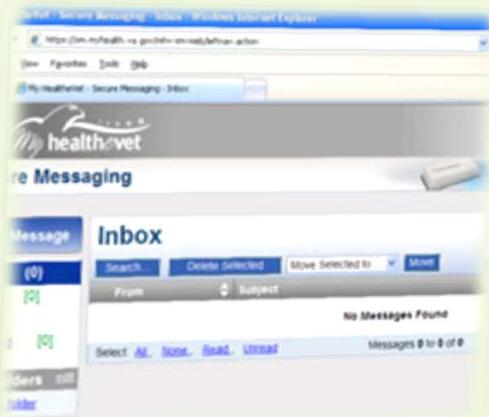


Evaluating user experiences of the Secure Messaging tool on the Veterans Affairs' patient portal system



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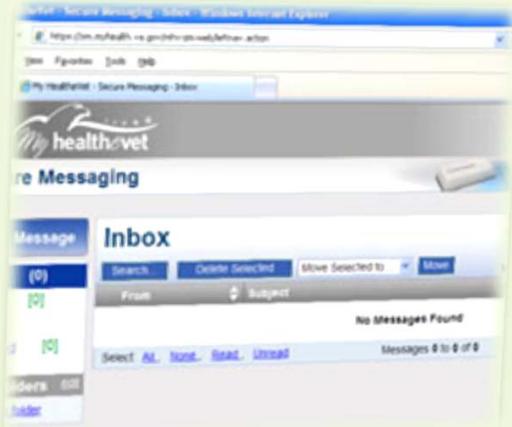
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Overview



My Health, My Care: 24/7 ^{Online} Access to VA



- Background
- Project Aims
- Project Methods
- Participants
- Data Findings
- Education
- Discussion

Poll Question #1

Who is joining us for today's session, by profession?

- A. Clinician
- B. MHV employee
- C. Administrator
- D. Researcher
- E. Other



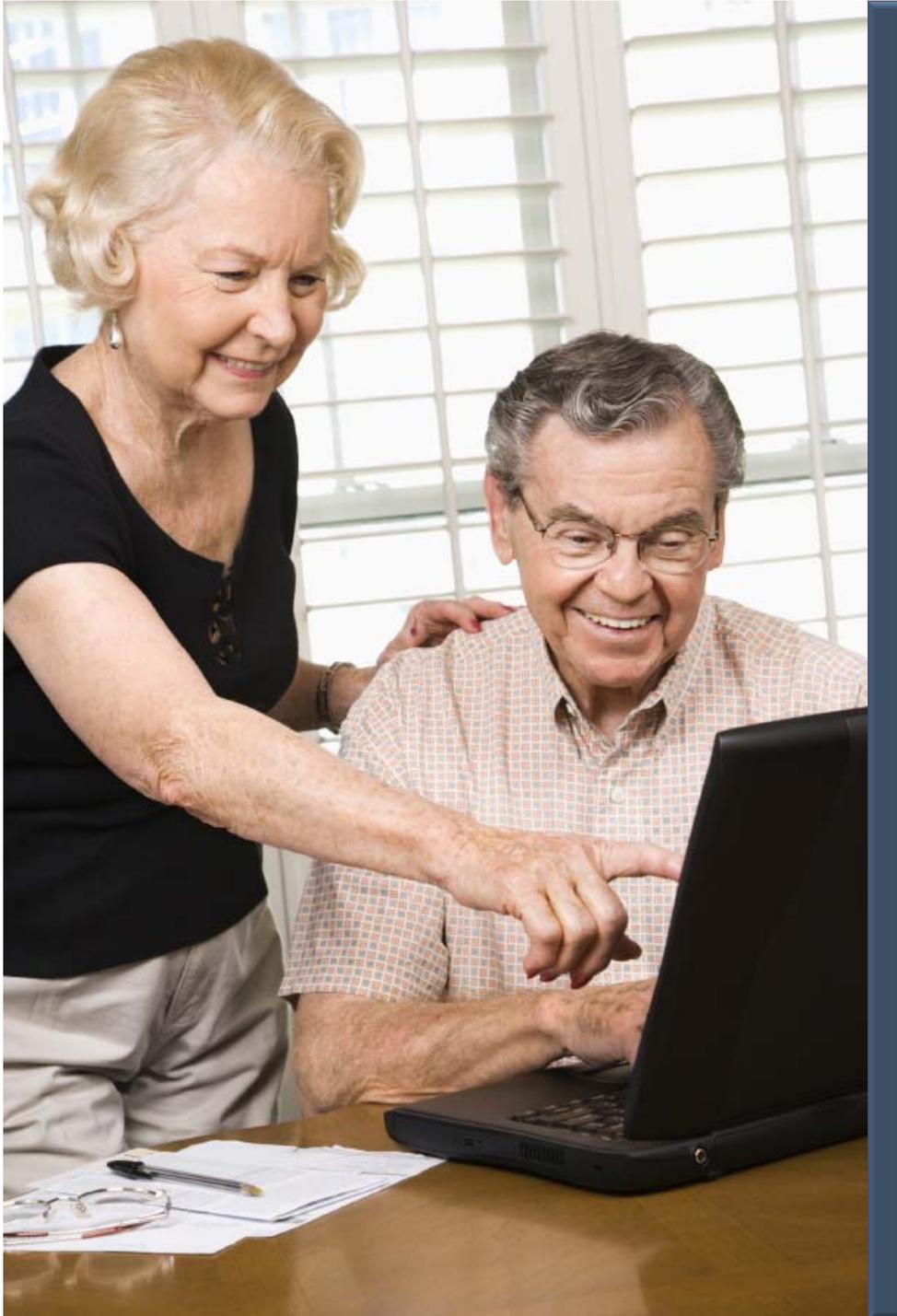
Background

- Communication mechanisms between Veterans and their providers is vital to allowing sharing of health information.
- When implementing technology such as Secure Messaging it is important to understand user's needs and preferences to support adoption and sustained use.

Haun J, Lind J, Shimada SL, Simon SR, Martin TL, Gosline R, Antinori N, Stewart M. Evaluating user experiences of the Secure Messaging tool on the VA patient portal system, *Journal of Medical Internet Research*, 2014;16:3:e75.



Haun J, Lind JD, Shimada SL, Simon SR. Secure Messaging as a tool to facilitate Veteran-provider communication, *Annals of Anthropological Practice*, 2013;37:2:57-74.

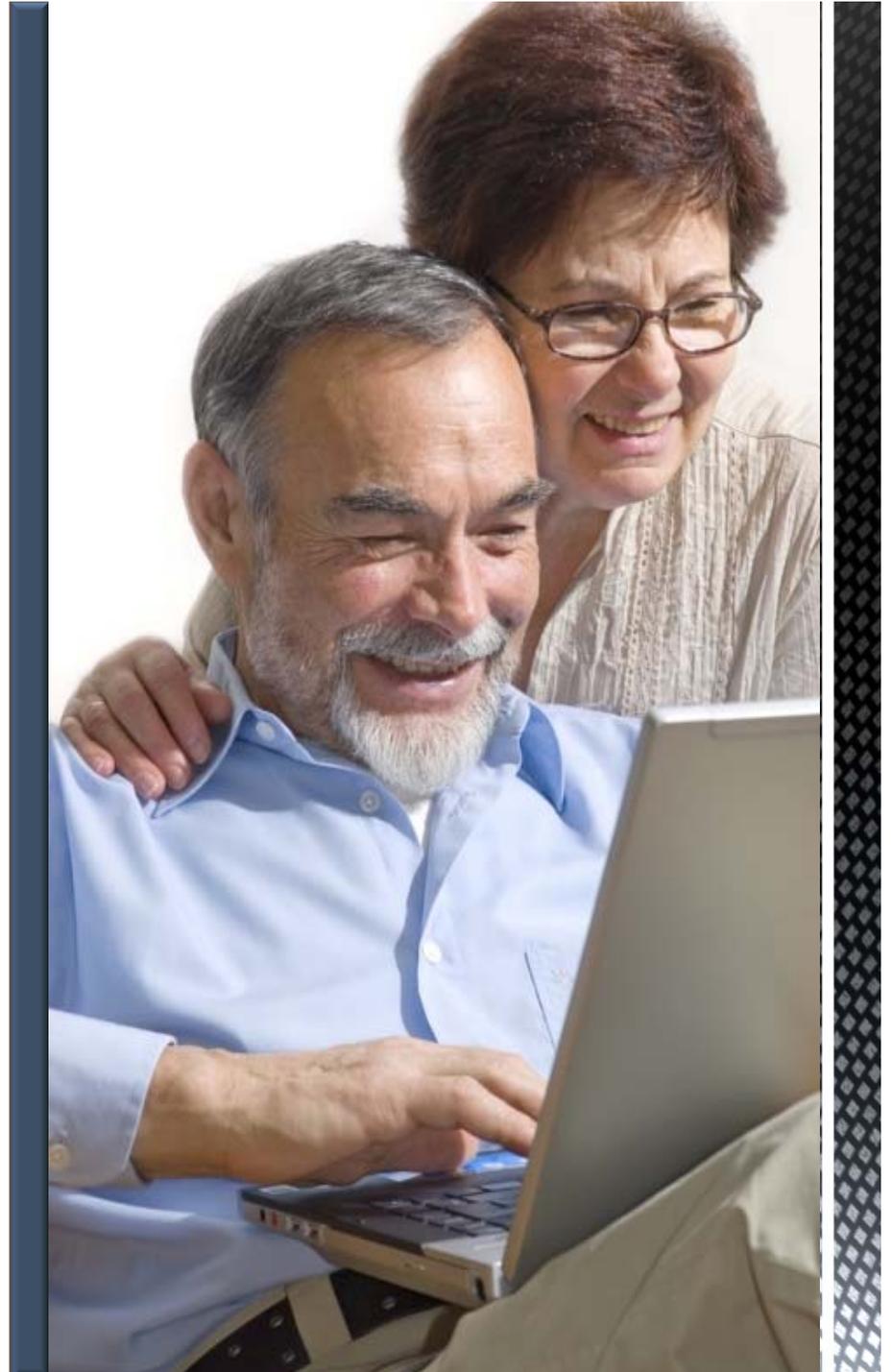


***Veterans Experiences
using the Secure
Messaging tool on
My HealtheVet***

**Health Services Research &
Development
eHealth Quality Enhancement
Research Initiative -QUERI
Rapid Response Project 11-397**

Describe Veteran's experiences using SM...

- *Beliefs, attitudes & perceptions*
- *User patterns & trends*
- *Barriers & facilitators*
- *Strategies to overcome barriers*





Study Overview

- A. Methods
- B. Sample Characteristics

PHASE 1

- C. Interviews
- D. Follow-Up Interviews
- E. Usability Testing
- F. Secondary Secure Message Content Review

PHASE 2

- G. Quantitative Survey Findings

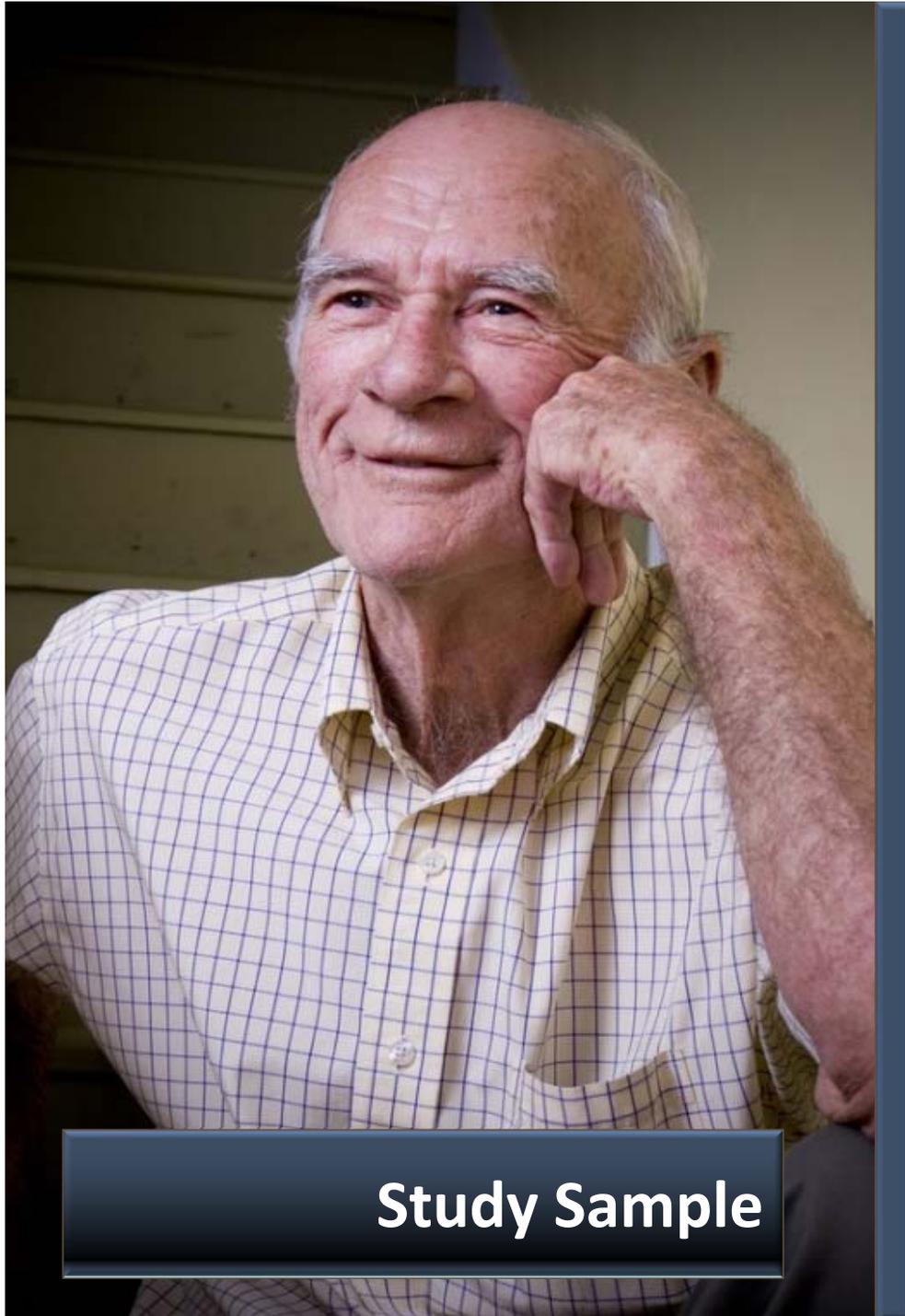
Poll Question #2

Have you used Secure Messaging to communicate with Veteran patients?

- A. I use it all the time
- B. I use it sometimes
- C. I used to, but stopped using it
- D. I have never used it
- E. I will never use it
- F. Not applicable

PHASE 1: Study Methods

-  In-person Interviews
-  Follow-up Telephone Interview
-  User testing
-  3-month Secondary SM Data Collection



33 Participants

Older white males

\geq \$35,100 Annually



levels of education



socio-economic status



Sample Characteristics

↑ health literacy and eHealth competency skills

Internet > more than once a week

SM use - past six months or longer

at least once a month (n=12, 36.4%)

or a few times a year (n=16, 48.5%)

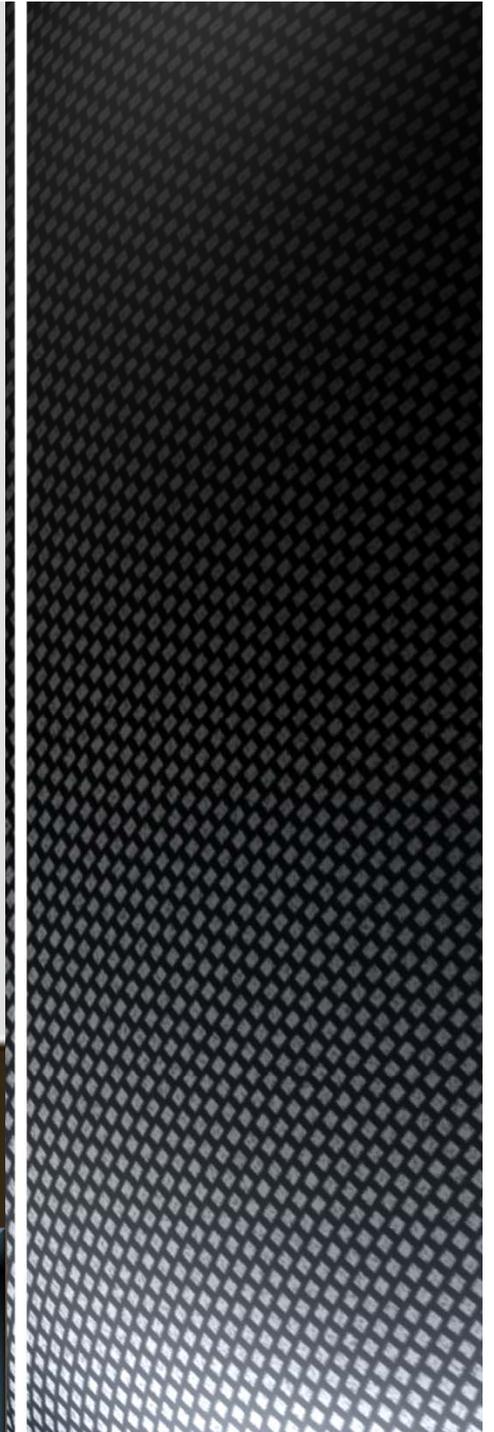
Satisfied users (n=27, 81.8%)

Poll Question #3

Do you believe virtual care, such as Secure Messaging is the future of healthcare delivery?

- A. Yes
- B. Maybe
- C. Probably not
- D. No





Interview Findings

Reasons for SM Use



Secure Messaging

- medication refills
- questions on meds
- cancel or schedule appointments
- general inquiries
- requests for information

Veteran's beliefs, attitudes & perceptions

Satisfaction

Efficient
communication
tool

Excellent
alternative

Response
within 48 hours

Beliefs, Attitudes and Perceptions

No problems understanding responses

Comfortable sharing PHI

Specialty Clinic Access

- *40% reported access to 1 specialty clinic*
- *Don't know how they got access*
- *Veterans wanted access*

SM Benefits

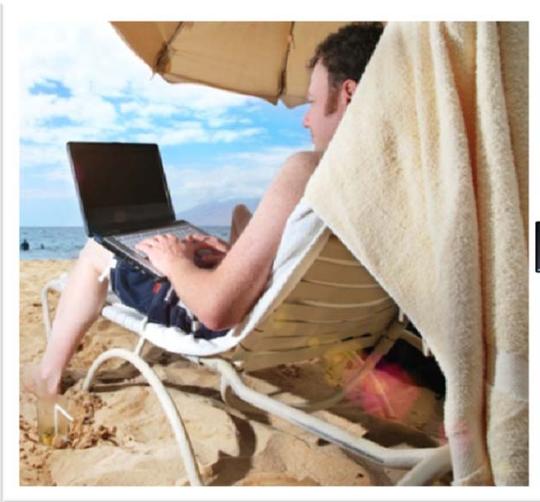
Draft option

*24 hour
access*

*NO travel
NO phone*

*Manage
Appointments*

Rx refills



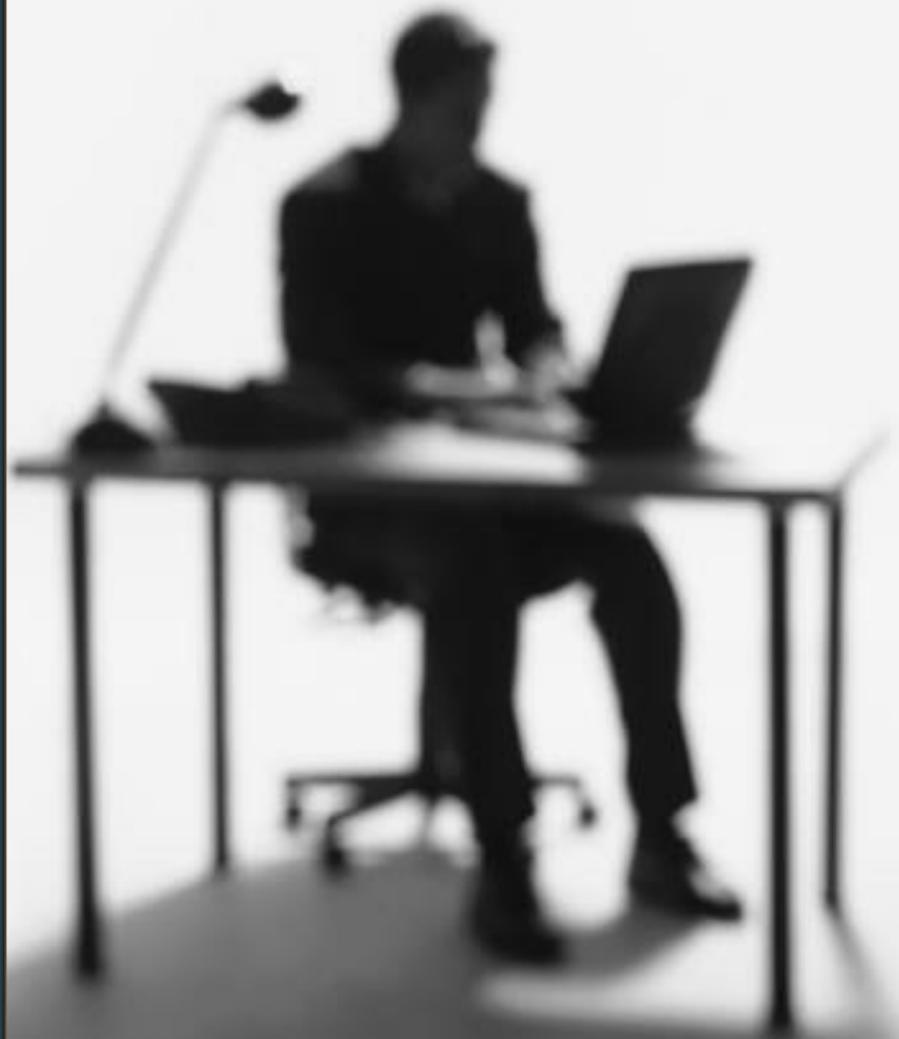
Experiencing
benefits
motivate use

Understanding
purpose

Getting a
response

Easy to use
SM features

Facilitators for Using SM



Barriers to Using SM

Confusion
between MHV
and SM

Getting access
not clear

Getting
started not
clear

Struggle to
navigate MHV
site

Don't know
purpose for
SM use

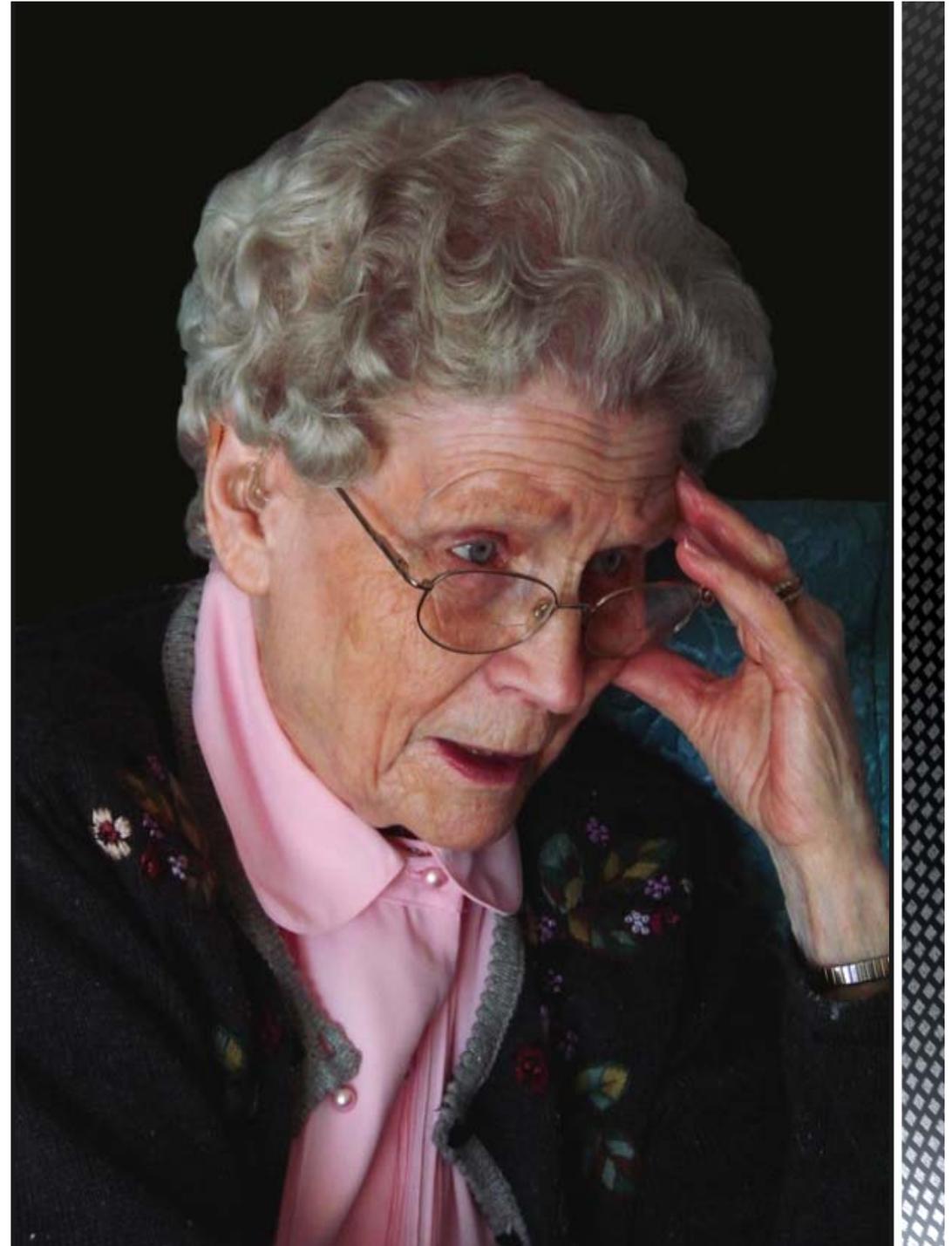
System
crashes and
back-up

Unmet Expectations

SM recipients
not “doctor”

Personal
communication
not appropriate

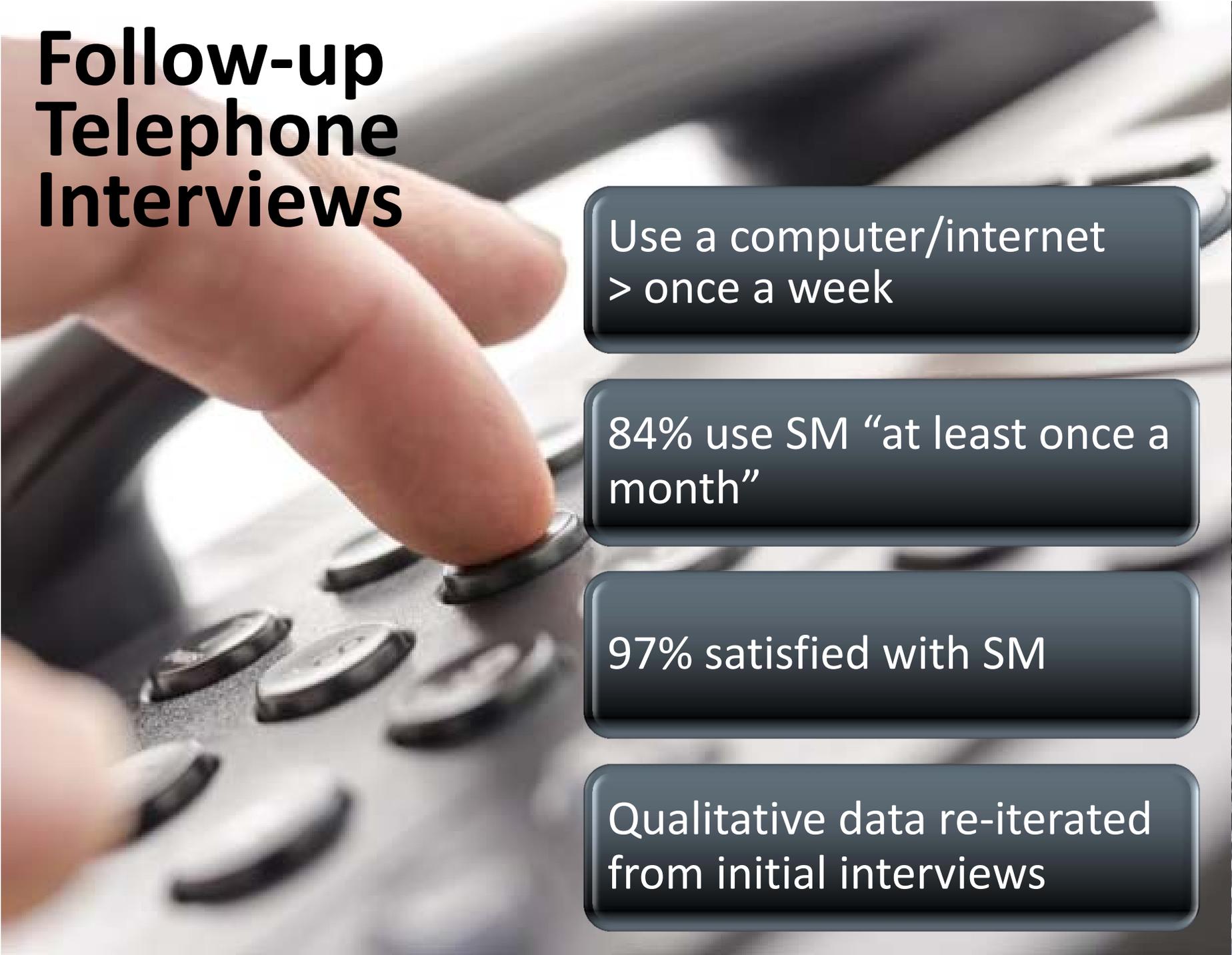
Staff resistance



Veterans with lower literacy were more likely to have concerns with sharing their private health information through secure messaging.



Follow-up Telephone Interviews

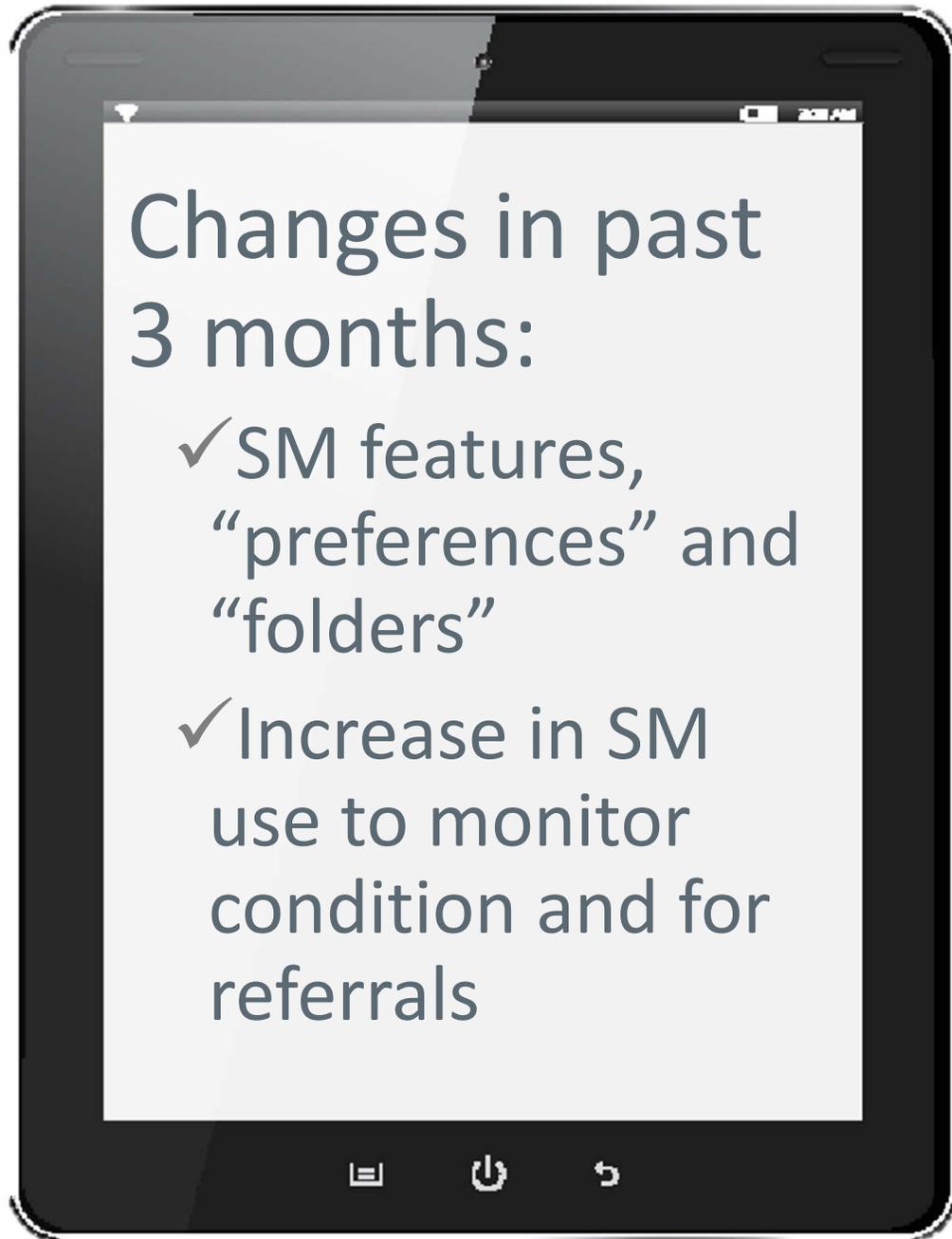


Use a computer/internet
> once a week

84% use SM “at least once a month”

97% satisfied with SM

Qualitative data re-iterated
from initial interviews



Follow-up Telephone Interviews





User-testing Results

SM User-testing

Most participants were able to complete most tasks.



Barriers:

MHV site navigation

Setting user preferences

Triaging messages

Formulating subject

headers

Usability Testing Findings

TASK	Able to Complete Task n (%)	Completed Task with Difficulty n (%)	Did Not Complete Task n (%)
Navigate to site	21 (63.6)	10 (31.3)	2 (6.3)
Log-in	30 (90.9)	2 (6.3)	1 (3.1)
Set User Preferences	23 (69.7)	8 (25)	2 (6.3)
Check Inbox	33 (100.0)	0 (0.0)	0 (0.0)
Use Links	33 (100.0)	0 (0.0)	0 (0.0)
Open Secure Message	33 (100.0)	0 (0.0)	0 (0.0)
Open Attachment	33 (100.0)	0 (0.0)	0 (0.0)
Send Secure Message	30 (93.8)	3 (9.0)	0 (0.0)
Choose Recipients	32 (97.0)	0 (0.0)	1 (3.1)
Triage Message	9 (28.1)	0 (0.0)	24 (72.7)
Formulate Subject Header	18 (54.6)	0 (0.0)	15 (46.9)
Formulate Message	33 (100.0)	0 (0.0)	0 (0.0)

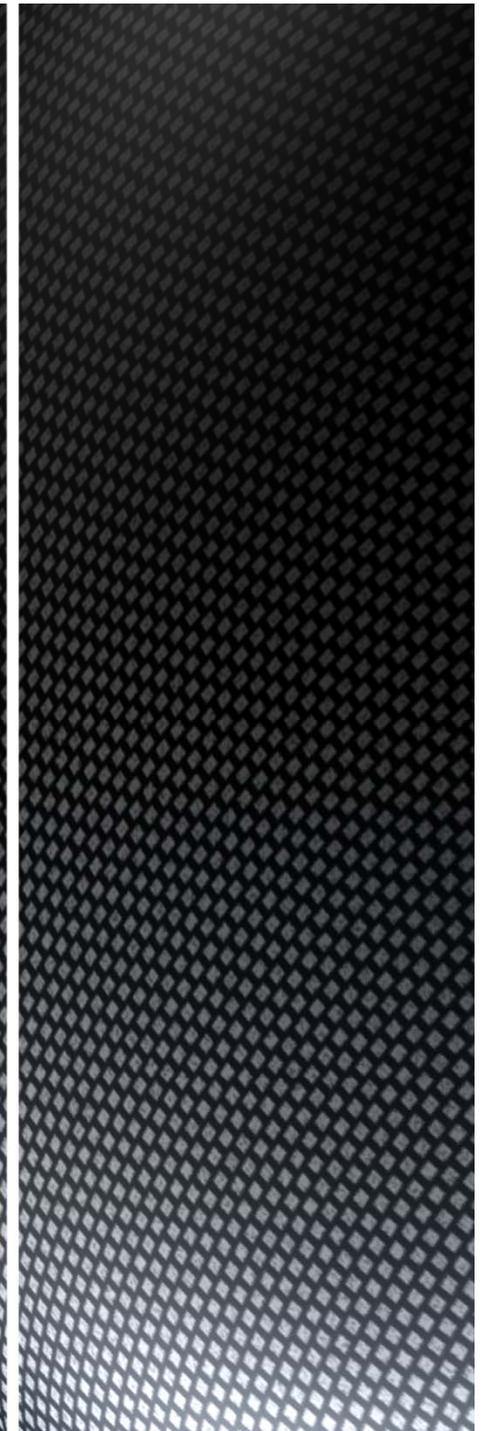
Poll Question #4

Do you think Veterans, caregivers, and VA employees would benefit from information and education about accessing and using Secure Messaging?

- A. Definitely yes
- B. Maybe some people
- C. I don't think so
- D. Definitely not



SM Secondary Content Review



SM Content Review

n = 18 (55%) sent SMs

n = 15 (45%) no SMs

SM Content

80% reported using SM at least once in past 3 months

SM content collection indicate only 55% sent SMs

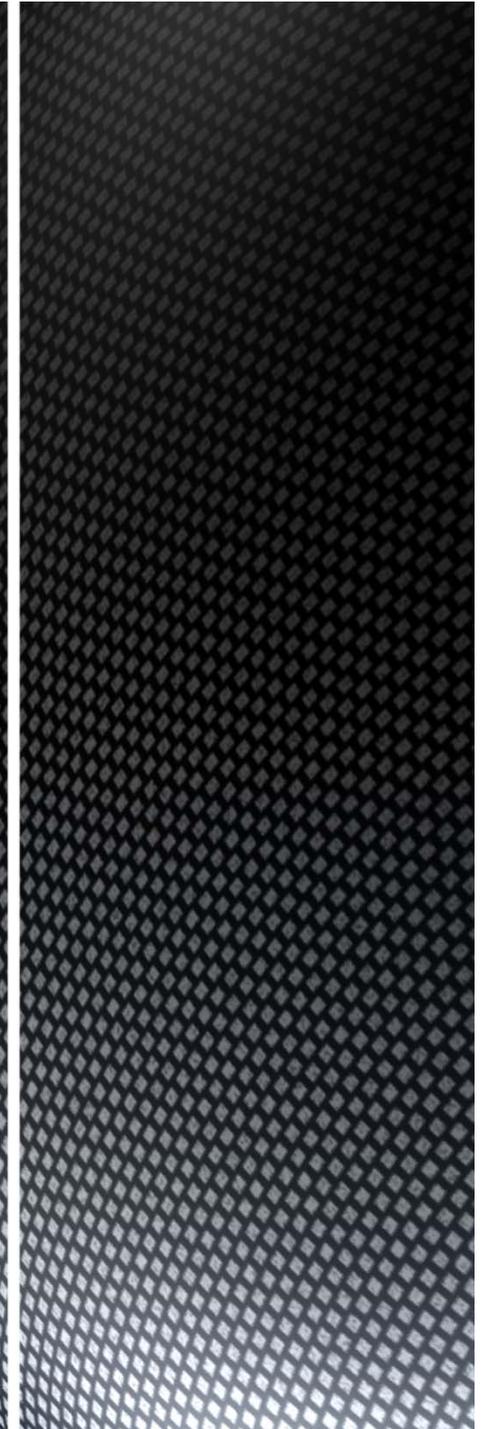
- RECALL BIAS

Those reported not using SM in the past 3 months cited no need for provider contact



75% SMs received responses

SM response time range: Minutes to 136 hours (>5 days)



SM Content Review

66 SMs; 3 SMs were to test system

62 were triaged

36 = General

15 = Appointment

10 = Medication

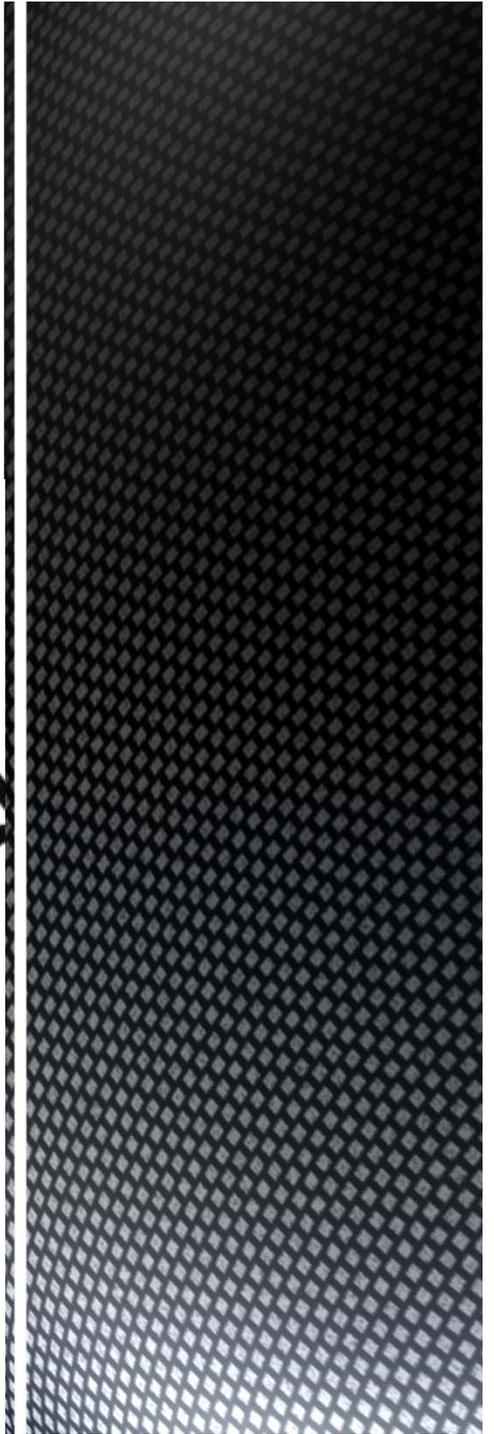
1 = Test

SM Content Specific Findings

- Sensitive Health Topics
 - Erectile Dysfunction
 - STDs
- Incident Reporting
 - Falls



Suggestions to Improve SM



Suggestions

Navigation

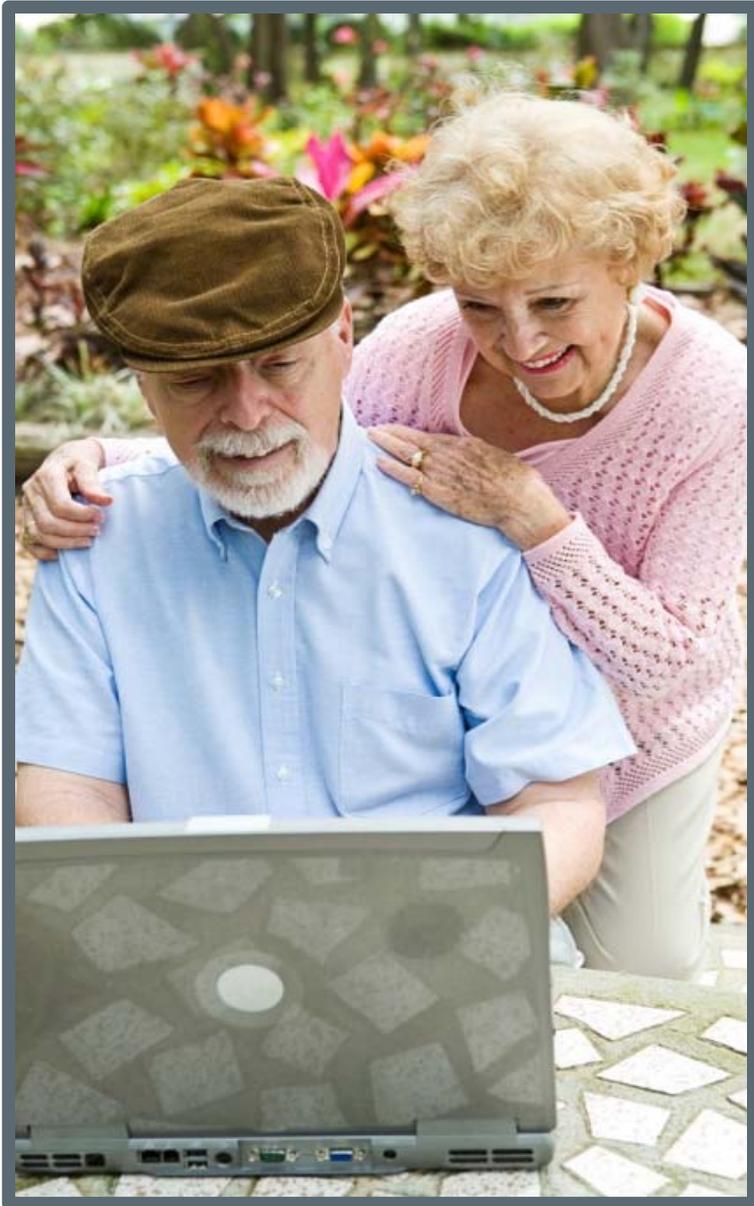
Screen
Visualization

Access

Features

Awareness

Improving Ease of Use



- Site navigation
- More obvious cues to navigate the site and log-in
- Pop-ups to prompt action
- Template SM options for Users
- Modify Triage Options
- User features
- Standard Signature Lines & Registry



Improvements for users with vision problems

Use visual icons

Change web resolution to eliminate scrolling

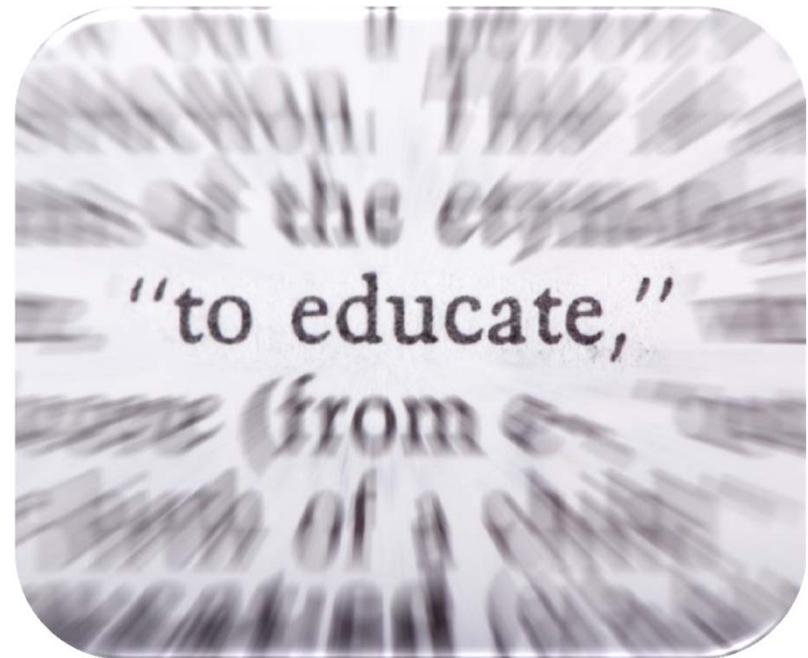
Ensure key elements are visible even with
magnification

Overcoming Barriers

- Redesign My HealthVet Site – navigation
- Clinical Team Awareness & Marketing

Need for strategies to increase:

- *Awareness*
- *Motivation*
- *Access & Skills*

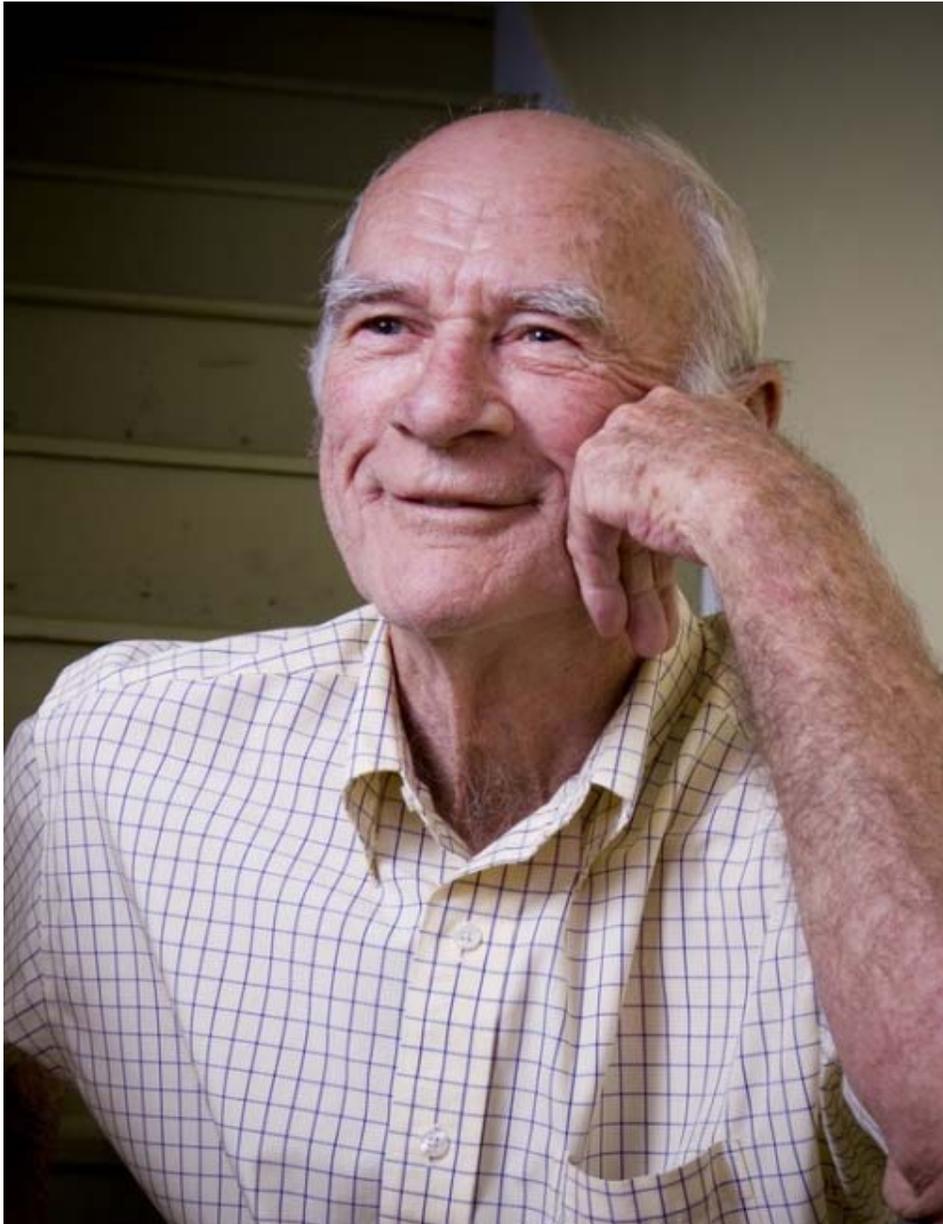


PHASE 2: Quantitative Survey

What: Mail survey study

Who: Veterans opted to use Secure Messaging

Why: Validate
Qualitative Findings



Survey Study Sample

819 Respondents

The majority:

Older white males

≥ \$35,100 Annually

↑ levels of education

↑ levels of health
literacy



Survey Results

- The majority of respondents reported:
 - Everyday use of computer (n=662, 81.0%) and internet (n=653, 79.9%)
 - Using My HealthVet a “few times a month or less” (n=629, 77.5%)
 - Using Secure Messaging 6 months or longer (n=499, 61.0%).
 - Using Secure Messaging at least once a year(486, 60.1%), while 131 (16.2%) reported using it at least once a month.
- Reports indicate Secure Messaging is used for:
 - Rx refills (n=546, 66.7%)
 - Rx questions (n=3135, 38.2%)
 - Managing appointments (n=343, 41.9%)
 - Accessing test results (n=350, 42.7%)
 - Health related questions (n=340, 41.5%)

Note: A small percentage reported using Secure Messaging to address sensitive health topics (n=67, 8.2%).

- Respondents reported Secure Messaging:
 - Good Communication tool (n=619, 76.7%)
 - Saves time (n=590, 73.3%)
 - Easy to use (n=544, 67.6%)
- Though (n=689, 85.2%) reported intention to use Secure Messaging in the future, n=342 (42.5%) reported that Secure Messaging could be improved to make it a more useful tool.



Survey Findings

- Men are more likely to report using Secure Messaging ($p = .00$) but females report using Secure Messaging more often ($p = .04$).
- Individuals who use Secure Messaging more often, typically have:
 - Higher levels of education ($p = .009$)
 - Higher levels of income ($p = .008$)

Survey Findings

Respondents with  levels of health literacy



-  Ease of use
-  Responsiveness of VA team
-  Usefulness
-  Secure communication method



Survey Findings

Who reported
higher levels of
satisfaction with
SM?

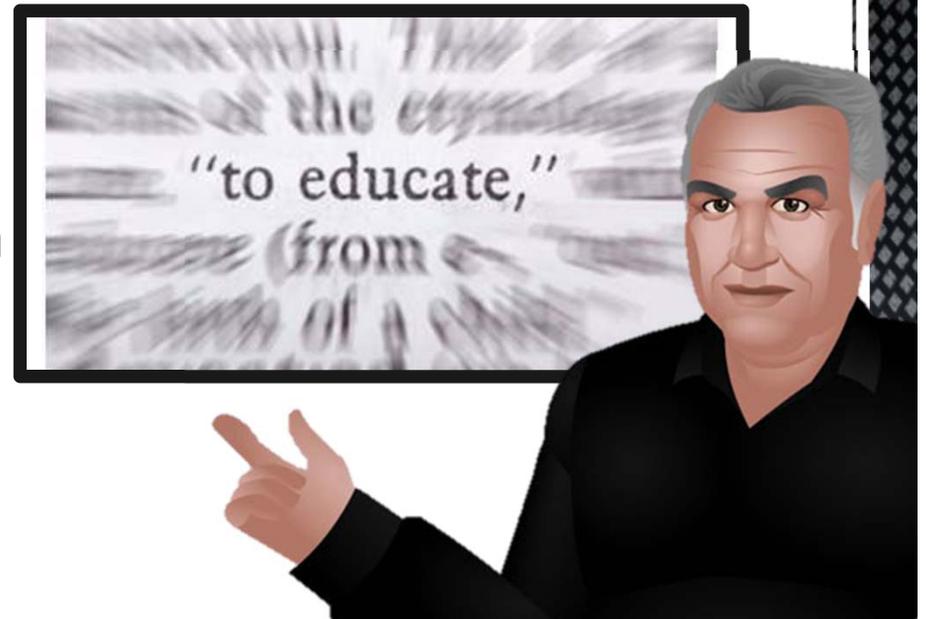


- ↑ eHealth and health literacy
- ↑ My HealthVet use
- ↑ Secure Messaging use

Using Secure Messaging **6** months or longer

Survey Findings

- Many respondents (**n=328, 40.6%**) reported they would like education and support using MyHealthVet and Secure Messaging.
- The majority (**n=652, 80.8%**) of respondents felt Veterans would benefit from education about MyHealthVet and Secure Messaging.



Implications for Education



To sustain adoption and utilization of Secure Messaging marketing, education, and skill building are needed.

Targeted messages and interventions to different potential user groups.



Conclusions

- Veterans value Secure Messaging as a tool to communicate with their VA health care team.
- Knowing about the tool, how to get signed up and started is a barrier to Secure Messaging use.
- Respondents reported typical reasons for using Secure Messaging but may also want to address sensitive health topics and incidents that occur in the home.
- Not all Veterans know the appropriate reasons for using this tool.
- Veterans feel increasing ease of access and navigation, adding user features, having signature lines and bio-registry for VA staff, access to specialty clinics are all means of making the tool more useful and easier to use.

THANK YOU

**Time for
Questions**

