

# Virtual Agent Chatbot

Automated Content and Claims Feature Research

Shane Strassberg// Dec 2021



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of Veterans Affairs

# Purpose for research

1. Vet preference for drupal content response
  - **Link**
  - **Preview**
  - **Full**
2. Feedback for claims feature
  - Any missing info
  - Comprehension of buttons
3. Updated Disclaimer location

# Participants

## **Seven (7) Veterans, Age 35-65+**

- Five (5) male
- Two (2) female

## **Race**

- Six (6) White
- One (1) Black

## **Education**

- One (1) Some college
- Two (2) Associates, Trade, or Vocational
- Four (4) Master's degree

## **Assistive Tech**

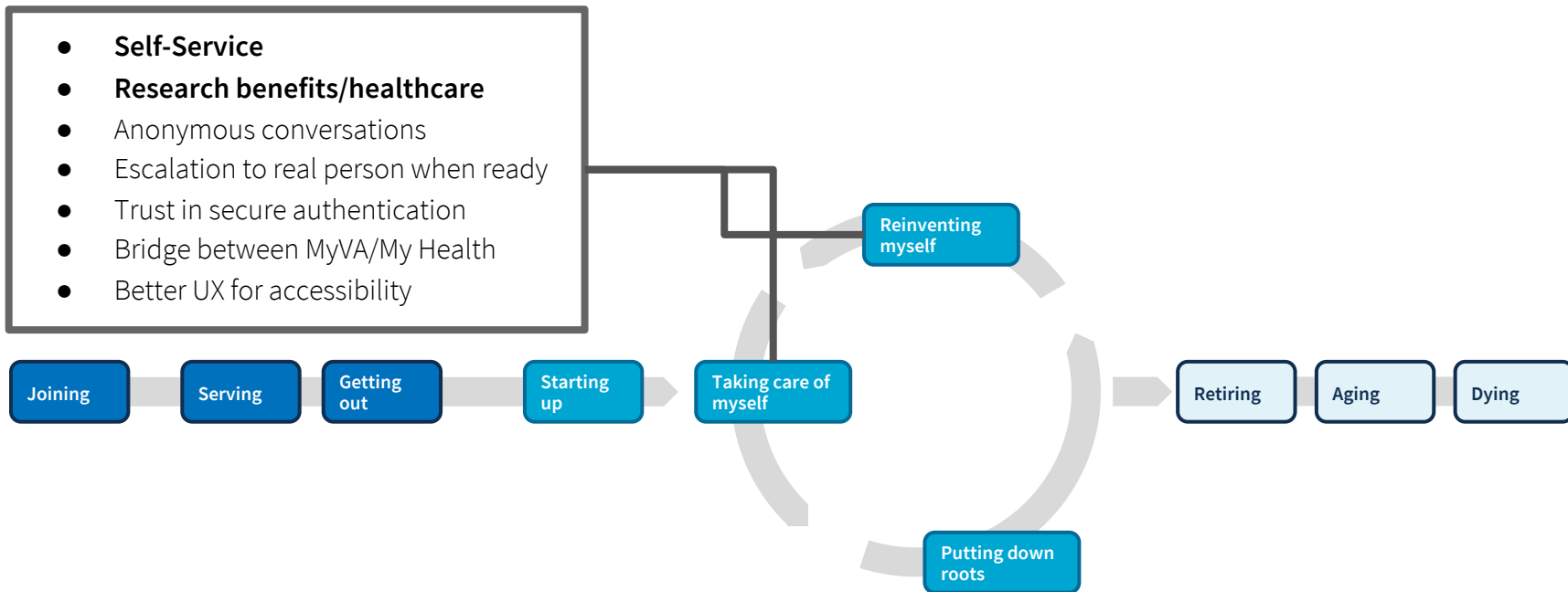
- One (1) Speech Input (Dragon)
- One (1) Hearing aid



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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

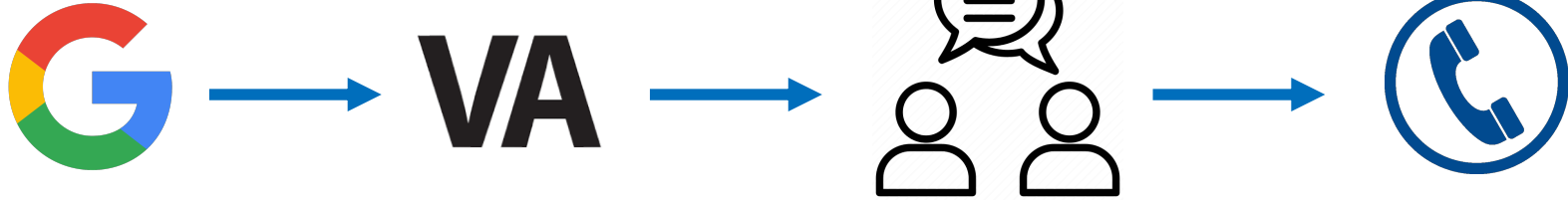
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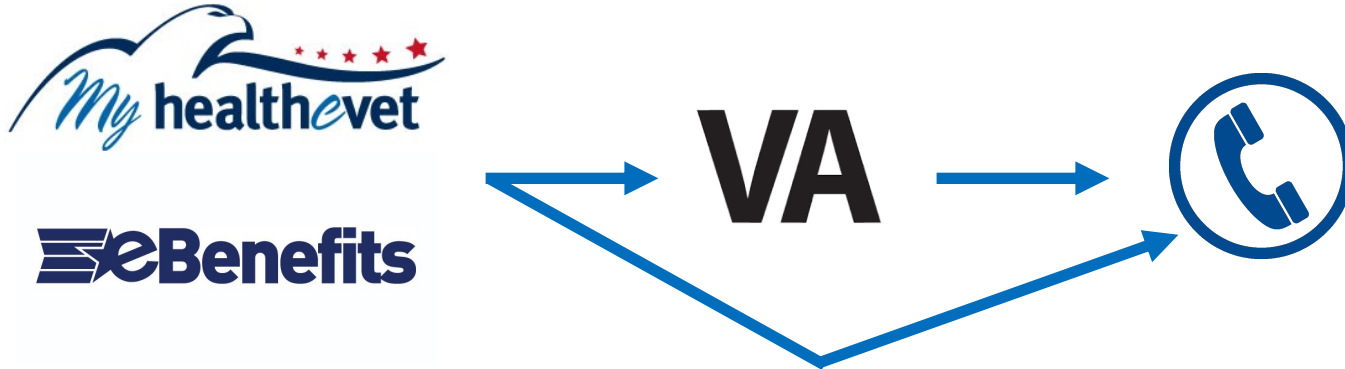
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# Vet Actions for VA Info

## General



## Specific



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“

**I just feel more comfortable talking to a vet or googling myself.  
The VA here...they're not very helpful. I don't know how to get  
to someone directly..**

Black, Female Veteran, Age 35-44

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# Updated Disclaimer

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Search **Contact us** Wesley

VA Benefits and Health Care

About VA

Find a VA Location

My VA

My Health

# Welcome to the VA.gov virtual agent study

Thank you for being part of this study. We appreciate your time.

## Why we're doing this study

We want to explore how a chatbot (or "virtual agent") can help you find answers on VA.gov.

We created a preview of this bot for you to try. Your participation and feedback will help us understand if this chatbot is helpful. It will also help us find ways to improve the bot.

## How to take part in this study

To start, type any question in the **Type your message** section of the bot. You can type questions like these:

- Does VA health care cover cosmetic surgery?
- How do I help a Veteran who is at risk of homelessness?
- How do I appeal a VA decision on my claim?

### VA Virtual Agent (beta)

#### Disclaimer

- This virtual agent is still in development and cannot help with personal, medical or mental health emergencies. Thank you for understanding.
- We keep a record of all virtual agent conversations, so we ask that you do not enter personal information that can be used to identify you.

Accept



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# Drupal Response Task

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## VA Virtual Agent (beta)

VA

Welcome, Wesley, to the U.S. Department of Veterans Affairs virtual agent.

To get started, you can ask questions such as:

- What's my claim status?
- How do I get health benefits?
- What's my nearest VA health facility?
- What's my appeal status?

Just now

Am I eligible for health benefits?



## VA Virtual Agent (beta)

- What's my nearest VA health facility?
- What's my appeal status?

A minute ago

Am I eligible for health benefits?

You

Just now

VA

For the purposes of this test, please indicate the format you would like to see your answer by typing one of the options below:

Am I eligible for health benefits, *link*

Am I eligible for health benefits, *preview*

Am I eligible for health benefits, *full*

Just now

Type your message



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## VA Virtual Agent (beta)

Am I eligible for health benefits, full

You

6 minutes ago

VA

Here is an article we found that can help:

What should I do if I received an other than honorable, bad conduct, or dishonorable discharge?

If you've received one of these discharge statuses, you may not be eligible for VA benefits.

**There are 2 ways you can try to qualify:**

[Find out how to apply for a discharge upgrade](#) [Learn about the VA Character of Discharge review process](#)

Type your message



## VA Virtual Agent (beta)

active-duty service, you may be able to get disability compensation. [Find out if you qualify for disability benefits](#)

10 minutes ago

Am I eligible for health benefits, preview

You

Just now

VA

Here is an article we found that can help:

"You may be eligible for VA health care benefits if you served in the active military, naval, or air service and didn't receive a dishonorable discharge."

To find out more, go to the [Health Care Eligibility](#) page.

Just now

Type your message



## VA Virtual Agent (beta)

A minute ago

VA

Here is an article we found that can help:

"You may be eligible for VA health care benefits if you served in the active military, naval, or air service and didn't receive a dishonorable discharge."

To find out more, go to the [Health Care Eligibility](#) page.

Just now

Am I eligible for health benefits, link

You

Just now

VA

Here is an article we found that can help - [Health Care Eligibility](#) page.

Just now

Type your message



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# Key Findings

1

Vets consistently preferred the preview response

2

They felt it provided just enough context and confident it would set them down the right path

3

Full response was too much info in small space. Info was more digestible on webpage.

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# General Topic Task

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# Key Findings

1

Results for correct responses were mixed. High-traffic topics like “prescriptions,” the bot provided an accurate response to the right webpage, or a facility location would provide response to the locator tool.

2

Bot could get “confused” when asked, “Can my spouse get VA benefits?”, and provided response with link to Education and Training Benefits webpage, or when asked more obscure topics like if VA is conducting studies on CLL (Chronic Lymphomatic leukemia).

3

However, Vets were not deterred from continuing to try to use the bot to get to the right info.

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# Claims Task

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## VA Virtual Agent (beta)

VA

Welcome, Wesley, to the U.S. Department of Veterans Affairs virtual agent.

To get started, you can ask questions such as:

- What's my claim status?
- How do I get health benefits?
- What's my nearest VA health facility?
- What's my appeal status?

Just now

What's my claim status?



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# Key Findings

1

Vets understood the provided info, really liked the rep. info, and appreciated the loading text/ellipses when bot was making API call.

2

Vets thought changing “your first claim” to “your most recent” claim makes more logical sense

3

Vets thought including the type of claim, “back, toe, PTSD” would improve recognition of the claim

4

Rather than having a “See Next Claim” button, each claim could be a button

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# Additional Findings

1

Vets really liked this feature because it removes being put on hold and passed around on the phone.

2

Some confusion for “Speak to Agent” button.

3

Vets said they would chat with a live agent if they wanted more info

4

Once connected to live agent, reverify personal info for added security

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# Recommendations

- Deploy preview drupal responses to minimize cognitive load and potential 508 issues with lots of text and links in full response
- Use LUIS instead of QNAmaker for natural language processing
- Include type of claim if possible for easier recognition of each claim
- Change “Speak with Agent” button to “Chat with Live Agent” or “Connect to Live Agent” to minimize confusion
- Prototype and test if displaying multiple claims as buttons improves the user experience



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“

This shows potential for getting information I need quickly, simply and reliably. I would definitely use chatbot as first resource in info-finding after chatbot goes through a few more rounds of development.”

“I would 100% use the chatbot again because it allows me to work at my own pace and not be pressured for questions.”

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Any questions?

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