**MHV Drug Image Display Usability Findings Report**

**Office of the CTO - Digital Experience (OCTO-DE), MHV, Pharmacy**

**Research Goals**

This research was conducted to test Veteran response to a new drug image display feature on the MHV Pharmacy Medication Details page, as well as new design systems on the same page. Secondary discovery research was conducted concurrently to learn more about why Veterans visit the Details page and how Veterans react when inconsistencies appear during their MHV Pharmacy experience.

The goals of this study are:

* Evaluate drug image ease of use and navigability.
  + Determine if the location of the image makes sense to Veterans.
  + Discover when/if Veterans need a drug image.
* Determine if the proposed design changes on the Medication Details page are helpful to the Veteran’s needs.
  + Evaluate Veteran’s ease of navigability and ability to accomplish tasks in new designs.
* Determine the purpose of Veteran’s visiting the Medication Details page, and what can be done to facilitate those needs.

**Research Questions**

* Can Veterans navigate the new designs of the Medication Details page and complete requested tasks?
  + Do Veterans know how to open and close accordion menus for Prescription Label Information and Fill/Refill History?
    - Do Veterans expect to see what information is found under these accordion menus?
  + Is the location of the drug image under the Fill/Refill History accordion intuitive for Veterans?
    - Is there another location on the page where Veterans expect to see an image?
  + Can Veterans find new information previously not found on the Medication Details page, like Prescriber Name?
* *In reference to what is currently in production:* Why do Veterans visit the Medication Details page? What actions do they take? Is there anything that is missing that Veterans wish they saw?
  + What do Veterans expect to see on the Medication Details page?
* How do Veterans respond to the new designs? What were the pain points or concerns Veterans had?

**Methodology**

We conducted 19, 30-minute long remote moderated research sessions via Zoom from February 10th to March 10th, 2023. Each participant was asked questions about their experience on MHV Refill Prescriptions pages and were asked to complete tasks exploring the new designs.

Task 1 *(upon beginning test, participants start on Refill VA Prescriptions page):*

1. \*\*Is the Veteran familiar with this page? What does the Veteran do here?
2. \*\*Besides refilling prescriptions, does the Veteran do anything else on this page?
3. Refill a prescription for Cabergoline.

Task 2

1. \*\*Confirm whether the refill submission has been received or not.
2. Open the Medication Details page for Buspirone.

Task 3

1. \*\*Is the Veteran familiar with the Medication details page? Why does the Veteran visit this page?
2. Find the Prescriber Name.

Task 4

1. Prompt: “Let’s pretend you just picked up a prescription for Buspirone. You think that the pills might look a little different than previous refills. What would you do to confirm that this new medication, though it looks different, is the correct medication for you?”

\*\*Discovery-based research questions.

**Hypotheses and Conclusions**

1. Veterans will be able to navigate through the new designs and easily access the drug image link.
   1. DEFINITELY FALSE – the location for the drug image was based on a premise that Veterans would only need an image to confirm whether or not their medications are accurate. Only 3 out of 20 participants found the image based on that premise.
2. Veterans will appreciate a new level of accuracy and record keeping of prescriptions.
   1. DEFINITELY TRUE – Most Veterans responded positively to the addition of the refill history, and referenced its contents throughout task completion.

**Key Findings**

**Discovery: Refill VA Prescriptions Page**

1. **10 out of 19** participants had no other reason to visit the Refill VA Prescriptions page
2. **7 out of 19** didn’t know the Medication Details page existed.

**Discovery: Medication Details page**

1. For those that visit the Medication Details page, most **(8 out of 12)** do so to check updated information about the medication they are taking; prescription number, reason for taking, etc.

**Discovery: Drug image**

1. Almost nobody interviewed **(1 out of 19)** have ever needed or referenced needing an image of their drug.

**Discovery: Drug changes**

1. **18 out of 19** have experienced drug color and/or shape changing randomly
   1. **6 out of 18** ‘trust the VA’.
   2. **3** call the pharmacy, **3** search on Google, **3** use Secure Messaging to confirm they are taking the right medication.

**Design Response: Medication Details Page navigation**

1. **4 out of 19** didn’t open any dropdowns when exploring the new Details page.
2. **16 out of 19** found the Prescriber name under the Prescription Label Information accordion.
   1. **16 out of 19** expected what was found in the Prescription Label Information
3. **6 out of 19** recognized the Prescription Label Information is what is found on a prescription bottle.

**Design Response: Drug Image**

1. **3 out of 19** found the drug image in response to the prompt given (see above).
   1. **11 out of 19** responded positively to the drug image location after being guided to the image.
   2. **3** opened the Fill/Refill accordion and didn’t see ‘View Image’
2. **9 out of 19** suggested a description higher on the page for easier access.

**Details of Findings**

**Discovery Takeaways**

1. **Most Veterans who visit the Medication Details page (8 of 11) are looking for specific information like prescription numbers, reason for taking, tracking, etc.**

This data will help shape requirements for Pharmacy features during the transition to VA.gov. It is important to mention that **7** participants of varying experience on MHV had never visited the Medication Details page. Those that were new to the Medication Details page were given the same tasks as those with experience, and their response was very similar to those who visit the Medication Details page frequently. This is encouraging, as it shows that new users with no experience can navigate the page appropriately.

1. **Only 1 participant has ever needed a drug image.**

While most Veterans responded positively to having an image on the Medication Details page, only 1 Veteran interviewed had ever needed an image. This indicates the priority in which to locate the drug image in reference to Veteran’s needs; perhaps a feature that would be good to have, but shouldn’t be considered critical to the user flow since most Veterans haven’t needed an image in the past.

1. **Medications changing shape/color isn’t a problem for Veterans and they have many ways of confirming their medication is correct.**

There were 4 ways that Veterans reported responding to their medications changing shape/color:

1. Use Secure Messaging to reach out to a provider **(3 participants).**
2. Use Google and search what the pill should look like **(3 participants).**
3. Calls the pharmacy **(3 participants).**
4. References the packet/bottle **(3 participants).**
5. User ‘trusts the VA’ and does nothing **(6 participants).**

No Veterans considered using the Medication Details page or an image to confirm the accuracy of their medication.

**Medication Details Design, Drug Image Response**

1. **Almost all Veterans (16 out of 19) found the Prescriber Name under the Prescription Label Information.**

This is encouraging, as the Prescriber Name is currently unavailable on the Medication Details page so participants were asked to look for something that is completely new. Furthermore, while only **6 out of 19** participants recognized the Prescription Label Information is the information found on the prescription bottle, all **16** expected what they found in the Prescription Label Information accordion.

Keywords: Labels, Accordion, content presentation, MHV Pharmacy

Quotes:

P9 - “Yes, [the Prescription Label Information] gives all the information that’s on the container when it comes in.”

P17 – “It’s exactly what I see on my bottles, same order and everything.”

1. **Only 3 out of 20 participants opened the drug image after being given the prompt.**

This information reflects an amalgamation of data, namely: many Veterans have never needed a drug image; when their medications have changed color/shape they normally do not reference the Medication Details page; Veterans didn’t know the Fill/Refill History provided up-to-date information about their refills. With those points in mind, it isn’t surprising that Veterans had trouble finding the image. After further questioning, only **1 Veteran** thought to look in the Fill/Refill History accordion to find an image. **5 participants** expected the image to be in the upper section of the page and **5 participants** expected the image to be in the Prescription Label information.

Keywords: Drug image, Accordion, content presentation, MHV Pharmacy

Quotes:

P3 – “[The medication] has changed on me, but it doesn’t concern me…If it was concerning I would call pharmacy first.”

P8 – “[If the medication has changed shape/color] I would call the pharmacist. Ask the cook!”

P15 – “I trust them [the VA], some meds change every time, so it looks different each time.”

1. **11 out of 20 participants responded positively to the location of the drug image after being guided to it.**

Many Veterans appreciated having as much information as possible available to them, even if they wouldn’t use all of that data. Our findings suggest that a drug image is not a critical need for Veterans, but more than half were excited about having access to an image and were comfortable with its location **(9 out of 20 suggested having an indication that there was an image in the Fill/Refill accordion)**.

Keywords: Drug image, Action link, Labels

Quotes:

P7 – “Anything that was here that we can use and self-serve will be beneficial.”

P16 – “If there was a picture of the med, it gets rid of one of the steps and saves time.”

P13 – “If there was a description to make it easier to see that there's a pill here, that would be good.”

**Additional Insights**

1. **9 out of 20** participants suggested changing the description of the Fill/Refill History accordion to indicate there was an image there, OR have an indication field for the description in the Prescription Information at the top of the page.

Veteran’s response suggests implementing either of those descriptions will have a positive effect on navigability and the user journey without dramatically changing the design of the page, which was positively received.

1. **4 out of 20** participants didn’t open any accordion menus when navigating the new Medication Details page for the first time (before being given any tasks). While the Medication Details page doesn’t have many interactive elements, seeing 20% of users not know to click on the accordion menus is concerning. It should be noted that all **4** did find the Provider Name (found in an accordion menu) without help.
2. **7 out of 20** had a *negative* response to the drug image location after testing had been completed. Responses fell into 3 categories: 1. Veterans didn’t know they could find an image in the Fill/Refill History section. 2. Veterans don’t assume the page has an image at all. 3. Veterans assumed that an image would be higher on the page.

Quotes:

P10 – “I would know to click on the Fill/Refill History now, but I never saw a need to click on it before.”

P13 – “I didn’t think this part would have a picture of my pill.”

**Recommendations**

1. **Leave drug image in Fill/Refill History, but change wording to ‘Fill/Refill History, Drug Images’.** Our data shows that Veterans don’t need images very often, and don’t rely on images to confirm their medication information. However, Veterans would like the feature to be somewhere on the page, regardless. To help Veterans recognize where an image could be found (without moving the image to a congested area of the page) we recommend adding wording in the accordion menu header that lets Veterans know they can find an image in the Fill/Refill History menu.
2. **Add a ‘Description’ indication field in the Prescription Information section at the top of the page.** Having a description was suggested by several Veterans and would not only help Veterans recognize the similarities between the Details page and their prescription bottles, it would also help those with screen readers and other accessibility tools.
3. Due to the success and positive response to the new design systems tested on the Medication Details page, we recommend **implementing the tested changes such as the Prescription Information field and the Prescription Label Information and Fill/Refill History accordion menus.** Many Veterans appreciated having more information about their medications and were excited to have it all in one place. Several mentioned throwing out the informational packet that comes with a prescription or using it as a fire starter. These components keep an updated repository of helpful information usually found on that packet, which was appreciated by the Veterans.

**Next Steps**

Share findings with the Pharmacy business team to begin next iterations. Share findings with VA Health and Benefits App team for help with their work and research.

**Further research needed**

Further research may be necessary concerning the following:

1. Does the redesigned Medication Details page provide all the information Veterans need to see? Is there any data missing?
2. Can Veterans easily understand the different informational fields and the data in them?

**Appendix**

[Research Plan](https://github.com/department-of-veterans-affairs/va.gov-team/blob/master/products/health-care/prescription-refills/mhv-prescription-refill/2023-01-pharmacy-drug-image-display/research-plan.md)

[Conversation Guide](https://github.com/department-of-veterans-affairs/va.gov-team/blob/master/products/health-care/prescription-refills/mhv-prescription-refill/2023-01-pharmacy-drug-image-display/conversation-guide.md)

**Tools used for Synthesis**

[Research Synthesis](https://github.com/department-of-veterans-affairs/va.gov-team/blob/master/products/health-care/prescription-refills/mhv-prescription-refill/2023-01-pharmacy-drug-image-display/Drug%20Image%20Display%20Synthesis.xlsx)

[Research Synthesis Cont.](https://github.com/department-of-veterans-affairs/va.gov-team/blob/master/products/health-care/prescription-refills/mhv-prescription-refill/2023-01-pharmacy-drug-image-display/Image%20Synth%20Continued.xlsx)

**Pages and applications used**

[Adobe XD Prototype](https://xd.adobe.com/view/712f4a57-b8cf-4011-a990-29fea3551a3c-247c/)

**Other supporting documents created**

e.g. user flows, personas, etc.

**Secondary research**

Include any secondary research you may have.

E.g. web analytics, ForeSee data, SME interviews, competitive analysis, or other relevant research studies.

**Who we talked to**

**Recruitment criteria**

Our test required the following criteria:

* 16 participants who are 65+
* 3 participants with cognitive disabilities
* 12 participants in rural locations
* 8 participants without a college degree
* 4 participants who use assistive technology (various)

We talked to **19 participants.**

Audience segment:

* Veterans: 19
* Caregivers: 0
* Family members of a Veteran: 0

Gender:

* Male: 16
* Female: 3

LGBTQ+:

* Transgender: 0
* Nonbinary, gender fluid, gender queer, Two-Spirit (Indigenous only), or another gender beyond man or woman: 0
* Gay, lesbian, or bisexual: 0

Devices used during study:

* Desktop: 19
* Tablet: 0
* Smart phone: 0
* Assistive Technology: 0

Age:

* 25-34: 1
* 35-44: 0
* 45-54: 1
* 55-64: 1
* 65+: 16
* Unknown: 0

Education:

* High school degree or equivalent: 2
* Some college (no degree): 7
* Associate's degree, trade certificate or vocational training: 4
* Bachelor's degree: 2
* Master's degree: 4
* Doctorate degree: 0
* Unknown: 0

Geographic location:

* Urban: 6
* Rural: 13
* Unknown: 0

Race:

* White: 16
* Black: 0
* Hispanic: 2
* Biracial: 0
* Asian: 0
* Native: 1

Disability and Assistive Technology (AT):

* Cognitive: 5
* AT beginner: 0
* AT advanced user: 0
* Desktop screen reader: 0
* Mobile screen reader: 0
* Magnification/Zoom: 4
* Speech Input Technology like Siri/Dragon Naturally Speaking: 0
* Hearing aids: 0
* Sighted keyboard: 0
* Captions: 0

**Underserved groups we haven’t talked to**

* Gay, lesbian, or bisexual
* Black, Asian
* Veterans with a cognitive disability

Table

Description automatically generated