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DEPT. COMM. NO. 427

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

July 15, 2026

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

June 1 – June 30, 2026

Final Submitted: July 15, 2026

PUBLIC CONSULTING GROUP

Solutions that Matter

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



Executive Summary

The project remains on track for Release 4.19, currently scheduled for deployment on July 29, 2026. Throughout June, project teams continued development, planning, and release preparation activities while advancing backlog items associated with the Document Management Scanning effort. Additional discussions continued regarding security governance, reporting priorities, user activity monitoring capabilities, and future enhancement initiatives.

Preparation activities for Release 4.19 progressed during the reporting period, with regression testing scheduled to begin on July 20, 2026. CAMHD completed key automation-readiness activities; however, recent system and access-related changes introduced additional remediation needs, leaving manual testing as the primary regression testing approach for the upcoming release. DDD test case development remains approximately 60% complete, and ongoing discussions are focused on timelines and next steps for the remaining effort. The project team continues to address automation-readiness activities and to evaluate opportunities to expand automated testing in future releases.

Defect activity remained manageable during the reporting period. Three new medium-severity production defects and one high-severity production defect were identified, with two defects actively being addressed and expected to be included in the upcoming release. BHA also continues to balance project delivery, operational support, recruitment efforts, and security compliance activities across limited resources. Upcoming July 31 security compliance deliverables and ongoing efforts to mature security governance processes may increase near-term resource demands; however, the BHA team continues to prioritize activities, clarify responsibilities, and coordinate support needed to advance compliance and operational objectives.

Executive Summary

Apr	May	June	Category	IV&V Observations
L	L	L	**Sprint Planning**	This category remains Green (low criticality) for the June reporting period with no active findings.
L	L	L	**User Story (US) Validation**	This category remains Green (low criticality) for the June reporting period with no active findings.
M	M	M	**Test Practice Validation**	CAMHD continued regression automation readiness efforts during the reporting period; however, recent system and access changes introduced additional remediation needs, and manual testing is expected to remain the primary regression testing approach for the upcoming release. DDD test case development remains approximately 60% complete, with ongoing discussions focused on timeline considerations and activities needed to support completion of the remaining test cases.

Executive Summary

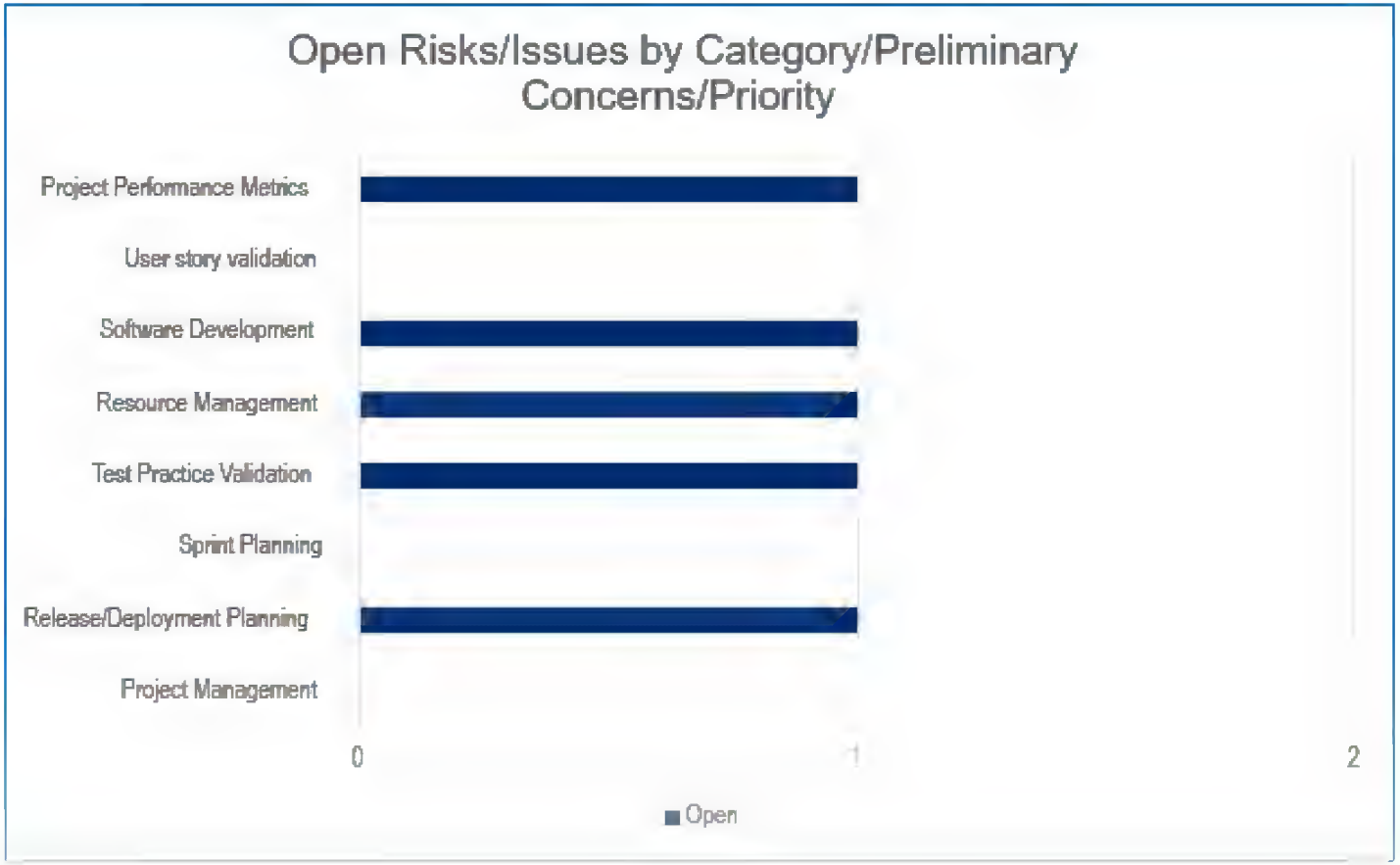
Apr	May	June	Category	IV&V Observations
M	M	M	**Release / Deployment Planning**	Release 4.19 remains on track for deployment on July 29, 2026. Deployment preparation activities are expected to begin next month, while Azure DevOps pipeline validation has not yet been executed and may be incorporated into future release readiness efforts. The project team continues to focus on deployment planning and readiness activities to support a successful release.
L	L	L	**On-The-Job-Training (OJT) and Knowledge Transfer (KT) Sessions**	This category remains Green (low criticality) for the June reporting period with no active findings.
L	L	L	**Targeted KT**	This category remains Green (low criticality) for the June reporting period. IV&V will continue to monitor.
L	L	L	**Project Performance Metrics**	There is one preliminary concern around to enhance documentation and governance practices related to aging defects. IV&V will keep this category's criticality rating Green (low criticality) and will continue to monitor.
L	L	L	**Organizational Maturity Assessment (OMA)**	This category remains Green (low criticality) for the June reporting period. There are no outstanding findings in this category, and IV&V will continue to monitor.

Executive Summary

Apr	May	June	Category	IV&V Observations
L	L	L	**Project Management**	The project remains on track for Release 4.19, scheduled for deployment on July 29, 2026. Project teams continued release planning and development activities while advancing security compliance, reporting, and operational initiatives.
M	M	M	**Resource Management**	BHA continues to balance project delivery, operational support, recruitment, and security initiatives across limited resources. Upcoming July 31 security compliance deliverables remain a key area of focus, with ongoing efforts to clarify responsibilities and support ongoing security governance and monitoring activities.

Executive Summary

As of the June 2026 reporting period, five (5) open findings. Three (3) Medium Issues, One (1) Low Issue and One (1) Preliminary Concern spread across the Release/Deployment Planning, Test Practice Validation, Resource Management, and Software Development, and Project Performance Metrics 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

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:** CAMHD continues to advance regression automation readiness activities. Workstation updates and related preparation activities have been completed; however, recent system and access changes have required additional adjustments before automation can be fully incorporated into the release process. As a result, CAMHD is not expected to fully use automated regression testing for the next release. DDD test case development remains approximately 60% complete. The project team is currently evaluating the path forward, including timeline considerations and activities required to support completion of the remaining test cases.	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 meet their testing objectives efficiently.	Open
A balanced approach that combines manual and automated regression testing to ensure broad test coverage and flexibility.	In-Progress

IV&V Findings & Recommendations

Release / Deployment Planning (cont'd)

#	Key Findings	Criticality Rating
39	**Medium 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:** Release 4.19 preparation activities are expected to begin next month, as no deployment planning activities were observed during the current reporting period. Azure DevOps pipeline validation was not executed during this period and may be considered as part of future release readiness activities. IV&V will continue to monitor deployment preparation activities to support successful Release 4.19 delivery.	M

Recommendations	Status
IV&V recommends that the project consider targeted efforts to reduce recurring defects, which may include performing Root Cause Analysis (RCA) on all post-production defects.	In-Progress
The project team is recommended to develop and document a formal Root Cause Analysis (RCA) protocol that includes defined triggers for initiating an RCA such as severity 1 or 2 production defects, recurring issues, or stakeholder-reported impacts. The protocol should also establish clear roles and responsibilities for conducting RCAs and reviewing outcomes, along with setting timeframes for completing RCAs following defect identification or release. Additionally, incorporating standardized templates or tools for documenting RCA findings and associated corrective actions, as well as implementing a tracking mechanism to ensure those actions are carried out and monitored for effectiveness, will strengthen the process. Formalizing these elements will help ensure RCA practices are applied consistently, improve visibility into root causes, and support long-term defect reduction across future releases, including those related to FHIR, MSDs, and AER.	In Progress

IV&V Findings & Recommendations

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.	In-Progress
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

IV&V Findings & Recommendations

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
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
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

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 continues to manage project delivery activities alongside operational support, reporting, recruitment efforts, and security-related work while balancing overall resource capacity. Staff remains engaged across Inspire, IT operations, deployments, testing, and other operational priorities. Recruitment activities are ongoing, with open positions and interview efforts continuing to place some demand on existing resources. The BHA team continues to collaborate on upcoming security and certification requirements, including multiple policies and procedures scheduled for completion by July 31. Discussions remain focused on reviewing requirements, assessing priorities, and clarifying roles, responsibilities, and support needs for ongoing security monitoring activities. Coordination efforts are underway to develop an approach to address these requirements.	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
Consider strengthening cross-functional continuity planning for activities that depend on BHA, IT, program staff, and key business users. This could include identifying critical dependencies, documenting handoffs, and designating backup contacts for operational processes, security-related activities, and new feature rollouts. This may help reduce the impact of vacancies, unexpected staff transitions, or competing duties on the team's ability to implement and sustain project initiatives.	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

IV&V Findings & Recommendations

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

IV&V Findings & Recommendations

Software Development

#	Key Findings	Criticality Rating
14	**Low Issue:** Due to multiple quality concerns, the project may continue to face impactful system defects. **Finding Update:** During the last reporting period, one (1) High-severity and three (3) Medium-severity production defects were identified, with two defects actively being addressed. While remediation efforts are underway, the occurrence of production defects presents an opportunity to further strengthen defect prevention practices. Continued focus on root cause analysis may help improve release quality and stability.	L

Recommendations	Status
	In-Progress
Consider exploring tools and practices that support continuous code quality improvements that could help to establish quality standards and assure high-quality code that is secure and can be easily maintained.	In Progress
	Open

IV&V Findings & Recommendations

Software Development (cont'd)

Recommendations	Status
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

IV&V Findings & Recommendations

Project Performance Metrics

#	Key Findings	Criticality Rating
59	**Preliminary Concern:** There is an opportunity to enhance documentation and governance practices for aging defects. IV&V observed that 32 of 66 defects (48%) have not experienced a status change in over one year, including 10 defects with no status change for more than three years. IV&V recognizes that other defect activity may have occurred during this period; however, the absence of status changes may make it more difficult to demonstrate how aging defects are periodically reassessed and dispositioned over time. **Significance:** Defects that do not experience status changes for extended periods may make it more difficult to demonstrate ongoing review and disposition activities, even when other defect-related activity may be occurring. Enhanced governance and documentation practices may improve backlog transparency, support risk management, and strengthen long-term application maintainability.	

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	N/A	Velocity Metric Trends:

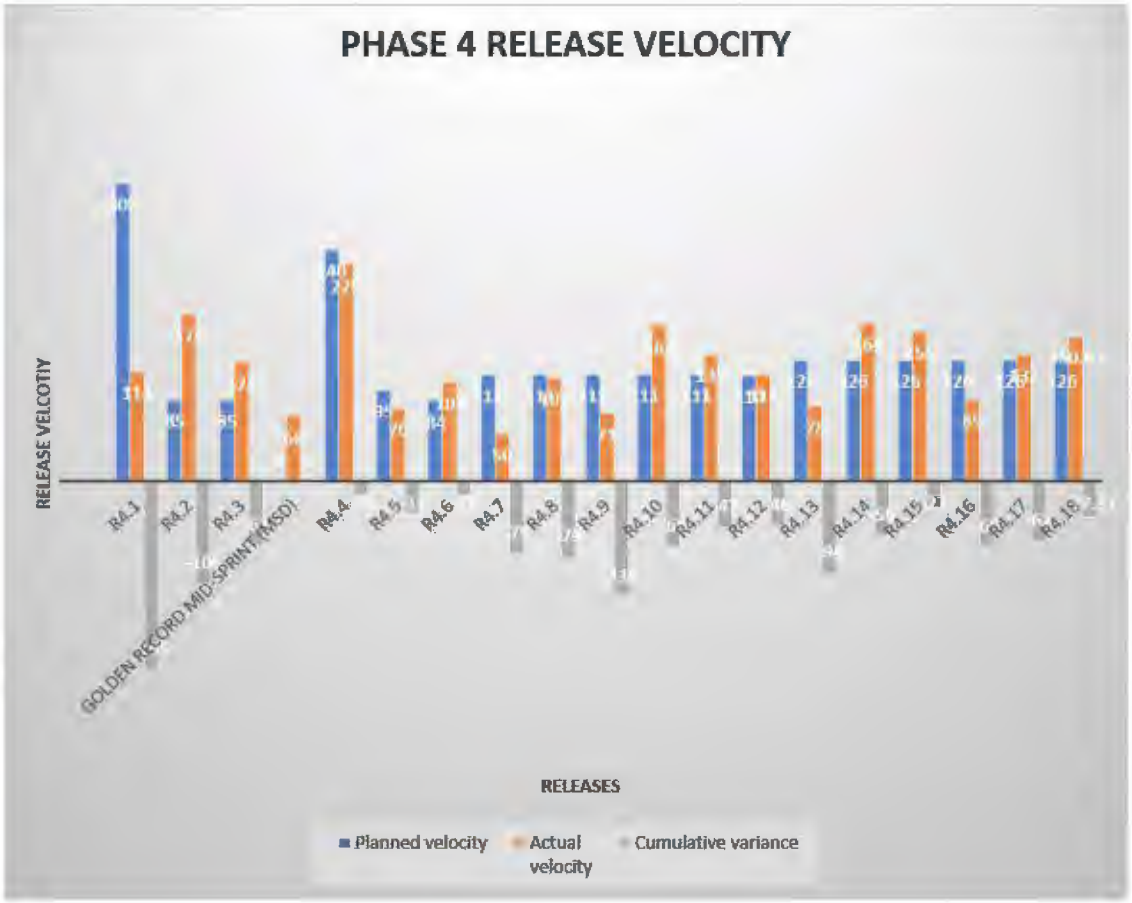
Release	Planned velocity	Actual velocity	Percentage attained
N/A	N/A	N/A	N/A

IV&V Findings & Recommendations

Project Performance Metrics

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 (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
R4.14	126	164	-56
R4.15	126	155	-27
R4.16	126	85	-68
R4.17	126	132	-62
R4.18	126	150.63	-37.37



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.

IV&V Findings & Recommendations

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	N/A	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 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 June 2026 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
9. DOH BHA IT Solution Project – Steering Committee

Artifacts reviewed during the June 2026 reporting period:

1. Daily Scrum Notes
2. Twice Weekly Issues Meeting Notes
3. Weekly BHA-ITS Program Status Report
4. Release 4.18 Release Notes
5. IV&V Interviews
6. Updating Project Trends
7. BHA Timesheets

Eclipse IV&V® Base Standards and Checklists

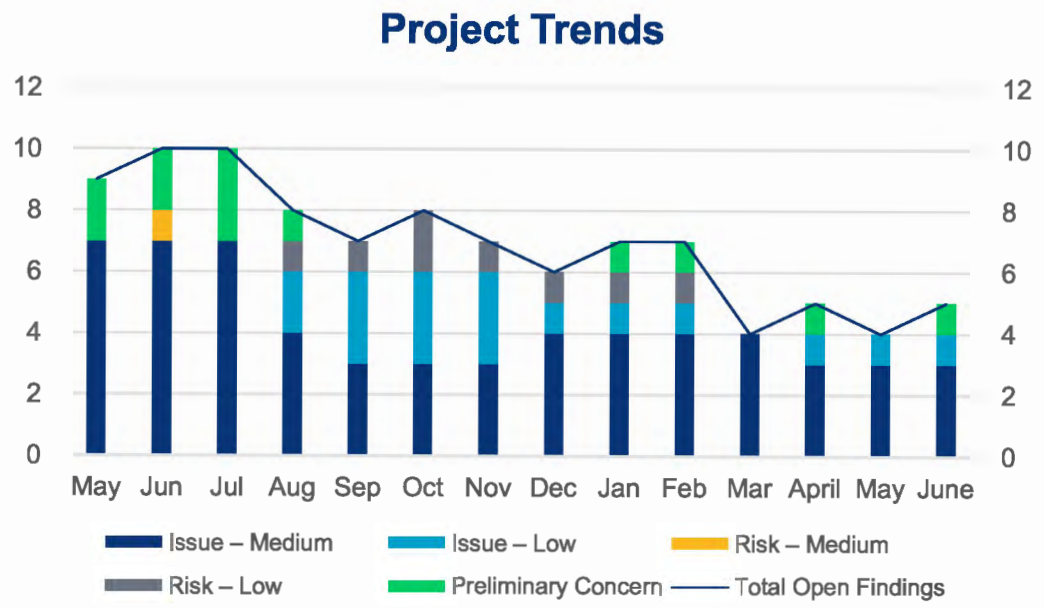


Appendix C: Project Trends

Appendix C
Project Trends

	September	October	November	December	January	February	March	April	May	June
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	7	8	7	7	7	7	4	5	4	5
Issue - high	0	0	0	0	0	0	0	0	0	0
Issue - medium	3	3	3	4	4	4	4	3	3	3
Issue - low	3	3	3	1	1	1	0	1	1	1
Risk - high	0	0	0	0	0	0	0	0	0	0
Risk - medium	0	0	0	0	0	0	0	0	0	0
Risk - low	1	1	1	1	1	1	0	0	0	0
Preliminary Concern	0	1	0	1	1	1	0	1	0	1

Appendix C
Project Trends



Appendix D

Acronyms and Definitions

Acronyms	Definition
DOH	Department of Health
BHA	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
ISP	Individualized Service Plan



Appendix E
List of Production Defects

ID	Work Iten	Division	Title	State	Priority	Severity	Found In	Created Date
42744	Bug	DDD	DDD - Document Scanning - NPP Files from Multiple Units getting routed to consent form folder	Completed in Dev	2	2 - High	PROD	6/4/2026 10:51
42907	Bug	DDD	DDD - Citizenship and Advocacy: Create Document Location flow failures	New	2	3 - Medium	PROD	6/26/2026 15:51
42863	Bug	DDD	DDD - Inspire/System Workflow changing Case Owner	New		3 - Medium	PROD	6/22/2026 13:06
42742	Bug	DDD	DDD - Document Scanning - Duplicate Files Being Created in Manual Routing Library	Completed in Dev	2	3 - Medium	PROD	6/4/2026 10:36
42691	Bug	DDD	DDD - Plan Service Date Restriction Error Displaying Unexpectedly	Completed in QA_Test	2	3 - Medium	PROD	5/29/2026 11:36
42535	Bug	DDD	DDD - Intermittent Outcome/Action Step duplication	New	2	3 - Medium	PROD	5/1/2026 7:43
42501	Bug	DDD	DDD - LTW & ISW not cloned	Approved	1	3 - Medium	PROD	4/28/2026 12:05
42494	Bug	DDD	DDD - Calculator not correct for RBT services	Pending Approval	2	3 - Medium	PROD	4/27/2026 14:35
42317	Bug	DDD	DDD - Program Enrollment mapping issues on ISP Report	New	2	3 - Medium	PROD	4/8/2026 6:16
42051	Bug	DDD	DDD - AER - Dashboard semantic layer error - Missing Customer	New	2	3 - Medium	PROD	2/16/2026 8:07
40855	Bug	DDD	DDD - Calculator one-time mid-year change ISP report discrepancy	New	2	3 - Medium	PROD	8/20/2025 7:49
40521	Bug	DDD	DDD - Alert - Found in Latest Claims Refresh not returning any data to send emails from	Ready To Test	2	3 - Medium	PROD	7/10/2025 10:59
37793	Bug	DDD	DDD - ISP Report Generation Issues	New	2	3 - Medium	PROD	2/10/2025 12:06
37733	Bug	DDD	DDD - Incorrect Columns displaying on Provider Plan subgrid (Action Plan tab of ISP)	Evaluated_On Hold	1	3 - Medium	PROD	2/5/2025 7:37
36383	Bug	DDD	DDD - Calculator problem with paid base and add on	New	2	3 - Medium	PROD	9/26/2024 12:19
35450	Bug	DDD	DDD - Calculator not printing correctly	Approved	2	3 - Medium	PROD	7/26/2024 11:36
35317	Bug	DDD	DDD - Plan Services with no Provider Plan	Active	2	3 - Medium	PROD	6/24/2024 12:06
34242	Bug	DDD	Bug - Case Merge - Contact Notes not merging; Permissions error	New	3	3 - Medium	PROD	8/17/2023 11:44
34238	Bug	CAMHD	CAMHD - Assessment Entity Initial Save Time - IMHE	Evaluated_On Hold	2	3 - Medium	Prod	8/17/2023 5:33
34110	Bug	DDD	Bug - Individual Budget unlinking from Service Authorizations	New	3	3 - Medium	PROD	7/27/2023 18:40
33550	Bug	CAMHD	Bug: "Progress Notes Associated to Invoices" page not loading	New	3	3 - Medium	PROD	3/31/2023 20:11
30726	Bug	DDD	Portal signature fields do not accept touchscreen input	Evaluated_On Hold	2	3 - Medium	PROD	9/17/2021 12:07



Solutions that Matter