Improving the Veterans Affairs Personal Health Record System

Collaboration between Health Services Research and Operations

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Outline

- Description of My Health eVet (MHV)
- MHV Research & Evaluation
- Illustrative Projects
“In the current health care delivery system, most patients are still not able to access their provider when they need to, don’t know how to manage their own health, often do not understand what the provider tells them during a visit, and do not have access to their own health information when they need it. HIT has not been well leveraged to address consumers’ needs and allow them to best manage their health.”

Veterans Health Administration (VHA)

Who does VHA serve

- About 5 million veterans (of 20 million)
- Predominantly male
- VHA is largest integrated health care system in the US
- Vets who use VHA (compared to Vets who don’t) \( (Nelson) \)
  - 46-64 years old
  - More African American
  - Lower education
  - Lower income
- Veterans in VHA in substantially worse health than patients using non-VA care \( (Kazis) \)

\[ \text{Nelson et al. Public Health Reports, 2007} \]
\[ \text{Kazis et al. Arch Intern Med, 1998} \]
VA’s My HealtheVet - Overview

Introduction

- My HealtheVet (MHV) = personal health record (PHR), tethered
- Launched 2005
- Growth not as rapid as Group Health, Kaiser
- Absolute numbers, however, are large
- Goal is to
  - help engage veterans in VHA and their health
  - Provide information
  - Make care delivery more efficient/automate functions
MHV Use Statistics

- 1.1 million registered users (about 20% of veterans who use VHA)
- 260,000 with In Person Authentication (about 5% of veterans who use VHA)
- 19 million prescription refills since August 2005
- 165,000 Blue Button users
Features of MHV – From EHR

• Medication list (current and past)
• Refill medications online
• Allergies and immunizations from VA EHR
• VA appointments (list, calendar, email reminders)
• Wellness reminders (colonoscopy, foot exam, etc.)
• Secure messaging
• VA Blue Button (download in text, pdf, etc.) format
• Chemistry and hematology labs  (*summer 2011*)
• Delegation / Proxy user – (2012)
Features of MHV – Patient Entered

- Medical history: Personal & family health
- Health logs (blood pressure, weight)
- Other meds (over counter, herbals)
- Food and activity journals
- Trusted health information website
- Self-assessment tools
What Veterans Have Asked For

(bold = now operational)

- view upcoming appointments (87%)
- Schedule or change appointments (74%)
- Look at information in my VA medical record (73%)
- Online secure messaging with doctors (64%)
- Check for drug-drug interactions (50%)
- Reminders of preventive care I need (38%)
- Notification of new content/features on the site (35%)
- Advance check-in for my VA clinic visits (35%)
- Monthly email newsletter (26%)
- Share information that I have stored with others (25%)
MHV Refill Function

VA Medications Summary
(Personal Health Record of TEST MHVZZVISNONEAA)

This list displays all medications, prescriptions and supplements in your records at VA Medical Centers. Select an item to view details. This information cannot be changed.

Refill a prescription

8 medications found, displaying all medications

<table>
<thead>
<tr>
<th>Category</th>
<th>Status</th>
<th>Medication</th>
<th>Start Date</th>
<th>Stop Date</th>
<th>Pharmacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rx</td>
<td>Active</td>
<td>4615535 GLIPIZIDE 5MG TAB</td>
<td>10/22/2010</td>
<td>10/23/2011</td>
<td>VA BOSTON HEALTHCARE SYSTEM - BOSTON DIVISION</td>
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<tr>
<td>Rx</td>
<td>Active</td>
<td>4615537 LISINOPRIL 10MG TAB</td>
<td>10/22/2010</td>
<td>10/23/2011</td>
<td>VA BOSTON HEALTHCARE SYSTEM - BOSTON DIVISION</td>
</tr>
<tr>
<td>Rx</td>
<td>Active</td>
<td>4615539 METFORMIN HCL 500MG TAB</td>
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<td>10/23/2011</td>
<td>VA BOSTON HEALTHCARE SYSTEM - BOSTON DIVISION</td>
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<tr>
<td>Rx</td>
<td>Expired</td>
<td>3014945 ASPIRIN 81MG CHEW TAB</td>
<td>06/03/2008</td>
<td>06/04/2009</td>
<td>VA BOSTON HEALTHCARE SYSTEM - BOSTON DIVISION</td>
</tr>
</tbody>
</table>
What is Cool about MHV

- Absolute numbers are large
- Linkage to VA datasets
- Satisfaction survey
- New research/evaluation unit February 2011
The mission of the eHealth QUERI is to work with VA program offices to implement and evaluate eHealth...to augmenting efficient, safe, high-quality, continuous, coordinated delivery of evidence-based services to Veterans and families.
eHealth QUERI Strategic Goals

1) To augment access and meaningful use of eHealth tools

2) To enhance veteran self-management and participation in collaborative care through the design, evaluation, and implementation of appropriate eHealth tools.
Illustrative eHealth Projects

- Clinic Intervention to Increase MHV Enrollment
- Veterans with HIV and HCV using My HealtheVet
- Caregivers of Veterans with HCV
- Homeless Veterans
1) Clinic Based Intervention to Increase MHV Enrollment

**Aims**

- Evaluate primary care receptivity to MHV
- Examine and modify MHV clinical reminder
- Pilot a “wrap around” intervention program
- Possible elements:
  - Workflow to *incorporate MHV clinical reminder (CR)*
  - Tools for rapid and efficient IPA


2) Training in Internet & MHV for Veterans with HIV or Hepatitis C

- “I just get nervous ... going into it [MHV], but that's me, you know, going, ‘Okay is it gonna let me in?’ And sometimes I make mistakes, and I have to re-log in and then there's times when it will tell me that I logged-in too many times and I won't be able to do it for 24 hours”

- “I went to the website of one of the colleges in California. I think it was Berkeley, and, they just had a wealth of information for Hep C which was the reason why I took this class to begin with.”
## MHV training Preliminary Results

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<thead>
<tr>
<th></th>
<th>Hepatitis C (n=8)</th>
<th></th>
<th>HIV (n=6)</th>
<th></th>
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<tbody>
<tr>
<td></td>
<td>Pre</td>
<td>Post</td>
<td>Pre</td>
<td>Post</td>
</tr>
<tr>
<td>Self-Efficacy scale</td>
<td>6.3</td>
<td>8.5*</td>
<td>8.2</td>
<td>8.7</td>
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<tr>
<td>(0-10 scale)</td>
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<tr>
<td>Patient Activation</td>
<td>3.4</td>
<td>3.4</td>
<td>3.5</td>
<td>3.5</td>
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<tr>
<td>(1-4 scale)</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>IMB scale</td>
<td>3.8</td>
<td>3.7</td>
<td>3.8</td>
<td>4.0</td>
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<tr>
<td>(1-5 scale)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internet for health</td>
<td>0.8</td>
<td>3.6**</td>
<td>2.7</td>
<td>4.7~</td>
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<tr>
<td>(12 functions)</td>
<td></td>
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<td></td>
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<tr>
<td>~ &lt;0.1; *&lt;0.05; **&lt;0.01</td>
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<td></td>
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</tr>
</tbody>
</table>
3) Informal Caregivers for HCV

Friend of veteran infected with hepatitis C

Importance of Information

...the people that are involved in the day to day care of this person need more information. Even if they [have to] go in and sit down with the doctor or the nurse ... because the [treatment] results for the patient will be better in the long term.

Trouble accessing the information

... I told the woman [at the VA] that I wanted to know what the situation was or I was going to throw the guy out of my house ... because I didn’t want to expose my family to anything that could compromise their health. And I was told politely, ‘You have no right for this information’.
Informal Caregivers (cont.)

- 20 veterans with HCV & informal caregivers
  - Some preparing for treatment; some in treatment
- Goal:
  - resource guide for caregivers.
  - Develop interventions around delegation of MHV.
4) Homeless Veterans

- Common condition, e.g. diabetes, hepatitis C
- Cell phone text messages for continuity of care or medication adherence
Summary

1) PHR: timely access to information and communication.
2) Potential for improved processes and outcomes.
3) Long way to go to increase adoption
4) Tailor for specific groups, e.g. by condition, by cohort, by supportive role, etc.
5) Don’t assume everyone is 30 years old
Thank You!

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