Navy Bureau of Medicine and Surgery (BUMED) CIC-Department of Health Informatics Position Description for Health Informatics CHIEF MEDICAL INFORMATICS OFFICER, CMIO

Introduction, Scope and Effect:

Mission Statement: "To improve health care in every domain and provide patients, clinicians, and the enterprise the information and technology to improve care, quality, patient safety, efficiency, and readiness."

Health Informatics, also known as medical informatics and clinical informatics, optimizes the integration of information science, computer science and health care in support of our health care system's staff including physicians, dentists, ancillary staff, nursing staff, students, and others. Navy Medicine Health Informatics (HI) leaders at the headquarters, regional, and local levels are responsible for directing and managing the development, implementation, and ongoing optimization of clinical, process improvement, and research programs.

We augment the warfighter and make Navy Medicine better at delivering world-class care, anytime, anywhere. Our **critical wartime and readiness work** includes influencing the standardization and optimization of the Service member's electronic health record (EHR), clinical content, notes, flowsheets, summary screens, clinical data sets, and reports to yield insight. The HI Directorate within the Navy Bureau of Medicine and Surgery (BUMED) Consolidated Information Center (CIC), serves to optimize health care across BUMED and the Navy Medicine (NAVMED) enterprise by leading, coordinating, and recommending policy for operational clinical/health information and systems. The vision of the HI Directorate is to serve as a leader and innovator in development, deployment, and management of clinical/health information systems across the Military Health System (MHS).

The Chief Medical Informatics Officer (CMIO) role is strategic in nature and requires knowledge, skills, abilities and proficiency of the purpose, features, functions, benefits, and limitations of Department of Defense (DoD) enterprise architecture, business tools, and networks and MHS business, clinical, and IT systems used in the operational medical environment. The CMIO serves BUMED, the Navy Medicine headquarters command, and operates within the CIC's Directorate of Health Informatics to fulfill the duties, qualifications and other conditions described in this document with focus on the needs of operational medicine. In addition, the CMIO will support Navy Medicine leadership's initiatives regarding data analytics, clinical research, cybersecurity, emergency preparedness, training, and workforce development.

Duties and Responsibilities:

- 1. Serve as primary clinician point of contact for BUMED Health Informatics with respect to operational medicine requirements, legacy and future/modernized systems.
- 2. Strategic advisor for best practices and trends impacting the operational environment.
- 3. Serve as liaison between the clinical, operational, and IM/IT communities, ensuring operational functional user needs are incorporated into plans and priorities.

- 4. Works collaboratively with IM/IT, Analytics and Informatics leaders at all levels to maintain a full suite of informatics capabilities to support the operational clinical informatics mission.
- 5. Work in close partnership with the BUMED Chief Information Officer (CIO), Chief Data Officer (CDO), Chief Health Informatics Officer (CHIO), Chief Ancillary Informatics Officer (CAIO), Chief Dental Informatics Officer (CDIO), Chief Nursing Informatics Officer (CNIO), and BUMED's Virtual Health Lead.
- 6. Serves as an advisor to the leaders and units at all levels and across services to integrate informatics priorities, policies, and best practices into the operational components of the health service support strategy, including the Combatant Command (CCMD) strategic plan.
- 7. Builds sponsorship and creates alignment for informatics best practices throughout the operational environment to ensure all internal and external stakeholders are active, visible sponsors of informatics capabilities within their respective roles.
- 8. Participates in knowledge-sharing initiatives with other members of the theater IM/IT community to discuss emerging trends/developments including software upgrades, new program rollouts, and communication efforts that may affect informatics programs, patient movement/tracking, and healthcare delivery. Activities include sharing tools, processes, experiences, and issues with IM/IT and Data/Analytics counterparts who are serving theater medical leadership and operational medical assets, revising the health informatics priorities to accommodate these changes.
- 9. Creates a roadmap for migrating policies, strategy, and best practices across the operational environment in a manner that addresses the preferences and needs of individuals and operational units while supporting clinical operations in theater.
- 10. Identifies clinical and readiness analytics/reporting needs, in addition to those required by regulation, to evaluate the quality, cost, safety and efficiency of operational health care services for optimal performance, patient tracking, readiness status ((for medically ready sailors and marines (U.S. Navy and Marines) and a ready medical force), Traumatic Brain Injury/Post Traumatic Stress Disorder prevention/treatment, improved survivability, and other pertinent/important issues in all areas of responsibility.
- 11. Enables, supports, promotes, investigates, and contributes to the advancement of predictive analytics, machine learning, and artificial intelligence (AI) where feasible and usable.
- 12. Projects needs for and provides resources for optimal personnel (e.g. IM/informatics support) to sustain operational medicine informatics operations and key functions in support of the theater informatics priorities.
- 13. In collaboration with IM/IT personnel, advises leaders at all levels on virtual health capabilities and requirements both in advance of and during deployment to ensure adequate capabilities and infrastructure to implement and maintain those virtual health services deemed critical for mission support/accomplishment.
- 14. Represents Navy and Marine Corps and supports the planning, acquisition or development, and implementation of operational clinical information systems that assist in the delivery of safe, effective, high quality patient care.
- 15. Serve as an advocate of management in promoting the use of information technology in clinical settings on all platform, active and reserve component. Serve as an advocate

- and champion for operational health care teams in all matters related to clinical information access and capabilities at the Military Treatment Facility (MTF), regional and enterprise levels, in order to promote continuity of care.
- 16. Coordinate the integration of all medical documentation and health care systems to promote data portability at sea, in the field and in coordination with garrison support.
- 17. Support the coordination, configuration, implementation, and change management efforts related to the new Military Health System (MHS) EHR for operational medical forces with an affiliated MTF as well as care delivered in the operational setting.
- 18. Advise on clinical information systems from a clinician perspective.
- 19. Assist in identifying clinicians' information and technology needs.
- 20. Optimize the use of EHR and other operational medicine systems.
- 21. Represent the ancillary clinical community's EHR interests at the enterprise level.
- 22. Ensure, when possible, data comparability within and among organizations by following national, state, and other recognized standards and guidelines on form and content
- 23. Access and use external knowledge bases and comparative data to pursue opportunities for improvement.
- 24. Work with individual clinical Departments, Directorates and/or Quality Management to redesign information-related processes/workflows to improve clinical efficiencies as well as patient safety and quality of patient care, treatment, and services.
- 25. Make recommendations for the revision of existing policies and procedures affected by the integration of health information technology (HIT).
- 26. Direct the designing of content (e.g. templates and notes) used in data capture and retrieval.
- 27. Disseminate related policy and guidance on clinical informatics.
- 28. Provide feedback on the applicability of policies and guidance on clinical informatics, including recommendations for future enterprise policy development.
- 29. Engage all care providers and staff (including physicians, non-physician providers, nursing staff, ancillary department personnel, medical records professionals and others) in the integration and use of clinical information systems.
- 30. Foster understanding of and empathy for clinician needs from information technology (IT) and build relationships to gain support from IT initiatives. Maintain high responsiveness to user needs, including training and support, to assure wide spread acceptance and use of the clinical systems.
- 31. Review health informatics trends, experiences and approaches, and develop technical application implementation strategies.
- 32. Work in concert with IT services to design, plan, acquire, evaluate, integrate, implement, and sustain systems supporting patient care activities.
- 33. Assist the Chief Information Officer (CIO) in implementing Navy Medicine IT Strategic Plans which support the objectives of the Navy Surgeon General and the MHS.
- 34. Assist the Chief Data Officer (CDO) in implementing Navy Medicine's Analytics and Data Strategic Plans which support the objective of the Navy Surgeon General and the MHS.
- 35. Serve on MHS clinical IT systems governance boards as assigned.
- 36. Serve as the Health Informatics Subspecialty Specialty Advisor and Consultant to the Navy Medicine Corps Chief's Office.

37. Perform other duties as assigned.

Governance/Portfolio Management

- 1. Oversees the design, development, implementation, and execution of the informatics priorities, policies, and practices for theater medical assets.
- 2. Participates as a member at IM/IT and Data/Analytics leadership meetings in the execution of capabilities based planning for the operational medicine community.
- 3. Partners with the IM/IT and Data/Analytics leadership and supporting personnel in every stage of the system life cycle of to ensure efficient and effective coordination, planning, acquisition, implementation, maintenance, and evaluation of clinical systems in the operational setting. Includes medical device, medical software, and support software life cycle management.
- 4. Serves as a core member/co-leader of any operational medicine clinical informatics steering committee responsible for validating functional requirements and system change requests, adjudicating and/or escalating issues to the leaders for resolution, ensuring end user usability and adoption of theater Health Information Technology (HIT) systems, and leveraging enterprise and operational medicine governance to advocate for resourcing of new capabilities.
- 5. Works closely with operational commanders, the Defense Health Agency (DHA), Joint Operational Medicine Information System (JOMIS) Program Office, Navy Medicine Regions and the Navy Medicine Training Commands (NMRTC) and Navy Medicine Training Units (NMRTU) to develop and execute plans for: functional requirements; training and support change management activities; data and reporting requirements; and usability needs necessary to support clinical operations at every level within the operational environment. Ensures the voice of the customer and stakeholders are clearly represented and well understood.
- 6. Collaborates with operational medical command leaders, managers and staff on establishing priorities that leverage clinical and business systems to enable and improve data quality and reporting as required by leaders at all levels.
- 7. Advises leaders and staff on operational clinical informatics projects, to ensure human factors, ergonomics, safety (patient and staff) and usability factors are integrated into plans.
- 8. Leads, or participates as is a senior member of, the business process re-engineering and optimization activities to continuously improve the quality, safety and efficiency of medical systems within the theater of operations.
- 9. Facilitates and coordinates operational medical command end user data and reporting requirements to align them with enterprise operational medicine data management and business intelligence priorities and systems, ensuring that information is shared with the operational commanders and any theater operational medicine leaders.
- 10. Works collaboratively with quality management, patient safety and clinical personnel to ensure reliable clinical data is available to support quality and patient safety reporting and activities as appropriate and desired in the operational setting.
- 11. Supports the Issue Resolution Process (IRP), configuration board, and defect review process to triage, analyze and/or approve/reject/escalate incidents/enhancements/change requests, by engaging with users, trainers, clinical champions/superusers, workflow analysts and other available staff. Conducts risk and impact analysis and mitigation planning; approving or rejecting courses of action and recommendations. Develops

- implementation and change management plans.
- 12. Continuously monitors feedback from trainers, workflow analysts and super-users, as well as data from analytical tools, to identify opportunities and action plans to improve and optimize the use of clinical information systems and elevate issues for resolution.
- 13. Conducts staff assist visits/site visits of medical units within the theater of operation to monitor and support clinical information systems. Ensures there is comprehensive and standardized documentation and integration of care and the smooth, timely exchange of that information throughout the echelons of care to provide optimal coordinated care across the theater. Ensures at the Role 1 and Role 2 level the focus is on data capture to evaluate and improve care, and survivability, at those levels of care.
- 14. Supervises personnel in accordance with DoD, DHA and operational command policies and procedures.
- 15. Advises leaders and operational medical command Cyber Security and Privacy staff on readiness policies and practices; continuously evaluates the impact on user access, clinical workflow, patient confidentiality and privacy, and system/ device usability.

Knowledge/Qualifications:

- 1. Medical Doctor of Doctor of Osteopathy for Physicians (required)
- 2. Master's degree or higher in Informatics, Computer Science, Public Health, or Informatics fellowship (preferred) OR completion of an informatics certificate program OR Graduate Certificate in informatics (required)
- 3. Clinical experience, past and current, in specialty (medicine, nursing, pharmacy, PAD, etc.) (required)
- 4. Experience using modern commercial EHR or HIT systems to deliver direct patient care (preferred)
- 5. Board certification in Clinical Informatics (preferred); required within two years of hire
- 6. Knowledge of the missions, organizations, programs, and requirements of health care delivery systems within Navy Medicine.
- 7. Familiarity with outpatient and inpatient EHR functionality and how they apply in the operational setting.
- 8. Ability to gather, analyze and make recommendations based on complex and diverse data.
- 9. Excellent written and verbal communication skills.
- 10. Ability to communicate effectively with both clinical users and traditional IT workers regarding capabilities and limitations of IT systems.
- 11. Telehealth/Virtual Health experience (preferred)
- 12. Joint operations experience (preferred)
- 13. Experience and exposure to operational military work environment (preferred)
- 14. Exposure to data science principles and analytics (preferred)
- 15. Prior assignment as MTF CMIO or equivalent position (preferred)
- 16. Project management experience (required), governance, defense acquisition (training and experience preferred), and leadership experience (required)
- 17. Project Management Professional (PMP) certification (preferred)
- 18. Certificate and/or experience in Change Management and/or Influencer skills (highly desired)
- 19. Certification as a Fellow of the American College of Healthcare Executives (FACHE) (highly desired)

Professional and Regulatory Requirements:

1. Active license to practice as a Physician (required)

Military Bearing and Readiness:

- 1. Demonstrate behavior exemplifying the Navy Core Values: Honor, Courage, and Commitment.
- 2 Maintain full military medical readiness status (PRT/immunizations/training).

Competency Maintenance:

- 1. Maintenance of Primary Board Certification in Clinical Specialty and Clinical Informatics Sub-Specialty
- 2. Annual attendance, whenever possible, at the following:
 - a. Defense Health Information Technology Symposium (DHITS)
 - b. Health Information Management and Systems Society (HIMSS)
 - c. American Medical Informatics Association (AMIA) Conference
 - d. Professional society CME meetings

Physical Demands:

 Work required is both office and hospital/clinic based and may entail extended hours of computer use.

Guidelines:

 Direction for performing work is received through DoD, DHA, BUMED and Navy publications, The Joint Commission standards, instructions from hospital and higher authorities, and administrative meetings.

Supervisory Controls:

| - | This 1 | position | reports | to the | Assistant | Deputy | v Chief. | CIC. |
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| I have read and understand the Position Description. | |
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