# Military Health System (MHS) VistA Metadata Project

## **Quality Control Plan**

January 29, 2016

To:
Mr. Alan Furuno, COR
1300 North Holopono Street
Suite U-216
Kihei, HI 96753
(808) 433-3602
alan.furuno@pacifichui.org

Submitted by:

Hokukahu, LLC

1050 Bishop Street, Suite 472

Honolulu, HI 96813

Primary Contact: Renton Nip

(808) 927-0999

renton.nip@hokukahu.com





## **CONTENTS**

1	Introduction	3
	1.1 Quality Process Overview	3
2	Purpose of Plan	3
3	Organization, Authority and Responsibilities	4
4	Standards and Guidelines	5
5	Maintaining Effective Communications with Customer	6
6	Problem Resolution and Corrective Action	6
7	Improving Performance	6
	7.1 Lean Six Sigma Methodology	7
8	Plan Compliance and Maintenance	9
L	LIST OF FIGURES	
Fi	figure 1: Lean Six Sigma	8



## 1 Introduction

This document presents the Quality Control Plan (QCP) that the management team will implement throughout the Military Health System (MHS) VistA Metadata Project. The QCP is designed to ensure all performance standards and/or service delivery summaries are met or exceeded on a consistent basis, and that government Quality Assurance Evaluators (QAEs), managers, and the Contracting Officer (CO) have insight into performance at the appropriate levels.

This QCP describes processes, procedures, and standard practices the Hokukahu Team (the Team) will employ to address the specific basic contract plan requirements.

### 1.1 Quality Process Overview

The Team's quality control process combines sound project planning, performance management, incentives, monitoring, and quick problem resolution into a self-reinforcing management system. The QCP is designed to make high quality performance the daily norm.

The overall approach to providing quality services is to:

- Achieve performance on the overall contract and each delivery submission meets or exceeds all performance and service delivery standards;
- Implement defined processes and tools for collecting performance and service delivery indicators; and
- Apply proven process improvement methodologies to continuously strengthen performance.

## 2 Purpose of Plan

The purpose of this Plan is to document the quality control program that the Hokukahu Team will implement to ensure the quality of the Team's services and products, including:

- Procedures that are used to help ensure the quality of the Team's services, and to deal with problems when identified
- Responsibilities of key personnel
- Self-inspection procedures
- Performance measurement
- Methods of correcting deficiencies
- Documentation and reporting
- Continuous process improvement method



## 3 Organization, Authority and Responsibilities

The Hokukahu Team management approach incorporates short, direct reporting relationships and an empowered Program Manager. Key personnel in the context of this QCP include the Program Manager and the Project Manager. The organization and responsibilities are described below.

#### Program Manager (PM):

- Serve as the interface to the CO
- Final decision authority for all contractual matters
- Communicate with the government customer
- Serve as the primary interface to the government
- Execute all contractual directions received from COR or his/her designated representative
- Allocate and manage all contract resources to accomplish contract objectives
- Coordinate and oversee all subcontracted personnel
- Resolve project issues
- Meet and exceed all contractual performance standards
- Oversee Project Coordinator

#### Project Manager:

- Prepare cost, schedule and status report
- Operate independently from the Program Manager even though continual communications among the individuals is critical
- Manage and direct staff assigned to deliverables
- Conduct quality inspections in accordance with the quality control plan
- Document all inspections and provide results to the Program Manager
- Recommend process or procedure changes to the Program Manager

The quality inspections will be conducted in accordance with the QCP. Documentation of all inspection results and recommendations will be provided to the Program Manager. All inspections,



reviews, and customer satisfaction surveys will be tracked by the Program Manager who will verify completion and/or follow up with the government as necessary.

The Program Manager (PM) will serve as the primary focal point for resolving any quality issue. Because the quality of services delivered to customers is of the utmost importance to Hokukahu Team, the PM will keep the government apprised of any quality related issues. The Program Manager is authorized by Hokukahu, LLC to make all programmatic decisions and commit the Hokukahu, LLC up to the value of the contract.

#### 4 Standards and Guidelines

The Hokukahu Team will inspect all deliverables for content, completeness, accuracy, timeliness and conformance to the requirements (including any applicable standards). Several methods will be used to ensure that the Project requirements adhere to appropriate quality standards:

- Deliverable Reviews and Acceptance Process. The Project team members will work together to develop the Project deliverables. The final step in the preparation of the deliverable is an internal Project review to ensure the deliverables are correct, comprehensive and completed according to the Project standards. This is the quality control step in which the Project team members with the Project leads review the deliverable after it has been completed and before providing the deliverable for management approval. Next the Program Manager for the Project will formally review and approve Project deliverables.
- Technical Design & Code Review. The technical team validates the design of required development in a team setting to ensure that efficiencies are being utilized and best practices are followed. These reviews will also focus on eliminating redundancy and enforcement of technical standards to ensure consistency for all technical development.
- Testing. The system will be validated throughout the Project. Tests will be executed to validate the functionality and performance of the system. Testing will vary as the Project progresses. Functional Testing will verify the delivered functionality is working properly, and Unit Testing validates the specific function being developed or modified. Integration Testing tests the full system once configured. If appropriate, the technical performance of the system will be validated through Performance Testing. For each type of testing, metrics will be captured and monitored to ensure that subsequent iterations of testing continue to resolve and drive down the number of issues discovered in testing.



## 5 Maintaining Effective Communications with Customer

Effective communication with the Government is a fundamental tenet of the Team's quality management. For communication to be effective, it must be timely, relevant, and accurate. The key features of the Team's communications approach include:

- Internal requirements for quarterly customer reviews;
- Planned meetings with the Government;
- Regularly scheduled staff meetings

## 6 Problem Resolution and Corrective Action

Corrective actions are needed to ensure that identified faults are rectified, and that the chance of recurrence is minimized. Faults are identified during the Project implementation when making configurations, using the application, and in formal testing processes. Faults once identified are logged as issues. An issue resolution process will be used to track these issues and items that require management intervention and guidance. Issue logs are the primary quality metric for this Project. The number and types of issues will be monitored and reported on throughout the Project and included in the weekly status reporting minutes.

The entire Project team is responsible for the quality of the Project and therefore corrective actions will be taken at all levels. All team members are responsible for documenting the actions and changes that take place throughout the implementation.

## 7 Improving Performance

The Hokukahu Team is committed to continuous process improvement and increasing the effective/efficient use of resources throughout the life of the contract. The Team's approach to continuously improving performance includes:

- Establishing a Quality Policy and quality goals;
- Designing and developing document control processes; and
- Applying Lean Six Sigma to continually drive process improvement.

The Team will implement the Lean Six Sigma methodology of process improvement.



## 7.1 Lean Six Sigma Methodology

Lean Six Sigma is a business improvement methodology that maximizes stakeholder value by achieving the fastest rate of improvement in customer satisfaction, cost, quality, and process speed. It is a combination of the Lean and Six Sigma process improvement methodologies. Lean reduces the time required to complete a process and increases efficiency by eliminating waste. Six Sigma began as a quality initiative to eliminate defects by reducing variations in processes. Application of Lean Six Sigma has migrated from their original manufacturing environments to being widely used in the service industry. The Lean Six Sigma methodology provides Hokukahu Team an established system for improving resource utilization, making cost/performance tradeoffs and increasing the value delivered to customers.

Lean Six Sigma for Services has been proven to achieve the fastest rate of improvement in standardizing and improving processes speed – while improving quality of services delivered and with reduced overall cost. Moreover, Lean Six Sigma for Services ensures that voice of the customer is the driving force related to any selected improvement initiatives and assures that the effort is focused on the area of greatest customer impact and need. Of note, Lean Six Sigma has been shown to provide significant improvement in the quality of services and products, while decreasing cost. In essence, Lean Six Sigma for Services provides methods and tools that use Lean methodology to maximize process velocity for the benefit of the customer by:

- Providing tools for quickly analyzing process flow and identifying delay times at each activity in the process;
- Providing a focus on the separation of "value-added" work/activities for the customer from
  "non-value-added" work/activities with tools to eliminate the root causes of non-valueadded work/activities; and
- Providing a means for quantifying and then eliminating the cost of the associated non value-added work/activities.

In turn, once the process is Lean, Six Sigma methods and tools are applied by:

- Providing tools and techniques to identify and eliminate defects;
- Measuring processes to ensure data driven decisions using a comprehensive set of quality tools with a powerful framework for effective problem solving of root causes; and
- Implementing a highly prescriptive cultural infrastructure which will deliver sustainable customer results.

Lean Six Sigma is attained by focusing on the process. It requires that everything be measured in a quantifiable manner, with accuracy being the ultimate objective, even intangibles such as customer perception are taken into consideration. This allows us to quickly identify and eliminate defects.



Application of Lean Six Sigma translates into process improvement, cost reduction and improvement in the quality of services delivered as illustrated in *Figure 1*.

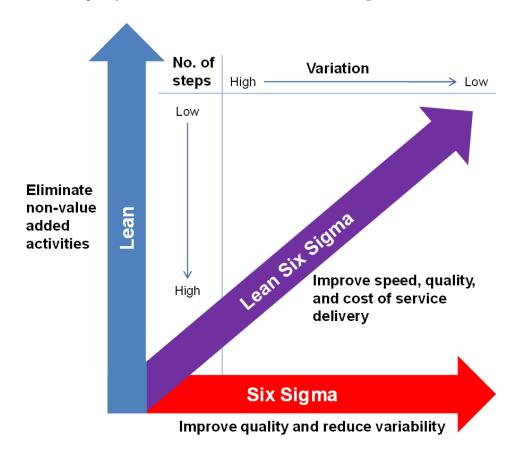


Figure 1: Lean Six Sigma

Lean Six Sigma is integrated into the Team's standard processes. The Team's application of Lean Six Sigma ensures that improvement initiatives are linked to customer needs and focused on the area of greatest impact. Using these practices leads to continued improvement of standardized practices and procedures.

As shown in Figure 1, the Lean Six Sigma process includes four key elements:

- Customer Requirements The Team continually strives to understand current and future customer needs and expectations.
- Leadership and Innovation The management team aligns strategy and deployment, mentors the organization through the right execution path, and drives cultural change. Using the Lean Six Sigma methodology they provide clear focus on what needs to be done to improve efficiency and effectiveness.



- Teaming and Employee Involvement This element provides the connection between concept and reality. People understand the need to change, they are equipped with the right tools, and they are empowered to take action.
- Closed-Loop Performance The Team emphasizes accountability and process ownership.
   Real time performance measurement also allows people to better understand the cause-and-effect relationship between their actions and the improvement goals.

Finally, the Team controls the new process through institutionalization by modifying management systems, policies, and procedures as required to deliver consistent high quality personnel and services to meet customer requirements.

## 8 Plan Compliance and Maintenance

This Plan has been placed under version control. Updates to the Plan can be recommended to the Hokukahu Team leadership for consideration and implementation as deemed appropriate.