

Profile: Add Email Notifications

Usability Study Readout

Research Goals

Research Goals

In the near future, we will need to support additional channels and notifications within our Notification settings section. We know design updates are needed related to the input type and to better separate notification items, but we aren't sure how the current auto-save pattern will work for users as the list of notifications grows, and new channels are added.

In order to make this determination, we needed to get our existing pattern in front of users, with all the notifications we're aware of today.



Research Goals

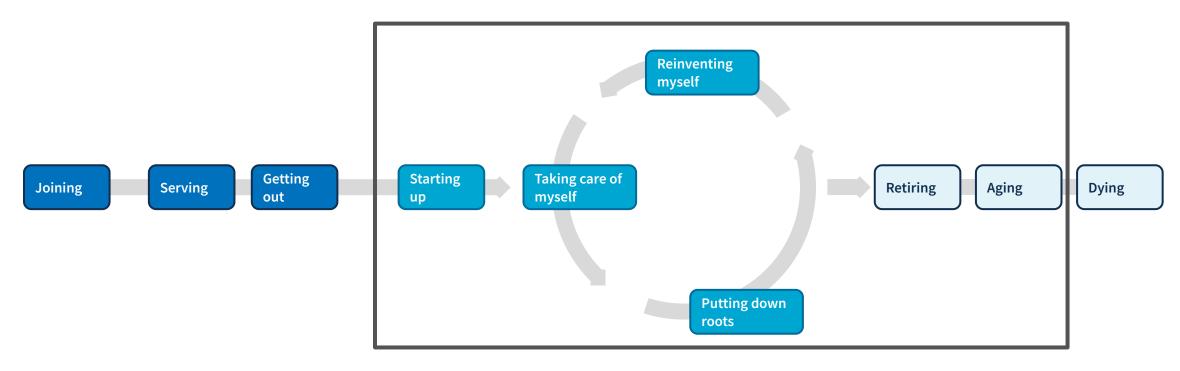
- 1. Learn how our single page, auto-save works for users when all known notifications are represented.
- 2. Learn what information needs to be surfaced make the current settings and options clear to people.

For a fully detailed list of research questions supporting these goals, review the complete findings report



How this research maps to the Veteran journey

VA notifications cover a broad spectrum of VA services, and managing settings is something Veterans may do at any stage from Starting Up through Aging.



For a fully detailed Veteran journey, go to

https://github.com/department-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



2023 OCTO-DE goals that this research supports

- 1. Enhance Veterans' personalized online experience
- 2. Integrate the health portal features into VA.gov



Methodology

Participant Demographics

- 8 Veterans
- 4 male, 4 female
- 7 identified as having a cognitive impairment
- 5 desktop, 2 mobile, 1 tablet
- 1 screenreader user
- 1 magnification user
- Aged 35-71
- 1 bi-racial, 3 Black, 4 Caucasian
- 5 urban, 3 rural
- 2 with no degree, 2 Associate's degree, 2 Bachelor's degree, 2 Master's degree



Marginalized groups we didn't speak with

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

- Other than honorable.
- Immigrant origin
- Expat
- Asian
- Gay, lesbian, or bisexual
- Transgender
- Nonbinary, gender fluid, gender queer, Two-Spirit (Indigenous only), or another gender beyond man or woman
- Assistive technology users using hearing aids, keyboard navigation, captions, switch devices or braille raders

We recommend studies with these underserved groups in the future.

Participant Tracker on Google Sheets

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final # of participant		9			-		usei	107.00	3				no			3
Category	%	Target	Study	1	2	3	4	5	6	7	8	9	10	11	12	13
Veterans		Based or	n curren	VA:	stat	istic	cs									
Age 55-64+	50.00%	5	7	0	1	N			1	1	1	1	1	N	1	
Cognitive Disability	50.00%	5	8	1	1		1	1		1	1	1	1	N		
Mobile user	50.00%	5	1	0			0.0						1	N		
<u>Rural</u>	25.00%	3	3	0			1				1	1		N		
No degree	25.00%	3	3	0	1			N				1	1			
Other than honorable	21.00%	2	0	0												
Immigrant origin	17.00%	2	0	0												
Women	10.00%	1	4	0			1		1		1	1		N		
Expat (living abroad)	0.40%	1	9	0			0					0	0			
Race		Based or	n VA's pr	oject	ted s	stat	istics	6								
Black	15.00%	2	4	0	1	0	1	0	1	0	0	0	1	N	0	0
Hispanic	12.00%	2	1	0								1				
Biracial	3.90%	1	1	0								1				
Asian	3.00%	1	Θ	0												
Native	0.30%	1	1	0								1				
LGBTQ+		LGBTQ+	Veteran	s are	5 ti	me	s as l	ikel	y to	hav	e P	TSD				
Gay, lesbian, or bisexual	%	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Transgender	%	1	0	0												
Nonbinary, gender fluid, ge	%	1	0	0												
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Assistive Tech (AT)		Ask an a	11v spec	ialist	tol	nelr	VOL	cor	nple	ete t	his.	Tar	gets	are	for a	a ge
Beginner AT User	50.00%	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0
Experienced AT User	50.00%	2	2	0	0								1		1	
Desktop Screen Reader (SF		1	1	0									0		1	
Mobile Screen Reader (SR)		1	1	0			0				0		1		0	
Magnification/Zoom	20.00%	1	1	0				N					0		1	
Speech Input Tech (Siri, Dra		1	0	0				0							0	
Hearing Aids	20.00%	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sighted Keyboard	10.00%	1	0	0		0		0				0		0		0
Captions	%	1	0	0		0	0	0	0	0		0		0		0
Switch Device	%	1	0	0												
Braille Reader	%	1	0	0												



Method

We conducted sessions remotely via Zoom, and asked participants to explore 2 HTML CodePen prototypes by completing 3 tasks.

One prototype used our existing auto-save pattern, and another used a read/edit pattern similar to the other sections in profile.

We alternated which version we started with for each session. Both prototypes had the same notification options available.

- Auto-save prototype
- Read/edit prototype



Research Findings

Key findings

- 1. Our existing auto-save edit pattern worked well with additional channels and notifications, and all participants preferred it to the read/edit pattern.
- 2. The read/edit pattern introduced some usability problems that weren't present in the auto-save pattern.
- 3. No one was confused by the lack of a save button.
- 4. People found the level of information provided to be sufficient for them to know whether or not they wanted to update the setting.
- 5. People were not totally clear on what to expect from notifications we'll be bringing over from My HealtheVet.
- 6. 7 of 8 participants easily navigated the path to add their email address.
- 7. The repetition of the prompt to add an email address wasn't overwhelming for most people.
- 8. Both variations of the design were equally usable on desktop and mobile.
- 9. Some participants were not clear about where their notifications would be delivered.



1. Our existing auto-save edit pattern worked well with additional channels and notifications, and all participants preferred it to the read/edit pattern.

The auto-save edit pattern in current designs was unanimously preferred to the read/edit (edit on a separate page) alternative.

- The addition of an email channel, and new notification groups didn't introduce any usability hurdles for 6 of 8 participants.
- 2 participants commented that they didn't need to see things that weren't relevant to them, such has Board of Veteran's Appeals hearing reminders. They were still able to navigate the page and update their settings.



"This [autosave prototype] is a lot simpler. It's just easy, it just saves it and does it. I can quickly see that I don't have it on and I can just turn it on " - P4

2. The read/edit pattern introduced some usability problems that weren't present in the auto-save pattern.

- 3 of the 8 participants in our study weren't sure if the edit button would lead them to edit their profile, or the notifications themselves.
- 2 of the 8 participants tried to click the bell icons to update their notification settings, instead of hitting edit.



Notification settings

We'll use the contact information from your profile to send you the notifications you choose:

- Mobile phone: 834-211-2334
- Email address: thanks.for.helping@withresearch.gov

Your health care

Appointment reminders

- Text notifications off
- Email notifications off

Edit

Appointment reminder settings

We'll send you reminders about upcoming appointments one week, and one day before your appointment.

Note: Some appointment reminders are sent from our Telehealth service provider or directly from your VA medical facility. This setting won't change those reminders.

- Notify me by text
- Notify me by email

Save

Cancel and go back

Notification settings

Update saved.

We'll use the contact information from your profile to send you the notifications you choose:

U.S. Department of Veterans Affairs

- Mobile phone: 834-211-2334
- Email address: thanks.for.helping@withresearch.gov

Your health care

Appointment reminders

- Text notifications off
- Email notifications on

<u>Edit</u>

Above: the read/edit flow. The flow starts on the main notification settings page by clicking the edit button. The person would land on a dedicated page for that specific setting, and then be returned to the main notification settings page.

3. No one was confused by the lack of a save button.

The feedback provided by the input message pattern made people feel that there changes were saved, even though they didn't interact with an explicit save button.

"'Update saved' makes me feel like something happened." - P4

"It's notifying me that it's been saved. I'm trusting that this is going to work and I don't need to call. - P9



4. People found the level of information provided to be sufficient for them to know whether or not they wanted to update the setting.

In both prototypes, each notification had a name, channel options (text and/or email), and displayed if it was turned on or off. All participants understood the channel options and if the notification was turned on or off.

Some participants had questions about a few notifications (detailed in the next finding), but even without clear answers to those questions in the interface, they felt information was sufficient.

A screenreader user especially appreciated the amount of content on the page.

Your health care Appointment reminders Appointment reminders Text notifications off Edit Your health care Appointment reminders Notify me by text Notify me by email



"Us being low vision and visually impaired, we always have the fine line of getting enough feedback, and too much feedback. The feedback I was getting from this prototype was right on point" - P10

5. People were not totally clear on what to expect from notifications we'll be bringing over from My HealtheVet.

- 4 of 8 participants weren't sure about "Medical images and reports". An extremely low-vision user wondered how they might understand an image with their screenreader.
- 3 participants asked questions and shared comments about the My HealtheVet Newsletter notification:
 - They wondered if it would be sent in it's entirety (preferred for email) or if they'd get a link to go read it somewhere else (preferred if available by text).
 - They felt that "notification" was not an accurate label for the My HealtheVet newsletter, because they associate newsletters with signing up and subscriptions, rather than notifications.



6. 7 of 8 participants easily navigated the path to add their email address.

- Going between the notification settings page and email form was intuitive for the majority of participants.
- One participant was surprised to find the single form field. Since the link said "profile" they expected to go to a page with their entire profile information.



7. The repetition of the prompt to add an email address wasn't overwhelming for most people.

Our team wondered whether or not the repetition of this call to action on the page is cumbersome for users, especially for screenreader users.

- 5 of 8 participants didn't comment on the repetition, and easily navigated the prototypes.
- Screenreader users were not bothered by the repetition of the links.
- 2 participants commented that the page had visual clutter, and after adding an email commented that it was "better" and "more streamlined".



8. Both variations of the design were equally usable on desktop and mobile.

Adding My HealtheVet notifications to our current page will nearly double the amount of content, so we wondered if the longer screen would present problems on mobile. It didn't; the 3 participants who joined their session via a mobile device were able to use the page equally as easily as those on a desktop.



9. Some participants were not clear about where their notifications would be delivered.

Our notification settings page has contact information under the h1 telling users the email address and mobile phone number where their notifications will be sent, as seen in the image on the right.

4 of 8 participants either didn't notice, or didn't recall that information at the top of the prototype. Of these 4

- Some made comments that told us they didn't understand the information, and others didn't remark on it at all.
- Screen sizes and devices varied, so that did not seem to be a factor to contribute to missing this section of the page.

Notification settings

We'll use the contact information from your profile to send you the notifications you choose:

- Mobile phone: 834-211-2334
- **Email address:** thanks.for.helping@with-

research.gov

Your health care

Appointment reminders

- Notify me by text
- Notify me by email

Prescription shipment and tracking updates

Only available at some VA health facilities. Check



Secondary findings

- 1. Most sighted participants didn't notice the "background color only" alert under the H1 telling them their update had been saved.
- 2. People don't intuitively understand the difference between their login email address and contact email address.
- 3 participants weren't clear about what would happen after they added a missing email address.
- 4. A low vision user was confused by the checkmark icon on "update saved" message, since it was immediately above a checkbox input.
- 5. Participants highlighted some missing items from the notification settings page that would be useful to them.
- 6. SMS notifications that new medical information is available would be helpful to Veterans.
- 7. The wording for the "add your email address" call to action confused some users.



Research process insights

- 1. Our latest screener questions for assistive tech users and people with cognitive considerations were more successful than previous versions, but we still have room to improve.
- 2. CodePen worked well as a tool for accessible HTML prototypes, and we learned ways to use it more effectively for future studies.



Recommendations

Recommendations

- 1. Use the pattern in the auto-save prototype for notification settings as we add channels and notification options.
- 2. Learn more about content of My HealtheVet notifications, and update content accordingly to set clear expectations about what they are.
- 3. Reconsider how we are encouraging people to add their email address to their profile.
- 4. Explore how we might make the input message pattern more accessible.
- 5. Explore how we might surface meaningful and relevant links to people in the notification settings section.



Next Steps

Next steps

- Review with product team and align on recommendations we'll take action on.
- Share findings with the VA Notify and My HealtheVet teams.
- Create tickets for our backlog based on the recommendations.



Further research needed

We need to re-evaluate the use of the background-only banner to confirm a save at the top of a page, once people can use their real information.

This was the first time we tested our new pattern of having a dedicated page for updating contact information. Most people didn't acknowledge the update, and that may be OK if they see their own information reflected back to them once it's saved. We should re-test the existing pattern in a future study, with people's actual information to get a sense of how important it is for them to read this confirmation banner.

We should recruit for the underserved groups we didn't get to talk to in this round in our next study.

Including these people in our next round of research will help our team get a diverse group of perspectives.



Appendix

Research documents

- Research plan
- Conversation guide
- Session notes
- <u>Topline summary</u>
- Auto-save prototype
- Read/edit prototype



Tools used for synthesis

- Mural board
- Topline summary cross-check

