DEPARTMENT OF THE NAVY
BUREAU OF MEDICINE AND SURGERY
7700 ARLINGTON BOULEVARD
FALLS CHURCH, VA 22042

BUMED INSTRUCTION 6000.16

From: Chief, Bureau of Medicine and Surgery

Subj: ESTABLISHMENT OF CLINICAL INFORMATICS WORKFORCE

Ref: (a) Kulikowski, Casimir A. et al., "AMIA Board white paper: definition of biomedical informatics and specification of core competencies for graduate education in the discipline." J Am Med Inform Assoc. 2012; 19:931–938. DOI 10.1136/amiajnl-2012-001053
(b) NAVPERS 15839I of 9 December 2008
(c) SECNAV M-5214.1 of 1 December 2005

Encl: (1) Acronym Listing
(2) 68L Additional Qualification Designator
(3) Appointment Letter Template
(4) Chief Medical Informatics Officer Position Description Template
(5) Chief Nursing Informatics Officer Position Description Template

1. Purpose. This instruction establishes policy for Navy medical treatment facilities (MTFs) in identifying and appointing candidates for local clinical informatics (CI) leadership roles. Enclosure (1) is provided for information and clarification.

2. Scope. All Navy Medicine medical centers and hospitals.

3. Background. As the transition to electronic health records expands, healthcare delivery will need to dramatically reinvent the way it collects, processes, and uses health information. This requires a substantial investment in healthcare infrastructure, most importantly; it requires an investment in intellectual capital to ensure the work force capable of innovating, implementing and using health information technology.

4. Policy

   a. To facilitate the growth of a clinical informatics workforce throughout Navy Medicine and to ensure MTFs have the expertise required to implement, train, sustain and innovate new solutions. Navy medical centers and hospitals will appoint in writing a Chief Medical Informatics Officer (CMIO) and a Chief Nursing Informatics Officer (CNIO).

   b. CMIO and CNIO candidates must complete an approved CI certification/training within 12 months of appointment. The following opportunities are approved for the Navy Medicine CI workforce:

(1) Completion of an American Medical Informatics Association (AMIA) 10x10 course. The AMIA partners with various educational institutions to offer current health care providers online or in-person training in CI. The Bureau of Medicine and Surgery (BUMED) will fund AMIA 10x10 training for one CMIO and one CNIO per command every 2 years. Commanding officer's (COs) endorsed applicants can request BUMED funding of AMIA 10x10 training by submitting a request to the Navy Medicine Personnel Development Command (NMPDC). Applicants must submit a Non-Operational Course Nomination request using the template available at: http://www.med.navy.mil/sites/nmpdc/courses/Pages/Non-operational%20Course%20Nomination.aspx
Fax completed application to NMPDC (301) 295-1292/(DSN) 295-1292 or send as an e-mail attachment to: Nominations@med.navy.mil.

(2) American Board of Preventive Medicine (ABPM) Certification. A 24 month CI fellowship is available for Navy Medicine physicians through Madigan Army Medical Center. The fellowship focuses on CI core competencies, see reference (a) www.ncbi.nlm.nih.gov/pubmed/22683918, and will incorporate Accreditation Council for Graduate Medical Education accreditation upon availability. The point of contact (POC) is Deputy Corps Chief for the Medical Corps (BUMED-M00C4)).

(3) Completion of an independent graduate degree program in CI from an accredited institution: The Navy College Program provides Tuition Assistance (TA) to active duty personnel seeking off-duty education at accredited institutions. POC is Navy College Office.

(4) Completion of CI training program through the Office of the National Coordinator (ONC) for Health Information Technology Community College Consortia: The ONC's Workforce Development Program provides training at 82 community colleges across the United States. Training is available for six separate CI professional roles and can be completed in 6 months or less.

(5) Completion of the BUMED Nurse Fellowship. POC is Deputy Corps Chief for the Nurse Corps.

(6) Other additional training opportunities may be approved by the Director, Clinical Informatics (BUMED M3B8) as they are developed, such as an equivalent graduate level introduction to Biomedical Informatics course.

   c. Navy Medicine clinicians can obtain a 68L Additional Qualification Designator (AQD) for CI in any Corps, see enclosure (2). For general information about assigning AQDs, see reference (b).

5. Action

   a. NAVMED Regional Commanders will:

(1) Appoint in writing a Regional CMIO and a CNIO at 0.5 Full-Time Equivalent (FTE), see enclosure (3).

(2) Appoint in writing a Regional CNIO at 0.5 Full-Time Equivalent, see enclosure (3).

b. Regional CMIO and CNIOs will:

(1) Maintain a list of MTF CMIOs and CNIOs and submit to BUMED Director, Clinical Informatics quarterly.

(2) Ensure regular streamlined communication between MTFs and the BUMED.

c. Commanders and CO's of MTFs will:

(1) Appoint in writing and maintain one CMIO and one CNIO at a minimum 0.1 FTE each with the exception of medical centers and family practice teaching facilities, which requires a minimum 0.5 FTE each, see enclosure (3) for sample. MTF commanders and COs will consider the requirements described in the CMIO and CNIO position descriptions, see enclosures (4) and (5), and this instruction in identifying and selecting candidates for the CI workforce. It is the commanders' and CO's prerogative to use civilian and/or military personnel for CI roles.

(2) Ensure CMIOs and CNIOs report to Executive Committee of the Medical and Nursing Staff chairs, respectively.

(3) Ensure CMIO and CNIO candidates have the knowledge, skills and ability to apply the appropriate use and protection of patient privacy safeguards as outlined in the Health Insurance Portability and Accountability Act and Personally Identifiable Information Training.

d. CMIOs and CNIOs will:

(1) Serve as clinicians' primary POC for command CIs, work closely with the Chief Information Officer and support the planning, acquisition, development, and implementation of information systems that assist clinicians in the delivery of safe, effective, high quality, patient care.

(2) Perform the duties as outlined in enclosures (4) and (5).

(3) Serve at least 18 months after any BUMED funded CI training and ideally 24-36 months.

6. Records. Records created as a result of this instruction, regardless of media and format, shall be managed per SECNAV M-5210.1 of January 2012.

7. <u>Reports</u>. The reports required in paragraphs 4b and 4c are exempt from reports control per reference (c), Part IV, paragraph 7j.

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ACRONYM LISTING

ABPM	American Board of Preventive Medicine
AHLTA	Armed Forces Health Longitudinal Technology Application
AMIA	American Medical Informatics Association
ANIA	American Nursing Informatics Association
AQD	Additional Qualification Designator
BUMED	Bureau of Medicine and Surgery
CHCS	Composite Health Care System
CI	Clinical Informatics
CME	Continuing Medical Education
CMIO	Chief Medical Informatics Officer
CNIO	Chief Nursing Informatics Officer
CO	Commanding Officer
DoD	Department of Defense
EMR	Electronic Medical Record
FTE	Full Time Equivalent
HIMSS	Healthcare Information and Management Systems Society
HIPAA	Health Insurance Portability and Accountability Act
HIT	Healthcare Information Technology
IT	Information Technology
MANMED	Manual of the Medical Department
MHS	Military Health System
MTF	Medical Treatment Facility
NAVMED PDC	Navy Medicine Professional Development Center
OIC	Officer in Charge
ONC	Office of the National Coordinator for Health Information Technology
PII	Personally Identifiable Information
PRT	Physical Readiness Test
QA	Quality Assurance
RAD	Released from Active Duty
TA	Tuition Assistance
TAD	Temporary Additional Duty
TFMMS	Total Force Manpower Management System
TJC	The Joint Commission

68L ADDITIONAL QUALIFICATION DESIGNATOR (AQD)

1ST	2ND		3RD		OFFICER AWARDING CRITERIA Officer will be awarded this AQD if member has:	BILLET DETAILING PREREQUISITES If other than "N/A", then there are existing billet requirements coded in Total Force Manpower Management System (TFMMS)	CONSULTANTS
	CODE	TITLE	CODE	TITLE			
6	8	Any Medical Department Designator	L	Clinical Informatics	Medical Corps (210X), Dental Corps (220X), Medical Service Corps (230X), and Nurse Corps (290X) who have completed the corps appropriate certification exam or fellowship, or a certificate program or graduate degree in Informatics, or the AMIA 10X10, or worked >50% of their time in informatics for at least 12 months. Designators: 210X, 220X, 230X, 290X Grades: All Length of Validity: Indefinite Manpower Type: Active and Reserve	N/A Designators: 210X, 220X, 230X, 290X Grades: All	Primary: BUMED-M00C1 / M00C2 / M00C3 / M00C4, Corps appropriate, BUPERS-31 Auxiliary: Chief, BUMED Advisor

SAMPLE APPOINTMENT LETTER

Date

From: Commanding Officer, Naval Medical Center/Hospital XXXXXX
To: LCDR John Doe

Subj: APPOINTMENT AS CHIEF (MEDICAL OR NURSING) INFORMATICS OFFICER

Ref: (a) BUMEDINST 6000.16

1. Per reference (a), you are hereby appointed Chief (Medical or Nursing) Informatics Officer (CMIO or CNIO) for Naval Medical Center/Hospital XXXXXX. This appointment is effective immediately for a period of (x) years. This is in addition to your primary assigned duty. In carrying out your responsibilities as (CMIO or CNIO), you must ensure performance of the functions described in enclosure (3 or 4) of reference (a).

2. At any time you anticipate a change in your availability for the responsibilities of this appointment (such as extended temporary additional duty, hospitalization, separation, etc.) you should notify the commanding officer at the earliest opportunity. In such a case, you would be expected to provide your recommendation for an appropriate interim replacement or successor.

3. Reference (a) outlines resources for support in your role as (CMIO or CNIO).

4. Congratulations. Your appointment as (CMIO or CNIO) reflects your significant professional accomplishment and the esteem of your community. Your support and dedication to Clinical Informatics are sincerely appreciated.

COMMANDING OFFICER

Copy to:
(NAVMED East or NAVMED West) (CMIO or CNIO)

Enclosure (3)

CHIEF MEDICAL INFORMATICS OFFICER POSITION DESCRIPTION TEMPLATE

Naval Medical Center/Hospital XXXXXX
Position Description for
Chief Medical Informatics Officer

Title: Chief Medical Informatics Officer (CMIO)	
Name:	**Supervised By:** MTF Executive Committee of the Medical Staff Chair

Introduction, Scope and Effect:

Integration of technology into medical practice has greatly impacted quality of care and productivity/reimbursement through adherence to Bureau of Medicine and Surgery (BUMED) and The Joint Commission (TJC) requirements. Clinical Informatics (CI), also known as medical informatics and health care informatics, is the integration of information science, computer science and health care.

The CMIO for Naval Medical Center/Hospital XXXXXX serves to fulfill the duties, qualifications and other conditions described in this document.

Duties and Responsibilities:

1. Serve as primary medical point of contact (POC) for Command CI.

2. Work in close partnership with the Chief Nursing Informatics Officer (CNIO) and Chief Information Officer.

3. Support the planning, acquisition or development, and implementation of information systems that assist clinicians in the delivery of safe, effective, high-quality patient care.

4. Serve as an advocate of management in promoting the use of information technology (IT) in clinical settings.

5. Serve as an advocate and champion for the health care team in all matters related to IT capabilities at the medical treatment facility (MTF) and regional levels.

6. Coordinate the integration of all medical documentation systems used to create the Electronic Health Record. At present, these systems include, but are not limited to paper copy, Essentris (inpatient electronic medical record (EMR)), Armed Forces Health Longitudinal Technology Application (AHLTA) (outpatient EMR), Composite Health Care System (CHCS) (order entry and results retrieval), Innovian (anesthesia EMR), Relay Health, and Health Artifacts and Imaging Management System (HAIMS).

7. Advise the commanding officer (CO)/executive officer (XO) on clinical information systems from the clinician perspective.

8. Report directly to the Executive Committee of the Medical Staff chairperson.

9. Assist in identifying clinicians' information and technology needs. Serves as the bridge between clinical and information technology communities.

10. Optimize the use of EMR systems by directing the efforts of the system administrators and IT trainers.

11. Ensure, when possible, data comparability within and among organizations by following national, state, and other recognized standards and guidelines on form and content.

12. Access and use external knowledge bases and comparative data to pursue opportunities for improvement.

13. Make recommendations for the revision of existing command policies and procedures affected by the integration of healthcare information technology.

14. Disseminate Navy policy and guidance on CI.

15. 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.

16. Foster understanding of and empathy for clinician needs from 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.

17. Work in concert with Navy and Military Health System (MHS) leadership to design, plan, acquire, evaluate, integrate, implement, and sustain systems supporting patient care activities.

Knowledge/Qualifications:

1. Medical Corps Officer with recent medical practice sufficient to gain broad based knowledge and expertise in patient care delivery.

2. Maintain professional certification and current practice in his/her specialty.

3. Knowledge of the missions, organizations, programs, and requirements of health care delivery systems within Navy Medicine.

Enclosure (4)

4. Familiarity with outpatient and inpatient electronic health record functionality.

5. Basic knowledge of the Department of Defense (DoD) Forms Management program.

6. Ability to gather, analyze, and make recommendations based on complex and diverse data.

7. Working knowledge of Navy provider specialties and the Manual of the Medical Department, Chapter 16.

8. Current knowledge of, and conducts all job duties per established hospital instructions regarding Medical Staff Policies and Procedures, Quality Assurance (QA) and Management Programs, TJC, and other regulatory requirements.

9. Ensure knowledge, skills, and ability to apply the appropriate use and protection of patient privacy safeguards as outlined in the Health Insurance Portability and Accountability Act and Personally Identifiable Information training.

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, BUMED, and Navy publications, TJC standards, and instructions from hospital and higher authorities, and administrative meetings.

- BUMEDINST 6010.13
- BUMEDINST 5210.9B
- DoD Instruction 7750.7M of 7 May 2008
- SECNAV M-5210.2 of 3 Jul 2012
- SECNAV M-5213.1 of 1 Dec 2005

I have read and understand the Position Description.

Name/Signature	Date

Enclosure (4)

CHIEF NURSING INFORMATICS OFFICER POSITION DESCRIPTION TEMPLATE

Naval Medical Center/Hospital XXXXXX
Position Description for
Chief Nursing Informatics Officer

Title: Chief Nursing Informatics Officer (CNIO)	
Name:	**Supervised By:** MTF Executive Committee of the Nursing Staff chair

Introduction, Scope, and Effect:

Utilizing nursing science, computer science and information science, CNIOs manage and communicate data, information, and knowledge in nursing practice. Nursing informatics itself facilitates the integration of data, information, and knowledge to support patients, nurses, and other providers and medical staff in their decision making in all roles and settings. This support is accomplished through the use of information structures, information processes, and information technology.

The goal of nursing informatics is to improve the health of populations, communities, families, and individuals by optimizing information management and communication. This includes the use of information and technology in the direct provision of care, establishing effective administrative systems, managing and delivering educational experiences, supporting lifelong learning, and supporting nursing research. (Staggers, N., and Bagley-Thompson, C. "The Evolution of Definitions for Nursing Informatics." *J Am Med Inform Assoc* 2002; 9: 255-261)

The CNIO for Naval Medical Center/Hospital XXXXXX serves to fulfill the duties, qualifications, and other conditions described in this document.

Duties and Responsibilities:

1. Serve as primary nursing point of contact for Command Clinical Informatics (CI).

2. Work in close partnership with the Command Chief Medical Informatics Officer (CMIO) and Chief Information Officer.

3. Support the planning, acquisition or development, and implementation of clinical information systems that assist in the delivery of safe, effective, high quality patient care.

4. Serve as an advocate of management in promoting the use of information technology (IT) in clinical settings.

5. Serve as an advocate and champion for the health care team in all matters related to clinical information capabilities at the medical treatment facility (MTF), regional and enterprise levels.

6. Coordinate the integration of all medical documentation systems used to create the Electronic Health Record. At present, these systems include, but are not limited to paper copy, Essentris (inpatient electronic medical record (EMR)), Armed Forces Health Longitudinal Technology Application (AHLTA) (outpatient EMR), Composite Health Care System (CHCS) (order entry and results retrieval), Innovian (anesthesia EMR), Relay Health, and Health Artifacts and Imaging Management System (HAIMS).

7. Advise on clinical information systems from the clinician perspective.

8. Assist in identifying clinicians' information and technology needs.

9. Optimize the use of EMR systems by directing the efforts of the system administrators and IT trainers.

10. Ensure, when possible, data comparability within and among organizations by following national, state, and other recognized standards and guidelines on form and content.

11. Access and use external knowledge bases and comparative data to pursue opportunities for improvement.

12. Make recommendations for the revision of existing command policies and procedures affected by the integration of Healthcare Information Technology.

13. Disseminate Navy policy and guidance on CI.

14. Provide feedback on the applicability of Navy policies and guidance on CI, including recommendations for future enterprise policy development.

15. 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.

16. Foster understanding of and empathy for clinician needs from 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.

17. Work in concert with Navy and Military Health System (MHS) leadership to design, plan, acquire, evaluate, integrate, implement, and sustain systems supporting patient care activities.

Knowledge/Qualifications:

1. Current practice in his/her specialty.

2. Knowledge of the missions, organizations, programs, and requirements of health care delivery systems within Navy Medicine.

3. Familiarity with outpatient and inpatient electronic health record functionality.

4. Basic knowledge of the Department of Defense (DoD) Forms Management program.

5. Ability to gather, analyze, and make recommendations based on complex and diverse data.

6. Working knowledge of Navy Nursing specialties and the Manual of the Medical Department (MANMED) chapter 16.

7. Current knowledge of, and conduct of job duties per established hospital instructions regarding Medical Staff Policies and Procedures, Quality Assurance (QA) and Management Programs, The Joint Commission (TJC) and other regulatory requirements.

8. Ensure knowledge, skills, and ability to apply the appropriate use and protection of patient privacy safeguards as outlined in the Health Insurance Portability and Accountability Act and Personally Identifiable Information training.

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Name/Signature	Date