

VA Mobile Discussion Series



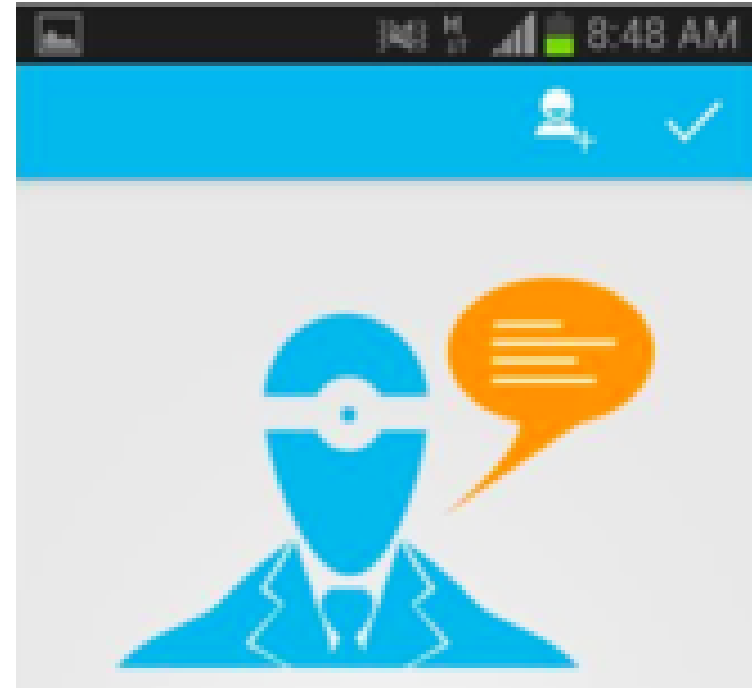
VA Mobile
mobilehealth.va.gov

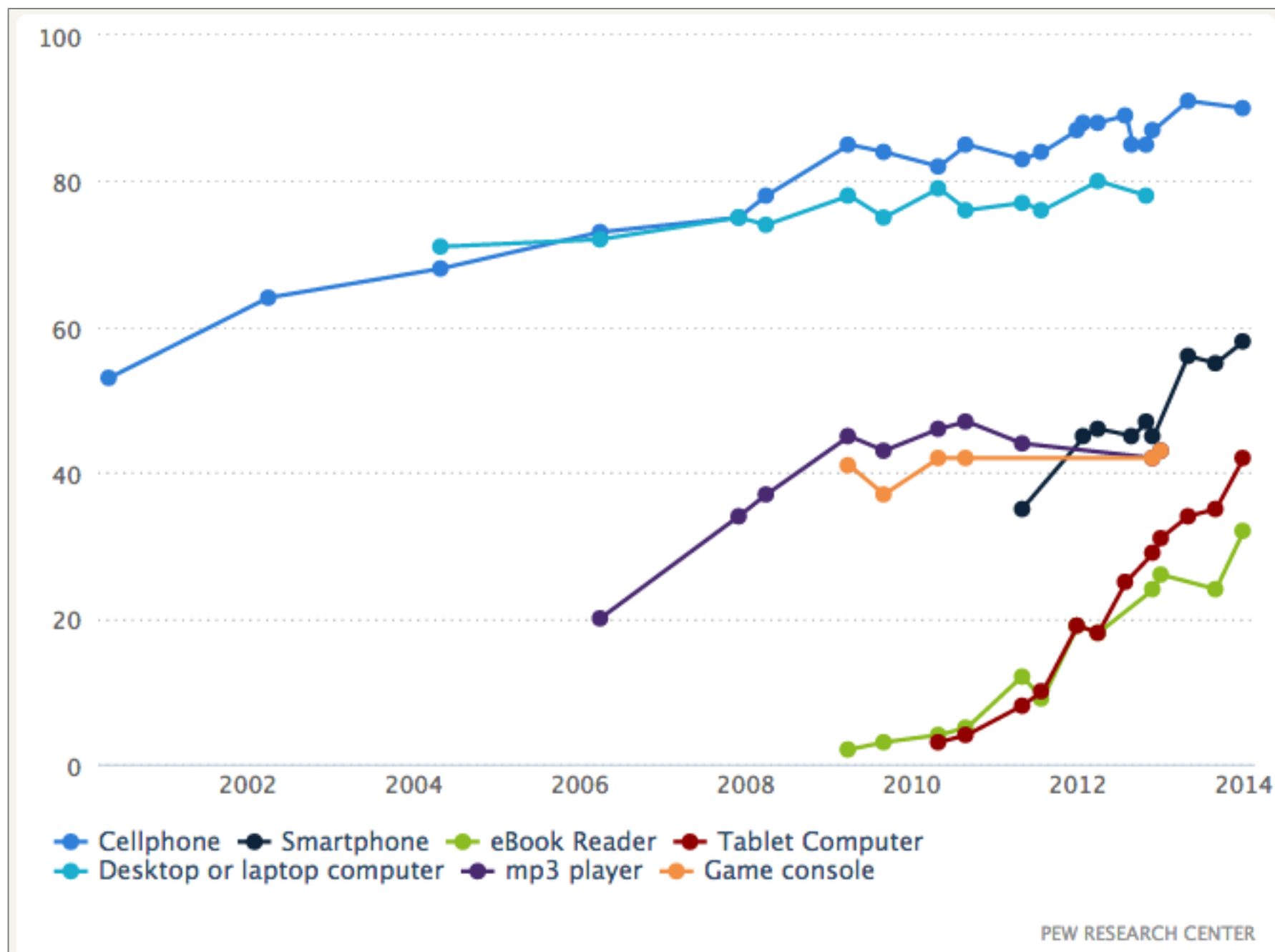
Susan Woods, MD, MPH
Shawn Hardenbrook, Director W/M Solutions
Connected Health Office
Veterans Health Administration

October 17, 2014

Annie: VA's Texting Platform for Veterans

- Trends
- Texting Goals
- Background
- Meet Annie



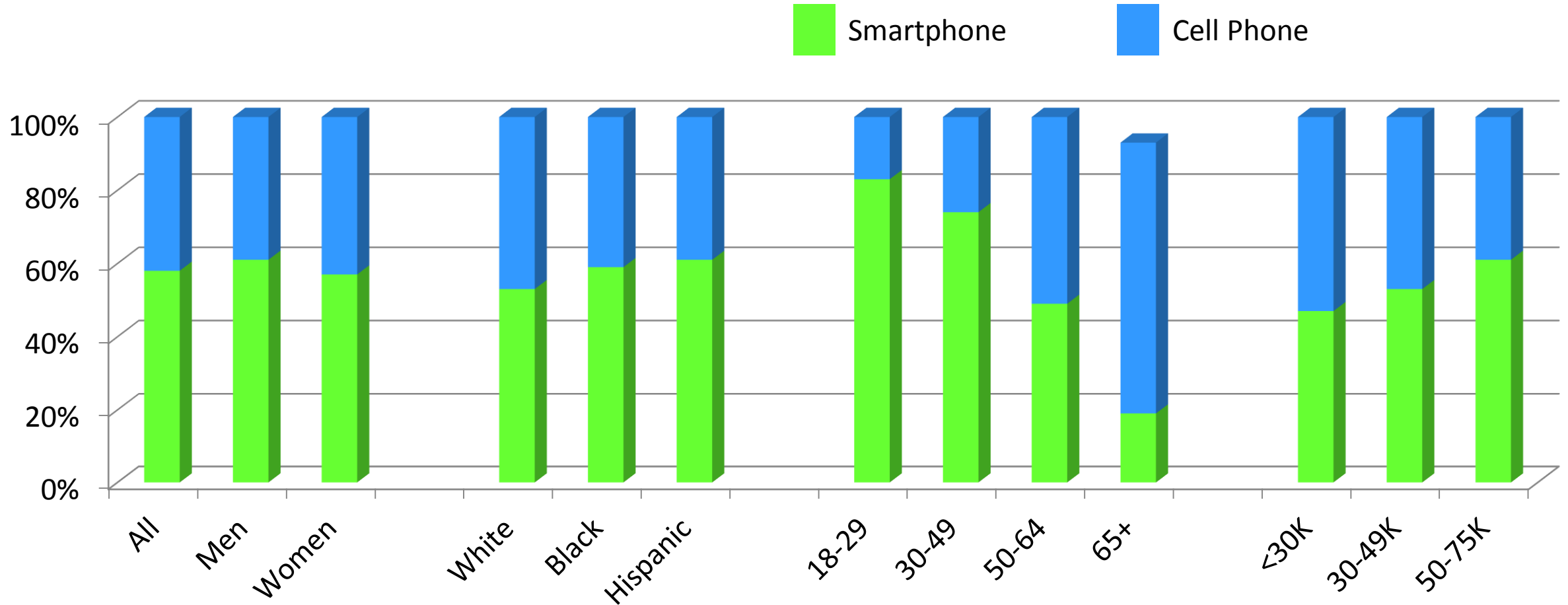


Cell Phone

Smart Phone

Tablet

U.S. Adults and Cell Phone Use (January 2014)



Pew Research Internet Project

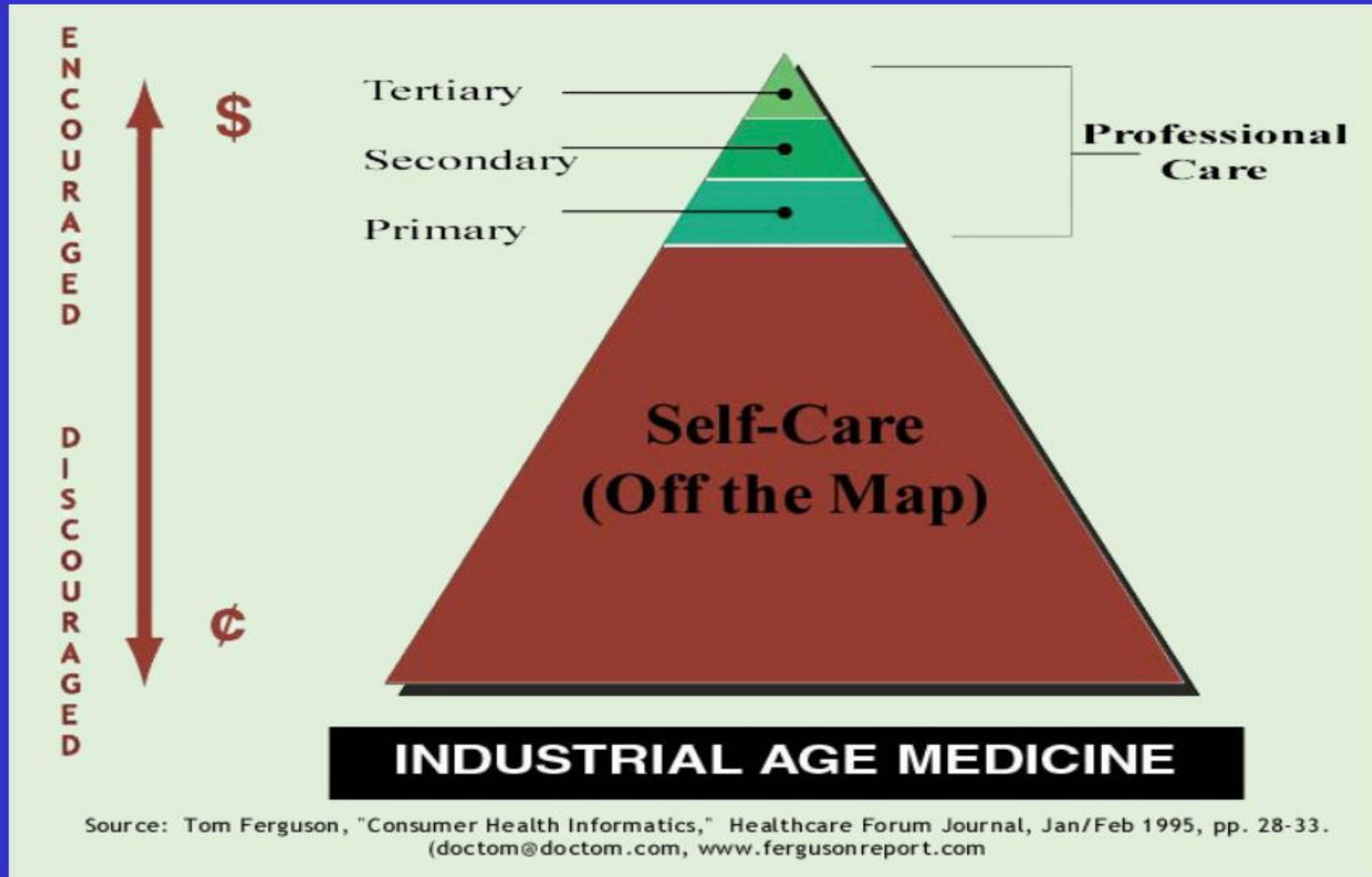
<http://www.pewinternet.org/fact-sheets/mobile-technology-fact-sheet>

VA Mobile

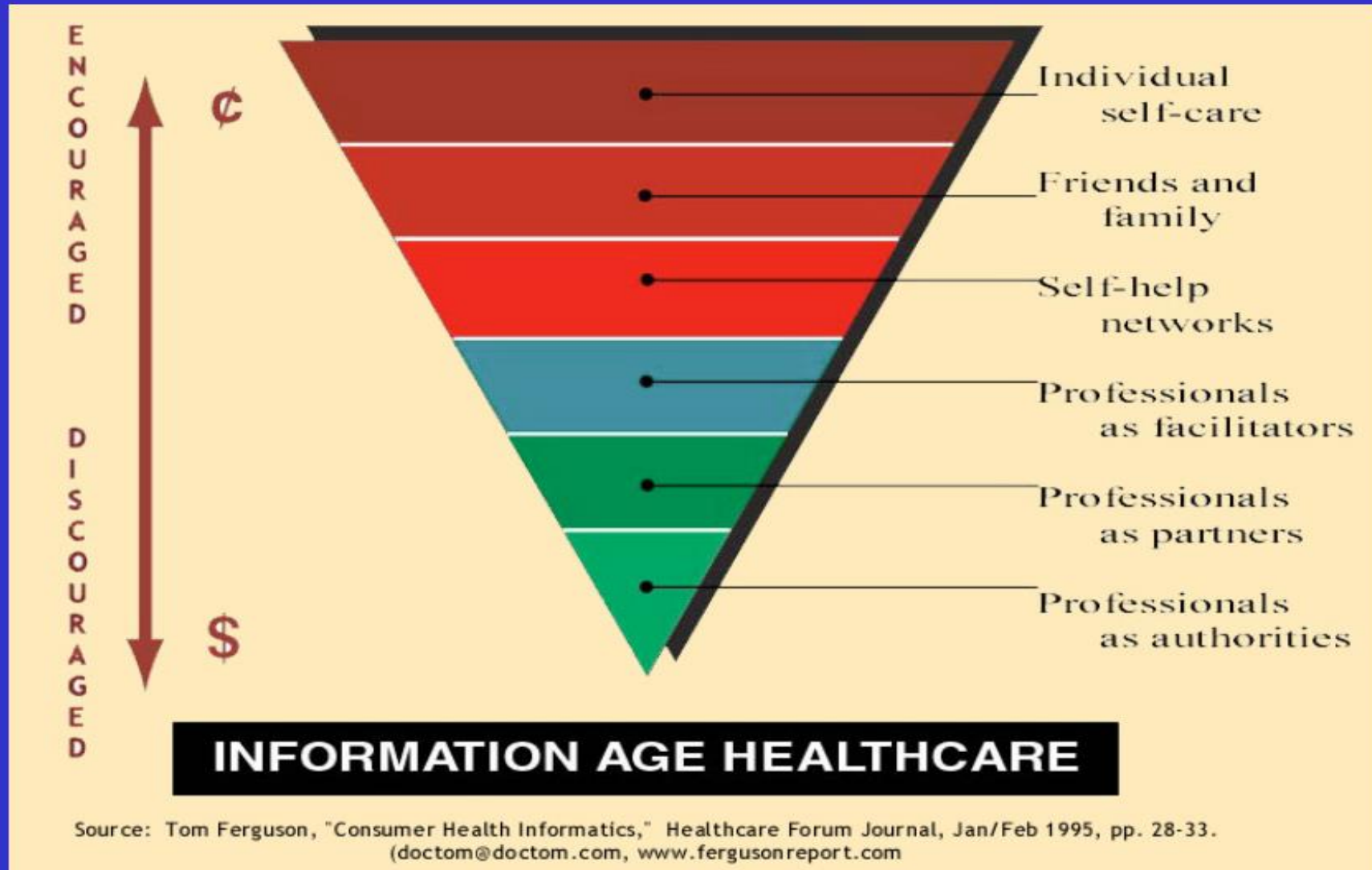
Mobile Culture

- Constantly present even sleeping
- Users love convenience
- Search often, leads to action
- Check phones often
- Users don't like 24/7 availability, costs
- Frequent use of multiple devices
- Don't think it's disruptive

Traditional Healthcare Model



Information Age Healthcare Model

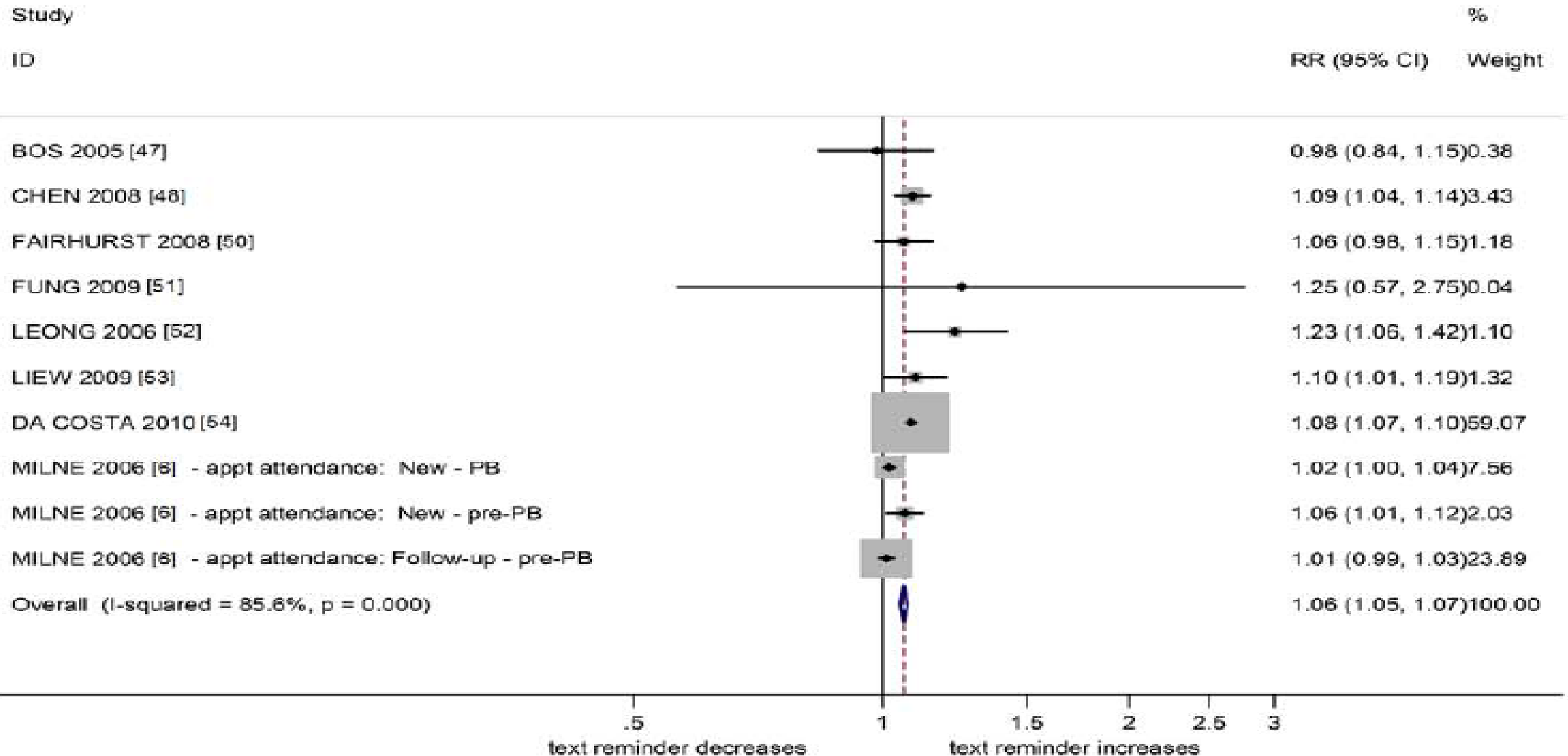


Behavioral Opportunity

Constructs

- Pervasive (always on)
- Cue to action (reminders, texts)
- Self-efficacy (exploration, goal setting)
- Social support (networks)
- Self monitoring (tracking)
- Feedback (algorithms)

Appointment attendance, SMS vs. none



Mobile phone messaging for facilitating self-management of long-term illnesses (Review)

de Jongh T, Gurol-Urganci I, Vodopivec-Jamsek V, Car J, Atun R



Across the Pond VA – NHS Partnership

Making Connections

A transatlantic exchange to support
the adoption of digital health between
the US VHA and England's NHS

John Cruickshank
Joanne Harding
Jon Paxman
Charlotte Morris

With forewords by
Dr Robert Petzel
Dr Adam Darkins
Miles Ayling
Stephen Johnson

March 2013



VAMobile

NHS Implemented Flo – Simple Telehealth

Named after Florence Nightingale

“The service has altered my life. I feel supported...It’s great.”

“I was astonished at how Flo changed my medication habits.”

“Flo found I had a heart problem and my [GP] saw me quickly and now checks on my progress.”

“I now feel that I am not on my own.”

Evaluation of 'Flo'

Patients find Flo

- Flexible
- Easy to use
- Can build confidence
- Can provide comfort and companionship
- Acceptable for reporting blood pressure vs. other means

Cottrell E, McMillan K, Chambers R. A cross-sectional survey and service evaluation of simple telehealth in primary care: what do patients think? [BMJ April 2012](#)

Questions



VA's Texting Program

VA system named:



Annie G. Fox

August 4, 1893 – January 20, 1987

First woman to receive Purple Heart

Chief Nurse in Army Nurse Corps at Pearl Harbor

Annie – VA Text Messaging Program

Protocol Messaging: Automated messages for specific clinical issues and conditions

Broadcast Messaging: Tailored messages to people/groups (age, facility) - “flu shot ready”


Provider to Provider : Staff messaging



Drivers for SMS Texting

- ✓ 24/7, everywhere phones
- ✓ Population reach (basic cell phones)
- ✓ Care efficiency (visit attendance)
- ✓ Empower patient self-efficacy
- ✓ Connecting with Veterans
- ✓ Low cost

Clinicians “Prescribe” Clinical Protocols



Welcome, Three ▾[About](#)

Patient Search

Search for Patient

Go

patient03, zztest

DOB: 10/05/1900

Age: 113

Mobile Phone: 1-571-555-0003

Gender: Male

SSN: 999-99-9903

Patient Search

Templates

Protocols

Message History

Reports

Protocols


Active Protocol(s)

Assign New Protocol

Protocol:	Blood Pressure Protocol1
Assigned On:	01/20/2014
Last Edited On:	01/27/2014
Edited By:	One Vehu
Last Comment:	Enable protocol
Status:	<input checked="" type="radio"/> Enable <input type="radio"/> Disable


Edit/View

Audit Trail



“Hi, Annie here. It is 10am and I haven’t seen your blood pressure reading yet. Can you send?”

Assigning a Protocol



[Welcome, Ralph ▾](#)[About](#)

Patient Search

Search for Patient

Go

patient01, zztest

DOB: 05/05/1900

Age: 114

Mobile Phone: 1-571-555-0001

Gender: Male

SSN: 999-99-9901


Patient Search

Protocols

Message History

Reports

Protocols


 Account Settings

Protocols Not Found

Assign New Protocol

This patient does not have any assigned protocols. Select "Assign New Protocol" to assign a protocol.

Protocol Assignment

Welcome, Three ▾About

Protocols

ProtocolsReports

Protocols

Status

All ▾

Search by Focus Area

Go

Add Protocol

Blood Pressure Protocol1

Created By: One Vehu
Created On: 01/05/2014

Description	This is blood pressure protocol with once schedule
Focus Area	Blood
Last Comment	Enable protocol
Status	<input checked="" type="radio"/> Enable <input type="radio"/> Disable

Edit/View

Audit Trail

Protocol Description

Patient Search

Protocols

Message History

Reports

Protocols

Search Focus Area

Go

Protocol: Diabetes Management Protocol

Description: To support the veteran who is living with diabetes and monitoring blood glucose values on a regular schedule. To provide an education overview of hypoglycemia prevention and management of sick day guidelines.

Template(s):
Vitals: Glucose Before Eating - Every 6 hour (At 7:30 AM)
Vitals: Glucose After Eating - Every 6 hour (At 9:30 AM)
Motivational/Educational: Glucose Management Motivational Messages - Sun., Mon., Tue., Wed., Thu., Fri., Sat. (At 8:00 AM)

Created On: 08/01/2014

Focus Area: Diabetes, Hypoglycemia, Blood Sugar

Status: Active

Assign

Protocol: Blood Sugar before meals - schedule

Template(s)

Select a template(s) to customize. * indicates a required field.

Save Cancel

Vitals: Glucose Before Eating

Every 6 hour
(At 7:30 AM)

▼

Schedule Settings

Schedule *

Custom ▼

Service Message Start Time *

7 ▼ 30 ▼ AM ▼

Time Between Each Cycle *

6 Hour ▼

Accept unscheduled reading

☐ Yes ☒ No

Template Start Date

MM/DD/YYYY

Template End Date

MM/DD/YYYY

Protocol: Blood Sugar before meals – alert to patient

— Readings/Alerts Settings

* indicates a required field

Measurement *

Glucose Before Eating

Keywords *

BGB, BEFORE

Reading Parameter One: Glucose (mg/dl)

Note: Messages defined in Reading Parameter One will be sent to the Veteran.

Lowest Valid Reading

30

Highest Valid Reading

300

Message for Valid Reading

If in the past month you have had any falls or near falls due to low blood sugar? Yes-No? You need to let your PACT team know.

34 characters remaining

Set Critical Low & High Level Alert

Critical Low Level Alert

50

Critical High Level Alert

250

Message for Critical Low Level Alert

To treat a low blood sugar below 50 take 30 Grams (GM) of Carbohydrate Examples: 1 tube of glucose gel or 8 glucose tablets.

36 characters remaining

VAMobile

Protocol: Blood Sugar before meals – education

Motivational/Educational: Glucose Management Motivational Messages

Sun., Mon., Tue., Wed., Thu., Fri., Sat.
(At 8:00 AM)



— Schedule Settings

Template Description *

Glucose Management Motivational Messages

Schedule *

Specified Days



Service Message Start Time *

8



00



AM



Select Days that Apply *

☒ Mon. ☒ Tues. ☒ Wed. ☒ Thurs. ☒ Fri. ☒ Sat. ☒ Sun.

Template Start Date

MM/DD/YYYY

Template End Date

MM/DD/YYYY

Protocol: Blood Sugar before meals – message content

— Message Settings

* indicates a required field

Motivational/Education Message

Always wear an identification bracelet or necklace (ask your diabetes educator)

81 characters remaining

Always carry a quick source of sugar with you

115 characters remaining

Check your blood sugar before driving and never drive when your blood sugar is low

78 characters remaining

Call your PACT Team or Telephone Advice Nurse if you have repeated low blood sugars

77 characters remaining

If you faint from low blood sugar and are unable to swallow, please tell family, friends or co-workers to call 911

46 characters remaining

Physical activity is a very good way of working off stress or anxiety but it can also lower blood sugar always carry a glucose source with you. Do you always ca

0 characters remaining

Questions



About

Annie - v1.0.0

Use the Annie app to:

Clinical Administrators

- Create protocols and protocol templates

Clinical Staff

- Assign/edit protocols, view messages history and reports for patients

Veteran

- View messages history and reports

[User Guide \[PDF xx\]](#)

OK

Patient Search

Search for Patient

Go

[Patient Search](#)

[Protocols](#)

[Message History](#)

[Reports](#)

Patient Search

To view a patient's information, please search for a patient.

Search for Patient

Go

[Patient Search](#)[Protocols](#)[Message History](#)[Reports](#)

Patient Search

To view a patient's information, please search for a patient.

[Go](#)

MobileAppsVeteran, One

DOB: 05/05/1900

Age: 114

Mobile Phone: 1-571-555-0001

Gender: Male

SSN: 999-99-9901



MobileAppsVeteran, Two

DOB: 10/05/1900

Age: 113

Mobile Phone: 1-703-333-4444

Gender: Male

SSN: 999-99-9902



MobileAppsVeteran, Three

DOB: 10/05/1900

Age: 113

Gender: Male

SSN: 999-99-9903





Account

* indicates a required field

First Name *

One

Middle Name

Last Name *

MobileAppsVeteran

SSN *

555-55-5555

DOB *

05/05/1955

Gender *

Female

Mobile Phone *

222-222-2222

(This will be used to receive messages from Annie.)

Time Zone *

Eastern (GMT-05:00)



Home Phone

XXX-XXX-XXXX

Email Address

Preferences *

How Patient will Receive Messages from Annie

☒ Has Basic Cell Phone

☐ Has Smart Phone



MobileAppsVeteran, One

Messages

Reports

Schedule

Account

About

Log Out

Schedule

View your schedule below and select to send a reading. If you forget I will remind you.

Blood Pressure

Due at:

8:30 AM

Once

Starting: 08/19/2014





MobileAppsVeteran, One

Messages

Reports

Schedule

Account

About

Log Out

Hello, just a quick reminder that your readings are due. Thanks.

17:34:40

BP 170 over 68

18:24:38

Your reading is fine

18:24:38

Enter Message

Send

SSN: 999-99-9901

Patient Search

Protocols

Message History

Reports

Message History

Protocols

All

Status

All

From

11/16/2013

To

09/06/2014

Reset

Calendar for September 2014:

#	Sun	Mon	Tue	Wed	Thu	Fri	Sat
35	31	01	02	03	04	05	06
36	07	08	09	10	11	12	13
37	14	15	16	17	18	19	20
38	21	22	23	24	25	26	27
39	28	29	30	01	02	03	04

Buttons: Today, Weeks, Clear, Close

Protocol	Date▼	Time	Alert	Message	
Blood Pressure Protocol3	09/06/2014	13:00:00	-	Hello, just a quick reminder that your readings are due. Thanks.	Sent
Blood	09/06/2014	12:55:22	-	Hello, just a quick reminder that your readings	Sent

[Patient Search](#)[Protocols](#)[Message History](#)[Reports](#)

Message History

Protocols

All

Status

All

From

11/16/2013

To

09/06/2014

[Reset](#)

1

2

Protocol	Date▼	Time	Alert	Message	Status
Blood Pressure Protocol3	09/06/2014	13:00:00	–	Hello, just a quick reminder that your readings are due. Thanks.	Sent
Blood Pressure Protocol3	09/06/2014	12:55:22	–	Hello, just a quick reminder that your readings are due. Thanks.	Sent
	09/05/2014	06:59:28	–	test	Sent
Blood Sugar After Eating beth	09/03/2014	13:46:44	–	This is the last day for you to send in responses for the Glucose After Eating. The protocol will no longer be active AFTER Sep 3, 2014.	Sent
Blood Sugar After Eating beth	09/03/2014	13:46:44	–	Please take your Blood sugar after you have eaten and record	Sent
Blood Pressure Protocol3	09/03/2014	09:54:04	–	Hello, just a quick reminder that your readings are due. Thanks.	Sent
Test Protocol	01/08/2014	18:36:14	–	Thank you. You are not subscribed to any protocols at this time.	Sent



MobileAppsVeteran, One

Messages

Reports

Schedule

Account

About

Log Out

Reports

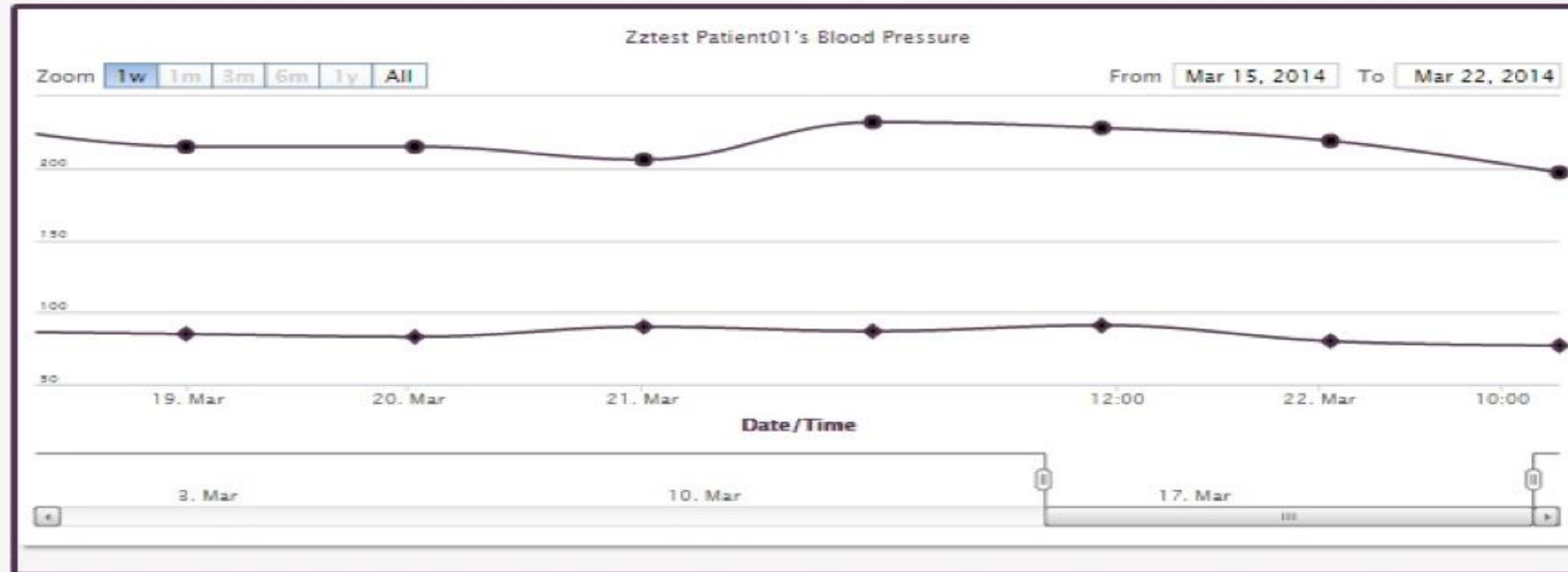
Blood Pressure



Reports

Readings

Blood Pressure ▼



Date/Time Blood Pressure - Systolic/Diastolic mmHg

03/19/2014 10:00:00

130/85

03/20/2014 15:00:00

132/83

03/21/2014 08:12:00

116/90

03/21/2014 09:00:00

145/87

03/21/2014 10:41:00

137/91

Protocols

Add Protocol

Please complete information about the new protocol. * indicates as a required field.

Protocol Name *

Description *

Focus Area *

Tags ie: blood pressure, glucose before eating

Next

Add Protocol

Add Template(s)

Select from either vitals, reminder, motivational/educational template, or create a custom template.

Vitals



Motivational/Educational



Custom



Select multiple templates to create a custom protocol.

☒ Vitals

Quantity

3



Motivational/Educational

Quantity

2

Next

patient01, zztest

DOB: 05/05/1900
Age: 114
Mobile Phone: 1-571-555-0001

Gender: Male
SSN: 999-99-9901

Patient Search

Protocols

Message History

Reports

Blood Pressure Protocol3: Audit Trail

From

09/05/2014

To

09/05/2014

Edited On	Edited By	Edited Time	Audit Trail/Comment(s)
09/03/2014	Neil Evans	10:53 AM	Field: Status set to Active. Field: Start Date set to 2014-09-03. Field: End Date set to 2015-07-03.

Annie Next Steps

- Completing development
- Finalizing training materials
- First phase testing planning
- Initially - early 2015

Questions



Susan Woods, MD, MPH - @SueWoods
Shawn Hardenbrook, Director W/M Solutions
Connected Health Office
Veterans Health Administration

VA Mobile

Support VA Mobile Health!

**Vote for Connected Health Co-Director Dr. Neil Evans
for FedScoop50's Most Inspiring Up & Comer**

<http://fedscoop.com/events/fedscoop50/#up-and-comer>

**What future topics would you like to discuss?
Let us know by answering our survey below!**

<https://www.surveymonkey.com/r/YQJ5T5G>

**A recording of this session will be available
on the VA Mobile Health website**

<http://mobilehealth.va.gov>

We hope you join us for our next presentation in November