No Patient Left Behind: Leading Transition to Modernized Capability

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Colonel Rich Wilson, Chief, Solution Delivery Division, Health Information Technology (J6), Defense Health Agency
Speaker Introduction

Colonel Rich Wilson, MS, CPHIMS
U.S. Army

COL Richard A. Wilson currently serves as the Division Chief for the Solution Delivery Division, the Health Information Technology Directorate (J6) of the Defense Health Agency (DHA). DHA is a Combat Support Agency supporting the military services and its 9.4 million beneficiaries worldwide. DHA supports the delivery of integrated, affordable, and high quality health services to beneficiaries of the Military Health System.
Conflict of Interest

COL Rich Wilson, MS, CPHIMS
Chief, Solution Delivery Division (J6)

Has no real or apparent conflicts of interest to report.
Agenda

• Intro & Background

• Military Health System’s (MHS) approach to transitioning legacy applications to modernized systems

• Enterprise Planning & Patient Risk

• Takeaways: What can Health IT and the commercial world apply from the lessons learned
Learning Objectives

• Demonstrate 1 SDD patient care system and what it does
• Identify at least 1 patient risk during a system transition
• Describe how SDD manages enterprise planning
REALIZING THE VALUE OF HEALTH IT

Health IT creates five kinds of value of benefit to patients, healthcare providers and communities.

- S SAVINGS
- T TREATMENT/CLINICAL
- E ELECTRONIC SECURE DATA
- P PATIENT ENGAGEMENT AND POPULATION MANAGEMENT

S SATISFACTION
Do you suffer BRIGHT SHINY SYNDROME?
Modernization is disruptive

Patient Safety Risks
  – Data Integrity
  – System Interfaces
  – Patient engagement

Cyber security risks

Investment

Risk Management
Introduction and Background

There isn’t another military medical force like it in the world—with the expertise, the assets and the global reach of our health system...
MHS by the Numbers

- **205,000+** Healthcare Professionals and Support Staff
- **9.4 Million** Eligible Beneficiaries
- **55** Military Medical Centers and Inpatient Hospitals
- **373** Health Clinics
- **245** Dental Clinics
- **5** Theater Hospitals
- **199** Forward Deployed Sites
  - 141 Army
  - 45 Navy
  - 11 Air Force
  - 2 Marine Corps
- **300** US Navy Ships
- **2** Hospital Ships

Prescriptions filled in Military and Network Pharmacies and Home Delivery

Outpatient Visits

Inpatient Admissions

Births
# MHS GENESIS in Perspective

<table>
<thead>
<tr>
<th>Who</th>
<th>Locations</th>
<th>Hospitals</th>
<th>Staff</th>
</tr>
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<tbody>
<tr>
<td>Military Health System</td>
<td>1,230</td>
<td>55 Inpatient Hospitals, 373 Ambulatory Care Clinics, 245 Dental Clinics, 300+ Expeditionary Units</td>
<td>205,000</td>
</tr>
<tr>
<td>Ascension Health</td>
<td>1,900</td>
<td>131 Hospitals, 30+ Sr. Health Facilities</td>
<td>160,000</td>
</tr>
<tr>
<td>Kaiser Permanente</td>
<td>660+</td>
<td>38 Hospitals</td>
<td>258,000+</td>
</tr>
<tr>
<td>Intermountain Healthcare</td>
<td>44+</td>
<td>22 Hospitals, 185+ Clinics</td>
<td>37,000</td>
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Our Mission
To deliver information technology solutions to the Military Health System through expert acquisition program management, process reengineering, information translation and sharing, training and integration activities in order to support and advance the delivery of health care to our patients

Modernization Roles
SDD: Application sustainment
Defense Healthcare Management Systems Modernization (DHMSM): Acquisition and Deployment
Solution Delivery Division (SDD) Portfolio

Providing functional benefits of IT and Enterprise Intelligence and Data Solutions (EIDS) to drive health care, patient safety, nutrition services, blood programs, occupational health, and more

Clinical EHR Solutions
- AHLTA – Outpatient EHR
- Essentris® – Inpatient EHR
- CHCS – appointing and ancillary
- Secure Messaging and TOL Patient Portal
- EHR Sustainment – Transition to new modernized EHR
- HAIMS – artifacts and imagery
- EBMS – blood product management

Business and Administrative Solutions
- DMHRSi – medical human resources
- DMLSS – medical logistics
- ESSENCE – syndromic medical surveillance
- JCCQAS – credentialing
- iMEDCONSENT – patient consent
- S3 – surgical scheduling
- PSR – patient safety
- EIRB – research support
- CCE – medical coding assistance

Global reach in all Military Treatment Facilities
- 63 Hospitals, 5,519 beds
- 413 Medical Clinics
- 375 Dental Clinics

Beneficiary Impact
- 9.4 million beneficiaries with clinical data
- 95K+ active users, 125K+ end user devices
- 150K+ new encounters daily

Medical Requisitions
- Process nearly 25K requisitions and $13M+ in medical supplies and pharmaceuticals daily

SDD at-a-Glance
SDD’s Modernization Transition Support

- Synchronization of EHR modernization
- Clinical workflow standardization
- EHR & MHS Transformation
- Interface development with legacy
- Sustainment organization for the future
MHS approach to transitioning legacy to modernized systems
Current State of MHS Legacy Applications

• Current EHR
  – 20+ years old
  – 4 separate applications (government and commercial products)
  – Client-server architecture with central data storage
• ~70 enterprise applications
• Future EHR – MHS GENESIS:
  – Modernized commercial product (Cerner)
    • Single, integrated system
    • Centrally hosted
  – Deploying Feb 2017 through 2022
Standardize clinical and business processes across the Services and the MHS

Design a patient-centric system focusing on quality, safety, and patient outcomes that meet readiness objectives

Decision-making and design will be driven by frontline care delivery professionals

Decisions shall be based on doing what is best for the MHS as a whole – not an individual area

Drive toward rapid decision making to keep the program on time and on budget

Provide timely and complete communication, training, and tools to ensure a successful deployment

Build collaborative partnerships outside the MHS to advance national interoperability

Configure not customize
Projected System Dispositions

242 Total Systems Reviewed (medical devices excluded) based upon input from:
1. SDD (Clinical & Business)
2. IDD
3. Army/Navy/AF

- **LPI**: Systems with a low probability of being replaced by MHS GENESIS and **will require** an interface to the EHR
- **LPNI**: Systems that have a low probability of being replaced by MHS GENESIS will **not require** an interface to the new EHR
- **HIGH**: Systems that will be replaced by MHS GENESIS and **will not interface** to the EHR – consolidate or terminate

*Updated as of May 20, 2016*
Transition Application Program (TAP)

• Data drive evaluation of current portfolio: Systems & Capabilities

• 242 Systems (enterprise and local)
What Happens to a Legacy Application?
Enterprise Planning and Risk
Enterprise Planning and Risk

- Continuity of care
- Human data entry
- Periodic and delayed data refresh
- Rotational staff
- Data interface gaps
- Data privacy
- Maintenance of legacy systems
- Policy, budget, and governance changes
- Legal issues
- Cyber Security
- System outages
- Interoperability
- Process Standardization
- Data accuracy, post migration
Continuity of Care

- Planned interfaces of legacy systems to MHS GENESIS
- Joint Legacy Viewer (JLV)
- Business process standardization
  - Mapping old to new; and new
  - Implementation to both legacy and new system
Legacy System Maintenance

- Must meet patient and staff demands well into 2022
  - Budget concerns
  - Reduced footprint over time
- Governance role in balancing investment
  - Planned upgrades
  - Cyber
  - Critical fixes
- Maintenance and improvement interfaces of legacy systems to MHS GENESIS
- Continued legacy data access for continuity of care, analytics, research
770 | Releases

2634 | Completed Change Requests
# Planned Maintenance and Upgrades

<table>
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<tr>
<th>AHLTA</th>
<th>Essentris</th>
<th>CHCS</th>
<th>HAIMS</th>
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<tbody>
<tr>
<td>• AHLTA (Client) v3.3.9 Baseline release is scheduled for Fall 2017</td>
<td>• Major Release CIS v213.02 offers new features and functionality</td>
<td>• Cyber Security PKI enhancements</td>
<td>• Migration from SharePoint</td>
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<td>• AHLTA (LCS) v3.3.9 Baseline release is scheduled for Fall 2017</td>
<td>• Security Patch Releases are implemented quarterly (at a minimum 4 per year)</td>
<td>• ICD-10 revisions and enrichments</td>
<td>• Document expansion</td>
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<td>• AHLTA (CDR) v3.3.9 Baseline release is scheduled for Fall 2017</td>
<td>• Security Maintenance Releases are done in up to 45 day intervals</td>
<td>• Enterprise blood transfusion services</td>
<td>• JLV connection</td>
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<tr>
<td>• Decommissioning</td>
<td>• Decommissioning</td>
<td>• Decommissioning</td>
<td>• Service Treatment Record (STR) Processing Operations Reports Tracking Solution (SPORTS) for Dep of VA</td>
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Cyber enhancements, critical fixes, etc.
Business Process Standardization

• Regardless of IT tools, process standardization saves lives
• Implementation of revised workflows now
• Training:
  – Consolidation of training mission in the DHA SDD
    • “Trust agents” embedded in clinics and hospitals
    • Augmenting workforce of sustainment trainers with new EHR
  – Improved support model
Governance and Execution

- Complex coordination and communication challenge
- 3 legged Stool
  - Functional Champion
  - Information Technology
  - Acquisition
- Functional Champion Leadership Group
- Workstream Steering Committees (WSCs)
- TriService Workflow Advisory Groups
Takeaways and Lessons Learned
Questions

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