

# Secure Messaging Usability Findings

Round 2 Research

# Background and Goals

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## Background

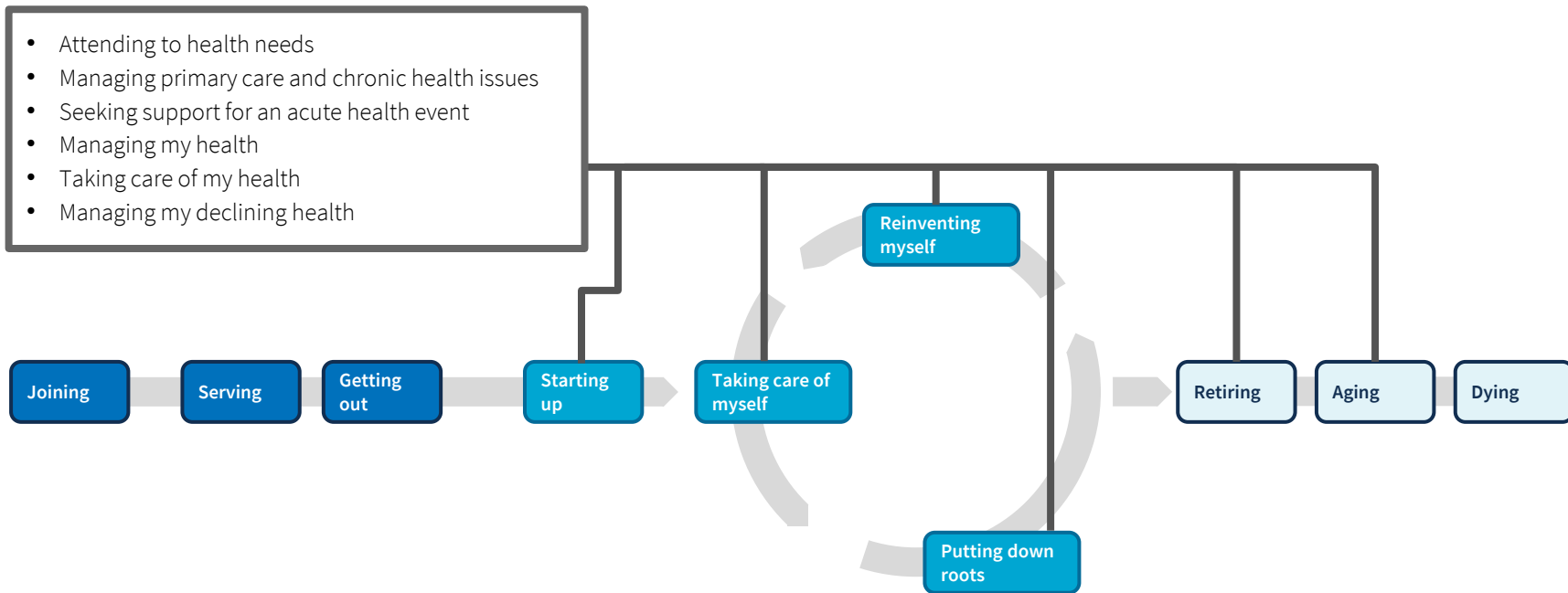
This project is part of the Digital Health Modernization strategy which aims to create a centralized place for Veterans to access their health information. As part of the effort, My HealtheVet (MHV) will be migrated to VA.gov.

## Research Goals

- Identify major **usability or content issues** with the current prototype of Secure Messaging on VA.gov.
- Determine **usability of components that have not been inducted into the VA.gov Design Library.**
- Assess user experiences with **updated content that aims to protect Veterans' safety.**

# How this research maps to the Veteran journey

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For a fully detailed Veteran journey, go to

<https://github.com/departement-of-veterans-affairs/va.gov-team/blob/master/platform/design/va-product-journey-maps/Veteran%20Journey%20Map.pdf>

Serving and separation

Living civilian life

Retiring and aging

VA



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# OCTO-DE goals that this research supports

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Supported

Not supported

Veterans and their families can apply for all benefits online

Veterans and their families can find a single, authoritative source of information

Veterans and their families trust the security, accuracy, and relevancy of VA.gov

Veterans can manage their health services online

VFS teams can build and deploy high-quality products for Veterans on the Platform

Logged-in users have a personalized experience, with relevant and time-saving features

Logged-in users can update their personal information easily and instantly

Logged-in users can easily track applications, claims, or appeals online

Measures to increase

Completion rate of online transactions

Percent of applications submitted online (vs. paper)

Veteran satisfaction with VA.gov Benefit use and enrollment, across all business lines

Benefit value (in \$) delivered from online applications or transactions

Number of VA.gov users as a function of total Veteran population

Usage of digital, self-service tools

Measures to decrease

Time to successful complete and submit online transactions

Time to process online applications (vs. paper)

Call center volume, wait time, and time to resolution

Time from online benefit discovery to benefit delivery

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# Methodology

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**We conducted hour-long moderated remote sessions via Zoom from November 1 – 21, 2022. Participants were asked to perform the following tasks on the prototype:**

## **Task 1: Message Threads**

1. Identify multmessage conversation
2. Identify read and unread messages in a conversation

## **Task 2: Replying to a Message**

1. Reply to a message
2. Attach and remove a document
3. Delete a draft
4. Identify how a draft is saved

## **Task 3: Finding a Message**

1. Find a specific message
2. Identify where message was found
3. Identify which message elements were searched

## **Task 4: Organizing a Message**

1. Create a folder
2. Change a folder's name
3. Delete a folder

## **Task 5: Patient Safety**

1. Identify important elements on the Compose Message screen



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# Participant Demographics

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Findings may not include the perspectives of the following underserved Veteran groups:

- Other than honorable
- Expat (living abroad)
- Identify as Latinx, Asian, Native, or LGBTQ+

We recommend studies with these underserved groups in the future.

## SM Usability Test Round 2

final # of participants		17	
Category	%	Target	Study
<b>Veterans</b>			
Based on current			
<a href="#">Age 55-64+</a>	50.00%	9	9
<a href="#">Cognitive Disability</a>	50.00%	9	13
<a href="#">Mobile user</a>	50.00%	9	5
<a href="#">Rural</a>	25.00%	5	6
<a href="#">No degree</a>	25.00%	5	3
<a href="#">Other than honorable</a>	21.00%	4	0
<a href="#">Immigrant origin</a>	17.00%	3	1
<a href="#">Women</a>	10.00%	2	5
<a href="#">Expat (living abroad)</a>	0.40%	1	0
<b>Race</b>			
Based on VA's proc			
Black	15.00%	3	4
Hispanic	12.00%	3	1
Biracial	3.90%	1	1
Asian	3.00%	1	0
Native	0.30%	1	0
<b>LGBTQ+</b>			
LGBTQ+ Veterans			
Gay, lesbian, or bisexual	--%	1	1
Transgender	--%	1	0
Nonbinary, gender fluid, ge	--%	1	0

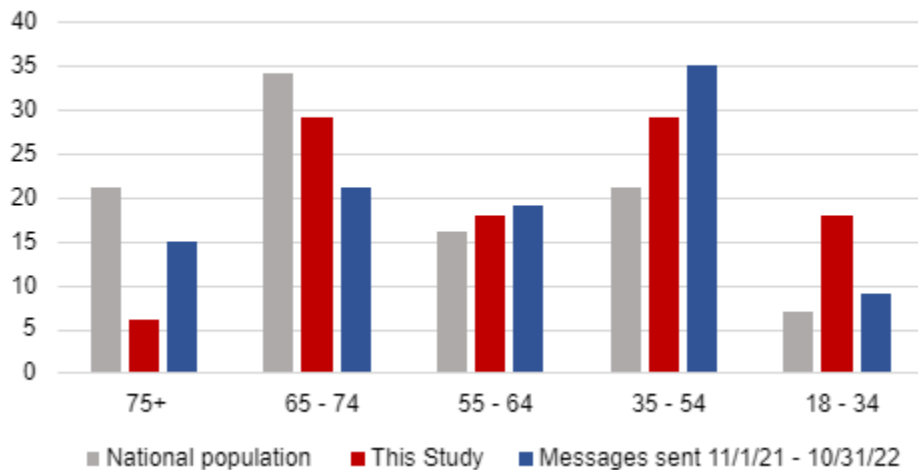


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# Participant Demographics Continued

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## Veteran Age Distribution



- 5 Smartphone users
- 11 Desktop/laptop users
- 1 Tablet user



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# Key Findings

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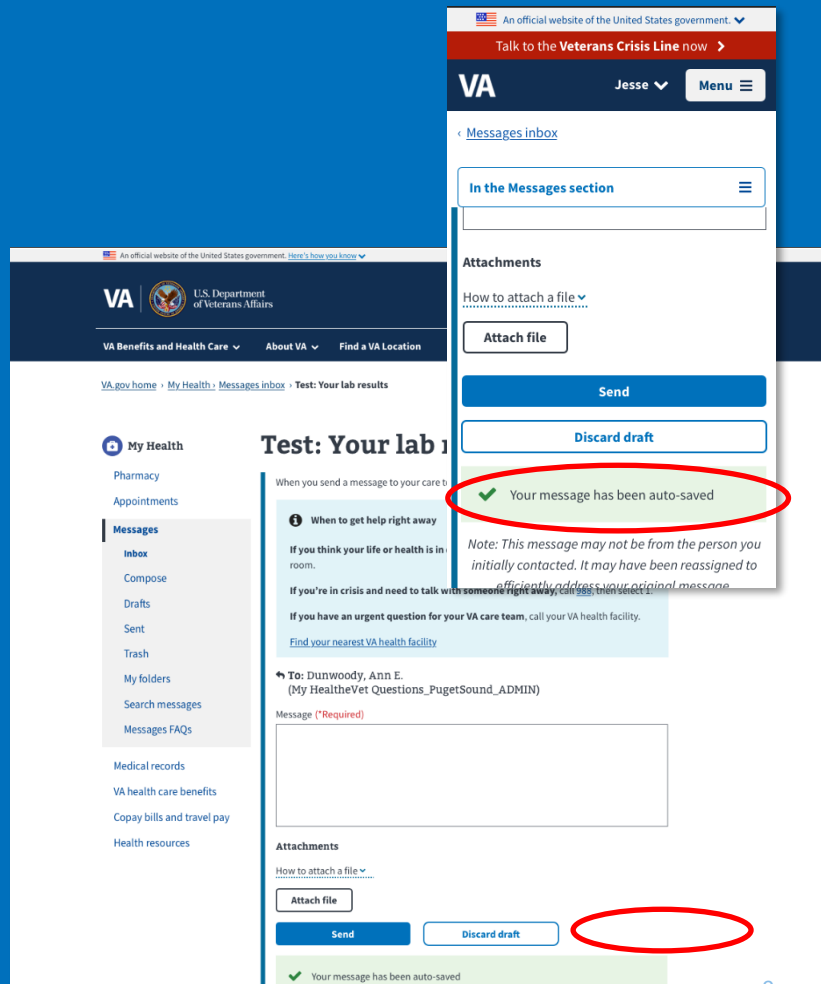
# Key finding 1

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**Most participants (11 of 17) looked for a “Save draft” button** when asked if they thought their draft would be available later.

**Many participants (8 of 17) did not notice “Your message has been auto-saved”** under the “Send” and “Discard draft” buttons.

*"I'm not seeing that as an option. To save."*



# Key findings 2 & 3

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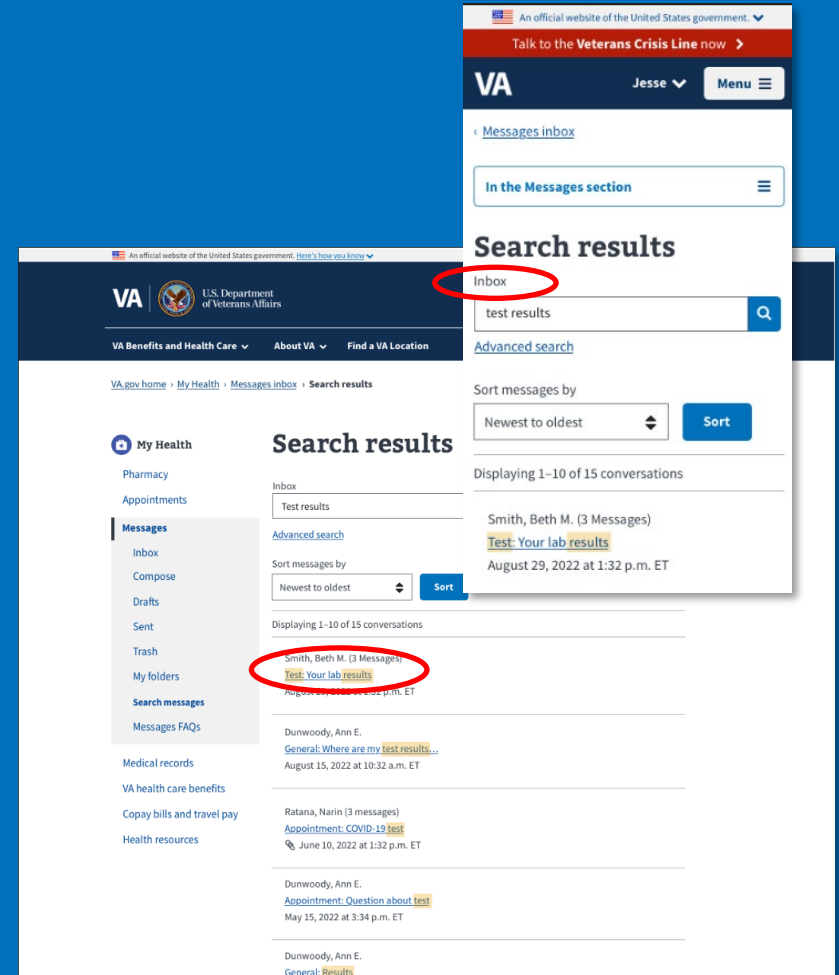
**Many participants (8 of 17) did not know which folder they searched in,** despite the folder name being under the “Search Results” header.

**Some participants (3 of 17) requested a “Search all” option.**

**Many participants (8 of 17) expected the system to search in the body and/or attachments of messages.**

**Many participants (6 of 17) had no idea** what parts of the message were searched.

*“I don’t know. It doesn’t say. I didn’t know I had folders.”*



# Key finding 4

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**Further research is needed on the Patient Safety warnings** on the “Compose Message” and “Reply” screens. The data collection method in which participants were asked to identify which parts of the page were important, is unreliable.

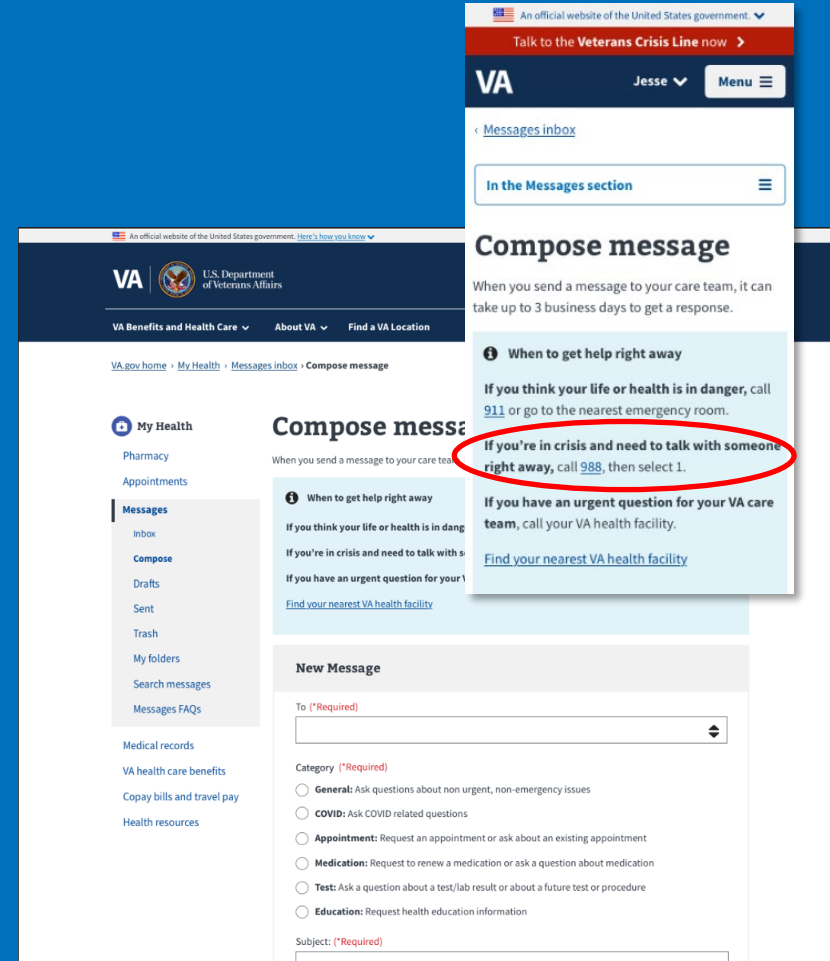
**3 of 17 participants missed the “call 911” notice.**

**5 of 17 participants missed the “call 988” notice,** while 5 of 15 stated that “crisis” referred to both physical and mental issues.

**8 of 17 participants missed the “urgent questions” notice,** while 4 of the 9 who did see it were dubious about successfully reaching someone via phone.

**6 of 17 participants missed the “3 business days” notice.**

*"The very immediate need of medical assistance, whether it's physical or mental."*



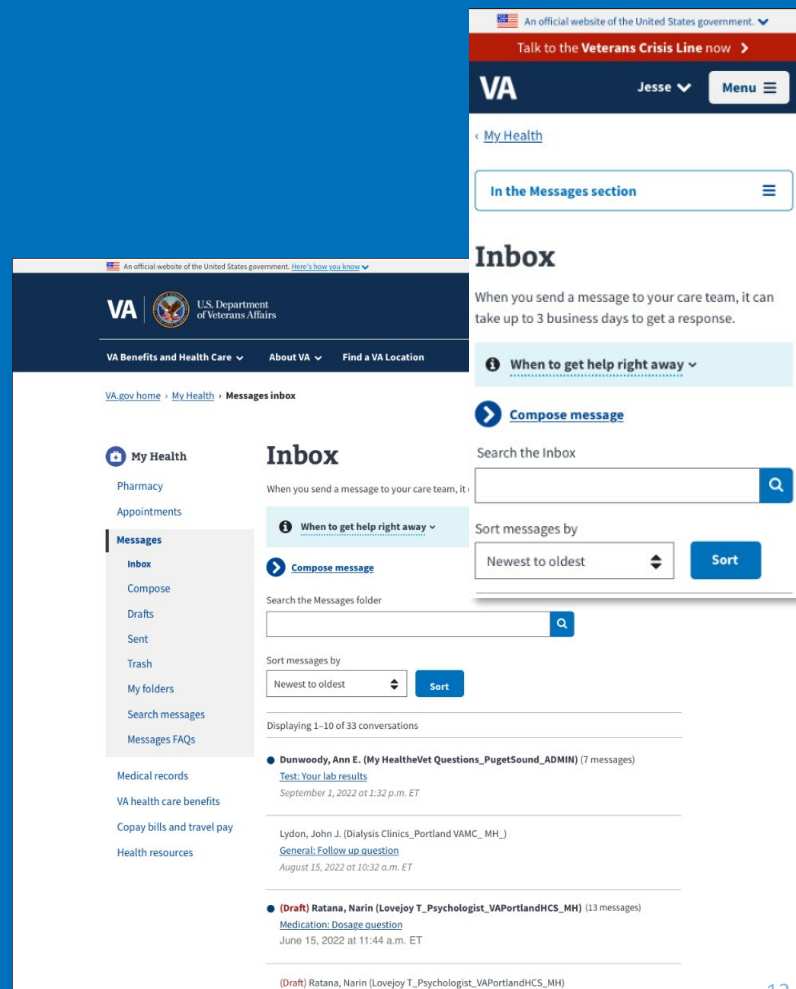
# Key finding 5

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**Most participants (9 of 17) used their mental model of email** to understand the product by directly referring to Secure Messaging as “email,” or making indirect comparisons with email.

*"This is ostensibly the same as most any email server inbox, so, it's fairly intuitive."*

*"It looks like it's some type of email."*



# Key findings 6,7,8,9

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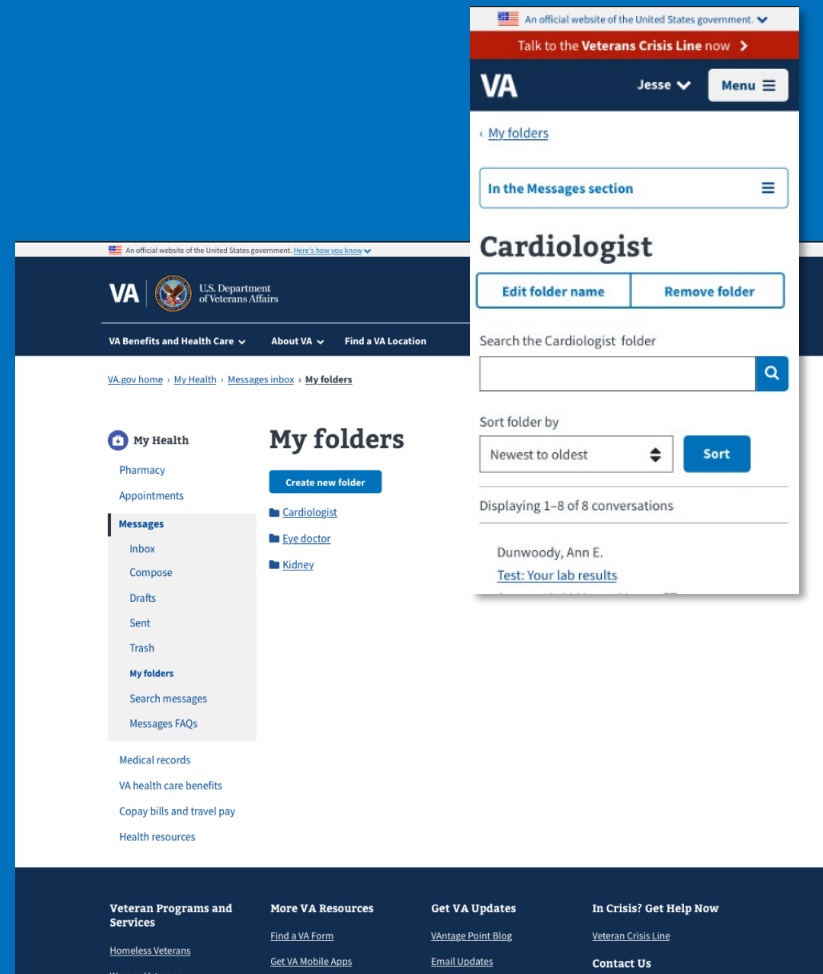
**All participants (17 of 17) understood that a conversation could contain multiple messages.**

**Most participants (16 of 17) could differentiate between read and unread messages** based on the font weight and dot icon next to the sender's name.

**All participants (17 of 17) successfully replied to a message and attached/removed a document; most participants (16 of 17) understood how to delete a draft.** Most participants (15 of 17) rated the difficulty of these tasks as “easy” or “very easy.”

**Most participants (16 of 17) successfully created a folder, changed a folder name, and deleted a folder** without assistance. Most participants (15 of 17) rated the difficulty of these tasks as “easy” or “very easy.”

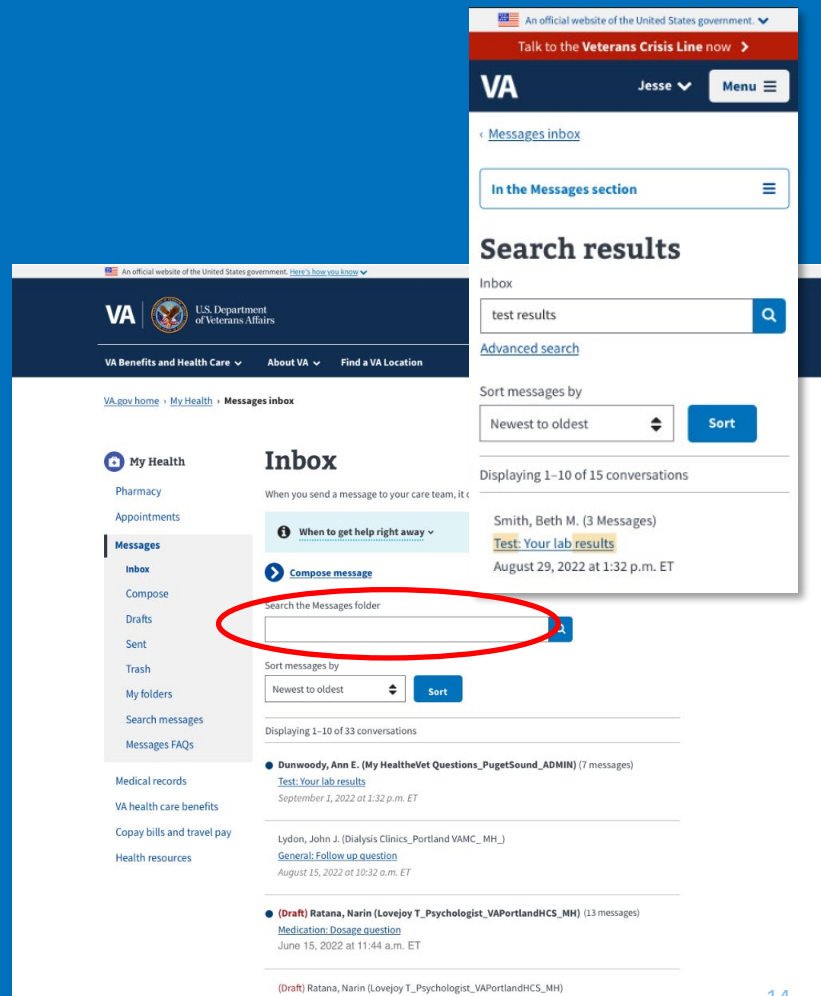
*“Oh, look at that...I didn't even know that was available!”*



# Key finding 10

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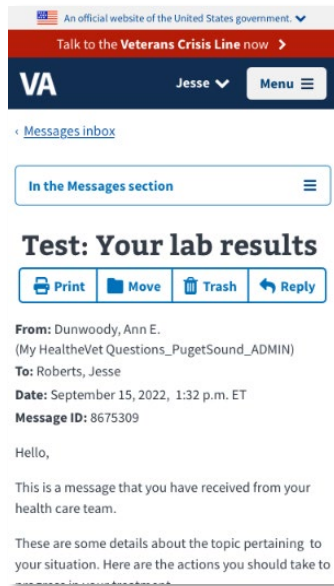
**Additional testing is required to assess the usability of the search function** due to prototyping limitations that may have skewed the results of this study.



# Additional Insights

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- All participants understood the non-validated components.
  - 7 of 17 participants used the “reply” button in the toolbar above the message.
- 7 of 17 participants used breadcrumbs to navigate.
- 5 of 17 participants attempted to right-click to complete tasks.
- 5 of 17 participants referred to their Medical Records during the usability test.
- 2 of 17 participants requested an “urgent” flag for sending Secure Messages.
- Age was not a significant factor in the participants’ ability to successfully perform the tasks.



# Recommendations

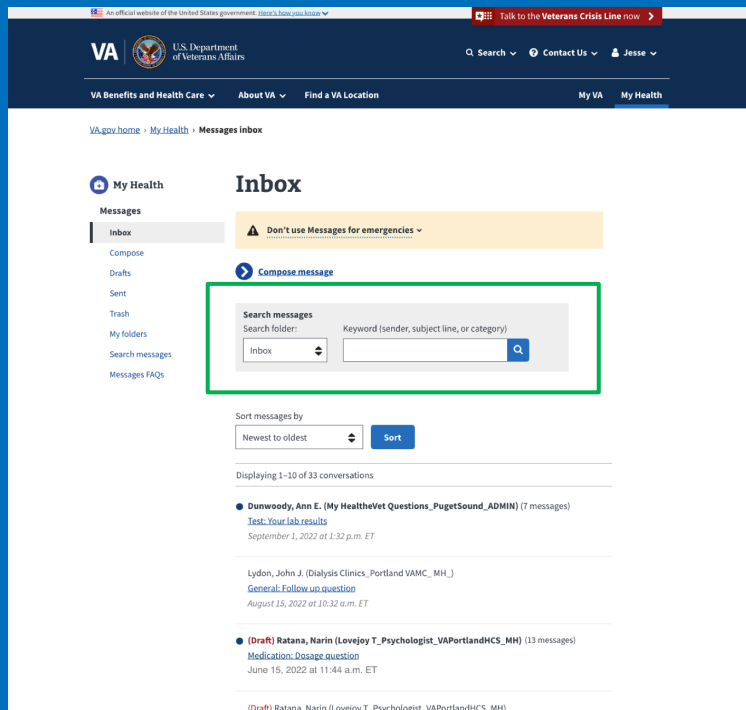
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# Recommendation 1

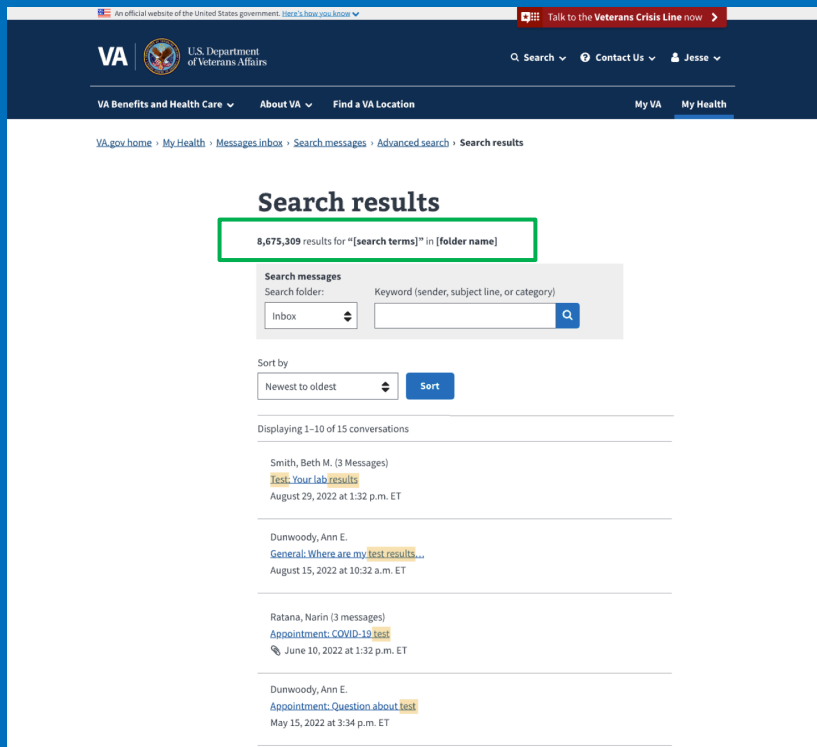
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- Add a “Search folder” drop down next to the Keyword search field on folder landing pages.
- Include helper text, “(sender, subject line, or category)” above the search field.
- Place both search elements in a gray box titled “Search messages.”

# Recommendation 2

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The screenshot shows the VA website's search results page. At the top, there's a navigation bar with the VA logo, "U.S. Department of Veterans Affairs", and links for "Search", "Contact Us", and a user profile "Jesse". Below this, a breadcrumb trail reads: "VA.gov/home > My Health > Messages inbox > Search messages > Advanced search > Search results". The main heading is "Search results". A green box highlights the text "8,675,309 results for '[search terms]' in [folder name]". Below this is a "Search messages" section with a "Search folder:" dropdown set to "Inbox" and a "Keyword (sender, subject line, or category)" search bar with a magnifying glass icon. A "Sort by" section shows "Newest to oldest" selected with a "Sort" button. The results section starts with "Displaying 1-10 of 15 conversations". The first result is from "Smith, Beth M. (3 Messages)" with a link "Test: Your lab results" dated "August 29, 2022 at 1:32 p.m. ET". The second result is from "Dunwoody, Ann E." with a link "General: Where are my test results..." dated "August 15, 2022 at 10:32 a.m. ET". The third result is from "Ratana, Narin (3 messages)" with a link "Appointment: COVID-19 test" dated "June 10, 2022 at 1:32 p.m. ET". The fourth result is from "Dunwoody, Ann E." with a link "Appointment: Question about test" dated "May 15, 2022 at 3:34 p.m. ET".

- Include the results count, the search terms, and folder name just below the header on the “Search Results” screen.

# Recommendation 3

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The screenshot shows the VA My Health Messages Inbox page. The page has a dark blue header with the VA logo and navigation links. Below the header, there's a breadcrumb trail: VA.gov/home > My Health > Messages inbox. The main content area is titled 'Inbox' and includes a warning banner: 'Don't use Messages for emergencies'. Below the warning, there's a 'Compose message' button. A green box highlights a 'Search messages' section containing the following fields: 'Keyword (Sender, subject line, or category)' with a search icon, 'Folder' with a dropdown arrow, 'Message ID' with a text input, 'From' with a text input, 'Subject' with a text input, 'Category' with a dropdown arrow, and 'Date range' with a dropdown arrow set to 'Any'. A 'Search' button is at the bottom of this section.

- Replace the Advanced search page function with a collapsible element below the search field.

# Recommendation 4

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The screenshot displays the VA Secure Messaging web application. The header includes the VA logo, navigation links, and a search bar. The main content area is titled "Test: Your lab results". Below this, there is a warning box about using messages for emergencies. The message composition area shows a recipient "Dunwoody, Ann E." and a text input field. Below the input field, there are buttons for "Send", "Save draft", and "Discard draft". A green box highlights the "Save draft" button and the confirmation message: "Your draft was last saved at 11:11 a.m. ET on 11/29/2022".

**Test: Your lab results**

**⚠ Don't use Messages for emergencies**

- If you think your life or health is in danger, call 911 or go to the nearest emergency room.
- If you're in suicidal crisis or emotional distress, call 988 then select 1, or chat at 988lifeline.org

Messages are for non-urgent questions and concerns. When you send a message to your care team, it can take up to 3 business days to get a response.

To: Dunwoody, Ann E.  
(Team: My HealtheVet Questions\_PugetSound\_ADMIN)

Message (\*Required)

Attachments

How to attach a file

This is an attachment from my laptop.pdf (108.7 KB) [X Remove]

Attach file

Send Save draft Discard draft

✓ Your draft was last saved at 11:11 a.m. ET on 11/29/2022

Note: The person you are sending this message to may have changed since this reply was first drafted. All messages in this conversation will appear below.

- Add a “Save draft” button between “Send” and “Discard draft.” Keep the timestamp with the green check mark.
- The green box would appear and highlight the timestamp only after the user clicks “Save draft.”

# Recommendation 5

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## Don't use Messages for emergencies

If you think your life or health is in danger, call [911](#) or go to the nearest emergency room.

If you're in suicidal crisis or emotional distress, call [988](#) then select 1, or chat at [988lifeline.org](#)

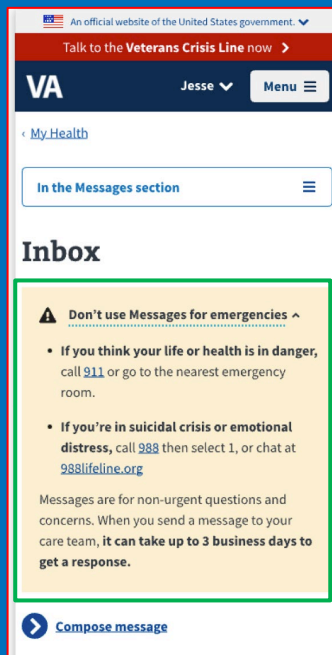
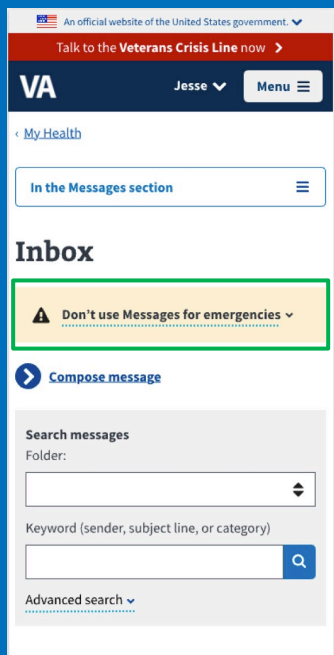
Messages are to be used for non-urgent questions and concerns. When you send a message to your care team, **it can take up to 3 business days to get a response.**

text TBD

- Add a modal in relation to the patient safety notice that appears each time the user clicks “Compose,” “Reply,” or “Edit draft.”
- Change the current “i” icon to an exclamation mark, and the header to, “Don’t use messages for emergencies.”
- Highlight, “If you think your life or health is in danger.”
- Change “If you’re in crisis...” to, “If you’re in suicidal crisis or emotional distress,” and add, “or chat at 988lifeline.org,” after “call 988 then select 1.”
- Remove the “if you have an urgent question...” statement.
- Include, “Messages are to be used for non-urgent questions and concerns. When you send a message to your care team, it can take up to 3 days to get a response.”
- Include a button at the bottom of the modal to dismiss the message without an X in the top right.

# Recommendation 6

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- Change the color of the “When to get help” box to yellow, and keep it collapsed on the Inbox page and expanded on the Compose and Reply pages.

# Next Steps

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# Next Steps

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- Socialize research to team, Health Apartment, and VA research community  
Anne Costello
- Incorporate recommendations into final Sketch designs for development team  
Lexi Wunder, Jessica Robertson, Joel Calumpong
- Conduct research study on patient safety notice  
Anne Costello
- Work with Content team on patient safety notice wording  
Lexi Wunder, Anne Costello



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# Further Research Needed

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# Further Research in Phase 0

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- Additional Usability testing on the live site:
  1. Assistive technology (screen reader)
  2. Search function