Facilities Health Services IA Study, Round 2

Prepared by the VA.gov CMS Team
Prepared for and presented to the Team 1

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The VA.gov CMS team conducted 17 **in-person usability tests** with Veterans and **a tree test** (n=255) to understand if people could find and comprehend the health and facility services they have access to. Our goal was to evaluate the pros and cons of having health/facility services content presented in (1) alphabetical order or (2) grouping by similarity (primary care, specialty care, etc.). An ancillary goal was to identify any new patterns that could further improve the UX. We found that while both content structures presented critical usability problems for people, a grouped structure seemed more useful in creating a memorable wayfinding experience. Additionally, we observed that miscellaneous categories caused more confusion than benefit for users.

Outline

1. Study Goals	
2. Research Methods	
3. Findings: Prototype testing	
4. Findings: Tree testing	
5. Recommendations	
6. Next steps	

This research focused on the information architecture, content, and design patterns used on the Facility Invision prototype.

1. Study Goals

Gain a <u>qualitative</u> understanding of the effectiveness of the proposed design.

- Evaluate the pros and cons of having health/facility services content presented in:

  - <u>alphabetical</u> order (A-Z grouping)

  - <u>grouping</u> by similarity (primary care, specialty care, etc.)

- Identify design patterns or content adjustments that could improve the experience for Veterans

<u>Quantitatively</u> evaluate the effectiveness of a proposed architecture for grouping services.

- Determine how accurately participants complete health-service-focused and "other"-service-focused tasks.

- Identify design patterns or content adjustments that could improve their experience

2. Research Methods

Mixed methods approach to deepen understanding

Prototype testing (i.e. "usability" testing)

- Qualitative methodology
- Small sample, moderated
- Helps us understand sentiments and concerns in the Veteran's voice and context

Tree testing

- Quantitative outputs
- Large sample, un-moderated
- Indicates potential opportunities and problem areas, non-contextual

We visited 2 facilities and intercepted 17 Veterans.

- Sessions lasted from 5 to 30 minutes, per participant's availability.

    - Most sessions lasted longer than 10 minutes.

- Used two clickable prototypes in Invision (a design tool).

    - alphabetical order (A-Z grouping)

    - grouping by similarity (primary care, specialty care, etc.)

Lessons learned: Open lobby/hallway spaces are too distracting for these kinds of interactions. Additionally, popular events (e.g., health fair) provide additional distraction.

We tested at a VA to gain a complete understanding.

A former team member evaluating designs with a Veteran

Tasks and scenarios focused on answering:

- Are participants able to navigate to Locations and services > A-Z services?

- Are participants able to find the service they need within A-Z services?

- What questions or blockers do they face when trying to find the target service?

- What are participants' reactions to the medical terms within the services list?

  - Are they able to understand the terms?

  - Do they suggest alternative terminology?

- What are participants' reactions to viewing services in an A-Z list and grouped?

We created a tree test in Optimal Workshop.

A menu-like activity that evaluates participants' comprehension of content captured under Our Health Services

- Included 16 tasks, 10 tasks randomly shown to each participant

- A total of 473 people participated in the test.

- 54% of participants (255) completed the full test.

- Median completion time = 8:05.

- Deployed over a 2 week window

The tree test abstracted navigation and accordion content to test the effectiveness of group labels.

UI appearance

Specialty care

Amputation care	**+**
Audiology and speech	**+**
Cardiology	**+**
Critical care	**+**
Dental/Oral surgery	**+**
Gastroenterology	**+**
HIV/Hepatitis	**+**
Laboratory and pathology	**+**

TreeJack appearance

▼ Specialty care
    └ Amputation care
    └ Audiology and speech
    └ Cardiology
    └ Critical care
    └ Dental/oral surgery
    └ Dermatology
    └ Gastroenterology
    └ HIV/Hepatitis
    └ Laboratory and pathology
    └ Low vision and blind rehabilitation
    └ Nephrology, renal, kidney
    └ Nutrition, food, dietary
    └ Ophthalmology
    └ Optometry
    └ Physical medicine and rehabilitation
    └ Podiatry

3. Findings: Prototype testing

Grouping seemed helpful to most, but critically troublesome to others.

Both list architectures presented usability problems with wayfinding, due to a perceived lack of plain language on the accordion labels.

"I prefer the grouped version here because it makes sense to me to look for things under primary care or specialty care."

"Good idea for [label] duplication - more likely to remember it and find it." (re: grouped services list)

"I don't like being in a maze." (re: grouped services list)

Where's my search bar?

People could not find the search bar in the prototype. Some expected a search function that helps them connect their own understanding of their problem and medical terminology.

"Is there a search button? I would have gone straight to that, but I don't see it."

"Would have searched for 'Foot care.'"

"'Speciality Care' doesn't really tell me what the specialty care list is. Should be a description or summary."

"Search should be on the left menu, too."

Product trust > VA authority

My HealtheVet is a recognized and trusted product.
Acknowledging the relationship between the old and new can
help bridge trust gaps.

"I would have rather seen 'My HealtheVet' at the top. That would have made more sense."

"If I'm just refilling my prescription, I'd go to My HealtheVet."

Digital tools don't replace human validation

Even with digital options, participants expressed either the need or the preference for a human touchpoint — in this case, a phone call.

"Were I someone who is not familiar, I don't know what I would do. Probably call the general phone number (866-...)."

"I would call the hotline and refill my prescription."

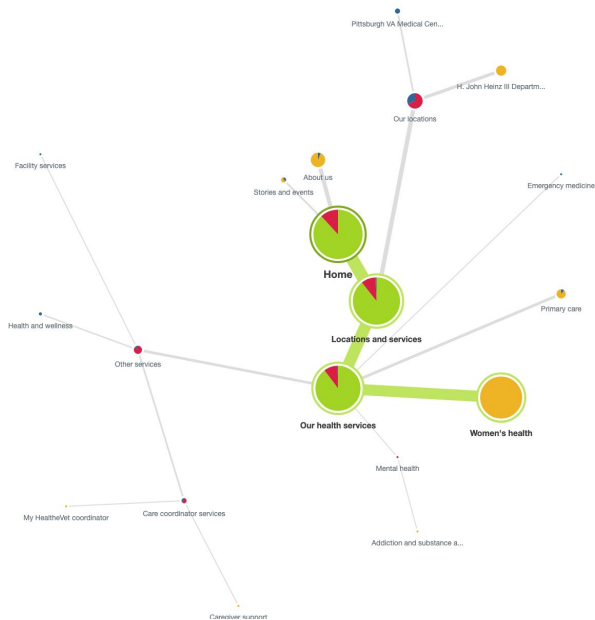"Usually call to make my appointment, normally make it online and then call to verify."

4. Findings: Tree testing

The findings from our tree testing mirrored those of our hallway testing.

Examples tree test results and how to interpret them.

Pie trees. (this one is relatively successful)

Larger green line, sparser tree = better

Destination matrix. (selection by task)

High number in green = better

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Locations and services																
Our locations																
Pittsburgh VA Medical ...																
Pharmacy			1		2		1	1					1	1	2	1
H. John Heinz III Depart...	16	10	6	6	9	3	5	6	2	8	7	10	7	20	13	26
Beaver County VA Clinic	2		1	9	2		3	2		2	1	2	1	3	2	3
Our health services																
Emergency medicine			1		4		8	1		1		1				2
Primary care	2	7	25	23	19	27	21	32	30	23	22	5	14	3	19	9
Pharmacy	1		1							1	2					2
Laboratory and patholo...	1		1	108		1	5		1		1					1
Geriatrics			2				2	14	6							
Women's health		128			14								1			
Mental health																
Addiction and su...		1		57							2					
Chaplain	22									1						
Psychiatry				3								7		1		

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The "Health Services" grouping was useful to participants, but "Other Services" was not.

The tasks with the lowest success rates were those that asked participants to find services grouped within "Other Services."

- Task 6 (vision limitations): 27% success
- Task 15 (returning service member who needs information about transitioning into civilian life): 27% success
- Task 12 (employment rehabilitation programs): 31% success
- Tasks 11, 9, and 16: 32% success (tied)
- Task 10 (caregiver resources): 34% success

Services that are (ostensibly) more commonly used had higher task success rates.

The tasks with the highest success rates focused on relatively straightforwardly described health conditions; none of the services were grouped under "Other Services."

- Task 2 (find a women's health provider): 77% success
- Task 4 (routine blood work): 66% success
- Task 7 (wisdom-tooth removal): 63% success
- Task 3 (consult with a nutritionist): 60% success
- Task 8 (kidney conditions): 52% success

"Other Services," as a descriptor, felt unclear.

If someone is new to VA Health Care, they may not be aware of the non-health-related services VA offers; because of this, they might not think to explore this category of services, or they may default to exploring the more familiar Primary care (or About us).

This descriptor also doesn't match the granularity and specificity of other categories — in short, the nebulousness of the label is not helping Veterans find the services they need.

Participants incorrectly nominated "About Us" and "Primary Care" as the answers for many tasks.

About us was a very common failed destination (10 of 16 questions), with the highest failed destination rates.

Primary care was another common failed destinations (10 of 16 questions). This may relate to Veterans' onsite experience of needing referrals from primary-care providers.

We need to further investigate why About Us was so commonly (incorrectly) chosen as a destination (more on this later).

Participants incorrectly nominated "About us" as the answer for many tasks.

About us was another common failed destination (10 of 16 questions), with the highest failed destination rates.

For 6 tasks, the failed destination rate was more than 20%; for the remaining 4 tasks, it was between 10 and 20%.

Legend: ■ Correct □ Incorrect (< 10% of responses) ■ Incorrect (10% - 20% of responses) ■ Incorrect (> 20% of responses)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Locations and services																
Our locations																
Pittsburgh VA Medical ...																
Pharmacy				1		2		1	1				1	1	2	1
H. John Heinz III Depart...	16	10	6	6	9	3	5	6	2	8	7	10	7	20	12	26
Beaver County VA Clinic	2		1	9	2		3	2		2	1	2	1	3	2	3
Our health services																
Emergency medicine			1		4		8	1		1		1				2
Primary care	2	7	25	23	19	26	20	32	29	23	22	5	13	3	19	9
Pharmacy	1		1							1	2					2
Laboratory and patholo...	1		1	107			1	5		1		1				1
Geriatrics			2					2	14	6						
Women's health		127			14								1			
Mental health																
Addiction and su...		1			57							2				
Chaplain	22										1					
Psychiatry					3								7		1	
PTSD treatment					1									6		

← User landed here incorrectly more often (destination rate)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Veteran and...	1									1	3	1	1		1	49
Stories and events	19	2	7	1	3	6	2	3	9	9	5	13	16	5	9	5
About us	38	16	13	13	23	15	13	14	16	30	66	39	37	40	40	27

→ User landed here incorrectly more often (destination rate)

5. Recommendations

Our recommendations from both types of testing fall into five broad categories:

- Content
- Information architecture
  - Filter/sort/search improvements
- Visual design
- Additional research

Because our findings from the tree test built on the findings from our prototype tests, we've created a list of recommendations that draws on both bodies of research.

Recommendation (1 of 7)

Avoid miscellaneous groupings like "Other Services."

- As a user, I want common-language group labels with some degree of specificity, so that I can tell if these services are generally what I need.

- As a user, I want smaller groupings so that I can hone in on the exact service I am looking for.

As of May 29, the team has proposed an architecture that avoids this label.

Other services: proposed IA

- Mental health
- Specialty care
- Care coordinator services
  - Caregiver support
  - (etc.)
- Service advocacy programs
  - Chaplain
  - (etc.)
- Health and Wellness
- (And so on)

Previously, these were nested under "Other services"
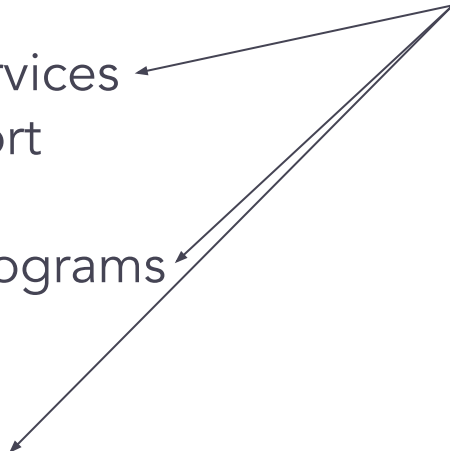
Recommendation (2 of 7)

Redundancies hold low value, so provide only one path per service.

Keep Chaplain under Mental Health (remove from Other Services)

Keep Laboratory and Pathology under Our Health Services (remove from Specialty Services)

Keep Nutrition, Food, and Dietary under Specialty Care (remove from Other Services)

- As a user, I want each service to be under one possible header, so that I am able to more confidently find that service again.

As of May 29, labels no longer repeat between categories. The only edge case is including a redundancy in a proposed Featured Services section.

Chaplain

Mental health
- Addiction and substance abuse treatment
- Chaplain ← Keep this path
- Psychiatry
- PTSD treatment

Chaplain

▼ Other services

▶ **Care coordinator services**

▼ Service advocacy programs

└ Chaplain ←———————————————— Remove this path

└ Compensated work therapy/vocational rehabilitation and employment program

└ Homeless services

└ Lesbian, gay, bisexual, transgender (LGBT)

└ Registry exams (military exposures: Agent orange, burn pit, Gulf War)

└ Returning service members (transition and care management)

Laboratory and pathology

▼ Our health services

    ∟ Emergency medicine

    ∟ Primary care

    ∟ Pharmacy

    ∟ Laboratory and pathology ◄———————— Keep this path

    ∟ Geriatrics

    ∟ Women's health

  ▶ **Mental health**

  ▼ Specialty care

      ∟ Amputation care

      ∟ Audiology and speech

      ∟ Cardiology

      ∟ Critical care

      ∟ Dental/oral surgery

      ∟ Dermatology

      ∟ Gastroenterology

Remove this path

      ∟ HIV/Hepatitis

      ∟ Laboratory and pathology ◄

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Nutrition, Food, and Dietary

▼ Specialty care
  └ Amputation care
  └ Audiology and speech
  └ Cardiology
  └ Critical care
  └ Dental/oral surgery
  └ Dermatology
  └ Gastroenterology
  └ HIV/Hepatitis
  └ Laboratory and pathology
  └ Low vision and blind rehabilitation
  └ Nephrology, renal, kidney
  └ Nutrition, food, dietary ← Keep this path

Nutrition, Food, and Dietary

▼ Other services

▶ Care coordinator services

▶ Service advocacy programs

MOVE! could be moved to Specialty Services

▼ Health and wellness

└ MOVE! Weight management

Remove this path

└ Nutrition, food, dietary

▶ Facility services

Recommendation (3 of 7)

Keep "Low vision and blind rehabilitation," "Ophthalmology," and "Optometry" under Specialty care, and include parenthetical patient-friendly labels.

- As a user, I want to see services that relate to similar kinds of conditions within proximity of each other, so that I can more accurately discern the care between the services.

As of May 29, this recommendation transcends eye care and is currently being applied across Specialty Care areas.

Eye Care Services: IA

- Specialty care
  - (...)
  - Ophthalmology (Eye care, ocular surgery)
  - Optometry (Vision specialists)
  - Low vision and blind rehabilitation (Accessibility, blindness)
  - Gastroenterology
  - HIV/Hepatitis
  - (etc.)

Recommendation (4 of 7)

Reconsider what's currently nested beneath About Us. "Jobs/Careers," "Contact Us," and "Policies" could be pulled out from "About Us," making them easier for Veterans to access.

- As a user, I want easy access to VA employment opportunities, policies, and contact information, so that I can connect more deeply with VA in a way that extends beyond healthcare services. Moreover, I want to access these materials without being distracted by content intended for internal users.

Further research: understand what people expect out of the About Us pages.

About Us: IA

- About Us
    - Mission and Vision
    - History
    - Leadership
    - Volunteer or Donate
    - Health and Medical Research
- Jobs and Careers
- Policies
- Contact Us

Recommendation (5 of 7)

Revisit the navigation labels for the non-health (other) services that demonstrated low success destination rates. Such as:

- Care coordinator services
- Service advocacy programs
- Compensated work therapy/vocational rehabilitation and employment programs

As a user, I want to see descriptive, easy-to-understand navigation titles so I can find what I'm looking for on the first try.

As of May 29, this recommendation has been adopted.

Recommendation (5 of 7)

Current label	Proposed label
Care coordinator services	Caregiver and care coordinator services
Compensated work therapy/vocational rehabilitation and employment programs	Job programs (or Employment programs)

Recommendation (6 of 7)

Guide people to services, in lieu of a facility-specific search bar.

- As a user, I want a list of the 10-12 most common conditions in plain language at the top of the page that link to the service content further down the page, so that I can feel comfortable digging into the service accordions.

Further research: what filters would work across groupings?

- As a user, I would like to be able to view Health Services in a number of ways, so that I can seek what I am looking for in a way that works for me.

Recommendation (7 of 7)

Help people trust the new experience by giving them traces of the past. Introduce co-branding/icons to show where actions may have taken place in previous VA products.

- As a Veteran or other user, I would like to see that this new tool is associated with something I am familiar with (My HealtheVet), so that I can trust it and feel more comfortable using it.

Future recommendation

Consider the implications of search functions as a desired primary interaction for users.

- As a user, I want to be able to search services by synonyms that I am more familiar with (like "foot" instead of "Podiatry"), so that I am more likely to get to what I need without help.

- As a user, I want a search bar to offer suggestions for me as I type, so that I feel like the system is helping me along my journey.

6. Next steps

Next steps

- Make and document changes, which will implemented in the next sprint (15).

- Prioritize opportunities for future research

    - Uncover more needs to inform future content models and functionalities.

    - Speaking with call center staff and/or patient advocates about how Veterans inquire about services to proactively address common questions through our content offerings.

- Prepare for research in Pittsburgh (June 2019)

Thank you!

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