BHA II Calculator	r Andrew Obiano <andrew, consultant@doh,="" gov="" hawaii,="" obiano,=""></andrew,>
34110 Bu		DDD		New		3 - Medium		7/27/2023 15:40				DOH BHA INSPIRE\Phase 4\CCB			a Andrew Oblano < Andrew. Oblano.consultant@doh.hawall.gov>
35317 Bu	ig .	DDD	DDD - Plan Services with no Provider Plan	Active	2	3 - Medium	PROD	6/24/2024 9:06				DOH BHA INSPIRE\Phase 4\R4.14	DDD; DD0	DOH BHA INSPIRE/Big	Slandzicki.consult, Alex <alex.slandzicki.consult@doh.hawaii.gov></alex.slandzicki.consult@doh.hawaii.gov>
35450 Bu	ig.	DDD	DDD - Calculator not printing correctly	Approved	2	3 - Medium	PROD	7/26/2024 8:36				DOH BHA INSPIRE\Phase 4\R4.14	Cal3.0; DI	DOH BHA II Calculator	Slandzicki.consult, Alex <alex.slandzicki.consult@doh.hawaii.gov></alex.slandzicki.consult@doh.hawaii.gov>
											Found in PROD, new bug as of prior Release, attributable to new code that broke something else or was not adequately tested				
36383 Bu	ıg	DDD	DDD - Calculator problem with paid base and add on	New	2	3 - Medium	PROD	9/26/2024 9:19			itself before going to PROD.	DOH BHA INSPIRE\Phase 4\R4.14	Cal3.0; DI	DOH BHA II Calculator	r Slandzicki.consult, Alex <alex.slandzicki.consult@doh.hawaii.gov></alex.slandzicki.consult@doh.hawaii.gov>
37694 Bu	g	DDD	DDD - TCM batch file date is different in PROD from other environments DDD - Incorrect Columns displaying on Provider Plan subgrid (Action	Pending Approval	2	3 - Medium	PROD	1/29/2025 8:25			Found in PROD, something that has operated this way prior to last release	DOH BHA INSPIRE/Phase 4\R4.14	DDD; DDI	DOH BHA INSPIRE\Big	g Standzicki.consult, Alex <alex.standzicki.consult@doh.hawaii.gov></alex.standzicki.consult@doh.hawaii.gov>
37733 Bu	ig.	DDD		Evaluated_On Hold	1	3 - Medium	PROD	2/5/2025 5:37			Found in PROD, something that has operated this way prior to last release	DOH BHA INSPIRE/Phase 4\R4.14	BHA led; D	DOH BHA INSPIRE/Big	Santoro.consult, Alec <alec.santoro.consult@doh.hawaii.gov></alec.santoro.consult@doh.hawaii.gov>
40.00								700007.00.00			Found in PROD, something that has				
40499 But 34238 But				Completed in QA_Te Evaluated On Hold		2 - High 3 - Medium		7/8/2025 10:10 8/17/2023 2:33		timeout risk.	operated this way prior to last release.	DOH BHA INSPIRE\Phase 4\R4.14 DOH BHA INSPIRE\Phase 4\R4.14			o Slandzicki.consult, Alex <alex.slandzicki.consult@doh.hawaii.gov> n Melinda Newkirk <melinda.newkirk.consult@doh.hawaii.gov></melinda.newkirk.consult@doh.hawaii.gov></alex.slandzicki.consult@doh.hawaii.gov>
5 1233 154			The state of the s								Something that has operated this way prior				The state of the s
40855 Buj	ig.	DDD	DDD - Calculator one-time mid-year change ISP report discrepancy	New	2	3 - Medium	PROD	8/20/2025 4:49		-div-Authentication method for SharePoint Online that all console apps use has been deprecated by Microsoft as of August 2025. Anbaps, Our current authentication method relies on two Cookies Aquoti-Fe4AuthAquot and Aquoti-FA4Augut being returned in the authentication cookie, but those are no		DOH BHA INSPIRE/Phase 4VR4.14	Cal3.0; Di	D DOH BHA II Calculator	Soltys.consult, Katianne < Katianne, Soltys.consult@doh.hawaii.gov>
40862 Buj	16	Both	Both - Console Apps Have Cookie Errors DDD - Power Automate flow bug - Community Living: Create	Active	1	1 - Critical	PROD	8/20/2025 11:16	Microsoft Issues	longer returned.	to last release. Found in PROD, new bug as of prior Release, attributable to new code that broke something else or was not adequately tested		CAMHD; C	DOH BHA INSPIRE/BIG	(Melinda Newkirk < Melinda .Newkirk.consult@doh.hawaii.gov>
40891 Bu	ıg	DDD	Document Location	New	2	3 - Medium	PROD	8/25/2025 7:53			itself before going to PROD.	DOH BHA INSPIRE\Phase 4\R4.14	BHA led; [DOH BHA INSPIRE\Big	(Soltys.consult, Katianne < Katianne.Soltys.consult@doh.hawaii.gov>
33550 Bu	g	CAMHD	Bug: "Progress Notes Associated to Invoices" page not loading	New	3	3 - Medium	PROD	3/31/2023 17:11			Found in 1990 annual in the table	DOH BHA INSPIRE\Phase 4\CCB	CAMHD; C	DOH BHA II Provider P	o Jasmine Utu.consult < Jasmine.Utu.consult@doh.hawaii.gov>
40776 Bu	ıd	DDD	DDD - Calculator Objective unchecking problem	New	2	3 - Medium	PROD	8/6/2025 9:46			Found in PROD, something that has operated this way prior to last release.	DOH BHA INSPIRE\Phase 4\R4.14	Cal3.0: DI	DOH BHA II Calculator	Slandzicki.consult, Alex <alex.slandzicki.consult@doh.hawaii.gov></alex.slandzicki.consult@doh.hawaii.gov>
30726 Bu		DDD		Evaluated_On Hold		3 - Medium		9/17/2021 9:07			and may prior to most residate.	DOH BHA INSPIRE/Phase 4		F DOH BHA II Customer	
30634 Bu	g	CAMHD	CAMHD Bug - Credentialing documents not copied into PROD during Data Migration	Completed in QA_Te	est 3	3 - Medium	PROD	2/16/2021 15:45				DOH BHA INSPIRE\Phase 3\R3.30	CAMHD 3	.1 DOH BHA II Credentia	ii Sheri Matsuda





Solutions that Matter

ID Short D	escription	Finding Statement	Analysis and Significance	Recommendation	Finding Update	Category	Туре	Priority	Status	Closure Reason	Closed Date	Identified Date	Owner	
2 Regress	ion testing	The lack of comprehensive automated regression testing has likely led to post-production defects, causing user frustration.	R3.3 introduced a defect that deprecated features in production specific to integrated Suppor 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 (RCQI) process used To the property of the project of the project of the cause analysis (RCQI) process used to the project of the	align on a unified resource allocation strategy. Given the limited		Test Practice Validation	Issue	Medium	Open			12/31/2019	Gautam Gulvady	
			determine why such functionality was deprecated but will discuss further with BHA in January 2020.	prioritize testing efforts, share critical test cases, and identify overlapping areas, the divisions can achieve comprehensive regression	7/31/25 - Release 4.13 Regression testing for is on track for 7/21/2025 – 7/29/2025, powered by manual test cases while the Tosca license is renewed. Release 4.13 Regression testing was successfully completed on 7/29/2025. The current reliance on manual processes may									
			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.	testing without overburdening a single resource. This collaborative approach will balance workloads, streamline processes, and enhance test coverage, minimizing delays and bottlenecks. Ultimately, it will	limit testing efficiency and increase the likelihood of gaps in test coverage, which could lead to some defects being introduced into production. The Tosca Automation Regression Testing SME is ready to resume automated test scenario development as soon as licensing is restored. At IVEX's request, the SI has also begun detailed end-to-end flow recordings to validate DDIO key processes, with completion									
				enable both divisions to efficiently meet their testing objectives. 2. A balanced approach that combines manual and automated	by month-end. 6/30/25 - Regression testing for Release 4.13 is on track for 7/21/2025 to 7/29/2025 and is expected to incorporate manual and									
				regression testing to ensure broad test coverage and flexibility.	automated testing. The Tosca Automated Regression Testing SME is progressing with the automation of DDD test scenarios per the timeline. This effort is intended to reduce manual testing effort, enhance test reliability, and establish a more unified and scalable test									
				 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 	framework. To support the accuracy and effectiveness of the automation effort, end-to-end flow recordings of each DDD module have been requested to help with business logic implementation, with particular emphasis on complex, role-based workflows.									
				personnel and stakeholders. 4. IV&V recommends reevaluating the schedule priorities by	5/31/25 - Regression testing was successfully executed from 5/19/2025 to 5/28/2025. PCG's Phase 1 analysis of DDD's test infrastructure has facilitated its selection of a hybrid approach centered on creating automated regression tests. The Tosca Automated Regression Testing SME is treamlining the DD tests to integrate with CAMHD tests, an effort expected to reduce manual testing time, improve test									
				distributing the work according to the resource bandwidth. This will ensure that the schedule is not impacted and that the work is done	reliability, and provide a unified framework.									
				efficiently between regression testing and Golden Record (GR). 5. Pursue and complete additional formal training in Azure DevOns and	4/30/25 - R4.11 Regression testing was successfully executed from 3/25/2025 to 4/2/2025. CAMHD executed both manual and automated tests, while DDD carried out manual regression testing. In April 2025, the project onboarded a Tosca Nutomated Regression Testing SME. The overall approach for automated regression testing									
				Tricentis for test automation as soon and complete efforts to automate the two primary regression test scripts.	will be finalized by the end of April 2025, with execution continuing through May 2025. The INSPIRE project will have an updated suite of automated test scripts, along with knowledge transfer and training for the identified DOD staff.									
				 IV&V recommends DDD and CAMHD to develop a common and consistent approach across divisions for performing regression testing. 	3/31/25 -The SI has updated the AER regression test scripts. Regression testing for R4.11 began on 3/25/25 and is scheduled for									
				7. Determine if current regression testing timeframes are adequate and if not, add more time to the pre-production regression test efforts.	completion by 4/2/25. For this release, CAMHD will perform both manual and automated testing, while DDD will primarily focus on manual regression testing. To ensure continued support for future Phase 4 releases—R4.12 and beyond—the project will be onboarding a Tosa. Automated Regression Testing Subject Matter Expert (SME) in early April 2025, with work scheduled to begin subsequently. This effort is									
14 Code qu	uality	Due to multiple quality concerns, the project may continue to face	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	IV&V recommends: 1. Closer collaboration between divisions to review reported defects,	8/31/2025 - As of this reporting period, one (1) critical and three (3) high-severity production defects remain unresolved and are actively being addressed by the project team. While progress continues on higher-priority defect remediation (see Appendix E), resolution of lower-	Software Developme	nt Issue	Medium	Open			9/30/2020	Gautam Gulvady	
		impactful system defects.	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:	ensuring a shared understanding and alignment, particularly regarding the severity and priority of production defects.	severity issues remains deferred due to ongoing resource focus. IV&V continues to monitor code quality closely, with particular attention on the resolution of remaining R4.13 defects, upcoming release readiness, and any Mid-Sprint Deployments (MSDs).									
			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 Releases 3.1.0. IV&V will	quality improvements that could help to establish quality standards	7/31/25 - At the close of this reporting period, one (1) high-severity production defect remains open and is actively being remediated by the project team. Fixes for two high-severity defects were deployed in R4.13. While remediation efforts for existing production defects continue (see Appendix P), resolution of lower-priority issues has been delayed as BHA focuses on higher-priority tasks. The R4.13 went									
			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	maintained.	Continue peer Appenius C., resolution on lower-priority issues has been delayed as ann locases on lighter-priority cashs. The MALLS went live on 7/30/25, IV&V will continue to monitor key areas, including R4.12 defect resolution, future releases and any Mid-Sprint Deployments (MSDs).									
1			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 project increases comprehensive testing prior to joint testing to reduce the burden on BHA testers and reduce post-production defects 	6/30/25 - Since the R4.12 deployment to production on 5/29/2025, users have reported five (5) production defects (two (2) high severity and three (3) medium severity) which the project team is actively remediating. While remediation of existing production defects (see									
			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	Appendix E) is ongoing, resolution of lower-priority issues has been delayed due to the project's focus on higher-priority tasks, IV&V will continue to monitor key areas, including R4.12 defect resolution, FHIR implementation, any Mid-Sprint Deployments (MSDs), and progress									
				indicate the environment where each defect was identified. 5. The SI vendor provides the total number of defects in production	on the ARR solution. (3/125 - R4.1.2 was deployed to production on 5/29/25, followed by successful smoke testing on 5/30/2025. Users have reported three (3) production defects which the project team is analyzing. During May 2025, one new medium-severity production defect was reported. The									
				and reports these numbers regularly to BHA. 6. The project evaluate existing project staff skills and experience level	project team continues remediation of existing production defects (see Appendix E), though resolution of lower-priority issues has been delayed as BHA focuses on higher-priority tasks. Additional production defects may emerge as users continue to engage with the R4.12									
				to ensure they meet BHA support requirements.	4/30/25 - R4.11 was successfully deployed on 4/3/2025, with Smoke Testing successfully completed on 4/4/25. A Mid-Sprint Deployment									
				 The project perform CAMHD revenue neutrality fiscal balance testing on a quarterly basis to ensure revenues are as expected. 	[MSD] was also performed on 4/18/25, which included four (4) User Stories. One of the two previously reported high-severity defects was resolved and deployed with R4.11. The second issue appeared to be related to a Microsoft service error and was resolved on 4/18/25, when Microsoft performed a rollback. Additional unresolved production defects									
				The project assign dedicated resources to provide oversight of CAMHD Fiscal Processes.	have been identified following the R4.11 deployment, and the project team is currently working to confirm the number of new defects. The project team continues to address other outstanding production defects (see Appendix E for details). BHA is currently prioritizing higher-severity tasks, which have delayed the the resolution of lower-priority issues, however, remediation efforts remain oneoing. IVSV									
				9. The project monitor implemented improvements for effectiveness.	will closely monitor R4.11, FHIR implementation, any Mid-Sprint Deployments (MSDs), and the AER solution.									
34 Limited	BHA resources	Shortage of Behavioral Health	Key BHA project resources have reported constraints on how much time they can devote to	Performing an RCA in collaboration with the SI after all future release deployments for continual quality improvement. IV&V recommends:	3/31/25 - The AER solution is in production. The project team closely monitored the solution to ensure stability, quickly resolve issues, and help users adjust to the new system (also known as Hypercare); Hypercare ended on 3/21/25 and the project is prioritizing the 8/31/25 - 8HA is in the process of recruiting for a supervisory role to help balance workload and support various team functions, including	Resource	Issue	Medium	Open			8/18/2023	Michael Fors	
		Administration (BHA) project resources could lead to reduced productivity and project delays.	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	Consider identifying key security-related activities such as policy development, monitoring, or access oversight that could benefit from additional support. This could help provide clarity for discussions	security-related responsibilities. In the interim, existing staff will continue to manage certain security coordination tasks. This gap may impact the timeliness and coverage of security-related activities until dedicated resources are in place.	Management								
1		productivity and project delays.	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	regarding the potential adjustment of existing roles or exploration of alternative solutions. A high-level overview of these activities may	7/31/25 - BHA continues to address its resource constraints by actively recruiting a supervisory role for the project team. Additionally, they are pursuing a Business Analyst position. They are exploring areas around security which could help with monitoring user activity									
			constrained, the project could experience a reduction in productivity and project delays.	assist leadership in evaluating and addressing any potential gaps over time.	along with PMP and third-party risk assessments. These developments mark progress in building internal capacity, and the team remains focused on enhancing both support and accountability within the project.									
				BHA implement a structured knowledge transfer process when key personnel retire, including cross-training and documenting critical knowledge in the Dynamics Help Desk system. Regular updates to the	6/30/25 - BHA continues to face ongoing resource constraints. The project has identified cybersecurity work that would benefit from support by individual with a relevant background. The project has proactively identified tasks such as drafting security policies, reviewing procedures, and implementing protocols and security monitoring as functions that are currently handled alongside regular workloads.									
				knowledge in the Dynamics Help Desk system. Regular updates to the knowledge base will maintain its accuracy, preserve essential information, and support smooth operational continuity.	These tasks could be strengthened by the involvement of resources with a cybersecurity background. While external teams, such as Enterprise Technology Services (ETS) and the Health Information Systems Office (HISO), provide valuable support, there is currently no									
				Utilizing peer-to-peer knowledge sharing, allowing experienced team members to informally share their expertise during team	centralized ownership or accountability for cybersecurity within the project team. BHA is implementing cross-training to better balance workloads and increase team flexibility, while also exploring additional resources to address capacity constraints and maintain focus on critical project activities.									
				meetings. Additionally, creating internal documentation that outlines best practices and processes for developing security policies would serve as a self-service resource for the team.	5/31/25 - BHA is currently facing resource challenges in security monitoring, including limited staff for managing security tasks, no									
				4. DDD and CAMHD have further discussions to optimize resource	dedicated person to review audit logs, and a lack of tools for efficient log analysis. To address these issues, the team is exploring several options, such as engaging a cybersecurity consultant and requesting additional funding for security support. In the short term, they are									
				utilization between the two divisions. 5. BHA should explore options for offloading project team members'	also exploring the incorporation of cybersecurity tasks into existing administrative roles. 4/30/25 - To address a few of the resource challenges the project has faced, in early April 2025, DDD onboarded a Tosca Automated									
				daily responsibilities to other staff. 6. BHA should work quickly to create new positions and receive State	Regression Testing Subject Matter Expert (SME). To support a successful onboarding, DOD provided system demos, training materials, and facilitated collaboration with the CAMHD and SI team. Internal DDD resources have been identified for knowledge transfer related to regression testing. This will enable an effective transition for maintaining the automated testing suite. Additionally, CAMHD and DDD are									
				approval. 7. BHA should identify tasks and duties that they can ask the SI to	actively working to identify and secure resources to support the Business Analyst roles. 3/31/25 - BHA is actively documenting knowledge to manage staff transitions and reduce resource strain. The team is creating knowledge.									
				assume, as permitted by the contract, which are presently being handled by BHA members.	3/3/1/2 - One is activery occurrenting aniowicegor or inactive scale in reduce resource stant. The team is retenting that transfer articles to capture key information, but some gaps remain. A key challenge is converting issues into clear, documented articles, as informal communication (emails, calls, or ad hoc discussions) can bypass the help desk system. To improve consistency and visibility, BHA									

ID Short D	Pescription	Finding Statement	Analysis and Significance	Recommendation	Finding Update	Category	Туре	Priority	Status	Closure Reason	Closed Date	Identified Date	Owner	
9 Deployi	ment process.	Due to on-going deployment processes and technical execution	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"	The project team is recommended to develop and document a formal Root Cause Analysis (RCA) protocol that includes defined	8/31/2025 - Following the R4.13 deployment, one (1) critical and three (3) high-severity production defects remain unresolved. The project team has completed root cause analysis (RCAs) for these four (4) defects, and none are related to the deployment, IV&V	Release/Deployment	Issue	Low	Open				Gautam Gulvady	
		issues, the Project may continue to		triggers for initiating an RCA such as severity 1 or 2 production defects		rianning								
		encounter defects and challenges,			project's progress toward a mature, systemic approach to defect management and deployment.									
		e.g., when releases are in production or in meeting projected timelines fo		also establish clear roles and responsibilities for conducting RCAs and reviewing outcomes, along with setting timeframes for completing	7/31/25 - The R4.13 went live on 7/30/25. As of this reporting period, one (1) high-severity production defect remains unresolved.									
		production and non-production	The root cause for these errors is currently being investigated.	RCAs following defect identification or release. Additionally,	Although this finding is focused on deployments, the continued absence of defined root cause analysis (RCA) protocols including criteria									
		deployments.		incorporating standardized templates or tools for documenting RCA	such as defect severity, recurrence, and business impact reflects a broader and ongoing gap across the project. The project team has									
			Repeatable documented release and deployment and resources experienced with deployments will help ensure that mistakes are minimized and that functionality is not	findings and associated corrective actions, as well as implementing a tracking mechanism to ensure those actions are carried out and	acknowledged this deficiency and is prioritizing RCA processes for certain calculator defects. The presence of multiple high-severity defects highlights the importance of proactively implementing a formal RCA framework to prevent recurrence, ensure consistent									
			mistakenly deprecated when deployments take place.	monitored for effectiveness, will strengthen the process. Formalizing	remediation, and reduce long-term risk exposure. IV&V will continue to monitor deployment quality across releases and Mid-Sprint									
				these elements will help ensure RCA practices are applied consistently	Deployments (MSDs), with particular attention to emerging defect trends and the project's responsiveness to systemic issues.									
				improve visibility into root causes, and support long-term defect reduction across future releases, including those related to FHIR,	6/30/25 - A Mid-sprint deployment (MSD) with two (2) defect fixes was successfully deployed on 6/28/2025. IV&V has not yet received									
				MSDs, and AER.	documentation of a formalized Root Cause Analysis (RCA) process, including for deployment-related issues. The project team has									
				Implement a streamlined Root Cause Analysis (RCA) process to	acknowledged the importance of RCA. While this finding highlights deployments, the absence of defined RCA protocols and criteria such as severity, recurrence, or business impact of defects extends across the broader project. The project team has acknowledged these gaps,									
				identify deployment causes and prevent recurrence. To manage	as seventy, recurrence, or business impact of defects extends across the broader project. The project fearn has acknowledged these gaps, they have indicated that efforts to address them are still evolving, and they may consider prioritizing RCA efforts at a later date once									
				resource constraints, consider timeboxing RCA efforts—e.g., 1–2 hours	higher priority functionality has been implemented. Establishing this framework could help ensure consistent application, support									
				per defect or a set number of hours weekly. Within this timeframe,	effective remediation of recurring issues, and reduce long-term risk. IV&V will continue to monitor deployment quality across R4.12, FHIR, Mid-Sprint Deployments (MSDs), and the AER solution for any emerging defect trends.									
				actions. Project PMs can track these actions to ensure follow-through.										
					5/31/25 - R4.12 was successfully deployed to production on 5/29/2025. However, there was a misunderstanding about whether one of the									
				 The Project should consider automating deployments for resource savings, increased efficiency, consistency, faster time to market, 	items on the deploy list was actually deployed. IV&V is having discussions with the deployment team on how the process can be improved to avoid such misunderstandings from recurring. While the project team reports that a Root Cause Analysis (RCA) process exists, IV&V has									
				improved collaboration and reliability, scalability, version control	not received documentation of a formalized process. Additionally, formal protocols and defined criteria for initiating RCAs have not yet									
				integration, and rollback capability.	been established. Specifically, there is no documented guidance outlining the triggers, thresholds, or conditions under which an RCA is									
				Ensure there are adequate and qualified resources to support the	required (e.g., severity, recurrence, or business impact of defects). This gap limits the consistent and effective application of RCA practices, reducing their utility in addressing and preventing recurring production issues. IV&V encourages timely adoption of these practices to									
				c3urrent deployment processes. This may require the support from	support long-term quality improvement and will continue monitoring deployment quality across R4.12, FHIR, MSDs, and the AER solution									
				RSM resources to provide assistance and knowledge transfer for some	for any related defect trends.									
				of the more complex deployment components.	4/30/25 - R4.11 was successfully deployed on 4/3/2025, with Smoke Testing successfully completed on 4/4/25. A Mid-Sprint Deployment							1/25/2024 - The R		
Limited	l testing	Limited testing processes can lead to	There is a limited understanding of the testing processes and the roles and responsibilities of	IV&V recommends enhancing the testing scripts across testing	98/31/25 – In addition to the ongoing automated regression test development for DDD and the annual performance testing, IV&V	Test Practice	Issue	Medium	Open			1/31/2024 - THE R	Gautam Gulvady	+
	-	poor-quality software, project delay	s those involved in the process. There is no formal process for the development, review, and	overall to better align with high-risk and business-critical workflows. As	recommends that BHA identify high-risk areas where enhanced test coverage would be beneficial. A phased approach is recommended to	Validation								
		and extended user acceptance testing.	approval of test scenarios, test cases, and test results to ensure adequate participation and	part of this effort, it may be helpful to review recent production defects to identify areas where test coverage could be improved. This	gradually expand new and/or existing testing processes while working within resource constraints.									
		testing.	approval from state start. When testing user stories 34564 and 34756 on 1/31/24, the test tasks did not reflect the real	may include incorporating a broader range of testing techniques such	7/31/25 - While regression testing for Release 4.13 was executed successfully as scheduled (7/21/2025 – 7/29/2025), the continued									
			use cases to give stakeholders adequate confidence that the user story could be tested. As a	as negative testing (e.g., invalid inputs or edge cases), boundary	reliance on manual testing, especially during Tosca license renewal, underscores broader limitations in test coverage and execution									
			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.	testing, role-based scenario testing, and end-to-end workflow	efficiency. Current practices may not fully exercise high-risk workflows or capture edge-case conditions, increasing the potential for undetected defects to reach production. IV&V encourages BHA to enhance its overall testing strategy to improve both the breadth and									
			nave been deemed to meet functionality when it did not.	validation. Expanding the scope of testing in this way will help uncover hidden defects, improve system robustness, and reduce the likelihood	depth of test coverage, with a focus on critical business scenarios and high-impact functional paths.									
				of post-deployment issues.	6/30/25									
				As part of this effort, it may be helpful to review recent production	Since the R4.12 deployment to production on 5/29/2025, users have reported five (5) production defects (two (2) high severity and three									
				defects to identify areas where test coverage could be improved.	(3) medium severity) which the project team is actively remediating. This underscores the risk associated with insufficient test coverage across business-critical workflows. Regression testing for R4.13 is scheduled for 7/21/2025 to 7/29/2025 and is expected to include both									
				Expanding smoke test scenarios to include key functional paths with a	manual and automated testing. The Tosca Automated Regression Testing SME continues to automate DDD test scenarios an important									
				history of defects, along with exploring opportunities for automation, can contribute to more efficient and consistent post-deployment	step toward improving test reliability and reducing manual effort. However, overall test coverage remains limited. Without broader and more comprehensive testing, the risk of post-deployment issues remains elevated. Expanding the scope and depth of testing particularly									
				validation. These enhancements are intended to support stronger	more comprehensive testing, the risk of post-deployment issues remains elevated. Expanding the scope and depth of testing particularly across high-risk and business-critical workflows, is essential to ensure system stability and reduce defect recurrence in future releases.									
				release readiness and help minimize the risk of post-deployment	5/31/25									
				issues.	R4.12 was deployed to production on 5/29/2025, followed by successful smoke testing on 5/30/2025. However, users subsequently reported three production defects that were expected to have been identified during smoke testing. R4.12 regression testing was									
				Make efforts to implement a streamlined Root Cause Analysis (RCA)	conducted from 5/19/2025 to 5/28/2025 and completed successfully. CAMHD and DDD focused on manual regression testing.									
					Additionally, the Tosca automation expert is reviewing current functionality to identify optimization opportunities and is developing									
				to project resource constraints, propose timeboxing RCA efforts for each defect introduced into production. Timeboxing involves	recommendations and effort estimates to enhance the automated regression testing framework. The project team continues to work on resolving outstanding production defects (see Appendix E), IV&V will continue to monitor key areas, including R4.12, FHIR									
				allocating a fixed period (e.g., 1-2 hours per defect or a set number of	implementation, any Mid-Sprint Deployments (MSDs), and the AER solution for quality issues.									
				hours per week) for focused Root Cause Analysis (RCA) activities.										
				These activities may include quickly gathering defect context, analyzing potential causes, and proposing corrective actions, all within	4/30/25 - R4.11 was successfully deployed on 4/3/2025, with Smoke Testing successfully completed on 4/4/25. A Mid-Sprint Deployment (MSD) was also performed on 4/18/25, which included four (4) User Stories. Additional unresolved production defects have been									
				the specified timeframe. Project PM(s) can oversee the tracking of	identified following the R4.11 deployment, and the project team is currently working to confirm the number of new defects. The project									
				corrective actions to ensure completion.	team continues to address other outstanding production defects (see Appendix E for details). The project team has enhanced smoke test									
				IV&V recommends that, after fixing a defect, the SI incorporate	scripts to provide more comprehensive coverage, including functionality such as the Provider Portal. To further strengthen quality assurance, the project onboarded a Tosca automated regression testing expert in early April 2025, with work scheduled to begin shortly									
				relevant test cases to validate these fixes in subsequent releases.	thereafter. This regression testing effort is expected to span April and May 2025. The expert will focus on repairing existing Tosca scripts									
Backlog	g meetings	The absence of separate dedicated			8/31/25 - BHA has initiated a redistribution of development responsibilities across the team to reduce workload concentration and	Sprint Planning	Risk	Low	Open			1/26/2024	Gautam Gulvady	
		product backlog review meetings can lead to unclear priorities,	meetings. This can lead to, e.g., scattered focus, limited stakeholder engagement, difficulty in managing complexity, and delayed decision making.	 BHA continue to conduct these meetings regularly and mature the practice over time, as they provide tangible value in sustaining project 	maintain project momentum. The team has addressed the bottleneck, and access provisioning for additional members is in progress to support this transition. Some development activities may be experiencing delays, potentially related to known issues that are actively	1			1		1	1		1
		misalignment with stakeholders,	A product backlog review is an essential part of agile project management, particularly in	velocity and reducing rework.	being addressed through existing support channels.	1			1					1
		inadequate refinement, and increased risk of scope creep.	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.	2. CAMHD and DDD implement a structured feedback management	7/4/05 0001	1			1		1	1		1
		increased risk of scope creep.	Scrum Master, and development team members, inspect and adapt the product backlog.		7/31/25 - BHA has identified a bottleneck in backlog processing, primarily due to a single team member managing the review, estimation, and assignment of tasks. While backlog items are prioritized, some from the current release cycle have been carried over, indicating a									
			The product backlog review is an important Scrum ceremony that helps keep the backlog	are thoroughly evaluated and aligned with project goals before being	need for additional support in this area. The BHA team is actively working to streamline the process by identifying synergies across backlog									
			relevant, up-to-date, and aligned with the project's goals and priorities. Here's a summary of	added to the backlog.	items and refining the distribution of responsibilities to enhance efficiency and throughput.									
			what typically happens during a product backlog review:	Separate dedicated product backlog review meetings (during)	6/30/25 - BHA is actively committed to managing its backlog effectively, focusing on aligning development efforts closely with business									
			1. Inspecting Backlog Items: The team reviews the items on the product backlog. This involves	sprints) would allow clarifying any ambiguities or uncertainties, re-	priorities. The product owner of DDD works closely with team members to understand business needs and prioritize user stories. Requests									
			discussing each item, understanding its priority, value, and acceptance criteria.	prioritization, estimation, and refinement of backlog items. This would	come from business leads and are then translated into development tasks. There are challenges with visibility into available user story									
			Ensuring Clarity: The team ensures that each backlog item is clear and well-understood. Any ambiguities or uncertainties are clarified at this stage.	including items mid-sprint would have to be taken.	points and the assignment of work across internal and external resources, which may make it difficult to accurately assess the capacity of the team and effectively assign work. Prioritization is based on business needs rather than just story points, with an effort to group related									
			3. Estimation: Estimation of backlog items may occur during the review. The team may use		tasks for improved efficiency. CAMHD's backlog meetings are held monthly. Overall, there is room for improvement in planning and				1					1
			techniques like story points or relative sizing to estimate the effort required for each item.	4. IV&V recommends scheduling separate dedicated product backlog	coordination to optimize the use of available capacity. 5/31/25 - BHA	1			1		1	1		1
			 Re-prioritization: Based on new insights, changes in requirements, or stakeholder feedback, the team may need to re-prioritize items in the backlog. 	review meetings (during Sprints) where all relevant stakeholders are invited to review the product backlog and scheduled at the	continues to hold backlog review meetings, with the most recent session conducted in April 2025. These efforts represent a positive step				1					1
			5. Removing or Adding Items: Items that are no longer relevant or necessary may be removed	appropriate time(s) such that there is sufficient time to plan the	toward aligning priorities, managing technical dependencies, and clearly defining backlog items to support development and testing.	1			1					1
			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	design, development, and implementation (DDI) of the next release(s).	While no sessions have yet been scheduled for May, IV&V understands that the team is still acclimating to roles and processes. IV&V plans to attend future backlog prioritization meetings to support this effort.									1
			 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 		to attend rature backing prioritization meetings to support this effort.									1
			needed.		4/30/25 - IV&V was invited to attend the DDD Backlog Prioritization Meeting. Several key items were discussed, including:	1			1		1	1		1
			7. Collaboration: The review is a collaborative effort involving the entire Scrum team. It's an		- Apple Health	1			1		1	1		1
1			opportunity for open discussion and sharing of ideas to ensure everyone is aligned on the goals and priorities.		- Calculator - Provider and Customer Portal Documents									1
			8. Updating Documentation: Any updates or changes made during the review should be		While the meeting addressed these items, many of the backlog items still require estimation. DDD is currently working to complete these									1
		1	documented to ensure transparency and visibility for all stakeholders.		estimations. IV&V is reducing the risk rating from medium to low due to the progress made in backlog prioritization and ongoing efforts to complete estimations.		1							1
			Feedback Loop: The review often generates feedback that can be used to improve the backlog management process or refine future backlog items.		complete estimations.									
			9. Feedback Loop: The review often generates feedback that can be used to improve the backlog management process or refine future backlog items. 10. Sprint Planning Preparation: The outcomes of the product backlog review help inform the upcoming sprint planning meeting, where the team selects items from the backlog to work on		computer estimations. 3/31/25- Product Backlog meetings are being scheduled, and the IV&V team has been invited to attend. These meetings are essential for aligning priorities, managing technical dependencies, and ensuring that backlog items are well-defined for development and testing.									

Short Description	Finding Statement	Analysis and Significance	Recommendation	Finding Update	Category	Туре	Priority	Status	Closure Reason	Closed Date	Identified Date	Owner
Defect management.	Neglecting the established defect	Failure to follow the established defect management process can result in defects being	IV&V recommends:	8/31/2025 - IV&V notes continued progress in adhering to established Help Desk and defect management processes, as demonstrated by	Project Management	Issue	Low	Open			9/30/2024	Gautam Gulvady
-	management process could lead to	overlooked, inconsistently tracked, or unresolved-leading to increased user frustration and	1. The project records the history of a defect's severity in the	the logging and active tracking of high- and critical-severity defects. This indicates the project team is effectively capturing and managing								·
	lost/forgotten defects, user	reduced trust in the system. This breakdown also impairs the project team's ability to analyze	corresponding ticket's description/notes section in ADO. For example,	issues through formal channels. IV&V encourages continued attention to field-reported issues, such as those involving the Provider portal,								
	frustration, and could slow	trends, implement root cause fixes, and prioritize effectively. Over time, neglecting structured	when a hotfix is deployed to mitigate a defect initially classified as	to further support continuous improvement and enhance end-user satisfaction.								
	resolution of similar defects in the	defect handling may slow resolution cycles, introduce rework, and degrade overall software	"Critical," the description/notes section should document that the									
	future.	quality and service reliability.	defect originally had a "Critical" severity rating.	7/31/25 - IV&V will continue to assess the project's adherence to Help Desk and defect management processes. IV&V encourages the								
				project team to proactively capture and address feedback from the field such as issues reported with the Provider portals to support								
			2. Based on Best Practices, updating the defect management	continuous improvement and end-user satisfaction.								
			documentation and having regular refresher training on the defect									
			management process.	6/30/25 - IV&V will continue to monitor the adherence to the Help Desk and defect management processes.								
			3. Send communications to the project stakeholders to clarify the	5/31/25 - IV&V continues to observe project focus on the Help Desk and defect management processes. BHA is actively reviewing the								
				submitted Help Desk documentation to assess the adoption and enforcement of the documented defect management procedures. IV&V								
			active transport and process and the importance of 1000 per detection	will provide feedback and recommendations to support alignment with industry best practices.								
			3. Take steps to assure current and new users understand how to	0								
			report and/or log defects.	4/30/25 - IV&V has reviewed the documentation outlining the Help Desk process, IV&V continues to observe increased project focus on								
				both the Help Desk and defect management processes, and will monitor adherence to these processes while providing feedback and								
			4. Consider designating a defect management lead or champion to	recommendations based on best practices Meanwhile, BHA is reviewing the previously provided Help Desk documentation and								
			oversee adherence to the process and assure all defects are logged.	considering adopting and enforcing the outlined defect management procedures.								
			5. Keep stakeholders informed about defect status, priority, impacts,	3/31/25 - In March 2025, the SI provided documentation that was originally created in 2019, outlining the Help Desk process. IV&V is								
			and resolution timelines. This could increase awareness of the	continuing its review of the process and will provide feedback and recommendations based on best practices in April 2025. Notably, the								
			importance of logging defects.	project has placed increased attention on this area, which is a positive development. As a result of this heightened focus, IV&V has								
				observed a corresponding rise in the number of defects being logged in Azure DevOps (ADO), indicating stronger adherence to reporting								
			6. Discuss ways to improve the defect logging and management	protocols and greater transparency in issue tracking. Productive discussions are underway to address critical defects. By reviewing the								
			process with the SI and come up with a plan to improve.	Help Desk process and addressing any gaps, IV&V anticipates improvements in the overall defect management approach. BHA usually								
				receives issues by email or helpdesk calls, with most reports submitted by email. Depending on the severity of the defect, BHA personnel								
				may consult with other team members and flag high-severity defects, reporting them to the SI. While the current process is generally								
				effective, there is room to speed up how critical defects are handled, particularly by enhancing how these issues are initially logged.								
				2/28/25 - A high-priority defect occurred on 2/6/2025, bringing to light an opportunity to strengthen the project's defect management								
				process, BHA encountered some challenges that resulted in a delay in addressing the defect. In February, there were productive								
				discussions on addressing critical defects. The SI has provided a document outlining the Help Desk process, which IV&V will review in								
AER	BHA lacks a streamlined report to	While BHA can determine the number of active AER analytics solution users in production			Software Development	Preliminary Concern		Onen			5/27/2025	Gautam Gulvady
1	identify active AER users, which	based on user email addresses, the process is manual and lacks a standardized report.		and the property of the property of the related data requests free plants to commente with the design.	ure bevelopment		1				-/2//2023	
1	could make it hard to track	Although the need for a reporting feature has been discussed, no formal request has been		07/31/25 - The project team is reviewing the User Request. The plan is to prioritize the User Request during the backlog review meetings.								
		t made to implement it. This limits efficient user monitoring and may impact future efforts to		IV&V will monitor the progress of the User Request to completion.								
I	Heare	track adoption or support planning. BHA plans to submit a new request.		- The source of		1	1	1				
1		and any any any any any and any		6/30/25 - BHA submitted a formal request to develop a reporting feature to identify active AER analytics users in production. The project								
	1			has created a User Request in Azure DevOPs (ADO).								