

National Utilization Management Integration (NUMI) Application Development

Aquilent teamed with the Department of Veterans Affairs (VA) to establish a project- and risk-management framework and communication plan to support the web-based National Utilization Management Integration (NUMI) application.

the objective_

The National Utilization Management Integration (NUMI) is a web-based application that automates documentation of clinical features relevant to each patient's condition and the associated clinical services provided as part of the Veterans Health Administration's (VHA's) medical benefits package. The Office of Quality and Performance (OQP) required support to manage and implement the solution, working in partnership with a nationally dispersed team of NUMI stakeholders, project managers, and developers.

The challenge was to provide a team that could create and support new VA documentation and process requirements, provide key technical resources, verify the software, and assist with the establishment and configuration of the environments needed to support and implement the NUMI system. This required a flexible team extremely knowledgeable about the VA application development processes, while also having experience with .NET development in an Agile environment employing an iterative approach to the software development life cycle.

the solution_

Aquilent assembled a team with experience in project management, business analysis, technical writing and documentation management, software quality assurance, database administration, and application development. The team assessed the development process and the maturity of the documentation and software within, concluding that a structured requirements elicitation process was required in order to develop software that would meet the needs of the end users.

The Aquilent team worked with the VA to implement a solutions delivery approach to support the NUMI effort. Aquilent's management approach for solution delivery projects is based on the Project Management Institute's Project Management Body of Knowledge (PMI PMBOK), and our service delivery processes are externally rated by the Software Engineering Institute (SEI) at Capability Maturity Model Integration (CMMI) Level 3 across all service delivery practice areas, using the Continuous Representation model.

Using these processes, which map to a corresponding process for the VA's System Development Life Cycle, the team established a project management framework tailored to the specific needs of the various stakeholders. A communications plan established processes to ensure frequent and clear communication as well as a common approach and vocabulary to facilitate communication among the dispersed NUMI stakeholders. The Aquilent team's approach to managing project risk has reduced the number of issues that impact the performance of project activities to specified technical, schedule, or cost targets.

Our requirements analysis activities have elicited requirements in a structured, iterative manner, coordinating with multiple stakeholders geographically dispersed across the country. This effort was instrumental in managing scope, which is inherent in Agile projects with open communications lines between the business owner and the development team. We provided the OQP with key development and administration resources for meeting key project milestones and ensuring that business needs were documented, prioritized, and supported. The team implemented a test methodology with activities that occurred throughout all phases of the SDLC in a multitiered process that provided system verification and validation.

The Payoff

Aquilent has integrated its validation process during requirements management activities based on best practices in order to confirm the accuracy of the documented system features. This process is conducted through a series of quality reviews and test activities ensuring that the outcome

translated into correctly documented, agreed upon, and testable NUMI features. Aquilent's continued support will enhance solutions analysis and development, project and development management, and facilitation of effective team communications, collaboration, and reporting, resulting in the successful national release of NUMI 1.0 and successive future releases.

HIGHLIGHTS

- > Reduction of the number of issues and their impact through effective project and risk management.
- > Requirements and use case development.
- > Tracking database and matrix alignment with ProPath, VA's process mapping solution.
- > Net and database development in support of the project.
- > Project and risk management framework tailored to the needs of the stakeholders.
- > Comprehensive communications plan development. awards

