

VA Mobile Discussion Series

VA Mobile
mobilehealth.va.gov



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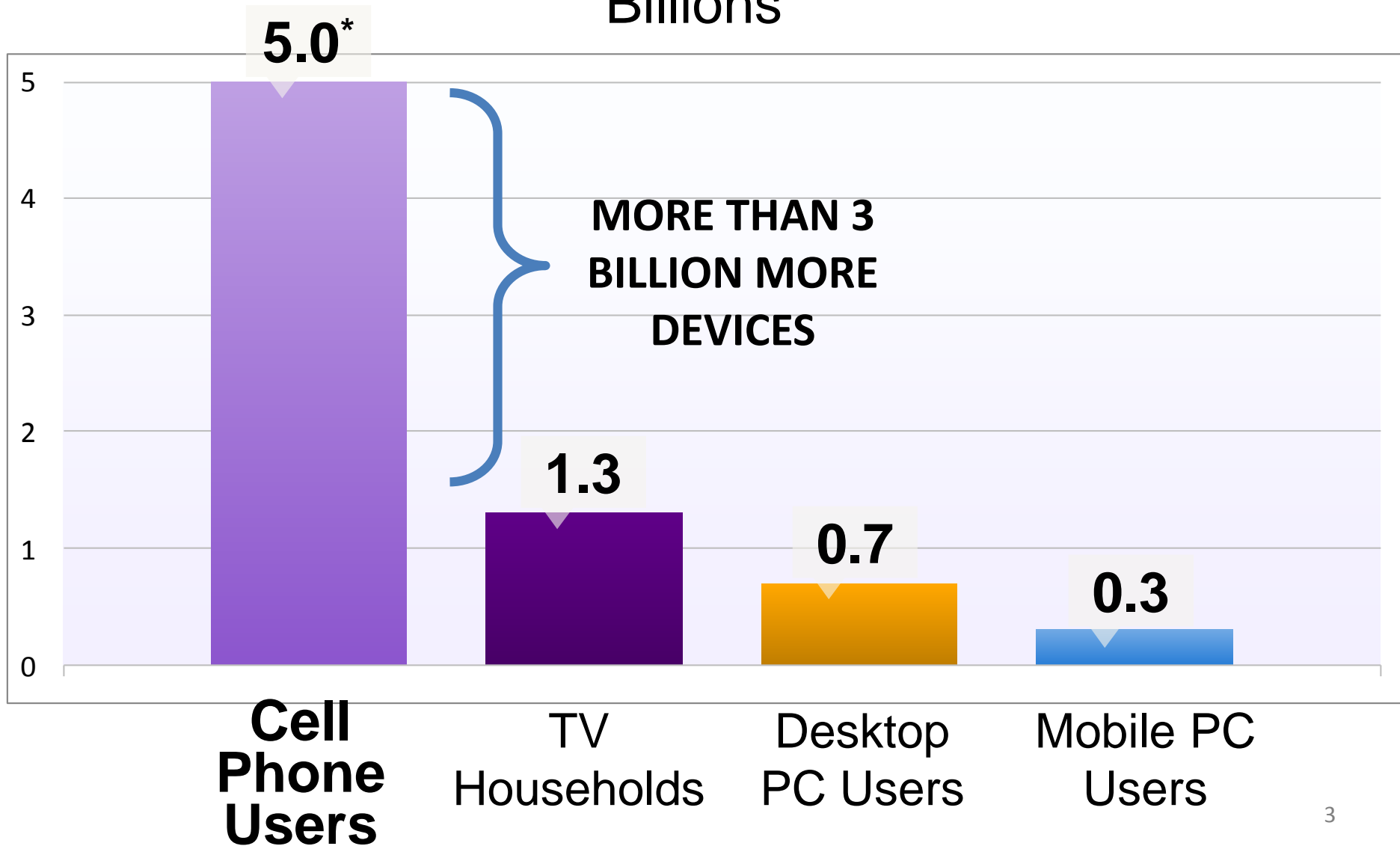
Veterans Health Administration

500 million

Smartphone users will be using health apps by 2015¹

More Cell Phone Devices Than Any Other Computing or Consumer Electronics Device Globally

Billions



- **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

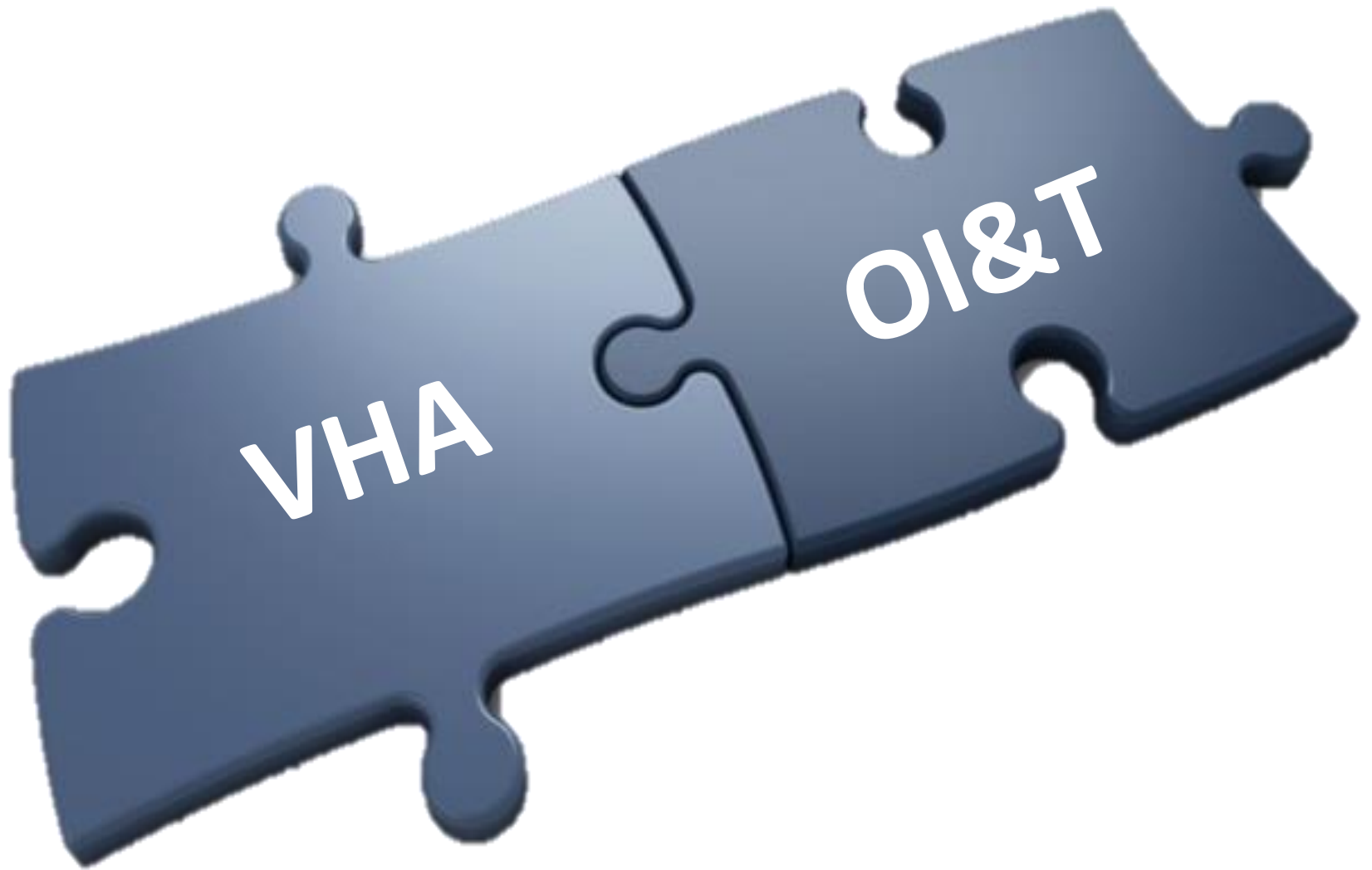
Increased access

Self reporting

Range of media

Tailored information

Quality face-to-face visits



Origin November 2011

VA Mobile Health: Expanding Care for Veterans

Personalized, Convenient, Coordinated & Accessible



Increase Patient
Engagement

Expand Care for
Veterans

Governance

Care Plan App

Patient Self-Entered Data to Health Team

Goal Setting App

Patient Decision Support (eCoaching)

Personal Inventory App

SMS Messaging

Increase Patient Engagement

Video
Conferencing

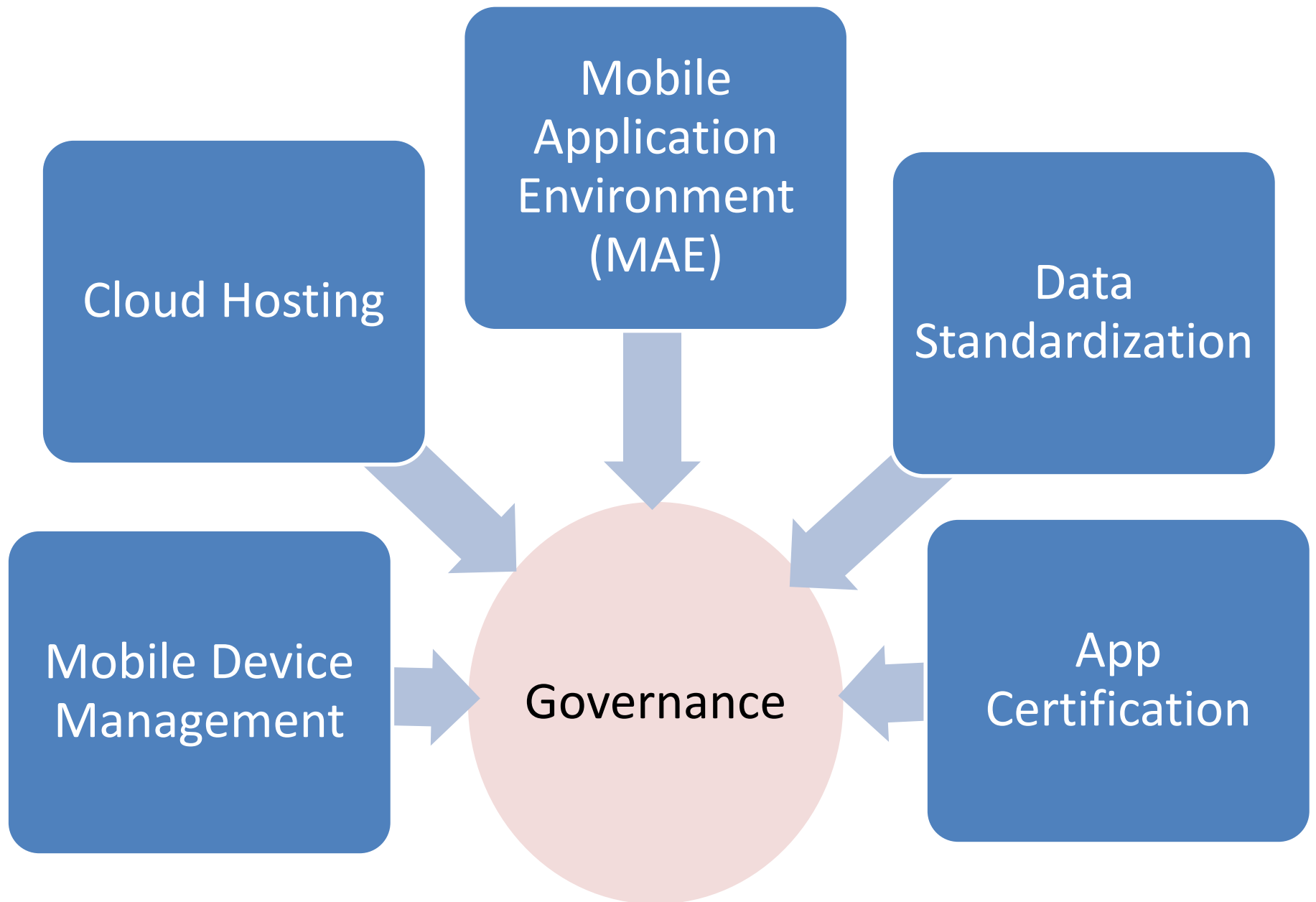
Secure
Messaging

Coaching
Notifications
from Health
Team

Increased
Coordination &
Communication

Expand Care
for Veterans

Display Clinical
EHR Data



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



Clinician 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

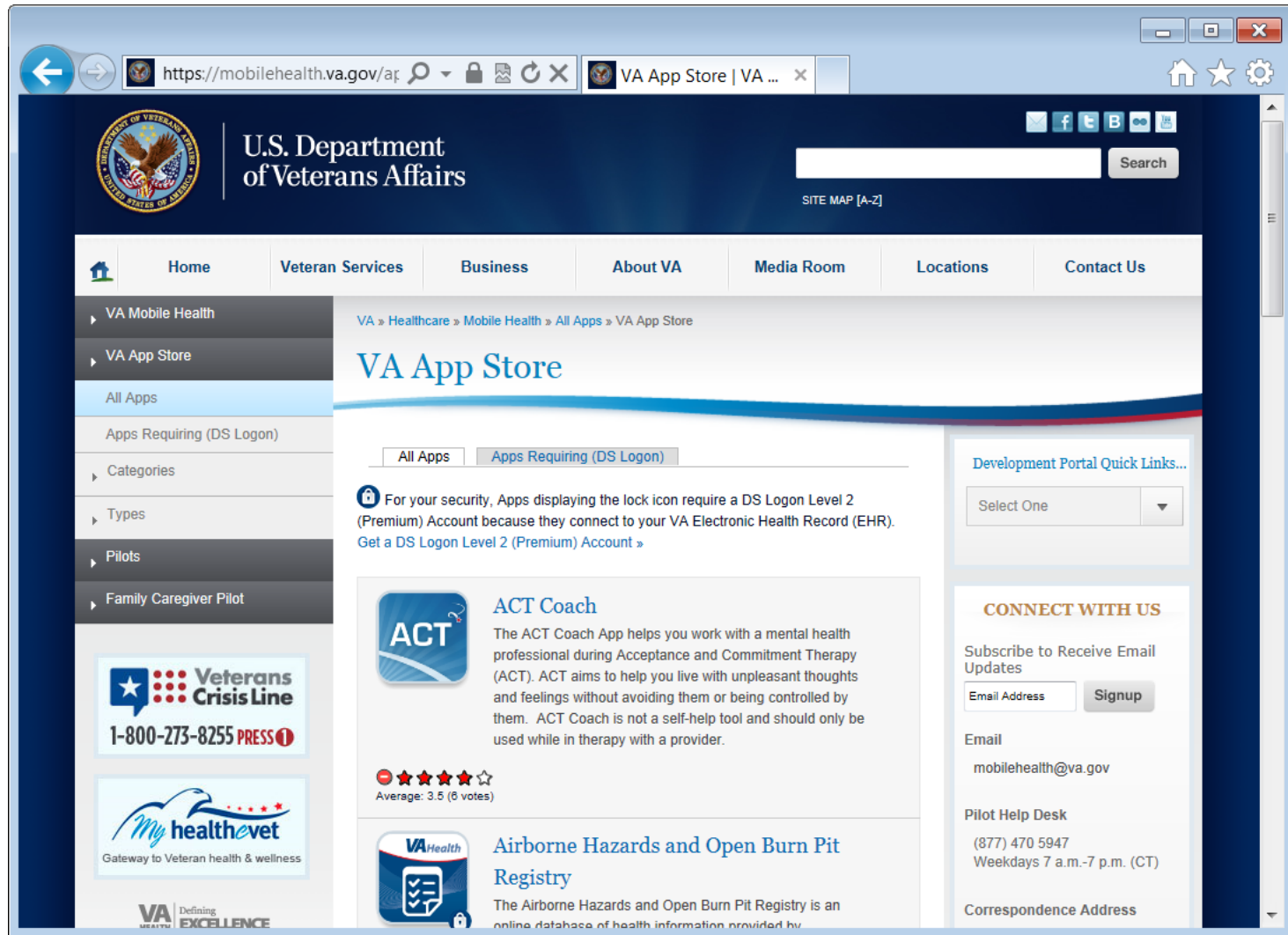


Suite of **10 apps** pre-loaded on iPads and
distributed to ~**1,000 Family Caregivers**
and their post 9/11 seriously injured Veterans

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)

VA App Store Preview



URL will be <http://mobile.va.gov/appstore> (Subject to change)

VA App Store Preview



URL will be <http://mobile.va.gov/appstore> (Subject to change)

VA App Store Preview



URL will be <http://mobile.va.gov/appstore> (Subject to change)

VA App Store Preview

The screenshot shows a web browser window with the URL <https://mobilehealth.va.gov/appstore>. The page title is "ACT Coach | VA Mo...". The main content area is titled "VA Mobile ACT Coach Feedback" and includes a heading "VA needs your feedback on this App *". Below this is a survey table with five columns: "Strongly Disagree", "Disagree", "Neutral", "Agree", and "Strongly Agree". The survey items are:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
This App is easy to understand and use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This App helps me better manage my VA services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would recommend this App to a friend or family member	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This App provides me with information or capabilities that were previously not available to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I use this App frequently	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Below the survey is a text area for "Additional comments *" and a "Submit" button. On the right side of the page, there is a sidebar with links: "Health Programs", "Protect Your Health", and "A-Z Health Topics". The footer contains navigation links: "CONNECT", "VA HOME", "QUICK LIST", "RESOURCES", and "ADMINISTRATION".

CONNECT

- Veterans Crisis Line: 1-800-273-8255 (Press 1)
- Social Media

VA HOME

- Notices
- Privacy
- FOIA

QUICK LIST

- Veterans ON-line Application
- Prescriptions
- Enroll/Update Medical Benefits

RESOURCES

- Careers
- Returning Service Members
- Vocational Rehabilitation &...

ADMINISTRATION

- Veterans Health Administration
- Veterans Benefits Administration
- National Cemetery Administration

URL will be <http://mobile.va.gov/appstore> (Subject to change)

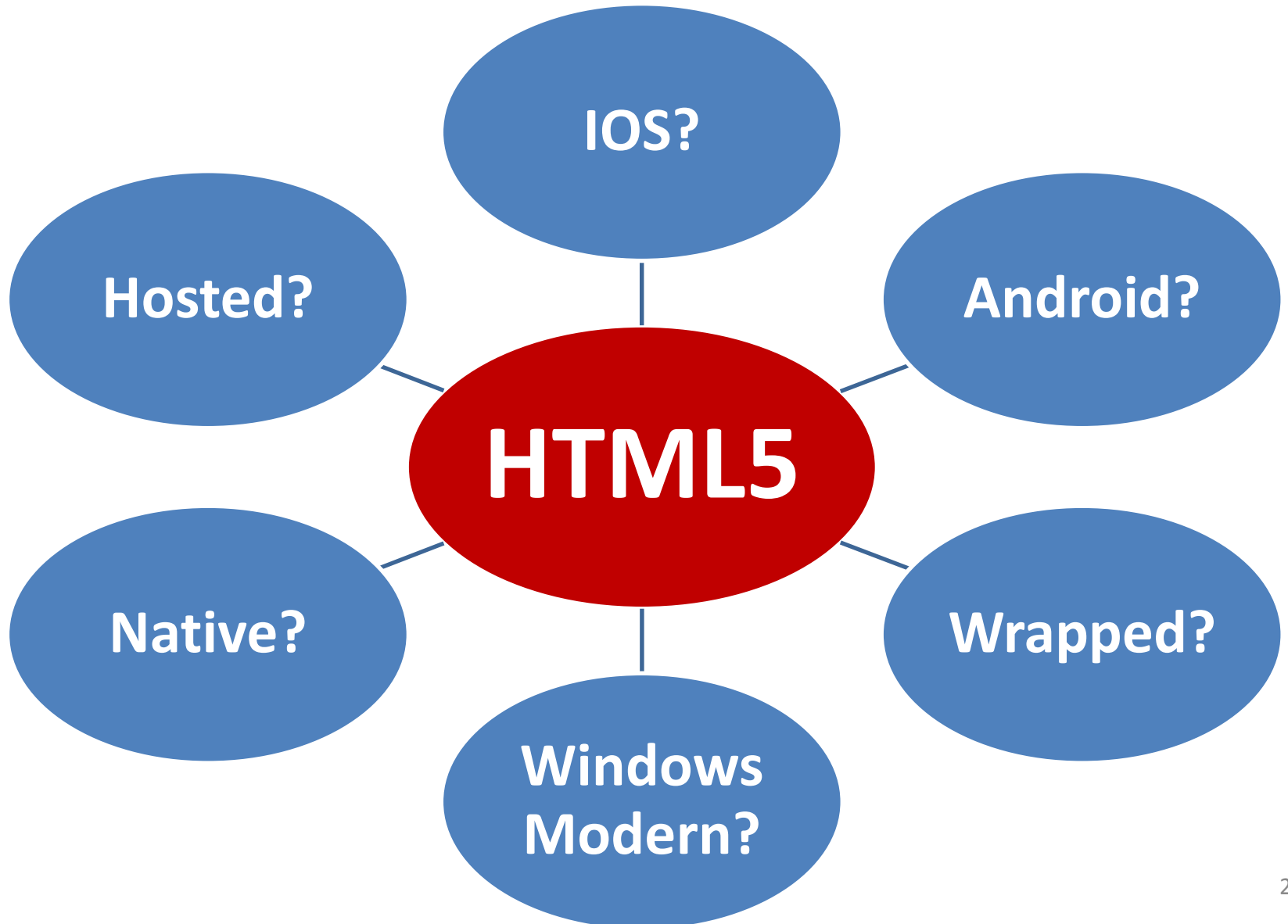
January 2014 Platform Adoption

Smartphone OS Sales Share (%)							
Germany	3 m/e Nov 2012	3 m/e Nov 2013	% pt. Change	USA	3 m/e Nov 2012	3 m/e Nov 2013	% pt. Change
Android	69.5	74.7	5.2	Android	42.3	50.3	8.0
BlackBerry	2.1	0.8	-1.3	BlackBerry	1.3	0.6	-0.7
iOS	21.1	17.3	-3.8	iOS	53.0	43.1	-9.9
Windows	1.9	5.7	3.8	Windows	2.6	4.7	2.1
Other	5.4	1.5	-3.9	Other	0.7	1.3	0.6
GB	3 m/e Nov 2012	3 m/e Nov 2013	% pt. Change	China	3 m/e Nov 2012	3 m/e Nov 2013	% pt. Change
Android	51.5	55.7	4.2	Android	73.7	78.6	4.9
BlackBerry	6.5	2.4	-4.1	BlackBerry	0.0	0.0	0.0
iOS	36.1	30.6	-5.5	iOS	18.5	17.0	-1.5
Windows	5.1	10.8	5.7	Windows	2.7	2.7	0.0
Other	0.8	0.5	-0.3	Other	5.1	1.6	-3.5

Kantar Worldpanel ComTech

In the USA, Android is the dominant platform at 50.3%, with iOS a close second at 43.1%.

Apps for Everyone!

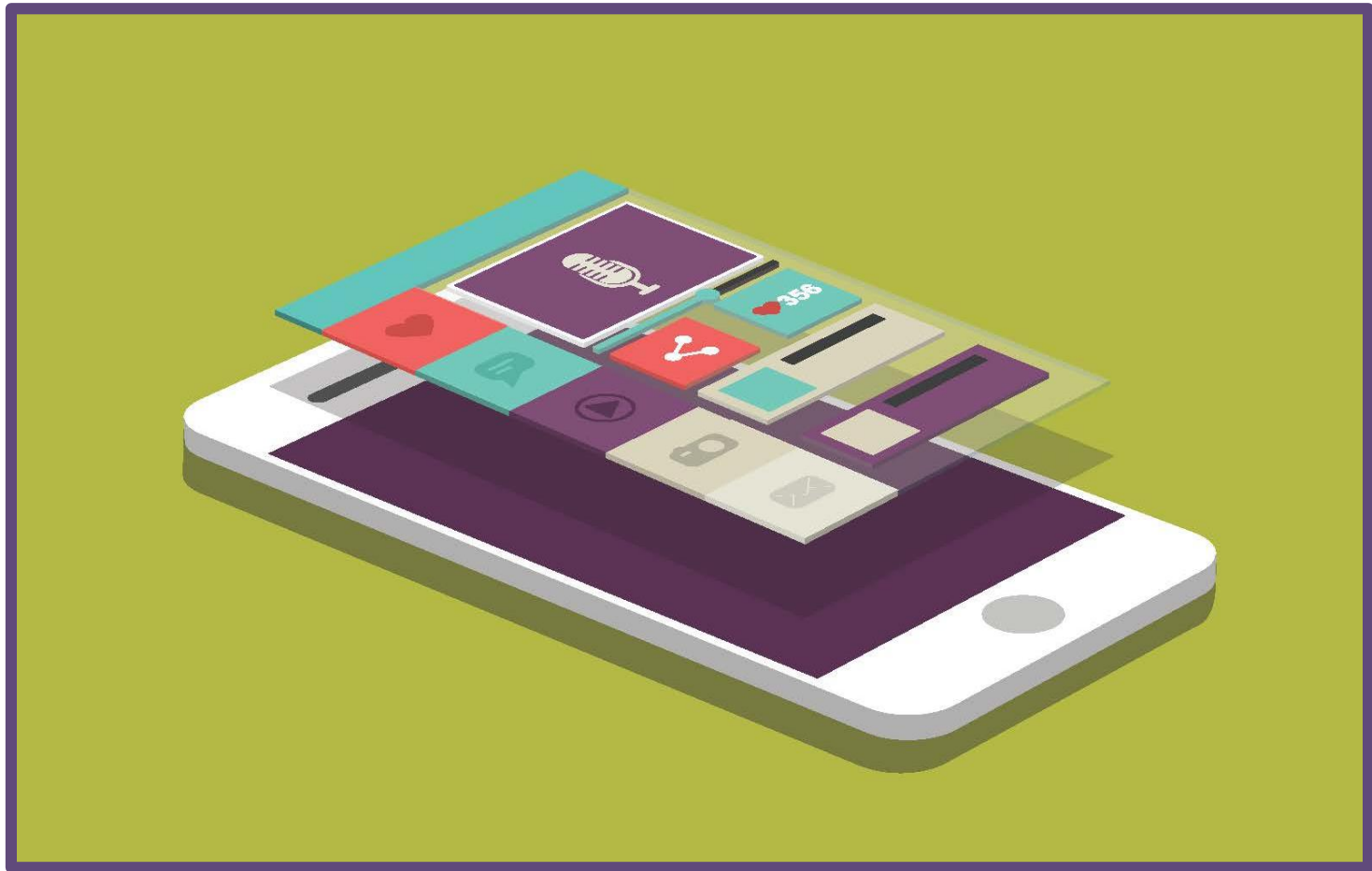


June 2014 App Retention Rate



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**

A screenshot of the VA Health app interface on a tablet. The screen displays a "Summary of Care" page for a male patient born May 05, 1900. The left sidebar contains a menu with icons and labels: Contact Information, Medical Diagnoses, Allergies, Medications, Surgeries, and Upcoming Appointments. The main content area shows three tables: Medical Diagnoses, Allergies, and Medications (Active and Recently Expired).

Medical Diagnoses	Onset Date	Source
Upper Respiratory Infection Acute	01/05/2011	
Accident Caused By Earth Movi...	10/29/2010	
Ankle Joint Pain	10/29/2010	

Allergies	Reaction	Source
Bee pollen	Hives	OTHER
Peanut	Anaphylaxis	
Penicillin	Rash	
Penicillin	Rash	OTHER

Medications (Active and Recently Expired)		
Abarelix	Active	VA
TAKE ONE TABLET BY MOUTH TWICE A DAY		
Abarelix	Active	VA
TAKE ONE TABLET BY MOUTH TWICE A DAY		
Abacetadumoxia	Active	VA



**Veteran
Appointment
Request**

Mobile Blue Button

Development...bile Health

RESCUE Support Site

VA Access Gateway

Internet VA Webmail

Mac 101

Apple

iCloud

Facebook

Twitter

Wikipedia

Yahoo!

Google

News

Popular

Duration

Sections

All

2 Year

Contact Information

Medical Diagnoses

Allergies

Medication List

Surgeries

Vitals

Medication History

Lab Results

Radiology Exams

Clinical Notes

Discharge Summaries

MBB

MEDICATION LIST

Updated: Nightly

Active and Recently Expired	Status	Source
Abarelix TAKE ONE TABLET BY MOUTH TWICE A DAY	ACTIVE	VA
Abarelix TAKE ONE TABLET BY MOUTH TWICE A DAY	ACTIVE	VA
Abobotulinumtoxin TAKE ONE TABLET BY MOUTH TWICE A DAY	ACTIVE	VA
AMITRIPTYLINE HCL 50 MG TAB	ACTIVE	VA
LISINOPRIL TAB 10MG TAKE ONE TABLET BY MOUTH TWICE A DAY	ACTIVE	VA
ASPIRIN 81MG EC TAB	DISCONTINUED	VA
RABEPRAZOLE NA 20MG EC TAB	DISCONTINUED	VA
ATENOLOL 50MG TAB UD	EXPIRED	VA
not recently expired TAKE ONE AT NIGHT BEFORE GOING TO BED	EXPIRED	VA
permanently recently expired outpatient TAKE ONE AT NIGHT BEFORE GOING TO BED	EXPIRED	VA
Aspirin	SUSPENDED	DoD

LAB RESULTS

Updated: Nightly

Number of Lab Results in this date range: 43

GLUC (SERUM)

CONFIDENTIAL

Logout

Launched

26

Mobile Blue Button

The image displays the Mobile Blue Button interface. On the left, a sidebar lists various medical sections with checkboxes. A red box highlights the 'Allergies' section, which is currently selected. The main area on the right shows a detailed view of the 'Allergies' section, with a red box highlighting the 'Allergies' title and a large checkmark icon. The interface is designed for mobile use, with a clear navigation structure and a focus on the selected section.

Sections

- 2 Year
- Contact Information
- Medical Diagnoses
- Allergies**
- Medication List
- Surgeries
- Vitals
- Medication History
- Lab Results
- Radiology Exams
- Clinical Notes
- Discharge Summaries

Allergies

Updated: Nightly

Active and Re

Abarelix
TAKE ONE TABLET

Abarelix
TAKE ONE TABLET

Abobotulinumtoxin
TAKE ONE TABLET

AMITRIPTYLINE HCL

LISINOPRIL TAB 10
TAKE ONE TABLET

ASPIRIN 81MG EC

RABEPRAZOLE NA

ATENOLOL 50MG

not recently expired
TAKE ONE AT NIG

permanently recent
TAKE ONE AT NIG

Aspirin

LAB RES

Updated: Ni

Number of L

GLUC (SERUM)

Logout

Launchpad

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Mobile Blue Button

Development...bile Health RESCUE Support Site VA Access Gateway Internet VA Webmail Mac 101 Apple iCloud Facebook Twitter Wikipedia Yahoo! Google News Popular

Duration Sections All MBB

2 Year

Contact Information

MEDICATION LIST
Updated: Nightly

Active and Recently Expired

	Status	Source
Abarelix TAKE ONE TABLET BY MOUTH TWICE A DAY	ACTIVE	VA
Abarelix TAKE ONE TABLET BY MOUTH TWICE A DAY	ACTIVE	VA
Abobotulinumtoxin TAKE ONE TABLET BY MOUTH TWICE A DAY	ACTIVE	VA
AMITRIPTYLINE HCL 50 MG TAB	ACTIVE	VA
LISINOPRIL TAB 10MG TAKE ONE TABLET BY MOUTH TWICE A DAY	ACTIVE	VA
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ATENOLOL 50MG TAB UD	EXPIRED	VA
not recently expired TAKE ONE AT NIGHT BEFORE GOING TO BED	EXPIRED	VA
permanently recently expired outpatient TAKE ONE AT NIGHT BEFORE GOING TO BED	EXPIRED	VA
Aspirin	SUSPENDED	DoD

MEDICATION LIST
Updated: Nightly

Active and Recently Expired

	Status	Source
Abarelix	ACTIVE	VA
	ACTIVE	VA
	ACTIVE	VA
	ACTIVE	VA
	ACTIVE	VA
	DISCONTINUED	VA
	DISCONTINUED	VA
	EXPIRED	VA
	EXPIRED	VA
	EXPIRED	VA
	SUSPENDED	DoD

CONFIDENTIAL

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Launchpad



Mobile Application Environment (MAE)



Register Today!

Mobile Development in the VA Mobile App Environment

7/25/2014 1:00 PM - 2:30 PM Eastern

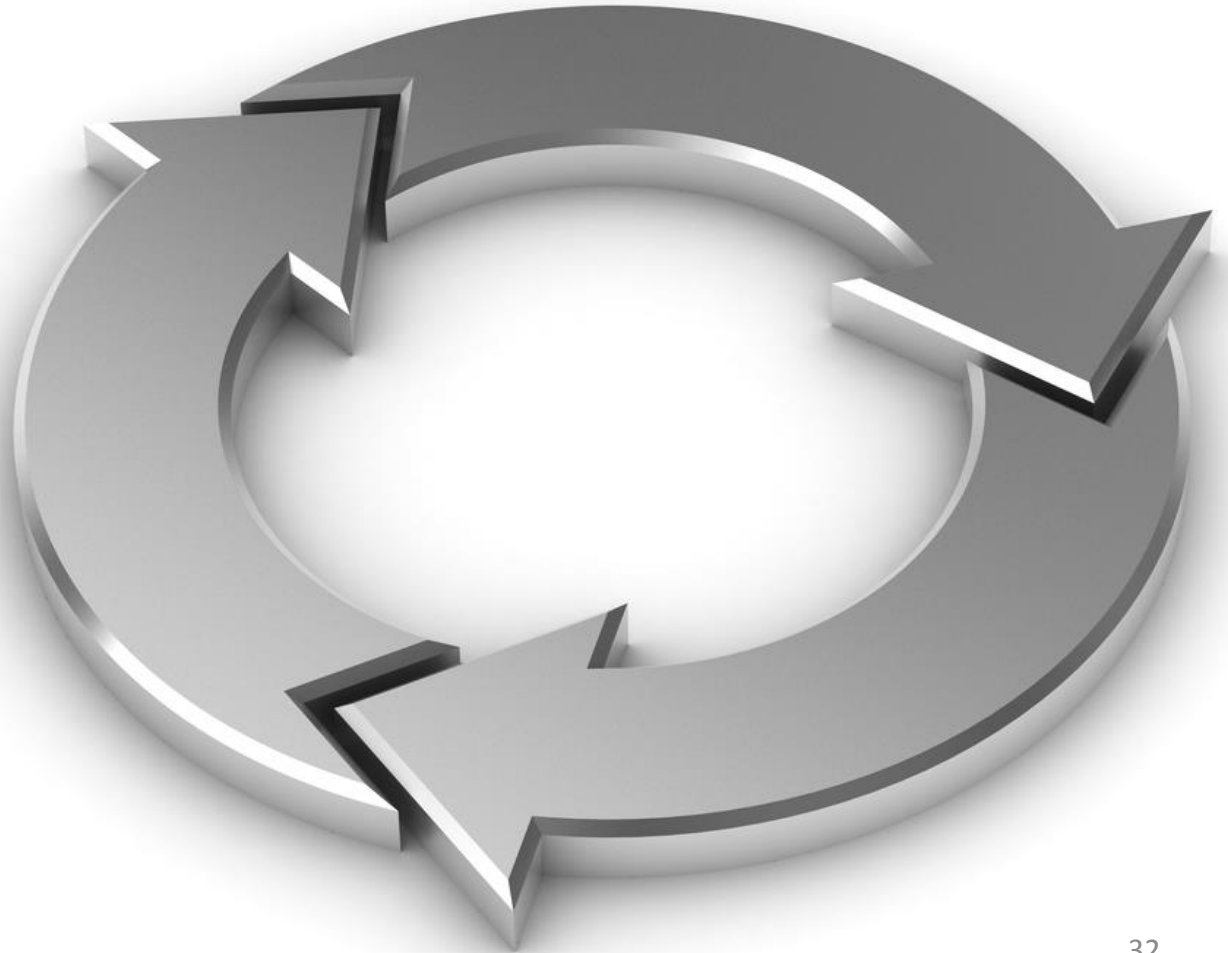
<http://www.myvehucampus.com>

Who is Building Mobile Apps?



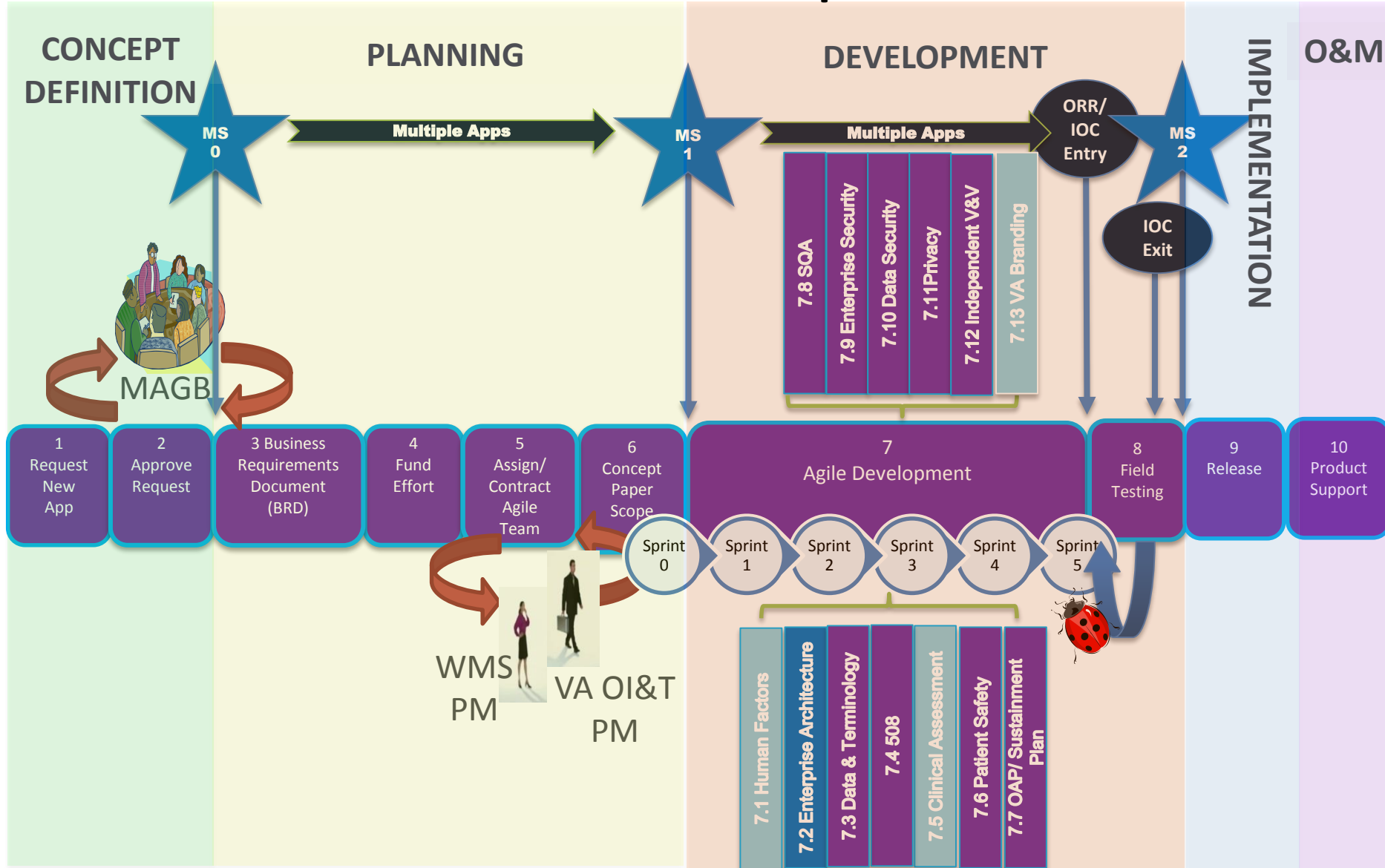
Agile Development Methodology

Strengths and Weaknesses

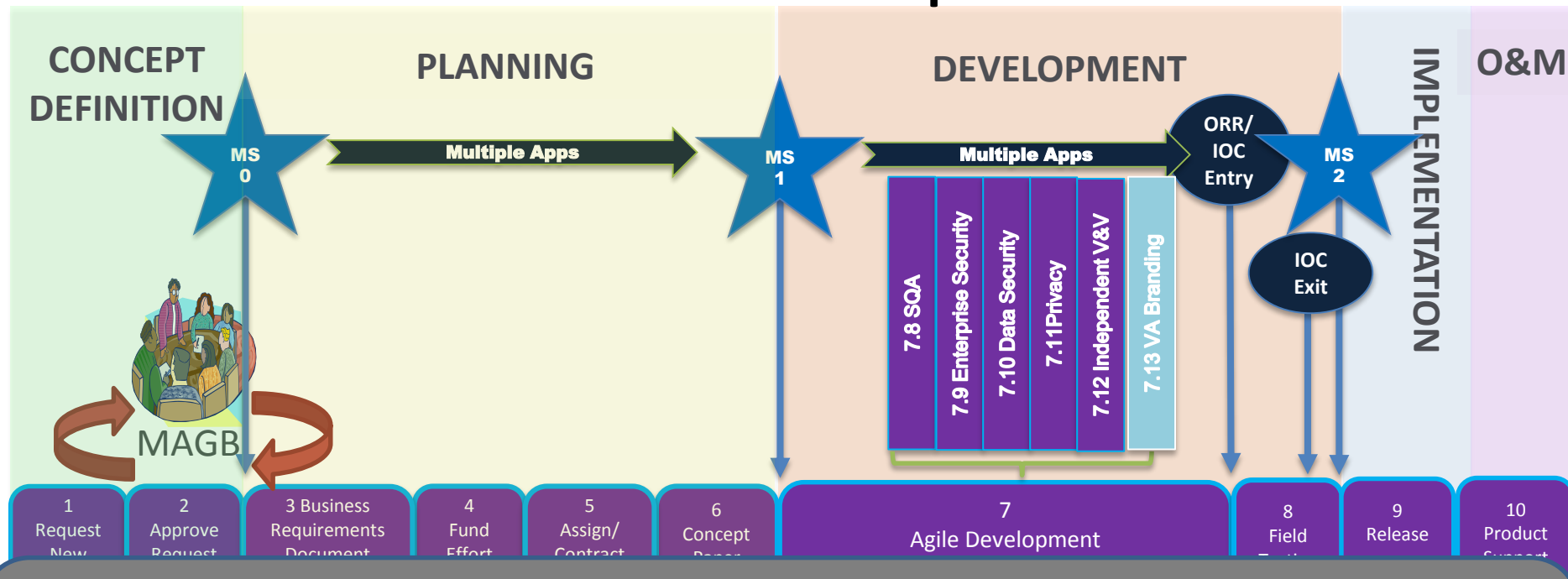




Mobile Development



Mobile Development



Request

Prepare

Approve

App Intake and Request Process

Request



Prepare



Approve

Register with VA by completing the forms that are specific to your request

App Intake Process

Request



Prepare



Approve

• 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

Request



Prepare



Approve

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App Intake Process

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App Intake Process



```
graph LR; Request[Request] --> Prepare[Prepare]; Prepare --> Approve[Approve];
```

Request

Prepare

Approve

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App Intake Process

Request



Prepare



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App Intake Process

Request



Prepare



Approve

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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

IMPORTANT!!!

- 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**

App Intake Process

Business Requirements Document (BRD)

- **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

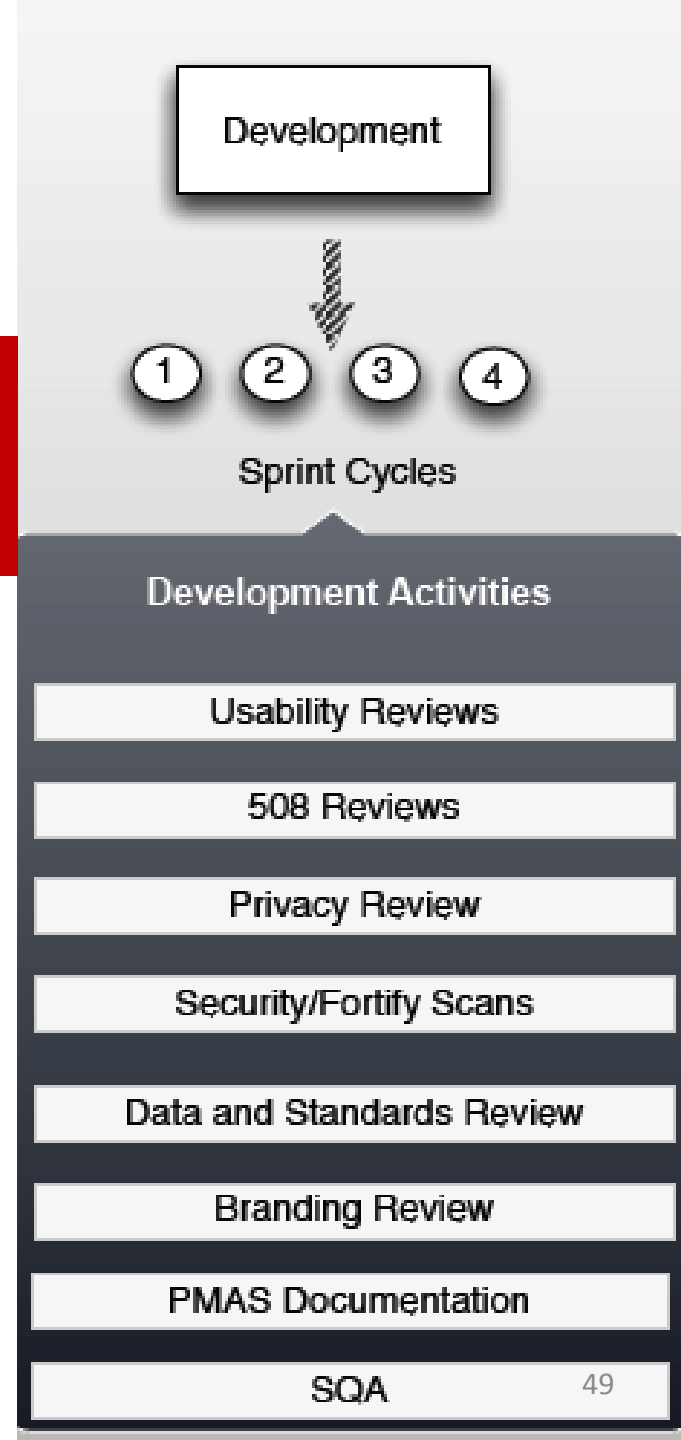


- **Agile Methodology**
- **Sprint meeting every 1-3 weeks**
- **Review work completed and planned**
- **Business Owner attendance**

Mobile Development

IMPORTANT!!!

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



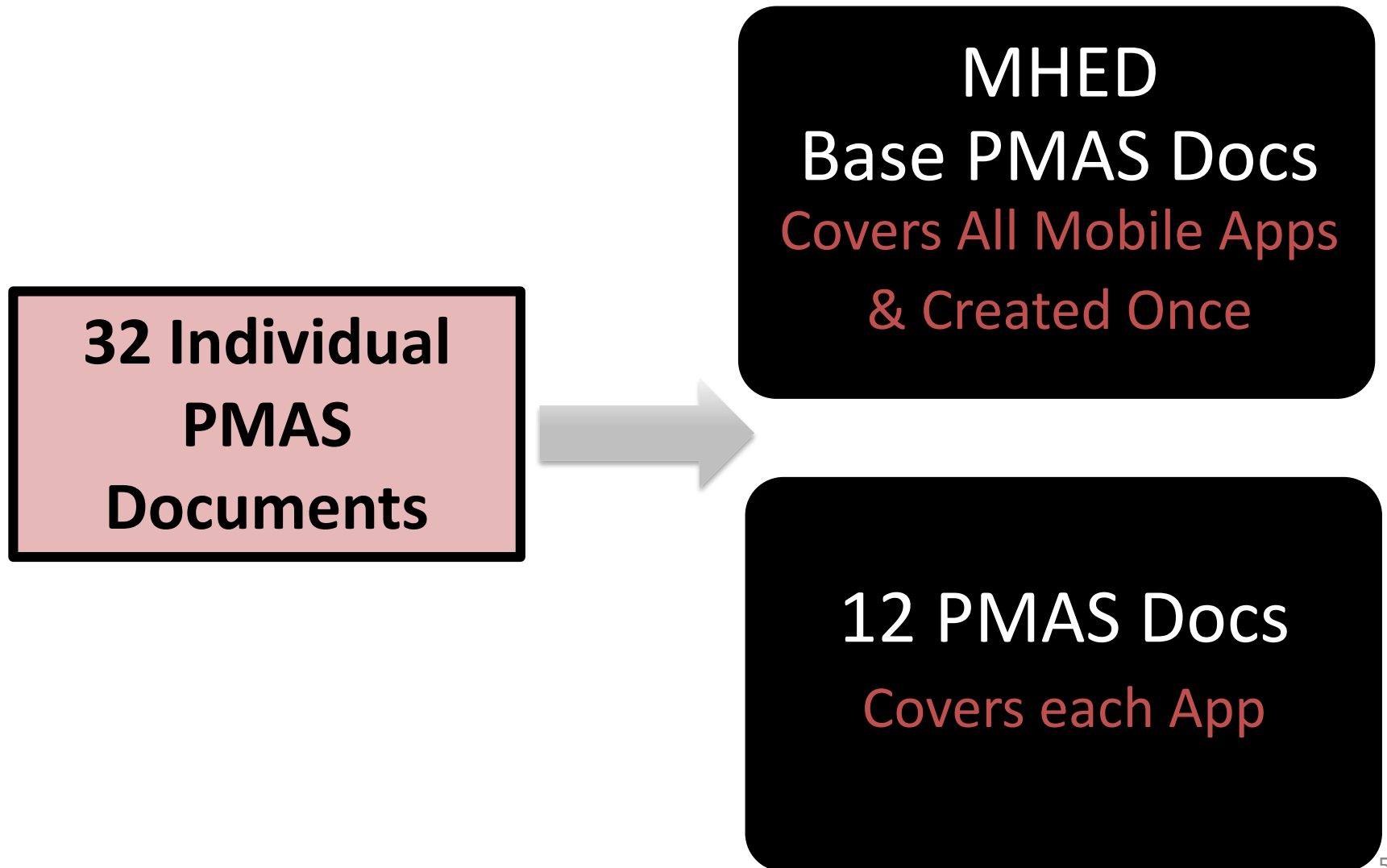


Mobile App Compliance



Mobile Application Classification	1 - Very Low	2 - Low	3 - Medium	4 - High
Certifying Bodies	Does not utilize VA resource	Read only access to VA resources	Write access to VA resources	Read and/or write access to VA sensitive resources
Software Quality Assurance	Assessment	Assessment	Testing	Testing
Patient Safety Assessment (OIA)	REQUIRED	REQUIRED	REQUIRED	REQUIRED
508 Accessibility (OIT)	REQUIRED	REQUIRED	REQUIRED	REQUIRED
Code Review	REQUIRED	REQUIRED	REQUIRED	REQUIRED
Usability Testing (OIA)	REQUIRED	REQUIRED	REQUIRED	REQUIRED
User Interface (OIA)	REQUIRED	REQUIRED	REQUIRED	REQUIRED
VA Branding (OPIA)	REQUIRED	REQUIRED	REQUIRED	REQUIRED
Sustainment Plan	REQUIRED	REQUIRED	REQUIRED	REQUIRED
System Performance Impact Assessment (OIT)		REQUIRED	REQUIRED	REQUIRED
UAT/V	REQUIRED	REQUIRED	REQUIRED	REQUIRED
Data and Terminology Standards Compliance			REQUIRED	REQUIRED
Privacy and Application Data Security (OIA)				REQUIRED
Enterprise Security				REQUIRED

Mobile Project Management Accountability System (PMAS)



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.



CODE

Dev Tools

Browse, review, test, and manage your code with our Dev Tools.

COLLABORATE



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

[illegible]

A person wearing a dark suit and white shirt is shown from the chest down. They are holding a silver pen in their right hand and a black smartphone in their left hand. They are positioned over a document that contains a table with multiple columns and rows of text. The background is a soft, out-of-focus grey.

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

