If using your phone for audio, please dial in:
201-479-4595
Meeting ID: 298-77-274#

Thank you for joining, we will begin shortly.

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VA Airborne Hazards and Open Burn Pit Registry
VA Mobile Discussion Series
August 28, 2015

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Post-Deployment Health Group
Office of Public Health (10P3)
Veterans Health Administration
Contents

• The old way to do business
• Forming concept
• How to make it happen
• Results
• Parting thoughts/questions
Disclaimer

• The opinions and views expressed are my own
• My bias/experience is based on 30 years of working with Information Technology
  – Part-time programmer using COBOL on an IBM 360 Mainframe with punch cards
  – Electrical engineer with a focus on communication systems
  – Member of a Quick ReactionCapability (QRC) team in the intelligence community
  – Physician in the DoD who oversaw the Defense Medical Surveillance System
According to the 2010 National Survey of Veterans, 37% of Active Duty and 33% demobilized National Guard/Reserve report “Definite or Probable Exposure to Environmental Hazards” during military service.
The Old Way – e.g. Agent Orange and Gulf War Registries

Limitations:

- Not all Veterans require an in-person evaluation.
- No national system to schedule non-enrolled Veterans
- Veteran must travel to medical center
- No uniform clinic or billing
- Manual data entry, double work with CPRS note
Forming a Concept – the “Opportunity” or “to-be solution”

• An on-line questionnaire could...
  – Improve access and improve population monitoring. The in-person evaluation is a barrier to access which limits the ability to monitor the population.
  – Enable a host of performance monitoring and quality improvement initiatives. E.g., report on user experience from first log-on through questionnaire completion.

• A structured CPRS note that captures “Health Factors” could...
  – Standardize the clinical evaluation
  – Collect information on health outcomes
  – Capture administrative data for program monitoring and improvement

• This is now possible because...
  – DoD collects and shares data on the who deployed with VA.
  – VA’s Web and Mobile initiative
  – Veterans and Servicemembers have high levels of internet access.
How to Make it Happen – Finding Support

• 2012 created a “Business Requirements Document” through OIA to re-engineer the Agent Orange and Gulf War registries. Note these are each required by law.

• 2013 Congressed passed and President Obama enacted Public Law 112-260 requiring VA to establish an “Open Burn Pit Registry” within 1-year.

• I decided to implement the new registry using the “to-be” approach.

• Met with USH Dr. Petzel and Acting CIO Step Warren in the “Business Relations Meeting” to find resources for a way forward

• Gail Graham and Kathy Frisbee were willing and able to execute initial capability on short timeline

• OIT to “take-over” future enhancements
Realize No one else Understands or is Responsible for all the Requirements
Clinicians are from Mercury – Developers are from the Moons of Jupiter

• The differences
  ➢ Clinicians run hot and a year’s effort is measured in earth weeks. Sometimes they are behind the sun and cannot communicate.
  ➢ Developers are a heterogeneous bunch and live on different “worlds”

• Learn to Communicate effectively
  ➢ What is a SCRUM call?
  ➢ Who’s in charge?
  ➢ Can clinicians devote many hours per week to SCRUM calls? Are there others ways to communicate?

• What is Agile development and PMAS/ProPath?
  ➢ Can VA be “Agile” given a 6th month Firm-Fixed Priced Contract?
  ➢ Who decides what is in scope?
  ➢ What are these documents they want me to sign?

• Most projects try to maximize use of existing data. Who examines the quality and limitations of this data to meet the objectives of the project?
Airborne Hazards and Open Burn Pit Registry – It Works!
## Registry Milestones

<table>
<thead>
<tr>
<th>Date</th>
<th>Events</th>
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<tbody>
<tr>
<td>10/2012</td>
<td>• VA/DoD Clinical Guidance Workgroup</td>
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<tr>
<td></td>
<td>• VA/DoD Exposure Assessment Workgroup</td>
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<tr>
<td>6/2013</td>
<td>• First public comment period begins</td>
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<tr>
<td>10/2013</td>
<td>• Usability testing of Veteran web app (OIA Human Factors Engineering)</td>
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<tr>
<td>3/2014</td>
<td>• OMB <a href="https://www.whitehouse.gov/omb/informationcollection">approves information collection</a></td>
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<tr>
<td>4/25/2014</td>
<td>• 1st Participant (field pilot Detroit, Indianapolis, New Jersey)</td>
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<tr>
<td>6/2014</td>
<td>• VA publishes eligibility criteria in a <a href="https://www.federalregister.gov">Federal Register Notice</a></td>
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<td></td>
<td>• National release on June 19&lt;sup&gt;th&lt;/sup&gt;</td>
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<tr>
<td>7/2014</td>
<td>• 10,000th Participant</td>
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<tr>
<td>9/2014</td>
<td>• Contract for independent scientific <a href="https://www.iom.edu">report awarded to IOM</a></td>
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<tr>
<td>10/2014</td>
<td>• VA/DoD Analysis and Reporting Coordination Workgroup</td>
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<tr>
<td>6/2015</td>
<td>• First public <a href="https://www.iom.edu">report</a></td>
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Optional Registry-Related Clinical Evaluations

- VHA electronic health record (CPRS/VISTA) National Text Integration Utility (TIU) Note Template
  - Developed by NJ War Related Illness and Injury Study Center (WRIISC) with input from OPH, Patient Aligned Care Teams (PACT), and Environmental Health Clinicians.
  - Pilot testing at three VA facilities

- Overview
  - Chief Complaint
  - History
  - Physical Exam
  - Diagnostic Evaluation(s) to Date
  - Overall Assessment
  - Recommendations
  - Quick Orders

- Future effort may include standardized reporting from specialists/Pulmonologists
Outreach

**VA Goals:**
Empower Veterans to improve health and well-being

**Lessons Learned:**
Social media can be a powerful tool to reach Veterans

**Metrics:**

**VA & VHA Facebook**
- Social Media Reach: 458,208
- Click-throughs: 26,636
- Likes, comments, shares: 10,281

**VHA GovDelivery**
- Recipients: 77,927
- Open Rate: 16%
- Click Rate: 3%

**Inside Veterans Health**
- Unique Pageviews: 10,083

**VAntage Point Blog**
- Unique Pageviews: 18,307

https://www.youtube.com/watch?v=b8c-TyEi2bk
Participation (as of Dec 31, 2014)

A Look at the Veterans and Servicemembers in the Registry*

- **Age Ranges (in years)**
  - ≥ 55: 4.8%
  - 45-54: 17.6%
  - 35-44: 22.6%
  - 30-34: 33.2%
  - <30: 21.6%

- **They range in age from 20-79 years**

- **More than two-thirds served in the Army**
  - 67.3%

- **Air Force**: 17.2%
- **Marine Corps**: 10.4%
- **Navy**: 4.7%
- **Coast Guard**: 0.4%

- **28,426 have filled out the Registry survey**

- **They represent a range of races, but most are white**
  - **White**: 86.0%
  - **Black or African American**: 10.2%
  - **Asian**: 2.0%
  - **American Indian/Alaska Native**: 0.9%
  - **Native Hawaiian or other Pacific Islander**: 0.2%
  - **Multiracial**: 0.7%

- **53.5% are interested in having a health exam**

*As of December 31, 2014. Percentages may not add up to 100% due to rounding.
Self-Reported Exposures

- Dust Storms: 98.5%
- Vehicle Operations: 82.2%
- Weapon Combustion Gases: 80.8%
- Blasts From Explosive Devices: 75.5%
- Refueling Maintenance: 71.5%
- Large Engine Maintenance: 41.5%
- Construction Duties: 40.3%
- Pesticide Duties: 12.2%

*As of September 30, 2014
Self-Reported Health Conditions

**Lung**
- Allergies (pollen, dust, animals) 41.2%
- Asthma 15.2%
- Chronic bronchitis 13.5%
- COPD 3.4%
- Emphysema 1.2%
- Constrictive bronchiolitis 1.2%
- Idiopathic pulmonary fibrosis 0.2%

**Heart**
- High blood pressure 35.9%
- Coronary artery disease 1.8%
- Heart attack 1.3%
- Angina (chest pain) 1.2%
- Other heart disease 6.7%

**Other**
- Insomnia (trouble sleeping) 81.1%
- Neurological problems 73.6%
- Immune system problems 21.9%
- Liver disease 6.7%
- Cancer 5.6%
Self-Reported Physical Limitations and Health

About 89% said they had trouble doing at least one of these activities:
- Walking
- Running
- Walking up steps

...because of:
- Back or neck problem: 59.5%
- Knee problem: 38.5%
- Lung or breathing problem: 34.2%
- Arthritis: 29.6%
- Depression, anxiety, or other emotional problem: 24.2%
Number of Airborne Hazard and Open Burn Pit Registry Clinical Evaluations Per Week

NOTES: Includes 286 visits with Airborne Hazards Note Health Factors through 06/30/2015
Registry Data Uses

• Registry data is available for VA and DoD program improvement, public health surveillance, and IRB approved research

• Reports
  • VA/DoD Analysis and Reporting Work Group provided a mechanism for Departmental coordination.
  • OPH will produce a series of reports.
    • Participation and reported exposures - April 2015
    • Reported Health conditions – June 2015
    • Technical report on bias analysis
  • Peer-reviewed manuscript with multi-variable analysis

• Examples of Completed Data sharing
  • DoD – Defense Health Agency and Army Public Health Command to store questionnaires for Active Duty participants
  • DoD – Defense Manpower Data Center (DMDC) to improve deployment accuracy
  • Veterans Benefits Administration – examine relationship with claims for benefits
  • VHA Facilities – local program improvement

• Support Institute of Medicine Committee
IOM Committee on the Assessment of the Department of Veterans Affairs Airborne Hazards and Open Burn Pit Registry

- Provide methodological recommendations on how to best ascertain and monitor the health effects of the exposure of members of the Armed Forces to toxic airborne chemicals caused by open burn pits and other potential airborne hazards during deployment to contingency operations.
- Conduct an initial workshop to receive suggestions and input from Veterans about their experiences so that the recommendations can be informed by insights from this group.
- Conduct an analysis using de-identified datasets provided to IOM by VA
- Make recommendations to improve the collection and maintenance of information in the AH&OBPR.
  - How to categorize the self-reported exposures in the AH&OBPR,
  - Suggested changes to the current information collection instrument
  - Methodological approaches to the analysis of these data.
- Prepare an independent scientific “assessment of the effectiveness of actions taken by the Secretaries [of Veterans Affairs and Defense] to collect and maintain information on the health effects of exposure to toxic airborne chemicals and fumes caused by open burn pits”.

VETERANS HEALTH ADMINISTRATION
Future Actions

- August 31, 2015 – Release “registry 2.0”
  - Enhance VHA staff portal – improved data reporting and tracking
  - Integrate Veteran web app with eBenefits
  - Support more user authentication options via “AccessVA”

- 2016 (subject to availability of new enterprise VA capabilities)
  - Enhance Veteran portal usability and integrate with appointment scheduling
  - Enhance integration of clinical activities (review of questionnaire and generation of clinical note) with Electronic Health Record, CPRS or electronic-Health Management Portal (eHMP)
Resources for Veterans

- VA Office of Public Health website (http://www.publichealth.va.gov/)
- You Tube Video - Published on Jun 15, 2015 https://www.youtube.com/watch?v=p-pddv4wBkE
- Pre-participation Fact sheet (mailed to facilities late July 2014) https://veteran.mobilehealth.va.gov/AHBurnPitRegistry/docs/AHOBPR-Post.pdf
- Postcard size flyer (mailed to facilities Late July 2014)
- WRIISC Provider and patient fact sheets: http://www.warrelatedillness.va.gov/warrelatedillness/education/exposures/burn-pits.asp
- Veteran and Servicemember post-participation fact sheets (available online after completion of questionnaire and mailed with participation letter)
- Social Media (VA Blog, Facebook post): links available on VA home page
Resources for Clinical Staff

• Available to VA and Non-VA staff
  - Borden Institute Specialty Textbook “Airborne Hazards Related to Deployment”
  - WRIISC recorded webinars and PowerPoint briefings
  - VeHU seminar for Pulmonologists

• VA Only
  - Providers can review the individual Veteran entered responses on the self-assessment questionnaire (SAQ) using a web portal
    https://staff.mobilehealth.va.gov/AHBurnPitRegistry/
  - National clinical template available in the electronic health record (CPRS patch)
  - PACT Champion “Train-the-Trainer” and Environmental Health “Train-the-Trainer” course
Questions?
Thank you!

What future topics would you like to discuss? Let us know by providing feedback below:

https://www.surveymonkey.com/r/5ZK36NV

Join us for next month’s presentation September 25 on Immunization Campaign