2011 Military Health System Conference

Big Things on the Horizon for Electronic Health Records and Communication with our Partners

*The Quadruple Aim: Working Together, Achieving Success*

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**Big Things on the Horizon for Electronic Health Records and Communication with our Partners**

**Military Health System, 5111 Leesburg Pike, Skyline 5, Falls Church, VA, 22041**

**presented at the 2011 Military Health System Conference, January 24-27, National Harbor, Maryland**
Agenda

- James A Lovell Federal Health Care Center (JAL FHCC)
- Virtual Lifetime Electronic Record (VLER)
- Electronic Health Records (EHR) Way Forward
- National Health Focus
• First single, Fully Integrated Federal Health Care Center Between the VA and DoD

• Designed to improve access, quality, and cost effectiveness of health care delivery to beneficiaries of both DoD and VA
JAL FHCC Capabilities Delivered

• **Single Patient Registration**
  - Sign on once with a DoD CAC or VA PIV

• **Medical Single Sign-On**
  - Find a patient one time in any application and other applications follow automatically
Orders Portability (OP) for Laboratory and Radiology
• View, manage and display in a computable format
• Display images within either VHA of DoD imaging systems

OP Pharmacy
• Reconcile medication and allergies for all patients; reachable 24/7 for discharge medications

OP Consults
• Will allow consults and referral orders for processing for all patients using either DoD or VA health information system
* The health record above contains sample test data used for demonstration purposes

2011 MHS Conference
JAL FHCC Challenges

- Complexity
  - Systems & Networks
  - Identity
  - Configuration Control

- Change Management
VCA 1: Foundational Clinical Health Data Exchange via Nationwide HIN: Clinicians Caring for Service Members & Veterans

VCA 2: Health Data Exchange for Veterans Benefits Administration & Social Security Administration Disability Benefits: Adjudicators Helping Service Members and Veterans

VCA 3: Data Exchange for Housing, Insurance, Education & Memorial Benefits: Benefit Providers Helping Service Members and Veterans

VCA 4: Single Virtual Access Point for Health & Benefits: Self Help for Service Members & Veterans
VLER Phase 1A Pilot Accomplishments

Tidewater Pilot

- Successful demonstration of capability to exchange data through NwHIN
- Beta testing, HHS CONNECT software
- On-boarding process for admitting new members to NwHIN

San Diego Pilot

- Demonstrated health information can be exchanged using NwHIN
The health record above contains sample data used for demonstration purposes.
"EHR modernization efforts provide the opportunity to implement standards-based Health IT solutions that will modernize existing Department EHR capabilities…and (provide) reduced sustainment costs.” *

*Joint Executive Council and Health Executive Council Report to Congress (RTC) on Defense and Department of Veterans Affairs Medical Information Technology.

To achieve these objectives, the Departments will widely integrate business requirements, acquisition and technical approaches.
Joint EHR Modernization Objectives

• Both Departments are working toward common objectives:
  – Effectiveness:
    • Provide a patient-centric health care experience
    • Improve the quality of delivered services
    • Ensure interoperability and data sharing between the departments
  – Efficiency:
    • Reduce overall cost of Health IT investments in acquisition, development and sustainment
Military Health System EHR Efforts

Sustainment
- Availability, Usability, Speed
- Establish a reasonable baseline (Theater & Garrison)
- Right people in the right seats
- Patient safety/compliance

Development
- Engineering & Innovation
- Integration/Interoperability
- Repurposing

Emerging Capabilities
- Functional & Technical testing labs
- Balance of Theater/Garrison priorities
- DoD/VA synchronization

- Clinical Informatics
- System Engineering
- Interagency Synchronization
# Mission Focused EHR Way Ahead Approaches*

## Approaches

<table>
<thead>
<tr>
<th>VA Approach</th>
<th>DoD Approach</th>
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<tr>
<td>• Employ an iterative, collaborative approach to evolving business processes</td>
<td>• Develop detailed “to be” workflow processes</td>
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<td>• Leverage commercial innovation (open source)</td>
<td>• Use commercial off the shelf (COTS) software without modifications where possible</td>
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<td>• Provide architecture and data management guidelines (SOA)</td>
<td>• Innovate at applications layer while using core common enterprise services (SOA)</td>
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<tr>
<td>• Build from VistA legacy using new application interface</td>
<td>• Use modular COTS upgrades to transition from legacy</td>
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*From Joint DoD and VA Health IT Modernization Way Forward briefing (7 October 2010)
Common Design Pattern & Framework

- Presentation Layer Team
  - DOD Primary Functionality
    - Veterinary
    - Pediatrics
    - Battlefield Care
    - OB
    - Neonatal
  - VA Primary Functionality
  - Potential Joint DoD/VA Responsibility

- Systems Capabilities Team
  - Common Core Functionality (Notional)
  - Common Information Model
  - Common Data Model

- Infrastructure & Enterprise Architecture Team
  - Common Interface Standards
  - Common Data Centers

- Data Interoperability Team
  - Common Interface Standards
  - Common ESB

- Mission Requirements & Performance Outcomes
  - Business Process Team

- Joint Program Office Oversight
  - Presentation (Common GUI)
  - Common Core Functionality (Notional)
    - Inpatient EHR
    - Radiology
    - Laboratory
    - Outpatient EHR
    - Scheduling
    - Disability
    - Pharmacy
    - Survey Registry
    - Blood

- DOD Program Office Responsibility
- VA Program Office Responsibility
- Potential Joint DoD/VA Responsibility

2016 MHS Conference
DoD/VA interagency teams (working the “what”):

- Mission requirements and performance outcomes
- Business processes
- Presentation layer
- Systems capabilities
- Infrastructure and enterprise architecture
- Data interoperability

Target outputs for path forward (addressing the “how”):

- Agreement on a common vision and definition of an interagency EHR
- Produce a Clinical Interoperability Framework & Common Clinical Data Model
- Develop a Common Business Reference Model/Capability Taxonomy
- Establish a prioritized Common Clinical EHR Capability
- Develop a Common User Interface using user/patient centric agile methods
- Establish a common Segment Architecture Framework
Intuitive Interface

* The health record above contains sample data used for demonstration purposes
The Blue Button- VA

Personal Information

My HealtheVet (MHV) has made it easy to keep track of your Personal Information. MHV is all about you and your health. Part of your personal online health journal is your identification. When you register for My HealtheVet, you entered important information about yourself. This is where you'll find it, along with other important facts like your login information, blood type and emergency contacts.

In Case of Emergency

Keep your emergency contacts in one place...

My Profile

Your name, address and identifying information...

Download your Data

Download, print, or share VA health data. It is simple, safe and reliable.

My Account

Manage your account, in-person authentication...

Change your Password

Change your My HealtheVet password here...

View My Links Information (self-entered)
(Personal Health Journal of)
The Blue Button - TRICARE

Welcome to TRICARE Online!
TRICARE Online features secure access to beneficiary appointments, prescriptions, and personal health data.

Family Member list last updated: 11/19/10 3:59 PM

Announcements

- Coming soon: TRICARE Online family member booking!
- Ensure you have access to upcoming TRICARE Online features!

Accessing your Personal Health Data, containing your labs, allergy profile, medication profile, problem list, and encounters.

Refill
- Refill and check status of your prescriptions. Access Mail Order Pharmacy.

CHART
- Access CHART, the Consolidated Health Assessment Reporting Tool, which combines health assessment and deployment-related questionnaires in one place.

eForms
- Access eForms to complete your health-related paperwork electronically, prior to your appointment.
REPORT TO THE PRESIDENT
REALIZING THE FULL POTENTIAL OF
HEALTH INFORMATION TECHNOLOGY
TO IMPROVE HEALTHCARE
FOR AMERICANS:
THE PATH FORWARD

Executive Office of the President
President’s Council of Advisors
on Science and Technology

December 2010
Wrap-Up

- Expectations for future VLER pilots and the future of the Virtual Lifetime Electronic Record
- Alternatives for the EHR Way Ahead
- Role of patients in future clinical work flow
- National focus on health care