



OCTO STRATEGIC FOCUS AREAS

In July 2010, Military Health System leadership announced the creation of its first Chief Technology Officer after a congressionally-directed assessment revealed that the MHS was still missing a dedicated body focused on improving technologies and leveraging innovation throughout the mission.

Today, the CTO reports directly to the Chief Information Officer and serves as a high-level technical authority responsible for providing future direction and improved capability for all OCIO projects and programs. Key responsibilities include assessing current and future management/technology trends in software-intensive systems; providing broad enterprise planning leadership and guidance for designated projects/programs; defining, leading, and/or overseeing projects that synergistically combine the Agency's IM/IT resources; synergizing development and innovation efforts; and defining the enterprise's technical vision including strategic direction, development, innovations, and future growth.

The strategic focus areas highlighted below outline the value that the CTO will provide to the enterprise mission through a number of horizontally-aligned initiatives that were created to support the MHS IM/IT strategic objectives. The OCTO is dedicated to improving the vast set of health IT solutions available to our end users – our nation's warfighters.



MISSION

Provide the MHS community with the visionary guidance to facilitate strategic business, technical, and functional synchronization across the Portfolio in an effort to realize efficiencies and cultivate controlled innovations that support the delivery of health care for our service members and their families

VISION

Serve as the trusted technical authority and change agent for the MHS, focused on uniting the business, technical, and functional communities; creating an environment built on innovative technologies; and shaping a portfolio that is comprised of clinically relevant, technically feasible, and financially viable solutions

OVERARCHING OBJECTIVES

STRATEGY

Align enterprise technologies with enterprise-wide business decisions

Manage technology lifecycle to identify efficiencies for enterprise value

Identify and mandate standards from best practices

GOVERNANCE

Lead enterprise governance for adherence to business and technology architecture

EXECUTION

Guide enterprise architecture and decisions

Define technical roadmap for the enterprise

Facilitate collaboration through enterprise repository

Create proof of concept and enterprise accelerators to foster voluntary compliance

GOVERNANCE & STANDARDS

Reduce redundancies within the current governance process, and establish centralized reporting and project restructuring to simplify internal governance and accelerate individual project monitoring

KEY ACTIVITIES

- 1 Complete MHS governance assessment
- 2 Integrate governance boards and establish a central forum for enterprise service management
- 3 Establish enterprise strategic management tool
- 4 Integrate investment sequencing and decision support into MHS governance
- 5 Publish service catalog for SOA Services lookup and SOA Playbook
- 6 Conduct an IT personnel skills assessment and HR planning for SOA implementation

FUTURE BENEFITS

- Alters the MHS culture to embrace speed and responsiveness by deploying capabilities every 12-18 months
- Leverages incremental development and testing to ensure optimal enterprise benefit and adoption
- Ensures that established standards and open modularity drive and constrain designs and decisions
- Recognizes that multiple acquisition paths exist to address different enterprise needs
- Central decision making ensures that stakeholders understand consistent strategic messages and are informed of changes

LONG RANGE TECHNICAL ARCHITECTURE PLAN

Develop an overarching, technology-focused LRA for the enterprise, including 1, 3, & 5-year views, as well as a 10-year technology vision

KEY ACTIVITIES

- 1 Analyze current and future operational capabilities and architecture drivers
- 2 Identify IT projects, initiatives, enabling technologies, and dependencies
- 3 Prioritize investments based on Decision Support methodology assessments
- 4 Establish MHS 10-year architecture vision and technology forecast
- 5 Develop MHS technology architecture reference models
- 6 Complete architecture transformation roadmap and transition plan
- 7 Establish an MHS LRA stakeholder working group
- 8 Reevaluate investment sequencing and portfolio changes and their impact on the LRA (annually)

FUTURE BENEFITS

- Roadmap for MHS IT architecture transformation will facilitate understanding of the MHS enterprise business and technology direction
- Provides a unified vision for the future adoption of virtualization, cloud computing, and service oriented enterprise technologies
- Unification of multiple architecture documents and artifacts

DECISION SUPPORT

Evolve a quantitative framework that aligns with enterprise strategy, considers business and technical needs, and translates them into tactical IT enablement

KEY ACTIVITIES

- 1 Establish investment sequencing and decision support as an enterprise technical and business driver
- 2 Implement investment sequencing reviews per MHS strategic priorities
- 3 Integrate investment sequencing services into the portfolio management process
- 4 Extend framework to facilitate transition planning
- 5 Analyze/prioritize DoD/VA sharing initiatives using established framework
- 6 Create strategy portal for self-service decision support and forecasting

FUTURE BENEFITS

- Decision support framework that considers and addresses enterprise technical and business pain points
- Quantitative portfolio rationalization
- ROI-driven acquisitions
- A dynamic roadmap for SOE implementation
- Outputs serve as mechanisms to ensure that business needs drive technology enablement

SERVICE ORIENTED ENTERPRISE

Define, implement, and manage the creation of a SOE that is aligned with business priorities by providing an organizational framework for instilling, governing, and evolving the culture of 'reuse' and 'sharing' of enterprise assets for improved interoperability and agility in the delivery of health care

KEY ACTIVITIES

- 1 Define the SOE strategy and foundational framework
- 2 Capture "As-Is" maturity assessment
- 3 Complete gap analysis of current and target maturity level
- 4 Develop SOE Roadmap
- 5 Establish governance/control model
- 6 Establish SOE Governance Center (SOEGC)
- 7 Complete SOE reference implementation
- 8 Define and execute compliance reviews
- 9 Author SOE policies, processes, and standards
- 10 Establish and maintain SOA Portfolio
- 11 Develop and maintain toolkits
- 12 Define and maintain a SOE Balance Scorecard
- 13 Provide mentoring and education on SOA
- 14 Define and execute organizational change management

FUTURE BENEFITS

- Migration from systems-based to services-based approach
- Reusable enterprise assets lifecycle
- Improved interoperability and external partner interaction
- Improved ability in adapting to changing enterprise needs

INNOVATIVE TECHNOLOGIES

Develop a coordinated innovation management process to identify, research, develop, test, and evaluate innovative solutions that benefit the MHS enterprise

KEY ACTIVITIES

- 1 Implement the MHS Innovations Alliance Charter
- 2 Establish and adopt criteria for evaluating innovation candidates
- 3 Create reference catalog of current needs and available solutions
- 4 Establish the policy, organization, structure, process, funding mechanisms, and metrics for innovation lifecycle management
- 5 Establish processes for migrating projects to the enterprise
- 6 Conduct call for innovations

FUTURE BENEFITS

- Uses innovation strategically to fulfill mission capabilities and gaps and increases speed to market
- Reduces cost of converting the existing multiple solutions to a single enterprise solution
- Leverages the MHS Innovation Alliance relationships to spread the costs of R&D
- Lowers the costs of research by starting with reuse
- Increases visibility into risks and benefits of R&D projects
- One program to serve all "gaps and needs"



SUPPORTING THE ENTERPRISE STRATEGY

The MHS CTO has the responsibility to influence movement towards an actionable, strategically-focused enterprise by linking day-to-day decision making with enterprise strategy. These efforts involve working side-by-side with various MHS stakeholders to help improve the overall performance of OCIO product capabilities and facilitate transparency and consistency of innovative ideas and programs across the Portfolio.

The horizontally-aligned OCTO strategic focus areas below outline the value that the CTO will provide to the enterprise mission in support of the Health IT Guiding Principles

	Joint First, Common Architecture	Adopt, Buy, Create	Transparent and Accountable Management	Driven by Strategy	Speed to Market	Requirements Drive Solutions
Service Oriented Enterprise (SOE)	<ul style="list-style-type: none"> Establish common, agnostic business services for use in a joint Service Oriented Architecture (SOA) infrastructure environment Develop joint infrastructure with the Department of Veterans Affairs (VA) in support of future capability sets Create an integrated notional future state architecture Create integrated transition and future state architectures with initial focus on integrated Electronic Health Record (iEHR) capability enablers 	<ul style="list-style-type: none"> Identify and adopt legacy services for joint SOE use Create estimates for legacy and new SOE services for joint adoption, purchase or creation Establish governance/control model Publish service catalog for SOA services lookup 	<ul style="list-style-type: none"> Establish, manage, and implement joint SOA policies and processes through central, collaborative SOEGC Encourage culture of reuse Extend framework to facilitate transition planning 	<ul style="list-style-type: none"> Facilitate movement to a SOE, leveraging legacy and/or new common services Prioritize common services in terms of value to the business process, technical maturity, existing interfaces, ability to meet requirements and cost to migrate Integrate with transition planning Create a clear strategy for migrating from interfaces to services Create estimation baselines Prioritize based on transition planning 	<ul style="list-style-type: none"> Create proofs of concept and accelerators for prioritized legacy and new common services to ensure quick deployment within the production SOA environment Identify interim architectures with minimal throwaway code Provide training to ensure program offices are enabled to achieve a SOE 	<ul style="list-style-type: none"> Leverage Decision Support prioritization methodology to ensure service development and deployment appropriately meets enterprise requirements
Decision Support	<ul style="list-style-type: none"> Identify joint DoD/VA and Service business process areas for refinement Identify requirements improvement opportunities within the DoD, Service Medical Components, and the VA Utilize Transition Application Planning (TAP) methodology to find common bottlenecks Provide a framework for transitioning to a common architecture with minimal duplication 	<ul style="list-style-type: none"> Conduct value stream analysis to identify and quantify legacy and new capabilities for future investment Facilitate Return on Investment (ROI) for investments to aid in cost benefit analysis Provide clear articulation of buy vs. build scenario from an investment perspective 	<ul style="list-style-type: none"> Prioritize investments leveraging objective enterprise data Implement joint decisions based on delivered enterprise value Provide comprehensive cost for a capability Provide on-demand glide path for any given investment Provide on-demand status of future state architecture progress 	<ul style="list-style-type: none"> Complete investment sequencing to ensure new and/or existing capabilities adhere to functional, technical, and financial strategic priorities Link functional gaps and technical errors to business processes to provide an actionable strategy Link strategy to execution through investments and projects to ensure continuous alignment 	<ul style="list-style-type: none"> Conduct value stream analysis to identify immediate needs for concentration Forecast doctrine, organization, training, materiel, leadership and education, personnel, and facilities (DOTMLPF) in advance to enable speed to market based on capabilities planned Identify internal assets that can be utilized to construct interim architectures 	<ul style="list-style-type: none"> Leveraging requirements as a driving factor, ensure assessed solutions meet requirements and are prioritized based on support to: the requirement, business process, as well as technical maturity Link requirements to business process through DBCM analysis to ensure adequate value Link capabilities to requirements to ensure ultimate benefit for the functional community and the warfighter Quantify delivered value before investing
Innovation	<ul style="list-style-type: none"> Work with research and development organizations to identify, develop, and test new innovations Outline integrated process for assessing and embracing new innovative architectures and capabilities 	<ul style="list-style-type: none"> Through adoption of new innovations processes, identify and assess existing or new solutions for adoption based on support to the joint requirement Integrate with the Decision Support methodology to suggest innovations on doctrine, organization, training, materiel, leadership and education, personnel, and facilities (DOTMLPF) based on gaps prioritized by the analysis 	<ul style="list-style-type: none"> Establish the MHS Innovations Alliance with Joint enterprise stakeholders for development, implementation, and management of Innovations lifecycle portfolio 	<ul style="list-style-type: none"> Establish Innovations lifecycle management processes focused on assessing products based on adherence to enterprise strategic requirements Integrate with the Decision Support methodology to suggest innovations on DOTMLPF based on gaps prioritized by the analysis 	<ul style="list-style-type: none"> Through the MHS Innovations Alliance and processes, identify existing innovative products that address enterprise requirements for streamlined adoption Integrate with the Decision Support methodology to suggest innovations on DOTMLPF based on gaps prioritized by the analysis 	<ul style="list-style-type: none"> Ensure appropriate innovative technologies are adopted centrally through the establishment of a controlled innovations assessment process which is grounded on the ability to support enterprise Integrate with the Decision Support methodology to suggest innovations on DOTMLPF based on gaps prioritized by the analysis
LRA (Technical)	<ul style="list-style-type: none"> Operationalize joint architecture strategy, and inform enterprise stakeholders as to when and how strategic benefits can be realized 	<ul style="list-style-type: none"> Propose sequencing and infrastructure modernization transition plan through investment sequencing prioritization and infrastructure strategy assessments 	<ul style="list-style-type: none"> Prioritize infrastructure investments based upon immediate requirements, enterprise transition strategy, and joint decision parameters 	<ul style="list-style-type: none"> Ensure the LRA plan is driven by the defined future state and parameters outlined via the near term transition application plan 	<ul style="list-style-type: none"> Propose sequencing and technology modernization transition plan for 'build to' use by Program Management Offices (PMOs) and new joint organizations 	<ul style="list-style-type: none"> Leveraging the sequencing methodology, ensure both future state and transition architecture is defined based upon the functional requirement and process
Governance	<ul style="list-style-type: none"> Establish joint architecture governance structures and processes Guide standards management process to relate policies to infrastructure Expose policies to all stakeholders through a collaborative SOE Governance Center (SOEGC) 	<ul style="list-style-type: none"> Create and/or leverage current governance boards to make investment decisions based on value to the business process, technical maturity, and cost to implement service/capability Ensure common services identified for capability are satisfied by the buy, adopt or build decisions Stand up SOEGC meetings to ensure reuse of services and service ownership 	<ul style="list-style-type: none"> Establish a unified governance body, decision making tool founded upon objective data, and acquisition assessment methodology to ensure decision making supports overall strategic alignment Provide project review reports to escalate non-compliance and associated cost Identify new standards as required to ensure better compliance Maintain SOA Balanced Scorecard which will feed the MHS Balanced Scorecard 	<ul style="list-style-type: none"> Establish a unified governance body, decision making tool founded upon objective data, and acquisition assessment methodology to ensure decision making supports overall strategic alignment Provide project review reports to escalate non-compliance and associated cost Identify new standards as required to ensure better compliance Update SOA Balanced Scorecard to feed into the MHS Balanced Scorecard 	<ul style="list-style-type: none"> Through the Chief Information Officer Management Board (CIOMB) and supporting boards (e.g., SOEGC, MHS Innovations Alliance) establish central, collaborative key performance indicators and measurement criteria to ensure product 'speed to market' Identify standards gaps based on the Decision Support methodology Identify metrics, Key Performance Indicators (KPI) for operational, financial, and customer perspective to link to strategy perspective Provide self-service portal for teams to assess their compliance to standards 	<ul style="list-style-type: none"> Review capability assessment methodology outputs centrally, and identify requirements gaps as a decision point for leadership Provide feedback to SOE about standards not adhered to in order to create accelerators that will ensure voluntary compliance Ensure adoption of best practices so that to facilitate minimal refactoring and future proof solutions