500 million

Smartphone users will be using health apps by 2015\(^1\)
More Cell Phone Devices Than Any Other Computing or Consumer Electronics Device Globally

Billions

Cell Phone Users: 5.0*

TV Households: 1.3

Desktop PC Users: 0.7

Mobile PC Users: 0.3

MORE THAN 3 BILLION MORE DEVICES
• Leverages wireless/mobile technologies to improve the health of Veterans

• **Expands care** for Veterans beyond the traditional office visits

• Helps Veterans, Caregivers and VA health care team securely **coordinate all aspects of care**

• Provides Veterans and their Caregivers with **tools** to help lead healthier lives

**VA Mobile**
The Potential of Mobile Health Technology

- Decision support tools
- Increased access
- Self reporting
- Range of media
- Tailored information
- Quality face-to-face visits
VA Mobile Health: Expanding Care for Veterans

Personalized, Convenient, Coordinated & Accessible

Increase Patient Engagement

Expand Care for Veterans

Governance
Expand Care for Veterans

- Secure Messaging
- Coaching Notifications from Health Team
- Display Clinical EHR Data
- Video Conferencing
- Increased Coordination & Communication
Governance

Cloud Hosting

Mobile Application Environment (MAE)

Data Standardization

Mobile Device Management

App Certification
Apps In Development
New Patient-Facing Mobile Apps

- Texting for Health
- Patient Health Inventory
- Caring for Women Veterans
- Preconception/Prenatal
- Maternity Tracking
- Veteran Health Competition
- Biosurveillance Reporting
- Subscription Service for Biometric Monitoring
Mobile Pilots and Field Tests
VA’s Mobile Health Pilots

Clinicin Pilot
January 2012

Mobile Health Browser Pilot
April 2013

Veteran Appointment Request (VAR)
May 2013

Veteran Patient/ Family Caregiver Pilot
June 2013
Family Caregiver Pilot Apps

Suite of **10 apps** pre-loaded on iPads and distributed to ~**1,000 Family Caregivers** and their post 9/11 seriously injured Veterans
Pending Mobile Health External Development (MHED) Releases, Increment 1, Summer 2014

- Mobile Blue Button
- Summary of Care
- Launchpad
- Schedule Calendar View
  - Veteran Appointment Request (VAR)
  - VA Appointing Clerk (VAAC)
URL will be http://mobile.va.gov/appstore (Subject to change)
URL will be http://mobile.va.gov/appstore (Subject to change)
VA App Store Preview

URL will be [http://mobile.va.gov/appstore](http://mobile.va.gov/appstore) (Subject to change)
VA App Store Preview

URL will be http://mobile.va.gov/appstore (Subject to change)
In the USA, Android is the dominant platform at 50.3%, with iOS a close second at 43.1%.
Apps for Everyone!

- IOS?
- Hosted?
- Native?
- Android?
- Wrapped?
- Windows Modern?
June 2014 App Retention Rate

The majority of apps are used 10 times or less and then uninstalled. Developers get one chance at making a good impression.

Technologies Utilized for UI Development
Veteran-Facing Apps

Mobile Blue Button

Summary of Care

Veteran Appointment Request
### MEDICATION LIST

#### Updated: Nightly

<table>
<thead>
<tr>
<th>Active and Recently Expired</th>
<th>Status</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aprekika</td>
<td>ACTIVE</td>
<td>VA</td>
</tr>
<tr>
<td>Aprekika</td>
<td>ACTIVE</td>
<td>VA</td>
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<tr>
<td>Aboonelfumorin</td>
<td>ACTIVE</td>
<td>VA</td>
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<tr>
<td>AMITRIPTYLINE HCL 50 MG TAB</td>
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<td>VA</td>
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<td>ATENOLOL 50MG TAB UD</td>
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<td>VA</td>
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<td>not recently expired</td>
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<td>VA</td>
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<tr>
<td>Aspirin</td>
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<td>DoD</td>
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### LAB RESULTS

#### Updated: Nightly

Number of Lab Results in this date range: 43

### GLUC (SERUM)
## MEDICATION LIST

**Updated:** Nightly

### Active and Recently Expired

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<td>ACTIVE</td>
<td>VA</td>
</tr>
<tr>
<td>Lisinopril Tab 10MG</td>
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<td>TAKE ONE TABLET BY MOUTH TWICE A DAY</td>
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<tr>
<td>Aspirin 81MG EC TAB</td>
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<td>Atenolol 50MG Tab UD</td>
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<td>VA</td>
</tr>
<tr>
<td>not recently expired TAKE ONE AT NIGHT BEFORE GOING TO BED</td>
<td>EXPIRED</td>
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<td>permanently recently expired outpatient TAKE ONE AT NIGHT BEFORE GOING TO BED</td>
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<td>DoD</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Mobile Application Environment (MAE)
Register Today!
Mobile Development in the VA Mobile App Environment
7/25/2014  1:00 PM - 2:30 PM Eastern

http://www.myvehucampus.com
Who is Building Mobile Apps?
Agile Development Methodology
Strengths and Weaknesses
LIFECYCLE MANAGEMENT

DEFINE

PLAN

DESIGN

IMPLEMENT

SUPPORT
Mobile Development
Register with VA by completing the forms that are specific to your request.
• Have VA build an app

• Certify an app you are building to carry the VA brand
• Start building a VA-branded app for which you have funds and resources
• Request a VA mobile app development environment (Tools setup)
• Request server resources for your VA mobile app development project
• Request a user account to participate in an existing VA mobile app development project

App Intake Process
- Have VA build an app

**Certify an app you are building to carry the VA brand**

- Start building a VA-branded app for which you have funds and resources
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**App Intake Process**
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• Certify an app you are building to carry the VA brand
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**Request a VA mobile app development environment (Tools setup)**

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**App Intake Process**
- Have VA build an app
- Certify an app you are building to carry the VA brand
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- Request a VA mobile app development environment (Tools setup)

**Request server resources for your VA mobile app development project**

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• Certify an app you are building to carry the VA brand
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• Request a VA mobile app development environment (Tools setup)
• Request server resources for your VA mobile app development project

• Request a user account to participate in an existing VA mobile app development project

App Intake Process
• You will be contacted by Web and Mobile solutions to prepare request for Mobile Apps Governance Board (MAGB)
• MAGB is responsible for reviewing and approving request

App Intake Process
In order to obtain approval by the Governance Board the request must answer 3 questions:

1. Meets the VA Mission
2. Has a Business Sponsor
3. Business Sponsor Commitment to Sustain

App Intake Process
• Once MAGB approves your request, if applicable a JIRA project will be created
• VA requirements documentation
• Very detailed
• Created by New Service Request (NSR) or agile development team
Business Requirements Document (BRD)

Modified with Agile Requirements

- Basic documentation
- Less detail and greater focus on “user stories”
- Created by agile development team
Mobile Development

- Agile Methodology
- Sprint meeting every 1-3 weeks
- Review work completed and planned
- Business Owner attendance
Mobile Development

IMPORTANT!!!

Development teams are required to engage the compliance teams to ensure the App will pass the final compliance reviews.
# Mobile App Compliance

<table>
<thead>
<tr>
<th>Mobile Application Classification</th>
<th>1 - Very Low</th>
<th>2 - Low</th>
<th>3 - Medium</th>
<th>4 - High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does not utilize VA resource</td>
<td>Assessment</td>
<td></td>
<td>Testing</td>
<td>Testing</td>
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<tr>
<td>Read only access to VA resources</td>
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<tr>
<td>Write access to VA resources</td>
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<tr>
<td>Read and/or write access to VA sensitive resources</td>
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</table>

<table>
<thead>
<tr>
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<td>508 Accessibility (OIT)</td>
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<td>System Performance Impact Assessment (OIT)</td>
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Mobile Project Management Accountability System (PMAS)

32 Individual PMAS Documents

MHED Base PMAS Docs
Covers All Mobile Apps & Created Once

12 PMAS Docs
Covers each App
PMAS Documents

- Business Requirements Document
- Concept Paper/Scope Statement
- Requirements Specification Plan
- Requirements Specification Addendum
- Software Design Document
Mobile Development Tools

**Track**

Enable dev and IT teams to capture issues, plan work, and resolve service requests.

**Confluence**

One place to share, find, and collaborate on information needed to get work done.

**Code**

Dev Tools

Browse, review, test, and manage your code with our Dev Tools.
OI&T MHED Release Process
Step 1: Validation and Verification (V&V)
Step 2: Final Compliance Review
Step 3: Review of Operation Readiness Report (ORR) and Initial operating Capability
Ask the Presenter