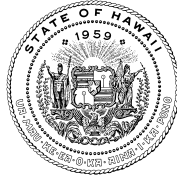


JOSH GREEN, M.D.  
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LUNA 'ENEHANA

**STATE OF HAWAII | KA MOKU'ĀINA O HAWAII'**  
**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

December 9, 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  
November 1 – November 30, 2025*

*Final Submitted: December 9, 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



# Executive Summary

The project remains on schedule, with Release 4.15 targeted for December 3, 2025. The team is progressing toward the planned go-live, with key features including system fixes, enhancements to assessment tools, updates to core workflow processes, and reporting improvements to support operational visibility. The DDD initiative is moving forward effectively with the Inspire Document Management Solution, following a successful proof of concept, to organize, index, and manage documents while ensuring retention compliance.

Following the 4.14 release, the deployment team completed a mid-sprint deployment to update the Provider Portal. In preparation for 4.15, the team is proactively resolving outstanding deployment tasks and has begun planning for automated update deployments from Development to Production, with a potential test run in Release 4.16.

System stability remains strong, with most functionality performing as expected. A few post-production defects were identified this month, including one high-severity and four medium-severity defects. Root Cause Analysis (RCA) has been completed for some defects, with remaining defects under review.

Backlog management continues as BHA and the SI break large user stories into smaller units to improve project velocity, with ongoing refinement activities supporting this effort.

Regression testing for Release 4.15 is underway. The Tosca Automation SME completed a dry run of 12 automated DDD modules and generated a results report, reducing manual testing and freeing resources for other priorities. CAMHD automation remains on hold pending a Tosca license upgrade. Until full automation can be implemented, the SI and CAMHD are executing manual regression testing.



# Executive Summary

Sep	Oct	Nov	Category	IV&V Observations
L	L	L	<b>Sprint Planning</b>	The BHA team is exploring an incremental approach to breaking large user stories into smaller, more manageable pieces to support improved throughput and sprint velocity. The approach is still evolving, and some larger or more complex stories may require additional attention. The team will continue to monitor and refine this method as needed.
L	L	L	<b>User Story (US) Validation</b>	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	<b>Test Practice Validation</b>	Regression testing for Release 4.15 is underway. The Tosca Automation SME completed a dry run of 12 automated DDD modules and generated a results report, reducing manual testing and freeing resources for other priorities. CAMHD automation remains on hold pending a Tosca license upgrade. Until full automation can be implemented, the CAMHD and SI are executing manual regression testing.



# Executive Summary

Sep	Oct	Nov	Category	IV&V Observations
M	M	M	<b>Release / Deployment Planning</b>	In preparation for Release 4.15, the deployment team is addressing missing tasks to support a smooth rollout. Few production defects have been identified and are being resolved. A Mid-Sprint Deployment on 11/7/25 updated the Provider Portal to enable report viewing. Deployment templates are being refined, and automation of deployment from Development to Production is planned, with a potential test run for release 4.16.
L	L	L	<b>On-The-Job- Training (OJT) and Knowledge Transfer (KT) Sessions</b>	This category remains Green (low criticality) for the November reporting period with no active findings.
L	L	L	<b>Targeted KT</b>	This category remains Green (low criticality) for the November reporting period. IV&V will continue to monitor.
L	L	L	<b>Project Performance Metrics</b>	There are no project performance metrics to report for the November reporting period. IV&V will keep this category's criticality rating Green (low criticality) and will continue to monitor.
L	L	L	<b>Organizational Maturity Assessment (OMA)</b>	This category remains Green (low criticality) for the November reporting period. There are no outstanding findings in this category, and IV&V will continue to monitor.



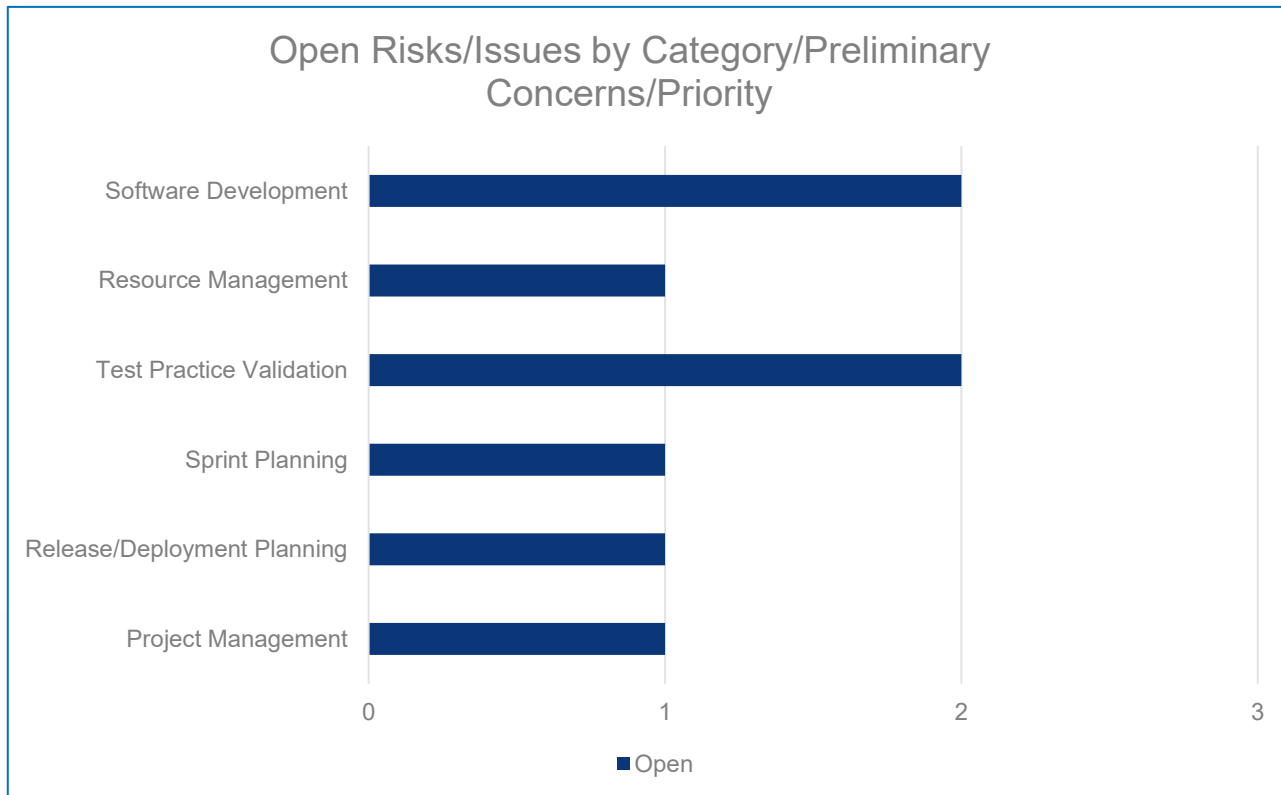
# Executive Summary

Sep	Oct	Nov	Category	IV&V Observations
L	L	L	<b>Project Management</b>	The project remains on schedule, for go-live on December 3, 2025. The team is progressing toward the planned go-live, with key features including system fixes, enhancements to assessment tools, updates to core workflow processes, and reporting improvements to support operational visibility.
M	M	M	<b>Resource Management</b>	BHA continues to be highly engaged and collaborative in addressing upcoming project needs. Resource limitations affect both the Data Analytics and Case Management teams, potentially impacting the depth of review for the predictive analytics dashboard and staff engagement in training. Regarding IT support, the DDD IT supervisor position was undergoing interviews in November. Although an IT training position has not yet been established, CAMHD developed Power Platform training catalogs in November to support IT onboarding and skill development, with departmental branding required for broader use.



# Executive Summary

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



The background is a solid blue color with several decorative elements. There are several light blue rounded rectangles of various sizes scattered across the page. Some of these rectangles have a thin white outline, while others are solid light blue. The rectangles are arranged in a way that suggests a grid or a layout of boxes, with some overlapping and others separate.

# **IV&V Findings & Recommendations**

# IV&V Findings & Recommendations

## Assessment Categories


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

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



# IV&V Findings & Recommendations

## Sprint Planning (cont'd)


#	Key Findings	Criticality Rating
41	<p><b>Low Risk:</b> 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.</p> <p><b>Update:</b> The BHA team is currently exploring an incremental approach to break large user stories into smaller, more manageable pieces. This approach is intended to improve project throughput and overall sprint velocity. While the method remains a work in progress, the team has noted ongoing considerations around managing particularly large or complex user stories. Continued monitoring and refinement may be needed to ensure the approach achieves its intended benefits.</p>	

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.	In Progress
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.	In Progress
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.	In Progress
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).	In Progress



# IV&V Findings & Recommendations

## Test Practice Validation

#	Key Findings	Criticality Rating
2	<p><b>Medium Issue:</b> The lack of comprehensive automated regression testing has likely led to post-production defects, causing user frustration.</p> <p><b>Finding Update:</b> Regression testing for Release 4.15 will run from 11/21/25 -12/02/25, leading up to the targeted 12/03/25 go-live. The Tosca Automation Regression SME will perform a dry run, execute the automated test scripts developed for DDD, covering 12 modules in this regression cycle, and provide a testing report upon completion. This support alleviates DDD's reliance on Manual testing, freeing resources to focus on higher-value tasks and improving overall project efficiency. CAMHD's automation efforts remain on hold pending a Tosca upgrade.</p>	

Recommendations	Status
<p>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.</p> <p>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.</p>	Open
<p>A balanced approach that combines manual and automated regression testing to ensure broad test coverage and flexibility.</p>	In-Progress



# IV&V Findings & Recommendations

## 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



# IV&V Findings & Recommendations

## Test Practice Validation (cont'd)

#	Key Findings	Criticality Rating
40	<p><b>Low Issue:</b> Limited testing processes can lead to poor-quality software, project delays, and extended user acceptance testing.</p> <p><b>Finding Update:</b> Role-based testing measures that were missing from the previous regression period are being implemented by the testing team during the 4.15 regression testing. In parallel, BHA continues to assess high-risk areas of the system where additional test coverage may provide value.</p>	L

Recommendations	Status
<p>IV&amp;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.</p> <p>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.</p>	In Progress



# IV&V Findings & Recommendations


## Test Practice Validation (cont'd)

Recommendations	Status
<p>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.</p>	In Progress
<p>IV&amp;V recommends that, after fixing a defect, the SI incorporate relevant test cases to validate these fixes in subsequent releases.</p>	In Progress
<p>IV&amp;V has requested an overview of the testing process, with a focus on process such as tracking test coverage and requirements traceability.</p>	In Progress
<p>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.</p>	In Progress
<p>Identify stakeholders (output is Stakeholder Register) and develop a RACI matrix for testing.</p>	In Progress
<p>Review the overall testing process and implement any needed improvements identified.</p>	Open



# IV&V Findings & Recommendations

## Release / Deployment Planning (cont'd)

#	Key Findings	Criticality Rating
39	<p><b>Medium Issue:</b> 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.</p> <p><b>Finding Update:</b> In preparation for the 4.15 release, the deployment team is proactively resolving missing deployment tasks to ensure a smooth rollout. Since the last reporting period, several production defects have been identified and are actively being addressed by the project team. Earlier this month (11/7/25), a Mid-Sprint Deployment (MSD) was conducted to deploy updates to the Provider Portal, enabling the viewing of specific reports. A deployment task template continues to be refined and may be considered in the next release. In addition, BHA will begin work on automating deployments from the Development environment to Production, with a potential test run with the deployment team for Release 4.16.</p>	
<b>Recommendations</b>		<b>Status</b>
<p>IV&amp;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.</p>		Open
<p>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.</p> <p>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.</p>		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
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



# 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
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



# IV&V Findings & Recommendations

## Project Management (cont'd)

#	Key Findings	Criticality Rating
46	<p><b>Low Issue:</b> 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.</p> <p><b>Finding Update:</b> IV&amp;V continues to observe the project's management of reported defects, noting continued adherence to the Helpdesk and Defects management processes. Hence, IV&amp;V is closing this finding.</p>	Closed
Recommendations		Status
	The project records the history of a defect's severity in the corresponding ticket's description/notes section in ADO. For example, when a hotfix is deployed to mitigate a defect initially classified as "Critical," the description/notes section should document that the defect originally had a "Critical" severity rating.	Open
	Based on Best Practices, updating the defect management documentation and having regular refresher training on the defect management process.	In Progress
	Send communications to the project stakeholders to clarify the defect management process and the importance of logging all defects.	Open
	Take steps to assure current and new users understand how to report and/or log defects.	In Progress
	Consider designating a defect management lead or champion to oversee adherence to the process and assure all defects are logged.	Open
	Keep stakeholders informed about defect status, priority, impacts, and resolution timelines. This could increase awareness of the importance of logging defects.	In Progress



# IV&V Findings & Recommendations

## Project Management (cont'd)

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



# IV&V Findings & Recommendations

## Resource Management

#	Key Findings	Criticality Rating
34	<p><b>Medium Issue:</b> A shortage of BHA project resources could lead to reduced productivity and project delays.</p> <p><b>Finding Update:</b> BHA remains highly engaged and collaborative as they work through upcoming project needs. Resource limitations remain a consideration for the Data Analytics team, as current analyst capacity may make it challenging to thoroughly review the predictive analytics dashboard or delve deeper into potential unreported adverse events. The Case Management team is experiencing similar constraints, as varying levels of technology comfort and the length and complexity of training sessions can make it harder for some staff to fully engage without additional structured skill-building opportunities. Regarding IT support, the DDD IT supervisor position was undergoing interviews in November. Although an IT training position has not yet been established, CAMHD developed Power Platform training catalogs in November to support IT onboarding and skill development, with departmental branding required for broader use.</p>	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



# 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
BHA should explore the use of contractors to fulfill the functions for open project positions.	In Progress



# IV&V Findings & Recommendations

## Software Development

#	Key Findings	Criticality Rating
14	<p><b>Medium Issue:</b> Due to multiple quality concerns, the project may continue to face impactful system defects.</p> <p><b>Finding Update:</b> During the last reporting period, One (1) High-severity and four (4) Medium-severity Production defects were identified, with remediation efforts completed for several of them. However, Root Cause Analysis (RCA) for multiple production defects remain pending. Timely completion of RCAs is essential to prevent recurring defects and reinforce overall quality assurance for future releases.</p>	

Recommendations	Status
Closer collaboration between divisions to review reported defects, ensuring a shared understanding and alignment, particularly regarding the severity and priority of production defects.	Open
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
The project increases comprehensive testing prior to joint testing to reduce the burden on BHA testers and reduce post-production defects.	Open
The SI vendor add a "Found In" column to the daily scrum file to indicate the environment where each defect was identified.	In Progress
The SI vendor provides the total number of defects in production and reports these numbers regularly to BHA.	In Progress
Evaluate existing project staff skills and experience levels to ensure they meet BHA support requirements.	Closed



# IV&V Findings & Recommendations

## Software Development (cont'd)

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



# IV&V Findings & Recommendations

## Software Development

#	Key Findings	Criticality Rating
53	<p><b>Preliminary Concern:</b> The project previously maintained a Lessons Learned document, but it was discontinued. Contributing factors included challenges in ensuring that retrospective discussions remained fully constructive and solution-oriented. As a result, the project currently lacks a comprehensive Lessons Learned document and review process that can be shared across the project to support continuous improvement. The absence of such documentation may limit opportunities to capture insights and drive process enhancements in key areas such as development output, testing effectiveness, and deployment preparation and execution.</p> <p><b>Finding Update:</b> Historically, the team held formal lessons-learned sessions at the end of projects and retrospectives following each release. Currently, the Root Cause Analysis (RCA) process for production defects is providing effective knowledge transfer, and BHA notes that there is no immediate need to restart formal retrospectives. The team can continue relying on RCA while considering structured retrospectives as a potential enhancement for future knowledge sharing. Based on these observations, IV&amp;V is closing this finding.</p>	Closed



# IV&V Findings & Recommendations

## Project Performance Metrics

Metric	Description	IV&V Observations	IV&V Updates								
<b>Velocity</b>	<ul style="list-style-type: none"> <li>Review and validate the velocity data as reported by the project</li> <li>Verify the project is on pace to hit the total target number of US/USP</li> </ul>	<p><b>November:</b> A Mid-Sprint Deployment was completed on 11/7/25. R4.15 is planned for production deployment on 12/3/2025.</p>	<p>Velocity Metric Trends:</p> <table border="1"> <thead> <tr> <th>Release</th> <th>Planned velocity</th> <th>Actual velocity</th> <th>Percentage attained</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Release	Planned velocity	Actual velocity	Percentage attained				
Release	Planned velocity	Actual velocity	Percentage attained								

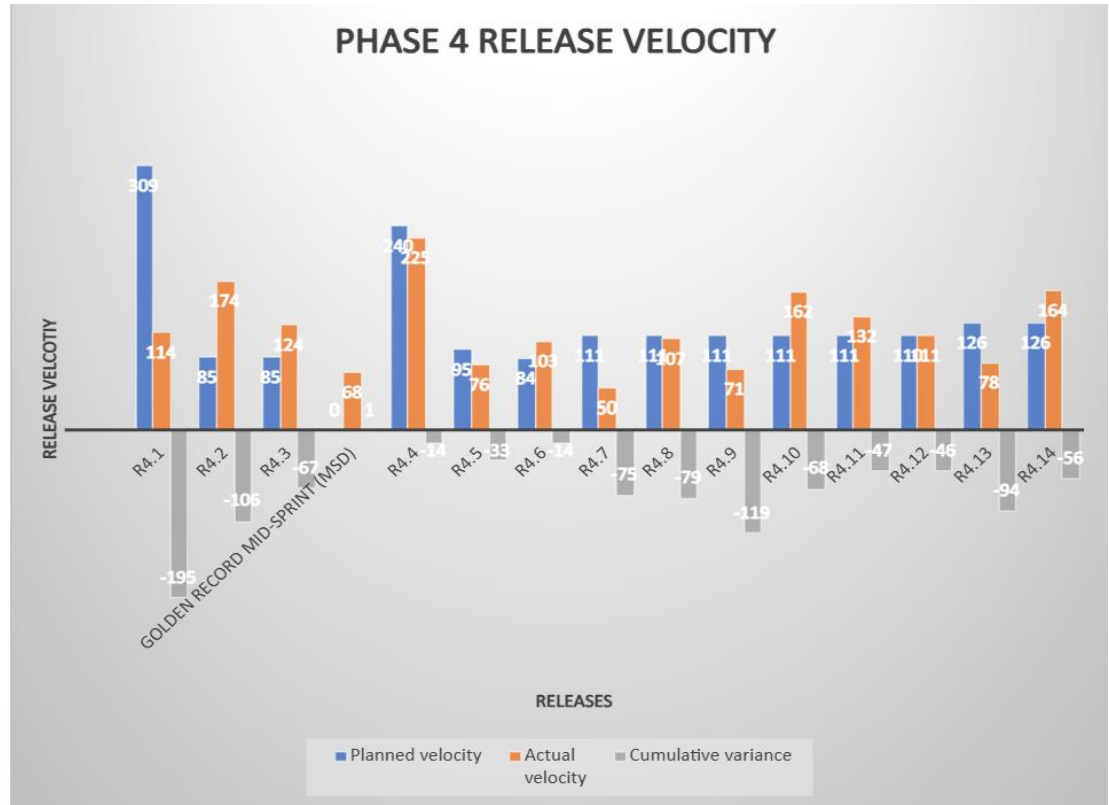


# IV&V Findings & Recommendations

## 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



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
<b>Defect Metrics</b>	Understand and track the following: <ul style="list-style-type: none"> <li>Defects by category (bug fixes)</li> <li>USPs assigned to defects in a release vs. USPs assigned to planned US in a release</li> </ul>	<b>November</b> – A Mid-Sprint Deployment was completed on 11/7/25. R4.15 is planned for production deployment on 12/3/2025.	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 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 November 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
9. DOH BHA IT Solution Project – Steering Committee
10. Incident Management Discovery
11. Discovery Management Solution Discovery Sessions

### Artifacts reviewed during the November 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. Conducted IV&V Interviews.

### Eclipse IV&V® Base Standards and Checklists



Document





# Appendix C: Project Trends

# Appendix C

## Project Trends

	February	March	April	May	June	July	August	September	October	November
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	11	10	9	10	10	10	8	7	8	7
Issue - high	0	0	0	0	0	0	0	0	0	0
Issue - medium	7	9	7	7	7	7	4	3	3	3
Issue - low	3	0	0	0	0	0	2	3	3	3
Risk - high	0	0	0	0	0	0	0	0	0	0
Risk - medium	1	1	1	0	0	0	0	0	0	0
Risk - low	0	0	1	1	1	1	1	1	1	1
Preliminary Concern	0	0	0	1	2	2	1	0	1	0



# 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



# Appendix E

## List of Production Defects

ID	Work Item	Division	Title	State	Priority	Severity	Found In	Created Date
41226	Bug	DDD	DDD - Service Authorization Generation Issues	Completed in QA_Test	1	2 - High	PROD	10/7/2025 9:36
41506	Bug	DDD	DDD - "SIS Status" in Assessment record not getting updated from Survey Answers	New	1	3 - Medium	PROD	11/20/2025 6:28
41318	Bug	DDD	DDD - Check not parsing fully in INSPIRE	Ready for Code Review	1	3 - Medium	PROD	10/24/2025 12:51
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
41498	Bug	DDD	DDD - ISP Cloning Issue	New	2	2 - High	PROD	11/18/2025 7:29
41522	Bug	DDD	DDD - Claims Pipeline From MedQuest Failing	New	2	3 - Medium	PROD	11/21/2025 13:00
41405	Bug	DDD	DDD - SIS Assessment Email not being sent out and update SIS Template	Completed in QA_Test	2	3 - Medium	PROD	11/4/2025 16:46
41400	Bug	CAMHD	CAMHD - Power BI Reports not viewable to all Providers in Provider Portal	Ready for Code Review	2	3 - Medium	PROD	11/4/2025 12:44
41185	Bug	CAMHD	CAMHD - 835 records Owner not being set	Ready for Code Review	2	3 - Medium	PROD	10/3/2025 11:51
40891	Bug	DDD	DDD - Power Automate flow bug - Community Living: Create Document Location	Pending Approval	2	3 - Medium	PROD	8/25/2025 10:53
40855	Bug	DDD	DDD - Calculator one-time mid-year change ISP report discrepancy *	New	2	3 - Medium	PROD	8/20/2025 7:49
40776	Bug	DDD	DDD - Calculator Objective unchecking problem	Active	2	3 - Medium	PROD	8/6/2025 12:46
37793	Bug	DDD	DDD - ISP Report Generation Issues	New	2	3 - Medium	PROD	2/10/2025 12:06
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
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	2	3 - Medium	PROD	7/27/2023 18:40
30726	Bug	DDD	Portal signature fields do not accept touchscreen input	Evaluated_On Hold	2	3 - Medium	PROD	9/17/2021 12:07
34242	Bug	DDD	Bug - Case Merge - Contact Notes not merging; Permissions error	New	3	3 - Medium	PROD	8/17/2023 11:44
33841	Bug	DDD	DDD - Calculator 3.0 - Users able to schedule service past ISP end date again	Approved	3	3 - Medium	PROD	5/17/2023 11:22
33550	Bug	CAMHD	Bug: "Progress Notes Associated to Invoices" page not loading	New	3	3 - Medium	PROD	3/31/2023 20:11
30634	Bug	CAMHD	CAMHD Bug - Credentialing documents not copied into PROD during Data Migration	Completed in QA_Test	3	3 - Medium	PROD	2/16/2021 17:45





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**Solutions that Matter**

ID	Short Description	Finding Statement	Analysis and Significance	Recommendation	Finding Update	Category	Type	Priority	Status	Closure Reason	Closed Date	Identified Date	Owner		
2	Regression 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 Support and Life Trajectory functionality. DDD has informed IV&V that there are other examples of functionality being deprecated after a release, some of which are still being investigated. As of this report, IV&V has not evaluated the project's root cause analysis (RCA) process used to determine why such functionality was deprecated but will discuss further with BHA in January 2020. Thorough vetting and validation of regression test cases are necessary to prevent defects when a release is pushed live. When defects occur in production, the project should follow a defined and repeatable process for determining the root cause of the problem.	<ol style="list-style-type: none"> <li>To ensure effective Tosca testing, it's 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.</li> <li>A balanced approach that combines manual and automated regression testing to ensure broad test coverage and flexibility.</li> <li>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.</li> <li>IV&amp;V recommends reevaluating the schedule priorities by distributing the work according to the resource bandwidth. This will ensure that the schedule is not impacted and that the work is done efficiently between regression testing and Golden Record (GR).</li> <li>Pursue and complete additional formal training in Azure DevOps and Tricentis for test automation as soon and complete efforts to automate the two primary regression test scripts.</li> <li>IV&amp;V recommends DDD and CAMHD to develop a common and consistent approach across divisions for performing regression testing.</li> <li>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.</li> </ol>	<p>11/30/25 - Regression testing for Release 4.15 will run from 11/21/25 -12/02/25, leading up to the targeted 12/03/25 go-live. The Tosca Automation Regression SME will perform a dry run, execute the automated test scripts developed for DDD, covering 12 modules in this regression cycle, and provide a testing report upon completion. This support alleviates DDD's reliance on Manual testing, freeing resources to focus on higher-value tasks and improving overall project efficiency. CAMHD's automation efforts remain on hold pending a Tosca upgrade.</p> <p>10/31/25 - As the team continues to make progress, limited resources remain a key challenge. The DDD IT Help Desk is currently staffed by three team members who support multiple functions, which may limit capacity and slow issue resolution. To enhance support and maintain efficiency, there is a continued need for additional cross-trained staff, along with a dedicated training position focused on IT-related tasks. IV&amp;V will continue monitoring to determine whether this area may trend toward high in the coming month.</p> <p>9/30/25 - BHA is proactively pursuing the addition of a new IT position to help strengthen capacity and support ongoing efforts. At the same time, they are managing a number of competing priorities, which is placing some strain on available resources. In the meantime, the team is managing multiple critical initiatives, including year-end rate change planning, and conducting UAT for document management. With these activities converging, maintaining a balanced workload and clear planning will help support the upcoming 4.15 release and other near-term goals.</p> <p>8/31/25 - 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.</p> <p>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 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.</p> <p>6/30/25 - BHA continues to face ongoing resource constraints. The project has identified cybersecurity work that would benefit from support by individuals 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. 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 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.</p>	Test Practice Validation	Issue	Medium	Open					12/31/2019	Gautam Gulvady
14	Code quality	Due to multiple quality concerns, the project may continue to face impactful system defects.	System defects identified in August that affected claims were due to multi-faceted quality issues were individually addressed during this reporting period. IV&V notes that there is one remaining defect still being evaluated that affects a limited number of claims. Overall, the Project Team has responded with a commitment to increase project quality and is in the process of identifying improvements to associated testing processes. These currently include: Performing Revenue Neutrality Testing to ensure expected revenue streams are largely unchanged from one period to the next. Conducting System Integration Testing, User Acceptance Testing, Performance Testing, and Regression Testing for Release 3.10. IV&V will continue to monitor the testing efforts throughout the balance of Release 3.10 and validate that enhanced quality processes, including industry standard regression testing, continue for Agile Release 3.11 forward. Finally, IV&V reviewed and provided feedback on the Help Desk and Semantic Layer design documents per request and found that both documents lacked design details. The identified quality issues have negatively affected DOH billing processes and DOH has stated these are the most impactful defects discovered to date.	<ol style="list-style-type: none"> <li>Close collaboration between divisions to review reported defects, ensuring a shared understanding and alignment, particularly regarding the severity and priority of production defects.</li> <li>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.</li> <li>The project increases comprehensive testing prior to joint testing to reduce the burden on BHA testers and reduce post-production defects.</li> <li>The SI vendor add a "Found in" column to the daily scrum file to indicate the environment where each defect was identified.</li> <li>The SI vendor provides the total number of defects in production and reports these numbers regularly to BHA.</li> <li>The project evaluate existing project staff skills and experience level to ensure +</li> </ol>	<p>11/30/25 - During the last reporting period, One (1) High-severity and four (4) Medium-severity Production defects were identified, with remediation efforts completed for several of them. However, Root Cause Analysis (RCA) for multiple production defects remain pending. Timely completion of RCAs is essential to prevent recurring defects and reinforce overall quality assurance for future releases.</p> <p>10/31/25 - Since the Release 4.14 deployment to Production, One (1) High and three (3) Medium-severity post-go-live defects were identified. The project team is actively addressing these defects, which impact key functionality - service authorization generation and data imports via the console application. Root Cause Analysis (RCA) has been conducted, with several defects pending analysis.</p> <p>9/30/25 - Release 4.14 is planned for 10/1/25. Since the last reporting period, the project team has been actively addressing one (1) Critical and one (1) High-severity production defect. Earlier this month, the team deployed two High-severity production defects in a mid-sprint deployment (MSD) on 9/25. IV&amp;V continues to monitor code quality, MSDs, and upcoming production releases, with particular attention to new production defects.</p> <p>8/31/25 - 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&amp;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).</p> <p>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 with remediation efforts for existing production defects continue (see Appendix E), resolution of lower-priority issues has been delayed as BHA focuses on higher-priority tasks. The R4.13 went live on 7/30/25. IV&amp;V will continue to monitor key areas, including R4.12 defect resolution, future releases and any Mid-Sprint Deployments (MSDs).</p> <p>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 Appendix E) is ongoing, resolution of lower-priority issues has been delayed due to the project's focus on higher-priority tasks. IV&amp;V will continue to monitor key areas, including R4.12 defect resolution, PHR implementation, any Mid-Sprint Deployments (MSDs), and progress on the AER solution.</p> <p>5/31/25 - R4.12 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 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 functionality post-go-live.</p> <p>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.</p>	Software Development	Issue	Medium	Open					9/30/2020	Gautam Gulvady
34	Limited BHA resources	Shortage of Behavioral Health Administration (BHA) project resources could lead to reduced productivity and project delays.	Key BHA project resources have reported constraints on how much time they can devote to the project. The departure of the Child and Adolescent Mental Health Division (CAMHD) System Management Office Manager and CAMHD Inspire Project Lead could further impact the project if DOH cannot acquire suitable resources. The lack of capacity of the DOH test script developer has slowed DDD's automated test script development.	<ol style="list-style-type: none"> <li>IV&amp;V recommends: <ul style="list-style-type: none"> <li>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.</li> </ul> </li> <li>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.</li> <li>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.</li> <li>DDD and CAMHD have further discussions to optimize resource utilization between the two divisions.</li> <li>BHA should explore options for offloading project team members' daily responsibilities to other staff.</li> <li>BHA should work quickly to create new positions and receive State approval.</li> <li>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.</li> <li>BHA should explore the use of contractors to fulfill the functions for open project positions.</li> </ol>	<p>11/30/25 - BHA remains highly engaged and collaborative as they work through upcoming project needs. Resource limitations remain a consideration for the Data Analytics team, as current analyst capacity may make it challenging to thoroughly review the predictive analytics dashboard or delve deeper into potential unreported adverse events. The Case Management team is experiencing similar constraints, as varying levels of technology comfort and the length and complexity of training sessions can make it harder for some staff to fully engage without additional structured skill-building opportunities. Regarding IT support, the DDD IT supervisor position was undergoing interviews in November. Although an IT training position has not yet been established, CAMHD developed Power Platform training catalog in November to support IT onboarding and skill development, with departmental branding required for broader use.</p> <p>10/31/25 - As the team continues to make progress, limited resources remain a key challenge. The DDD IT Help Desk is currently staffed by three team members who support multiple functions, which may limit capacity and slow issue resolution. To enhance support and maintain efficiency, there is a continued need for additional cross-trained staff, along with a dedicated training position focused on IT-related tasks. IV&amp;V will continue monitoring to determine whether this area may trend toward high in the coming month.</p> <p>9/30/25 - BHA is proactively pursuing the addition of a new IT position to help strengthen capacity and support ongoing efforts. At the same time, they are managing a number of competing priorities, which is placing some strain on available resources. In the meantime, the team is managing multiple critical initiatives, including year-end rate change planning, and conducting UAT for document management. 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BHA is implementing cross-training to better balance workloads and increase team flexibility, while also exploring additional resources to address capacity constraints and maintain</p>	Resource Management	Issue	Medium	Open					8/18/2023	Michael Fors



