

Patient Safety Usability Findings

January & February 2023

Background and Goals

Patient Safety Usability Findings: January & February 2023

Background

During the round 2 usability testing of Secure Messaging, we found that participants did not notice some or all of the patient safety message. We also found that 1/3 of participants who were asked did not understand the connotation of “crisis” in the 988 sentence.

Research Goals

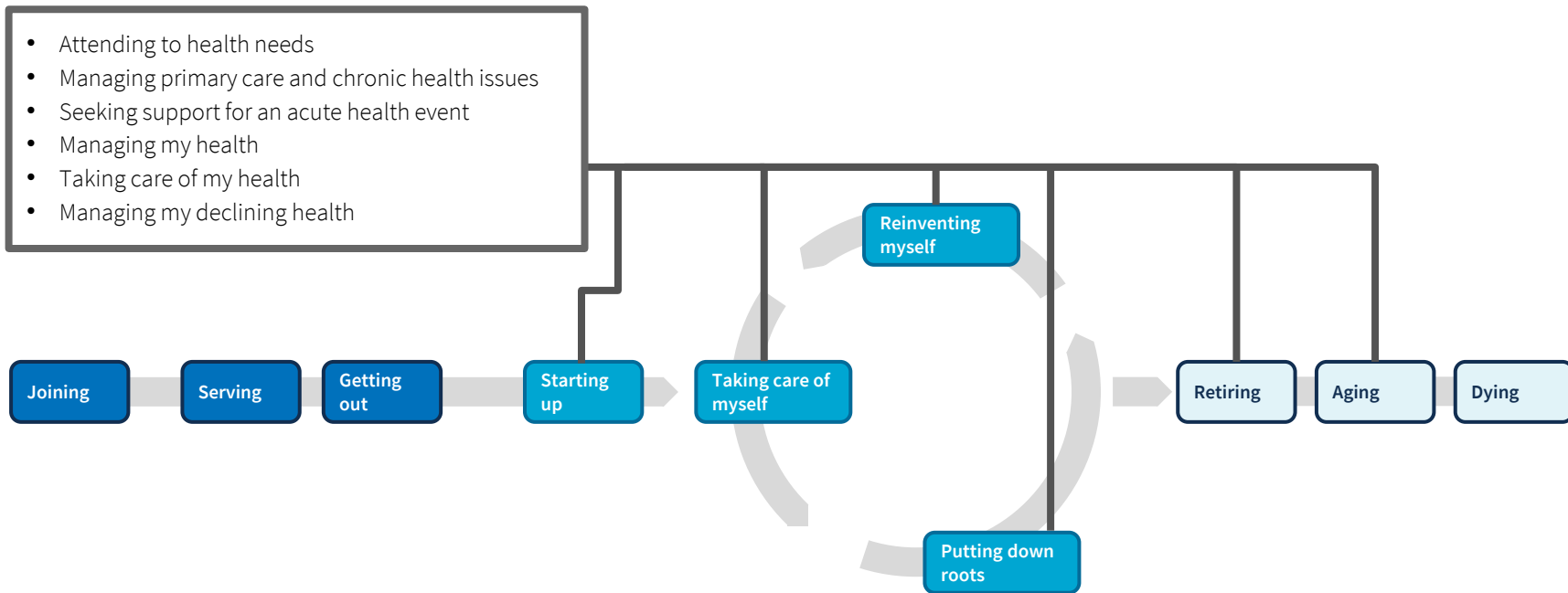
- Identify Veterans' tolerance for the interstitial screen.
- Identify any usability issues with the patient safety message flow.
- Measure Veterans' understanding of when using Secure Messaging is appropriate.
- Measure Veterans' understanding of the mental health help available.



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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

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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 January 27 – February 7, 2023

Participants were asked to perform the following tasks on the prototype:

Task 1: Interrupted Flow

Select “Start a new message,” Read content and find “Continue to start a new message” on the interstitial and reach the Compose message screen.

Task 2: Interstitial

Provide feedback on content, identify urgent vs. non - urgent needs, identify expected time for a response.

Task 3: Secure Message

Measure confidence in VA keeping messages secure.

Task 4: Patient Safety Banner

Identify tolerance of original banner in addition to the interstitial.

Participant Demographics

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

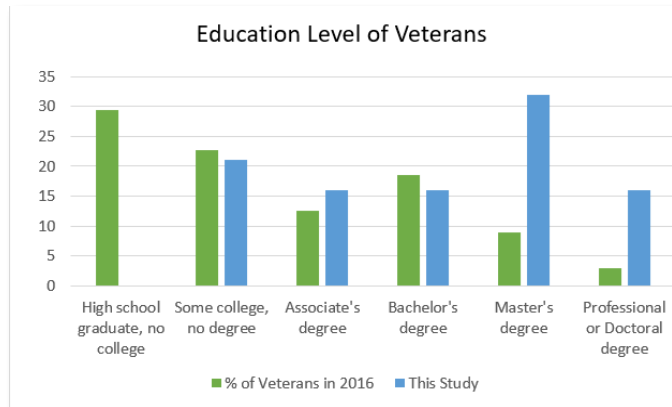
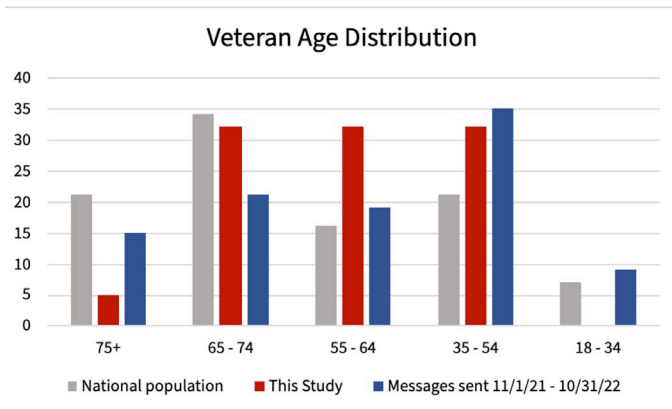
- Other than honorable
- Expat (living abroad)
- Identify as Latinx, Biracial, Asian, Native, or Transgender

We recommend studies with these underserved groups in the future.

Veterans		Based on current	
Age 55-64+	50.00%	10	13
Cognitive Disability	50.00%	10	7
Mobile user	50.00%	10	6
Rural	25.00%	5	4
No degree	25.00%	5	4
Other than honorable	21.00%	4	0
Immigrant origin	17.00%	4	2
Women	10.00%	2	8
Expat (living abroad)	0.40%	1	0
Race		Based on VA's pro	
Black	15.00%	3	3
Hispanic	12.00%	3	0
Biracial	3.90%	1	0
Asian	3.00%	1	0
Native	0.30%	1	0
LGBTQ+		LGBTQ+ Veterans	
Gay, lesbian, or bisexual	--%	1	2
Transgender	--%	1	0
Nonbinary, gender fluid, ge	--%	1	1

Participant Demographics Continued

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- 6 Smartphone users
- 12 Desktop/laptop users
- 1 Tablet user



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Previous Research

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Discovery Key Findings

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Suicide rates for Veterans is higher than for non-veteran U.S. adults.

- Veteran suicide deaths were almost 3 times greater than for non-veteran U.S. adults in 2020.
- Suicide is the #2 leading cause of death for Veterans aged 18 to 44.
- Suicide rates in older Veterans are lower, but the suicide numbers (65%) are greater in those 50 and older.

High-risk symptoms have been shared through secure messaging services.

- In a study conducted at VISN 17, 4.3% of secure messages were about urgent issues.
- In a study conducted at the Mayo Clinic, 3.5% of messages contained high-risk symptoms.
- Secure messages with thoughts of depression, self-harm, and suicidal ideation have been sent within 30 days of death by suicide, an ER visit, or hospitalization for mental health.

Attending to language is imperative to designing for users with cognitive disabilities.

- Follow VA.gov Content Standards for using plain language.
- Divide processes into logical essential steps with progress indicators.
- Provide cues and reminders to reduce cognitive load.

Discovery Key Findings

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Banner blindness, a form of selective attention, is overcome with element similarity.

- Following Gestalt principles with the patient safety message will help them get noticed.
- Elements related to a users' goals will be seen.
- "What seems to matter most to noticing is the unexpected object's similarity along the critical dimension that defines the attention set."
- Ads are commonly placed on the top and right side of webpages, so elements there get ignored.

Additional clicks do not necessarily reduce usability.

- The problem is not the clicks, but the decisions they require.
- "A path with 5 easy clicks is vastly superior to one with 3 clicks."
- The purpose of each click is to make the user's task easier for them.

Key Findings

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Key finding 1

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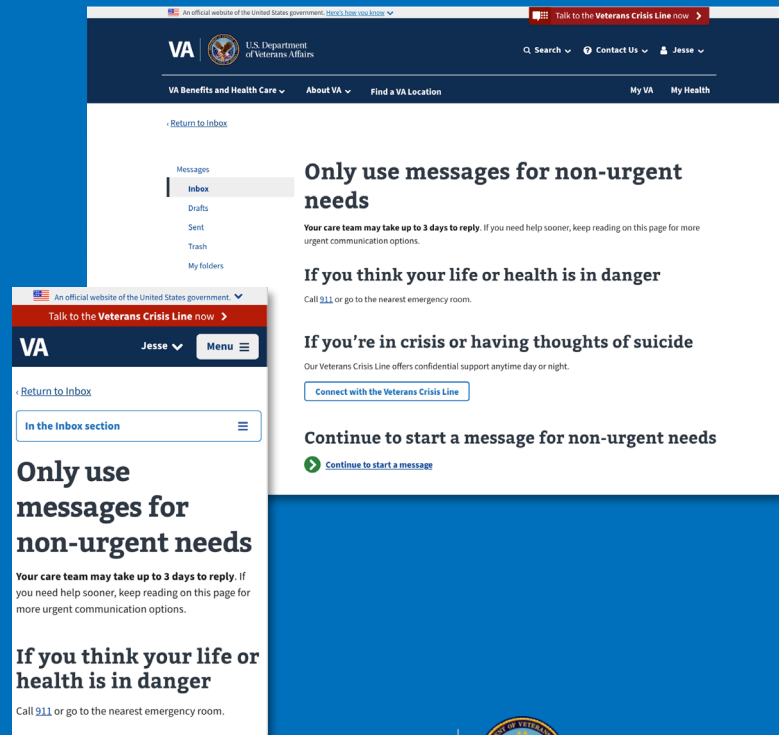
All participants viewed the patient safety message and understood its purpose.

All participants (19 of 19) were able to accurately describe the purpose of the interstitial page when they reached the Compose message screen.

Most participants (13 of 19) read aloud and/or hovered their cursor over the text on the interstitial.

"A reminder that the messaging system is not for emergencies."

"To confirm it's non-urgent... If someone is in crisis [to] make sure they are helped expeditiously."



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Key finding 2

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All participants were able to distinguish the difference between urgent and non-urgent needs.

All participants (19 of 19) were able to identify when secure messaging would be the most appropriate means of communication.

Most participants (16 of 18) pointed out the statement, “Your care team may take up to 3 days to reply.”

All participants (18 of 18) expected that response times would be at least one to two business days while citing their own positive experiences in receiving responses in much less time.

Only use messages for non-urgent needs

Your care team may take up to 3 days to reply. If you need help sooner, keep reading on this page for more urgent communication options.

Only use messages for non-urgent needs

Your care team may take up to 3 days to reply. If you need help sooner, keep reading on this page for more urgent communication options.

Participant counts may vary because of technical issues and time constraints.

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Key finding 3

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Participant responses to the statement “If you think your life or health is in danger,” and the link to 911 were divided.

Many participants (9 of 19) said they feel the statement and link are helpful.

Many participants (9 of 19) said they feel the statement and link are not helpful, stating that it is common knowledge and that they hear it too often.

7 of those 9 said the statement is an insult to their intelligence.

2 of 9 did not understand how the link to call would function on a laptop/desktop and based its helpfulness on that.

One participant was unsure if the statement and link are helpful.

"I have to scroll past it. It's right there [in] my face and it's like, duh! Do you think I'm stupid?"

If you think your life or health is in danger

Call [911](#) or go to the nearest emergency room.

If you think your life or health is in danger

Call [911](#) or go to the nearest emergency room.

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Key finding 4

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Participants reacted favorably to the Veterans Crisis Line link and modal.

All participants (19 of 19) said they felt the statement, "If you're in crisis or having thoughts of suicide" and the VCL link are helpful.

Some participants (6 of 19) requested access to a non-crisis mental health line for Veterans.

"I think there's a lot of Veterans who are afraid to reach out."

"Naming it right there, 'If you're in crisis or having thoughts of suicide,' allows you to... name what's happening, to be able to give you the strength to [take the] next step."

If you're in crisis or having thoughts of suicide

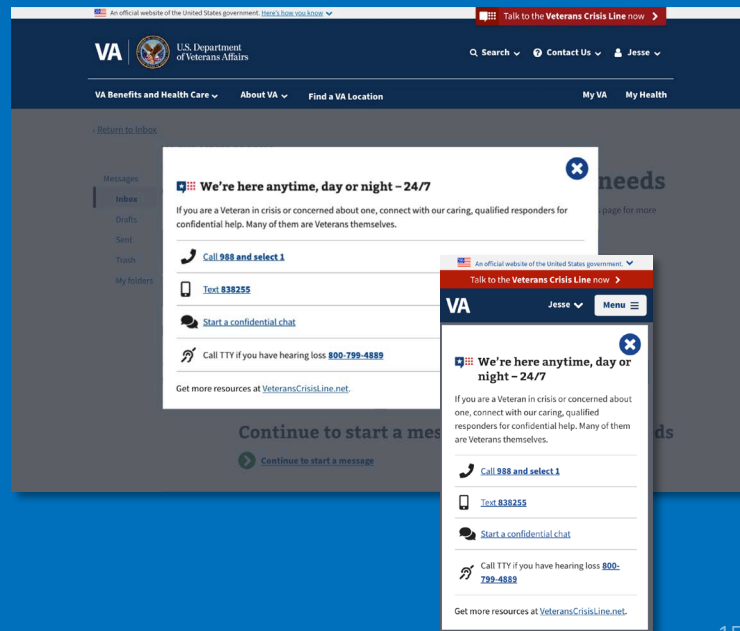
Our Veterans Crisis Line offers confidential support anytime day or night.

[Connect with the Veterans Crisis Line](#)

If you're in crisis or having thoughts of suicide

Our Veterans Crisis Line offers confidential support anytime day or night.

[Connect with the Veterans Crisis Line](#)



Key finding 5

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Many participants tolerated the interrupted flow.

Many participants (10 of 18) cited no pain points with the interruption.

5 of the 10 reacted positively, 5 of the 10 were neutral about it, making statements such as, “it was fine,” “I’m not upset about it,” and “it’s something that is part of the process.”

Many participants (8 of 18) did cite pain points with the interruption unprompted while viewing the interstitial and when prompted for feedback by the moderator.

3 of 8 were frustrated with constantly hearing the same message when calling the VA or community health care providers.

"Everybody has to say it on their messages. They all have this spiel they have to say and it's like, my god, I've heard that like 5 million times now and I am just really done with it."

2 of 8 wanted to go directly to the compose message screen.

"When I clicked on 'Start a new message' I wanted to see a text box right away."

3 of 8 complained about the amount of reading they were required to do prior to beginning their task. These participants each spent 13 seconds or less on the interstitial during the task. The median time spent for all participants was 13.5 seconds and the mean was 21.5 seconds.

"It's a lot to read."

Key findings 6 & 7

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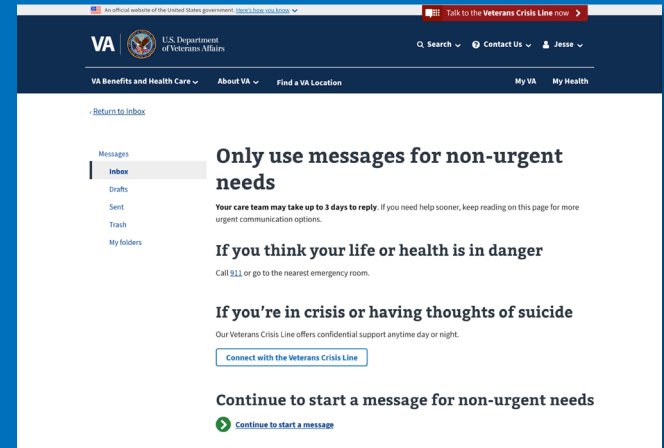
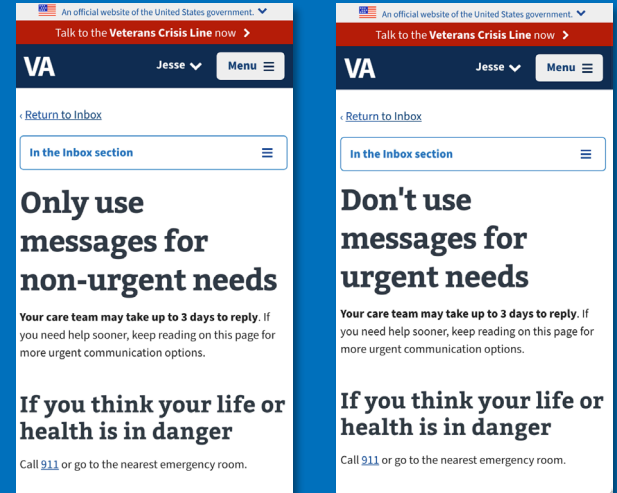
Most participants preferred “Only use messages for non-urgent needs” to “Don’t use messages for urgent needs.”

Most participants (13 of 19) stated that “Only use messages for non-urgent needs” was more helpful than “Don’t use messages for urgent needs” because it was a softer, more positive directive. 2 of the 13 felt the contraction “don’t” was informal.

Many participants cited text and action link sizes as pain points.

Several participants (6 of 19) felt the action link for “Continue to message” was too small and difficult to find on the page.

Several participants (7 of 19) stated that the H2 header text was too large. 4 of those 7 were viewing it on mobile and complained of the need to scroll.

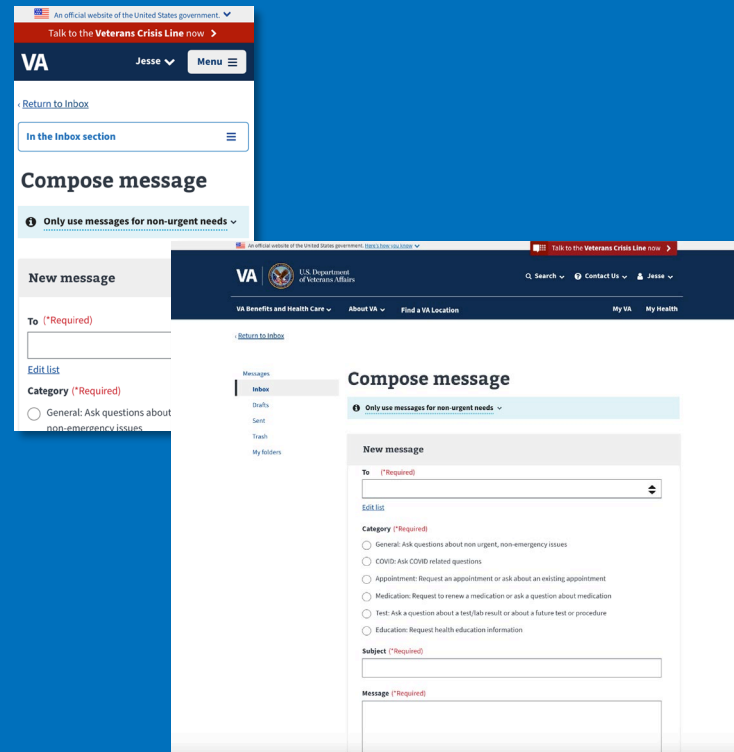


Key finding 8

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Most participants felt that keeping the safety banner on the “Compose message” is helpful.

Most participants (13 of 16) stated that keeping the banner with the full safety message dropdown on the “Compose message” screen is helpful. This included 7 participants who had expressed issues with the interstitial and 6 who had stated the 911 notice and link were not helpful.



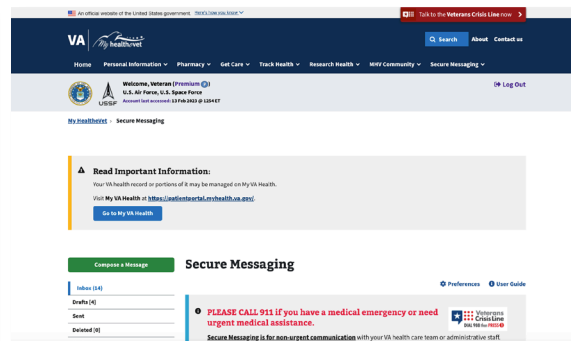
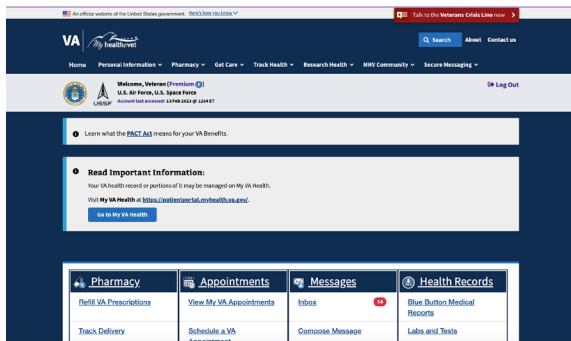
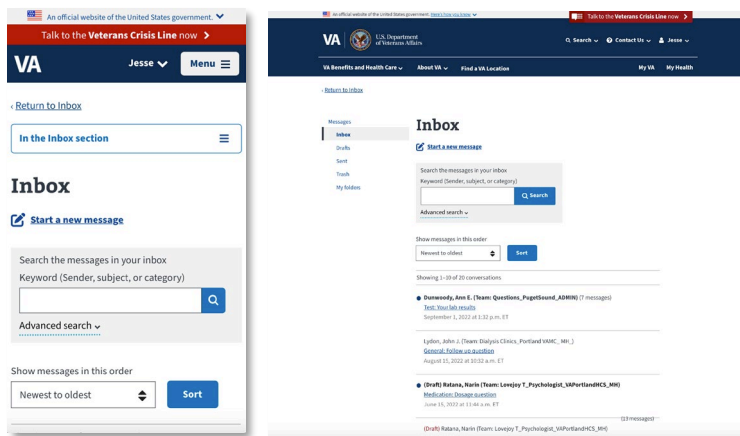
Participant counts may vary because of technical issues and time constraints.

Additional Findings

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Additional finding 1

Patient Safety Usability Findings: January & February 2023



Most participants require reassurance about the security of their messages.

No participants (0 of 17) mentioned the absence of the word "secure" in the prototype or in the moderators' references to the portal during the session. The prototype flow began at the inbox, so it could have been assumed that it was on previous screens.

Most participants (12 of 17) stated the inclusion of the word "secure" in the portal is necessary for them to retain confidence. Those that did not require it stated they were satisfied with the security of the entire site based on the rigorous login process.

Many participants (8 of 19) used the term "secure messaging" when referring to the portal. 5 of those 8 did not know why they used that term and 3 of 8 thought it was on the MHV homepage.

Participant counts may vary because of technical issues and time constraints.

Recommendations

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Recommendations: Patient safety message

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Keep the interstitial as part of the secure messaging flow with the following requirements and or changes:

Interstitial page:

- Use “Only use messages for non-urgent needs” as H1 header.
- Remove H2 headers and redesign for better hierarchy and usability.
- Place “If you are in crisis...” link before the “If you think your life...” link on the page.
- Change “Continue to start a message” to a primary button.

Start a new message screen:

- Keep the “Only use for non-urgent needs” banner and informational dropdown.
- Place “If you are in crisis...” link before the “If you think your life...” link on the informational dropdown.

Additional testing:

Test the new designs during Phase 0.

Recommendations: Secure messaging

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Include the word “secure” on the Messaging landing page and in the success banner that follows a sent message.

Additional testing:

Test the new designs during Phase 0.