



# The Informatics Nurse as the Chief Medical Information Officer

Angela Ross MSN, MPH, PMP, PHCNS-BC CMIO, US Army Medical Information Technology Center, US Army Medical Command

LTC Nicole L. Kerkenbush, MHA, MN, RN-BC CMIO, US Army Office of the Surgeon General and US Army Medical Command

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# Agenda



**Purpose**: To educate Summer Institute in Nursing Informatics attendees on the expanding role of the nurse executive, and discuss a recommended approach to prepare nurses to serve as the Chief Medical Information Officer at the strategic and operational levels.

- American Nurses Association Standards for Informatics
- Nurse as the CMIO
- Nurse as the Strategic CMIO
- Nurse as the Operational CMIO
- Questions / Discussion



# **Leadership Support**



- 43<sup>rd</sup> Army Surgeon General First Nurse Surgeon General in the Department of Defense.
- The Surgeon General recognizes the importance of informatics and the role of nursing in strategic and operational CMIO positions.
- Focus on "Talent Management" for the future of the US Army Medical Department.







# **American Nurses Association Informatics Nurse Definition**

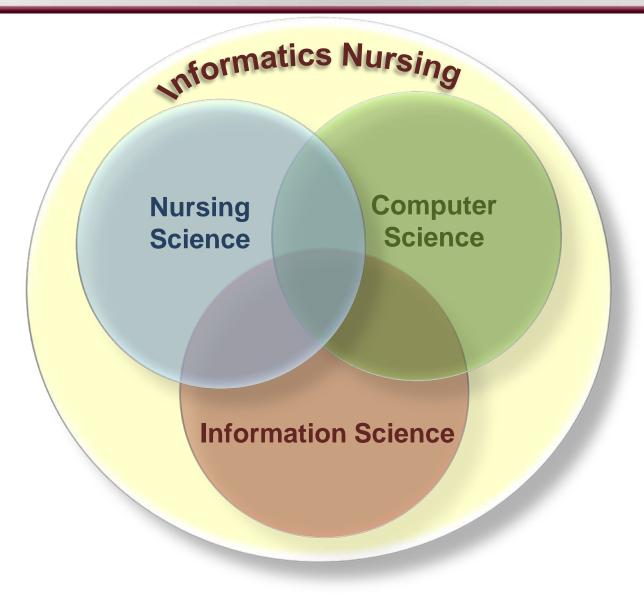


- In 2008, the American Nurses Association provided the following definition of the Informatics Nurse:
  - "A specialist that integrates nursing science, computer science, and information science to manage and communicate data, information, and knowledge in nursing / patient practices".
  - 2. Facilitates the integration of **data**, **information**, and **knowledge** to support patients, nurses and other providers in their decision-making in all roles and settings.
  - This integration is accompanied through the use of information structures, information processes, and Information Technology."



# American Nurses Association (ANA) Informatics Nurse Definition







### Need for the Role of the CMIO



- National focus on Health Information Technology Health Information Technology for Economic and Clinical Health Act and Meaningful Use Criteria.
- Requirement for interoperability between the Veterans Administration and the Department of Defense.
- Physician's dissatisfaction with the Department of Defense Electronic Health Record – Armed Forced Health Longitudinal Technology Application.



- Necessity for Behavioral Health and trauma data tracking throughout the Health Care Continuum.
- Lack of interoperability between inpatient and outpatient Electronic Health Record solutions.
- Lack of timeliness in Health Information Technology solution delivery.



### **Qualifications of an Informatics Nurse as CMIO**



- Expert clinicians with extensive clinical practice background.
- Extensive nurse leadership experience.
- Experience in utilizing and implementing the nursing process.
- Education and experience with Information Systems.
- Expertise as a Project Manager. There is similarity between the Project Management Process and the Nursing Process.
- Serve in a variety of Informatics roles: Project Manager, Analyst, Consultant, EHR Educator / Trainer, Researcher, and Director / Manager of Nursing Informatics, etc.





# **Benefits of an Informatics Nurse as CMIO**



- Improve future processes in the current health system by improving customer satisfaction and developing clinical systems:
  - Assess and identify the current clinical issues, risks, and gap analysis.
  - Impact technology in health policies and clinical case usage.
  - Proficient with informatics applications to support the healthcare team.
  - Knowledge of system analysis, requirements, and workflow analysis.
  - Knowledge of organizational structures.
  - Collaborate with Interprofessional teams.
  - Use of critical thinking in all areas.



# **CMIO** in the Strategic Role



**Mission:** The CMIO will be the premier advocate for clinical information systems for providers, and serve as the liaison between the healthcare community and the US Army Medical Department leadership.

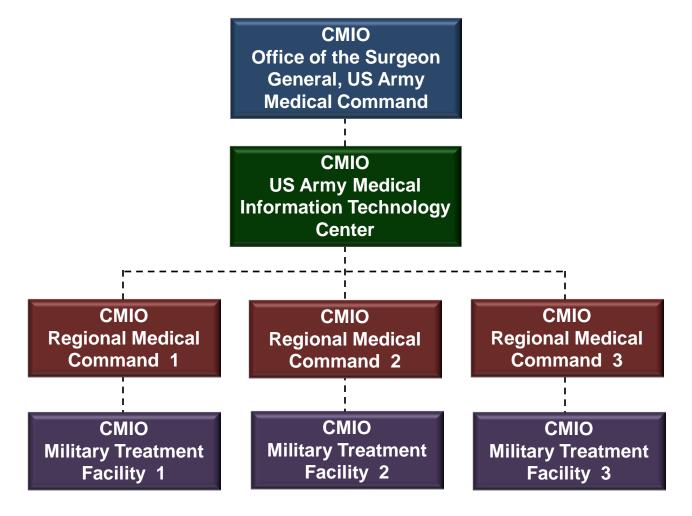
### **Mission Essential Task List:**

- Establish and maintain trust among the healthcare provider community.
- Advocate for improving provider / user satisfaction by improving meaningful use of information systems, with focus on improving the Department of Defense Electronic Health Record.
- Improve business and clinical information systems by engaging the user population, the information management governance bodies, and the program management offices.
- Improve business and clinical processes by leveraging systems, best practices, training, and business intelligence tools in the daily workflow of providers and users.



# **CMIO Organization Chart**







## **Informatics Core Business Units**



### **Business Process Management (BPM)**

- Optimize use of CIS / technology in healthcare workflow.
- Integrate innovation into enterprise.
- High level functional requirements management (customer focused).
- Standardized, reliable approach.
- Culture / ownership / leadership for BPM.

### **Clinical Business Intelligence (BI)**

- Point of care delivery of actionable, timely, accurate information to multiple stakeholders (largely clinical).
- Data stewardship / governance.
- BI infrastructure and analytic platform.
- Culture / ownership / leadership for BI Data Competency Center and BI governance.

### **System Integration**

- Strategic, tactical and operational alignment in deploying, sustaining and integrating systems.
- · Technical and strategic liaison.
- System Change Requests and configuration management.
- Project assistance and decision support for HIT solutions.

### **Clinical System Training**

- Clinically and customer-focused.
- Consistent, Competency / Standards-Based.
- Role-based curricula.
- Not "button-ology".
- Training Material Development.
- · Work flow / BPR.
- Workforce development.



## Informatics Implementation for Transformation



### Areas of Focus for Transformation

### **Strategy**

Clarify and communicate strategy from the board room to front line employees.

- Strategy Clarification
- Strategy Alignment



### Leadership

Build strong leadership teams with the right knowledge, skills and abilities to execute with focus and discipline.

- Leadership Models
- Leadership Development
- Leadership Alignment

### **Enterprise Organization**

Ensure right people, in the right roles at the right time, with the right motivation to deliver results.

- Strategic Workforce Planning Performance Management
- Competency Development Compensation & Rewards
- Succession Planning/Talent Development
- Engagement and Retention



### **CMIO Organization**

Rebuild to efficiently get work done and realize the full capability / creativity of its workforce.

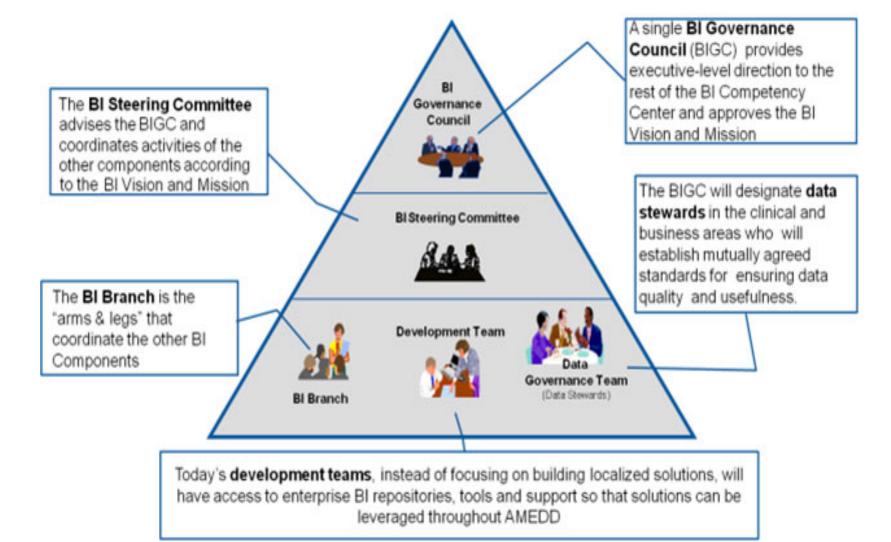
- Organization Design & Restructuring
- Governance
- Operating Company Model





# **Business Intelligence**







# **Workforce Development Project Plan**



# Phase

- Review
   Organizational overview
- Gather data (interviews, focus groups, and review of exiting internal and external data)
- Analyze data
- Strategy role profile and creation
- Collaborate
   Stakeholders'
   Conference
- Develop performance metrics for Proof of Concept

# Phase

- Implement Proof of Concept
- Complete assessments
- Analyze and present assessment results
- Development of Workforce Development Strategy:
  - Learning and Development
  - On Boarding
  - Recruitment Tools
  - Job Descriptions

# Phase II

- Evaluate performance metrics of Proof of Concept
- Develop operational plan to implement the 'Strategy' throughout the AMEDD
- Develop collateral to more broadly share the earnings / outcomes of this work

#### **Key Artifacts**

- Job Family / Role Profiles
- Competency Model
- Performance Metrics



#### **Key Artifacts**

- Proof of Concept Plan
- Gap Analysis
- WFD Strategy & Plan



#### **Key Artifacts**

- Operational Plan
- Final Report
- Marketing Collateral



# **Informatics Workforce Development**



# **PROGRAMS**

### STRATEGIC WORKFORCE DEVELOPMENT

### **Acquisition**

Programs, processes, and means by which the organization attracts and selects individuals that align with the organizations' talent needs, and enables them to fulfill their mission.

### Performance Management

Programs, processes, and means by which the organization measures individuals' contributions and ensures they are rewarded for contributions that are meaningful to the organization.

### **Onboarding**

Programs, processes, and means by which the organization ensures individuals are oriented and integrated into the organization.

#### Retention

Programs, processes, and means by which the organization ensures individuals are emotionally and rationally involved in, motivated by, and committed to their work.

### **Learning & Development**

Programs, processes, and means by which the organization ensures that individuals have the skills, competencies, and behaviors necessary to be successful.

### **Succession Planning**

Programs, processes, and means by which the organization develops a cadre of leaders that are capable to assume key clinical informatics leadership roles.

### **Talent Management Principles**

**Role Profiles & Competency Models** 



# **CMIO** in the Operational Role



**Mission:** Serve as the liaison between the health and information technology communities. The collaboration focuses on identifying requirements to improve patient outcomes and safety, meet user expectations, and improve communication for staff and patients.

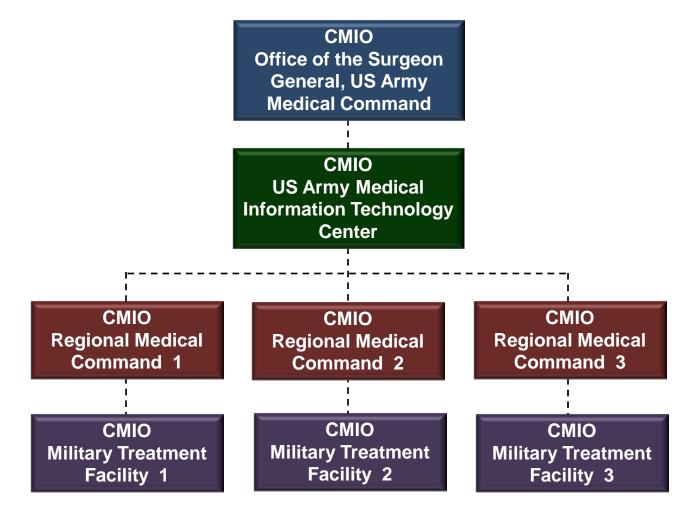
### **Mission Essential Task List:**

- Educate clinical staff, subject matter experts and leadership on Project and Acquisition Management.
- Engaged in improving communication between clinical and technical communities.
- Negotiate with clinical and technical staff to foster agreement on technical solutions.
- Identify projects with schedule, cost and performance issues to assist in mitigating clinical issues.



# **CMIO Organization Chart**







# **CMIO** in the Operational Role



- Partner with the clinical and technical team to design, select, implement, and manage Clinical Information Systems; supporting all patient care initiatives throughout the enterprise.
  - Serve as the Health Informatics liaison between Healthcare and Information Technology.
  - Identify projects with schedule, cost, and performance issues to assist in mitigating clinical issues.
  - Coordinate with the customer to identify requirements.
  - Communicate the clinical relevance and case usage.
  - Integrate innovation, Evidence-Based Practice, and industry trends as a component of the IM/IT Strategic Plan.





# CMIO in the Operational Role (cont'd)



- Collaborate and advise customers on the clinical standards, workflow, and change management process to support data collection in an accurate and timely manner.
- Implementation and deployment.
- Mentor and educate Project Managers on clinical projects.
- Identify Health Information Technology projects that are mediumto-high risk, and assist in mitigating issues by communicating and collaborating with the interprofessional team.
- Communicate the clinical relevance and case usage.





# **CMIO** Project initiatives



- Integrated Disability Evaluation System.
- Patient and Exam Room Kiosks.
- Virtualization.
- Pain Management Applications.
- Windows 7 Migration.
- Behavior Health Application.



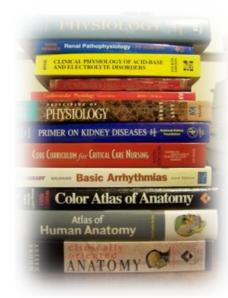




# **Suggested Education / Preparation**



- PhD, DNP, Master-prepared Nurse Informaticist.
- Certification in Nursing Informatics, Project Management, Health Care Information and Management Systems.
- Knowledge and experience with Organizational Management.
- Knowledge of institutional Policies, Procedures, and Politics.
- Strong communication skills to collaborate with the Interprofessional Team and Management Team across the organization.
- Knowledge of acquisition and contracting.
- Knowledge and skills in change management, workflow analysis, and requirements analysis.

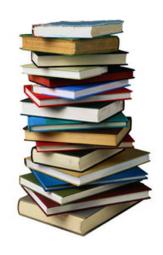




# **Achieving a CMIO Position**



- Prepare for a CMIO position through:
  - Education.
  - Professional experience:
    - Clinical.
    - Administrative.
  - Tenacity and Desire.
  - Working with Health Information Technology.
- Leadership Support.







# **Questions?**





