VA Innovation

OSEHRA
and
Open Source Health IT

Mike O’Neill
Senior Advisor to the Director, VA Innovation Initiative (VAi2)
U.S. Department of Veterans Affairs

May 15, 2012
Innovation at VA

Identify, Develop, and Test New Solutions to VA’s Top Priorities

Innovation at VA

SECVA
DEPSECVA
COSVA

Executive Selection Board

VAi2

Employee Competitions
Industry Competitions
Special Projects
Prizes & Challenges

77 employee innovations launched
36 projects underway
3 Special Projects completed
3 prize challenges run

~ $103.5 M portfolio funding 119 innovations
Why A New Open Source Model?
You Can Already Get the Code...
Why A New Open Source Model?
Many Organizations Have It...

Medsphere

DSS

IHS

MHS

World VistA

VA FOIA VistA
Why A New Open Source Model?
They’ve Invested In Development...

Medsphere: Open Vista

DSS: vxVistA

IHS: RPMS

World VistA

VA FOIA VistA

MHS: CHCS
Why A New Open Source Model?
Customers Have Been Supported...

Medsphere: Open Vista
Midland Memorial, Kern Medical Center, Silver Hill Hospital, ...

DSS: vxVistA

IHS: RPMS

VA FOIA VistA

World VistA
Oroville Hospital, Jordan, ...

MHS: CHCS

Nigeria, Finland, Mexico, West Virginia...
Why A New Open Source Model?
But the Picture Is Fragmented.

- **DSS: vxVistA**
- **IHS: RPMS**
- **MHS: CHCS**

**Medsphere: Open Vista**
*Midland Memorial, Kern Medical Center, Silver Hill Hospital, ...*

**World VistA**
*Oroville Hospital, Jordan, ...*

**VA FOIA VistA**
*Nigeria, Finland, Mexico, West Virginia...*
What Do We Want The Picture To Look Like?

• Share code that should be shared
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- Allow fixes to be widely shared
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• Allow companies to make money
• Promote the growth of the market
What Do We Want The Picture To Look Like?
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This is not just a VistA story...
What Do We Want The Picture To Look Like?

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EHRs, including AHLTA & CHCS
What Do We Want The Picture To Look Like?

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EHRs, including AHLTA & CHCS

iEHR
What Do We Want The Picture To Look Like?

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EHRs, including AHLTA & CHCS
iEHR
PHRs
What Do We Want The Picture To Look Like?

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PHRs

Information Exchange
What Do We Want The Picture To Look Like?

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EHRs, including AHLTA & CHCS
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Information Exchange
Analytics
What Do We Want The Picture To Look Like?

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EHRs, including AHLTA & CHCS

iEHR

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Analytics

Tools
What Do We Want The Picture To Look Like?

This is not just a VistA story...

EHRs, including AHLTA & CHCS
  iEHR
  PHRs
  Information Exchange
  Analytics
  Tools

Fully Enable Providers, Patients, and Researchers
What Do We Want The Picture To Look Like?

Different People...
What Do We Want The Picture To Look Like?

Different People...
Different Organizations...
What Do We Want The Picture To Look Like?

Different People...
Different Organizations...
Different Roles...
What Do We Want The Picture To Look Like?

Different People...
Different Organizations...
Different Roles...

One Community
What Do We Want The Picture To Look Like?

Different People...
Different Organizations...
Different Roles...

One Community
An Open Source Custodian For Health Record Systems

• The central governing body of an open, collaborative group of users, developers, and integrators engaged in advancing EHR technology

• Over **850** members, including 125 companies

• Board of Directors:
  
  – **James B. Peake**, M.D. (Chair), former VA Secretary and Army Surgeon General
  
  – **John D. Halamka**, M.D., CIO Beth Israel Deaconess Medical Center
  
  – **Mike O’Neill**, Senior Advisor to the Director, Veterans Affairs Innovation Initiative
  
  – **Charles B. Green**, M.D., (DoD liaison) Lieutenant General and Surgeon General, USAF

www.osehra.org
A LOOK INSIDE
OSEHRA Code Repository

- **VistA**
  - Open Source VistA
  - CPRS
  - VA Gold Disk
  - Patches and Class 3 enhancements
    - On the way
- **AHLTA – Coming Soon!**
- **Janus – Coming Soon!**
- **HealtheMe PHR**
- **EWD Web Application Framework**
- **Tools:**
  - Eclipse M environment
  - Cache-to-GT.M converter
  - Authentication
OSEHRA Workgroups

• Core EHR
  – Architecture
  – Code Convergence
  – Refactoring

• Infrastructure
  – Development Tools

• Health IT
  – Genomics
  – Imaging
  – Data Warehouse & Analytics
Code Convergence

Key participants in convergence:

<table>
<thead>
<tr>
<th>VistA Version</th>
<th>Primary Representative</th>
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<tbody>
<tr>
<td>Open vxVistA</td>
<td>DSS, Inc.</td>
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<td>OpenVistA</td>
<td>MedSphere</td>
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<td>RPMS</td>
<td>Indian Health Service</td>
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<tr>
<td>FOIA</td>
<td>Department of Veterans Affairs</td>
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</table>
1. HL7,
2. RPC Broker,
3. VA FileMan,
4. VISTA Data Extraction Framework,
5. VISTALink,
6. TaskMan

Sites of Care
- Clinics
- Hospitals
- Nursing Homes
- Domiciliary
- Home/Workplace
Enabling EHR Development

App 1

... App N

Access Layer

EHR Transactional Data
Enabling EHR Development

App 1  ...  App N

Access Layer

EHR Transactional Data

Converge on a Common Core
Enabling EHR Development

Access Layer

EHR Transactional Data

Define and Publish Common Services

Converge on a Common Core
Enabling EHR Development

Rapid Application Development and User Interaction

Define and Publish Common Services

Converge on a Common Core
Enabling Health IT Analytics

App 1

Access Layer

Data Warehouse

App N
Enabling Health IT Analytics

Data Warehouse

Access Layer

Data Import & Export
Common Data Services

App 1 ... App N
Enabling Health IT Analytics

Define and Publish Common Services

Data Import & Export
Common Data Services

Access Layer

Data Warehouse

App 1 ... App N
Enabling Health IT Analytics

Rapid Application Development and User Interaction

Define and Publish Common Services

Data Import & Export Common Data Services
A Common Approach?

App 1  ...  App N

Access Layer

EHR Transactional Data

App 1  ...  App N

Access Layer

Data Warehouse
OSEHRA and iEHR
Near-Term Opportunity

• Communication
  – Architecture
  – APIs
  – Features
  – Roadmaps

• Feedback and Collaboration
• Interoperability
• Code Sharing

OSEHRA Facilitates Community Interaction
VA, DoD, IPO
Government Sector
Private Sector