

VA.gov CMS research for the Authoring Experience (AX)

Round 2
Pittsburgh, PA

Prepared by the VA.gov CMS Team
[Research: June 25-27. Presentation: July 16]

Outline

1. Intro

2. Study goals and research methods

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4. Findings

5. Next steps

This research examines the effectiveness of the Drupal AX (authoring experience) — in short, how easy it is for VA content authors and editors to use the Drupal CMS.

1. Intro

Executive summary

- In-person research consisting of mixed methodology (task-based, contextual inquiry, paraphrase testing) with 8 Public Affairs team members at the Heinz campus of Pittsburgh VA Medical Center evaluating the effectiveness and usability of the current Drupal CMS authoring experience for immediate usability and long-term workflow improvements.
- Evaluate and compare the author experience
 - (1) using the current Drupal CMS to find, edit, review and publish content and
 - (2) using an Invision (facility dashboard) prototype as a proof-of-concept. An ancillary goal was to gather feedback from the Public Affairs team on types of CMS-related resources needed to efficiently onboard to Drupal CMS.
- We found that participants felt the new Drupal CMS was more efficient and easier to use, preferred aspects of the Invision prototype noting its clear summary and wayfinding to key content and actions and expressed enthusiasm for a variety of in-CMS help resources.
- Regional and facility content distinctions weren't meaningful to participants and may conflict with established concepts of organization division.

Background

Research: Drupal CMS product

Team: Ryan, Kate, Rachel, Lapedra, Meghana, Jane, (Eric)

Interviewees:

- 8 Public Affairs team members at the Heinz campus of Pittsburgh VA Medical Center

Methods:

- Task-based usability testing
- Paraphrase testing
- Contextual inquiry

What the team learned

Our goal was to empathize with the content editors by allowing them a space to share their current feelings and emotions.

Biggest content frustration

The current editorial workflow can be a slow process due to the team's workload and technical limitations of current technologies. This creates a bottleneck at various stages and, at the high end, a 2-3-month backlog.

Top priority

Relatably, the team's top priorities are efficiency and speed, especially in high-pressure or quick-turnaround situations such as adding weather-related alerts (e.g., hurricane in Florida).

2. Study goals and research methods

Our goals

For the **Authoring** experience **(this study)**

- Evaluate the usability of the editorial workflow (create, review, edit, and publish content) within the Drupal CMS.
- Gather feedback on the types of CMS-related resources the VA team needs to become more comfortable using Drupal.

For the **Veteran facilities webpage** experience **(readout was on July 12)**

- Evaluate perceived utility of wait time and appointment access data for decision making about care.
- Evaluate comprehension of labels and global navigation.
- Gather additional feedback to make our designs more usable.

Our approach

We wanted to understand the user experience of the external-facing VA.gov (the front stage) and the internal VA-facing CMS (the backstage) from multiple, discrete user perspectives.

This is important because the usability on the backstage directly impacts the quality of the front-stage experience.

Hypotheses

Hypothesis	What we asked or observed	General finding
H1: The editorial workflow needs to be improved so that editors can easily find and edit pages within the CMS.	<p>Activity: Find a page (detail & service) and make an edit to the content using the Drupal CMS and a prototype.</p> <p>Addressing:</p> <ol style="list-style-type: none">1. usability of searching for and editing a page using the CMS; validating ideas for improvement from the prototype.2. usability of searching for and editing multiple pages to edit a service description.	Supported
H2: Editors need resources (inline help, training sessions or materials) to use the new CMS comfortably and confidently.	We asked participants what kind of support they would need, and what has worked well for them in the past.	Supported

How we got here



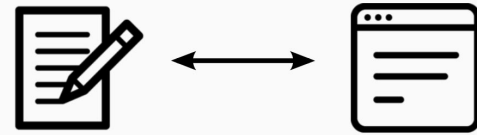
3. Context

Context

Current CMS structure

Maps in a more or less 1:1 relationship with front end: there is a field on the back end for every page that appears on the front end.

Teamsite



Navigation in the Drupal CMS (Manage menu)

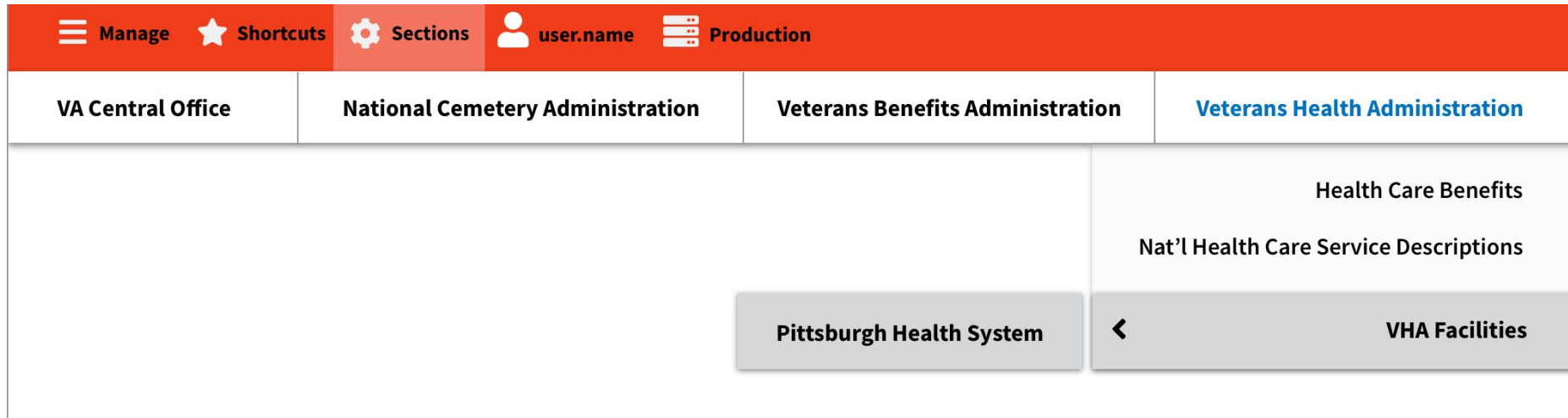
The image shows the top navigation bar of the Drupal CMS interface. It features a yellow header with the 'Manage' menu highlighted, along with 'Sections', the user 'rachel.kauff', and 'Staging'. Below this is a grey bar with icons and labels for 'Content', 'Content Models', 'Appearance', 'Extend', 'Configuration', 'People', 'Reports', and 'Help'. A large grey box displays the user name 'rachel.kauff'. At the bottom, a row of buttons includes 'View', 'Roles', 'Edit', 'Workbench Access', and 'Moderation Dashboard'.

Manage	Sections	rachel.kauff	Staging
	Content	Content Models	Appearance
		Extend	Configuration
		People	Reports
			Help
rachel.kauff			
View	Roles	Edit	Workbench Access
			Moderation Dashboard

[Home](#)

Member for 4 months 1 week

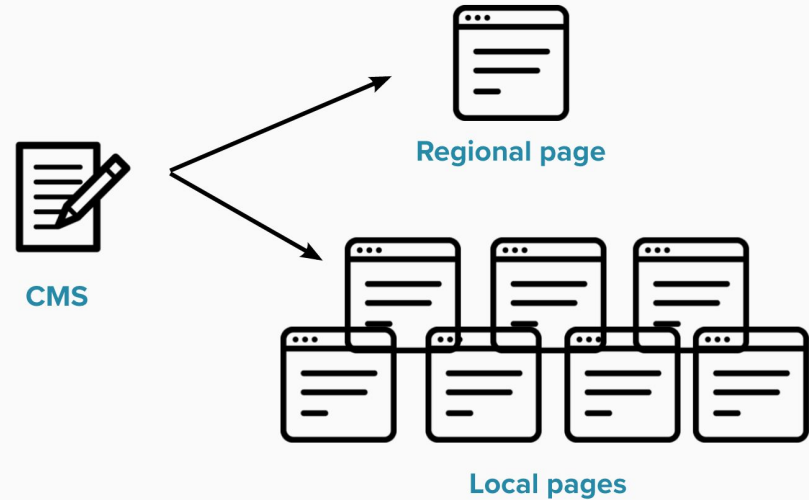
Navigation in the prototype (Sections menu)



New CMS structure

An edit to a single piece of structured content in a CMS field, such as a regional health service offering, appears on multiple pages in the front end.

Drupal CMS



Drupal CMS landing page

The screenshot shows the Drupal CMS interface for a user named 'rachel.kauff' on the 'Staging' environment. The top navigation bar includes 'Manage', 'Sections', and 'Content'. The 'Content' section is active, showing a list of content items. The interface includes a search bar, a filter dropdown, and a table of content items with columns for Title, Content type, Updated, Moderation state, Owner, and Operations.

Content Management Interface

Home » Administration

+ Add content

Displaying 1 - 50 of 546

Content type: - Any - Moderation state: - Any - Owner: - Any -

Filter Reset

Action: -- Select action --

▶ SELECTED 0 ITEMS IN THIS VIEW

Apply to selected items

TITLE	CONTENT TYPE	UPDATED	MODERATION STATE	OWNER	OPERATIONS
Primary care at Belmont County outpatient clinic	Local Health Service Offering	07/15/2019 - 15:14	published		Edit
MOVE! weight management at Belmont County outpatient clinic	Local Health Service Offering	07/15/2019 - 15:14	published		Edit
Nutrition, food, and dietary at H.J. Heinz III Campus	Local Health Service Offering	07/15/2019 - 15:14	published		Edit
Geriatrics at Pittsburgh VA Medical Center-University	Local Health	07/15/2019			

Prototype landing page

The screenshot shows the Prototype landing page for the Pittsburgh VA Content management interface. The top navigation bar includes 'Manage', 'Shortcuts', 'Sections', 'user.name', and 'Production'. The 'Sections' section is active, showing a list of content items. The interface includes a search bar, a filter dropdown, and a table of content items with columns for Title, Content type, Updated, Moderation state, Owner, and Operations.

Pittsburgh VA Content

Sections » Veterans Health Administrations » VHA Facilities » Pittsburgh Health Care

Locations Health Service Offerings Staff Profiles Events Press Releases Stories

This list displays all users who have access to this content.

▼ Pittsburgh VA Users (4 users)


NAME	ROLE	EMAIL
Ryan Stubblebine	Editor/Reviewer	ryan.stubblebine@va.gov
Louis Scavnick	Editor/Reviewer	louis.scavnick@va.gov
Kim Edwards	Editor/Reviewer	kim.edwards@va.gov
Shelly LName	Editor/Reviewer	shelly.lname@va.gov

▲ Other VA Users (5 users)

Context

Drupal CMS locations (filtered)

ManageSectionsrachel.kauffStaging

ContentContent ModelsAppearanceExtendConfigurationPeopleReportsHelp

SELECTED 0 ITEMS IN THIS VIEW

Apply to selected items

<input type="checkbox"/>	TITLE	CONTENT TYPE	UPDATED	MODERATION STATE	OWNER
<input type="checkbox"/>	Pittsburgh VA Medical Center– University Drive	Health Care Facility	07/15/2019 – 15:12	published	Pittsburgh Health Care
<input type="checkbox"/>	Beaver County outpatient clinic	Health Care Facility	07/15/2019 – 15:12	published	Pittsburgh Health Care
<input type="checkbox"/>	Washington County outpatient clinic	Health Care Facility	07/15/2019 – 15:12	published	Pittsburgh Health Care
<input type="checkbox"/>	Fayette County outpatient clinic	Health Care Facility	07/15/2019 – 15:12	published	Pittsburgh Health Care
<input type="checkbox"/>	Westmoreland County outpatient clinic	Health Care Facility	07/15/2019 – 15:12	published	Pittsburgh Health Care
<input type="checkbox"/>	Belmont County outpatient clinic	Health Care Facility	07/15/2019 – 15:12	published	Pittsburgh Health Care
<input type="checkbox"/>	H.J. Heinz III Campus	Health Care Facility	07/15/2019 – 15:12	published	Pittsburgh Health Care

Apply to selected items

Prototype locations page

ManageShortcutsSectionsuser.nameProduction

VA Central OfficeNational Cemetery AdministrationVeterans Benefits AdministrationVeterans Health Administration

All ContentLocationsService OfferingsStaff ProfilesEventsPress ReleasesStories

Pittsburgh VA Locations

Sections > Veterans Health Administrations > VA Facilities > Pittsburgh Health Care

In this section, edit individual content pages, photos and other assets by VA locations.

▼ Main locations	Status	Edited by	Date edited	
Pittsburgh VA Medical Center - University	In review	joseph.blow	April 9, 2019	Edit Preview
H. John Heinz III Department of Veterans	Published	sally.williams	May 10, 2019	Edit Preview

▼ Other locations	Status	Edited by	Date edited	
Beaver County VA Clinic	Draft	chris.pine	Sep 12, 2018	Edit Preview
Belmont County VA Clinic	Published	shawn.carter	Jul 9, 2017	Edit Preview
Fayette County VA Clinic	Staged	april.lane	Apr 21, 2019	Edit Preview
Washington County VA Clinic	In review	lee.thomas	Feb 10, 2018	Edit Preview
Westmoreland County VA Clinic	Published	patricia.long	Mar 12, 2019	Edit Preview

[Add location](#) [Add other VA location](#)

Station IDs that will populate the "Other nearby locations" section on the Locations page, via the Facility Locator API.

▼ Other nearby VA locations	
vha_692a	
vha_232a	Edit
vha_443	Preview
vha_223	

4. Findings

Content editors were afraid to make any changes fearing that they might "mess things up."

So what?

Interfaces that are harder for new users to learn could lead to errors that negatively impact user experience for Veterans on the front end.

The screenshot shows the CMS 'Edit' page for a content item. The top navigation bar is yellow and includes 'Manage', 'Sections', 'rachel.kauff', and 'Staging'. Below this is a secondary navigation bar with icons for 'Content', 'Content Models', 'Appearance', 'Extend', 'Configuration', 'People', 'Reports', and 'Help'. The main content area is divided into two columns. The left column contains the 'Meta title tag' field, which is currently empty, and a 'Summary' field. The 'Meta title tag' field has a character count of 70. The 'Summary' field has a character count of -75. The right column contains a 'GOVERNANCE' section with fields for 'Related office or health care' and 'Owner'. Below this is a 'MENU SETTINGS' section with a 'META TAGS' section. The 'URL ALIAS' section is expanded, showing a checkbox for 'Generate automatic URL' and a text field for 'URL alias'. The 'AUTHORING INFORMATION' section is partially visible at the bottom.

Meta title tag *

Characters remaining: 70

This title displays in search results, and as the browser title page (eg, in a browser tab). [Use title case.](#)

Format as follows: "VAMC Short Name | H1 Page Title | Veterans Affairs", but omit the "| Veterans Affairs" if the title tag goes over 70 characters. For example:

- VA Pittsburgh Health Care | Our Services | Veterans Affairs
- VA Pittsburgh Health Care | Billing And Insurance

Summary *

Make, cancel, or reschedule appointments at our Pittsburgh VA facilities for pri

Characters Remaining: -75

This text appears search results, social media shares, and may appear in teaser listings, and should include a brief (ideally one sentence) summary of the topic of this page.

Like this: "VA provides extensive mental health services, including same-day care."

Not like this: "Find out how to get started with VA mental health services for Veterans."

Intro text *

Make, cancel, or reschedule appointments at our Pittsburgh VA facilities for primary care, behavioral and mental health, and specialty care. For routine visits to some specialty care clinics, you no longer need a primary care referral.

Characters remaining: 365

This is displayed directly beneath the title as an introduction to the page. This text should help a user figure out whether the information on this page is relevant to them, and should be written in the 2nd person. It will never be shown alongside the Description, so it's ok for it to be duplicative of that information.

GOVERNANCE

Related office or health care

VA Pittsburgh health ca

Owner *

--Pittsburgh Health Ca

The health care system that

MENU SETTINGS

META TAGS

URL REDIRECTS

URL ALIAS

☐ Generate automatic URL

Uncheck this to create a

[Configure URL alias patt](#)

URL alias

/pittsburgh-health-care/

Specify an alternative path to

access. For example, type

about page.

AUTHORING INFORMATION

A section of the Edit page

"I found it difficult that the WYSIWYG section had a dual function: I could rearrange the sections, which I feel like I would do by accident, I could also make edits." - **Public Affairs (writer/editor)**

"The text is hard... It all seems to all run together. The headers are not distinct" - **Public Affairs (writer/editor)**

We recommend

- Making design changes to forms to improve information hierarchy.
- Moving key task buttons like “preview” to a places where editors expect to find them.
- Using Drupal-editor-friendly language in addition to plain language within labels.
- Applying commonly used colors to global UI elements (e.g., alerts).

Findings - CMS

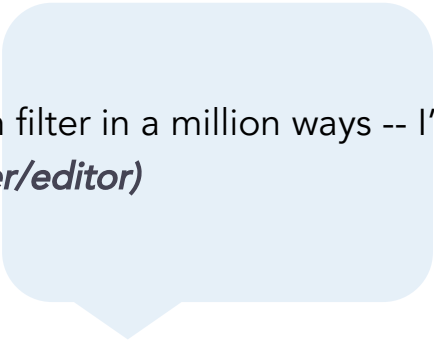
Content editors were able to find and edit pages using the current CMS, but had difficulty locating that content quickly and with confidence.

So what?

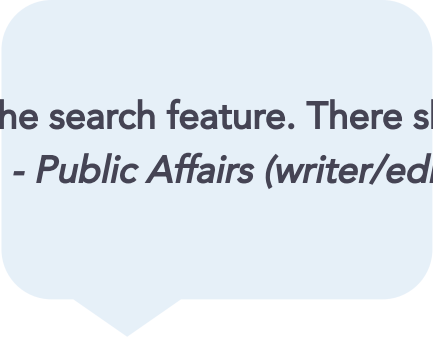
Confusing or tedious navigation takes time away from content editors' work in other areas.

The screenshot shows the 'Edit Detail Page' for 'Make an appointment' in a CMS. At the top, there's a title bar 'Edit Detail Page Make an appointment' with tabs for 'View', 'Edit', 'Delete', 'History', and 'Revisions'. Below this is a breadcrumb trail: 'Home » Node » Make an appointment'. A red warning banner states: 'There is a security update available for your version of Drupal. To ensure the security of your server, you should update immediately! See the available updates page for more information and to install your missing updates.' Below the warning, a green message says: 'This content is now locked against simultaneous editing. This content will remain locked if you navigate away from this page without saving or unlocking it.' The main content area is titled 'TITLE, METATAGS, AND INTRODUCTION' and contains a 'Page title' field with the value 'Make an appointment', a character count 'Characters Remaining: 131', and a note 'This appears as the h1 to visitors of the page. Use sentence case.' There is also a 'Meta title tag' field. On the right side, a 'Draft' box shows 'Last saved: 06/10/2019 - 19:13' and 'Author: deann.miller', with a checked option 'Create new revision' and a note 'Revisions are required.' At the bottom right, there is a 'GOVERNANCE' section.

A section of the Edit detail page



"I can filter in a million ways -- I'm not sure [where to find it]." - ***Public Affairs***
(writer/editor)



"My last resort is to use the search feature. There should be another way to do it." - ***Public Affairs*** ***(writer/editor)***

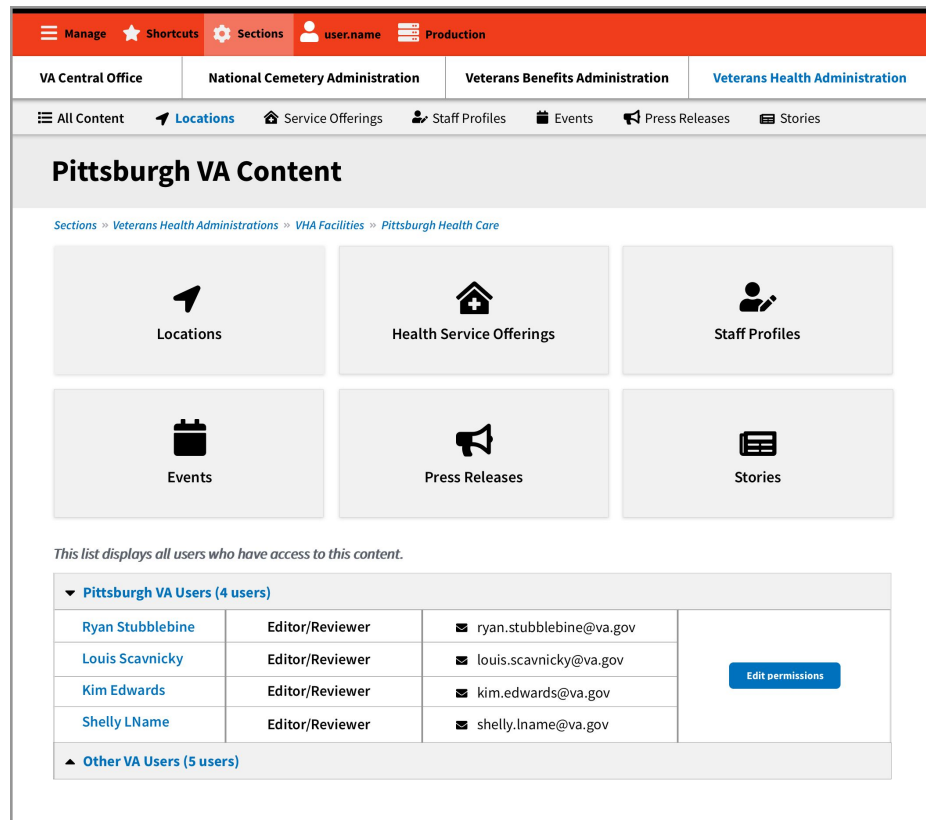
We recommend

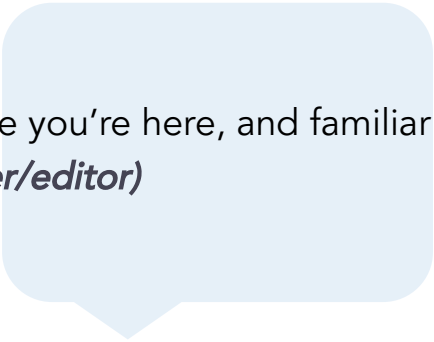
- Reducing the effort required to navigate to facilities content from the top menu.
- Presenting content in categorized way rather than unordered lists on content landing page.
- Implementing changes proposed in the facility dashboard prototype. (Findings in next slide)

Content editors preferred the prototype's layout and design, especially the additional of color which helps differentiate between design components.

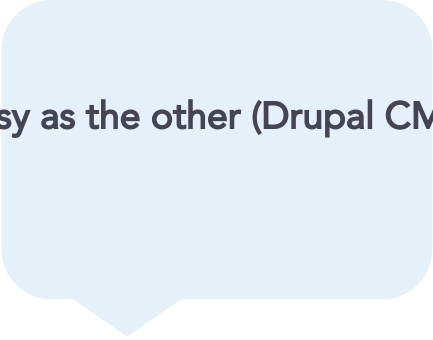
So what?

Improving hierarchy and adding color to buttons improves wayfinding and increases efficiency when finding and editing pages.





"Once you're here, and familiar with it, [it is] well laid out" - ***Public Affairs***
(writer/editor)



"The page was not as busy as the other (Drupal CMS) page." - ***Public Affairs***

We recommend

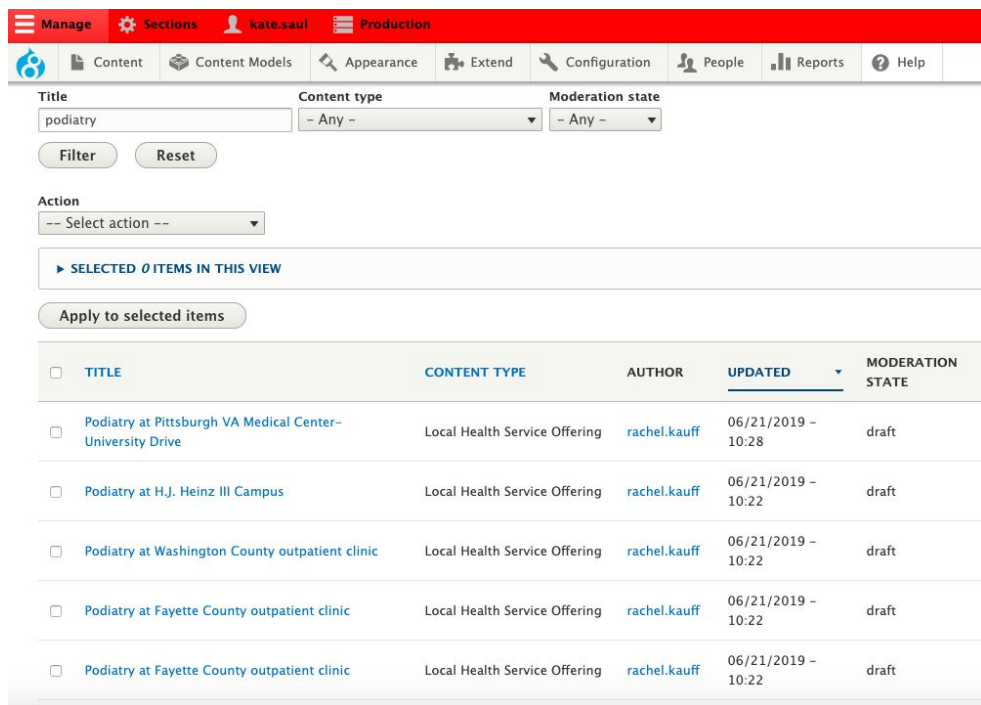
- Apply color to links and buttons in the CMS.
- Integrate better content hierarchy within the edit page and color to differentiate between other design elements.
- Filter and organize content in a meaningful way (e.g., grouping similar content types together).

Findings

Regional and facility content distinctions aren't meaningful to users and may conflict with established concepts of organizational division.

So what?

This confusion could result in the creation and entry of inaccurate content, negatively impacting the front-stage experience.



The screenshot shows a web application interface for managing content. At the top is a red navigation bar with tabs for 'Manage', 'Sections', 'kate.saul', and 'Production'. Below this is a secondary navigation bar with icons and labels for 'Content', 'Content Models', 'Appearance', 'Extend', 'Configuration', 'People', 'Reports', and 'Help'. The main content area has a search bar with 'podiatry' entered, and dropdown menus for 'Content type' (set to '- Any -') and 'Moderation state' (set to '- Any -'). There are 'Filter' and 'Reset' buttons. Below the search bar is an 'Action' dropdown menu set to '-- Select action --'. A status bar indicates 'SELECTED 0 ITEMS IN THIS VIEW' and an 'Apply to selected items' button. The main table displays a list of podiatry services. The table has columns for 'TITLE', 'CONTENT TYPE', 'AUTHOR', 'UPDATED', and 'MODERATION STATE'. The data rows show five entries, all with the content type 'Local Health Service Offering' and author 'rachel.kauff'. The 'UPDATED' column shows dates from 06/21/2019 to 10-28. The 'MODERATION STATE' column shows 'draft' for all entries.

<input type="checkbox"/>	TITLE	CONTENT TYPE	AUTHOR	UPDATED	MODERATION STATE
<input type="checkbox"/>	Podiatry at Pittsburgh VA Medical Center- University Drive	Local Health Service Offering	rachel.kauff	06/21/2019 - 10-28	draft
<input type="checkbox"/>	Podiatry at H.J. Heinz III Campus	Local Health Service Offering	rachel.kauff	06/21/2019 - 10-22	draft
<input type="checkbox"/>	Podiatry at Washington County outpatient clinic	Local Health Service Offering	rachel.kauff	06/21/2019 - 10-22	draft
<input type="checkbox"/>	Podiatry at Fayette County outpatient clinic	Local Health Service Offering	rachel.kauff	06/21/2019 - 10-22	draft
<input type="checkbox"/>	Podiatry at Fayette County outpatient clinic	Local Health Service Offering	rachel.kauff	06/21/2019 - 10-22	draft

Services at various VA facilities (filtered - podiatry)

Findings

“‘Related healthcare office or region...’ — that seems a little confusing.” - *Public Affairs participant*

“I feel like that “regional” word is going to trip a lot of people up. VBA offices, their Pittsburgh office **is** a regional office.” - *Public Affairs participant*

We recommend

- Finding terminology for regional and facility labels that more accurately reflects VA's organizational structure.
- Providing an annotated diagram of health services content in the CMS for additional guidance.

Findings

Establishing consistency of language between the front stage and the back stage is important. Content authors felt that the word “offering” didn’t map to how they think about health services.

So what?

Using consistent language can create clarity for authors, ultimately resulting in a better front-stage experience for Veterans.

Findings: Establishing language consistency

Current label used by CMS team to describe content structure	Relationship to VA Organizational structure
National health service offering	Standardized health service names established by VHA
Regional health service offering	Health service available at a health care system
Local health service offering	Health service available at a specific facility

Findings

"If we call it *services* on the website, we should call it that on the CMS." - ***Content editor***

"Offering sounds religious." - ***Content editor***

"Health services offerings seems a little vague as a category." - ***Public Affairs participant (webmaster)***

We recommend

- Changing the content type label from “Offering” to “Service” to promote greater consistency between the backstage and the front stage.
- Comparing terminology on the front end to see how it compares to that on the back end and finding areas of overlap/ways to reflect front-end language in the authoring experience.

Findings

Participants weren't immediately comfortable using the **content types** to locate content in the CMS.

So what?

Discomfort using the content types drop-down could result in inefficiency, mitigating the positive effects of an updated editorial workflow.

Displaying 1 - 1 of 1

Title	Content type	Moderation state
make an appointment	✓ - Any -	- Any -
<div>Filter Reset</div>		
Action -- Select action --		
<div>▶ SELECTED 0 ITEMS IN THIS VIEW</div>		
<div>Apply to selected items</div>		
<input type="checkbox"/> TITLE	Content type	
<input type="checkbox"/> Make an appointment	Details	
<div>Apply to selected items</div>		

Benefits detail page

Benefits hub landing page

Detail Page

Documentation page

Event

Event listing

Health Care Facility

Health Care System

Local Health Service Offering

Office

Outreach asset

Press release

Publication listing

Regional Health Service Offering

Staff profile

Story

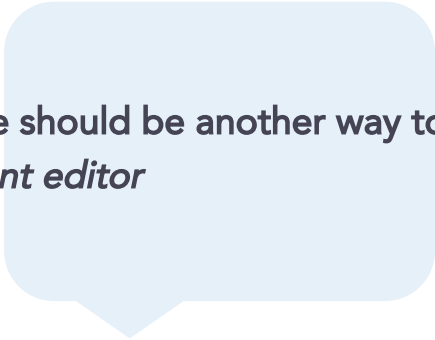
Support Service

UPDATED

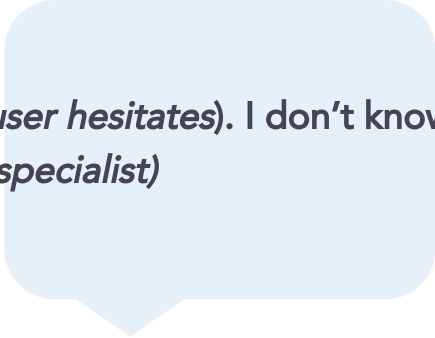
06/10/2019 - 19:13

Filter component on landing page

Findings



**"There should be another way to do it [find content by type]." -
*Content editor***



**"So, I think I'd go to...(user hesitates). I don't know." -
*Public Affairs (outreach specialist)***

We recommend

- Exploring the option of offering categorized lists of content on the content landing page. These lists could reflect how content is broken down on the prototype landing page (health services, locations, and so on).
- Providing instruction on how to search for pages in Drupal using URL snippets.

Findings

For initial CMS training,
participants prefer in-person
instruction to written or online
instruction.

So what?

Participants emphasized that hands-on training could help them learn the CMS more quickly and more effectively retain knowledge, helping them get up and running faster.

Findings

"I learn [best] by poking around and getting hands on [experience]." - *Public affairs participant (webmaster)*

"[It's] better to be shown than to get a booklet that says 'This is how you do it.'" - *Writer/editor*

We recommend

- Offering interactive, in-person training to help content authors/editors and Public Affairs staff become comfortable using the CMS.

Findings

Participants expressed enthusiasm for continued CMS training and help options, including in-CMS support and points of contact to answer questions.

So what?

Providing authors and editors with resources they need to develop their CMS knowledge (and quickly get their questions answered) will help authors maintain strong velocity and increase their comfort with the authoring experience.

Intro text *

Make, cancel, or reschedule appointments at our Pittsburgh VA facilities for primary care, behavioral and mental health, and specialty care. For routine visits to some specialty care clinics, you no longer need a primary care referral.

Characters remaining: 365

This is displayed directly beneath the title as an introduction to the page. This text should help a user figure out whether the information on this page is relevant to them, and should be written in the 2nd person. It will never be shown alongside the Description, so it's ok for it to be duplicative of that information.

Help text on the Edit page

We recommend

- Reviewing the current in-CMS help text and editing it to make it as clear as possible.
- Assessing whether/where to add more help text (possibly based on additional rounds of research).
- Providing an annotated diagram of health services content in the CMS for additional guidance.
- Providing a consistent place on every page that has contact information for people who can answer CMS-related questions in real time.

Findings

Valuable insights in addition to ones related to our hypotheses

- Writers, editors, and Public Affairs officials at VA voiced enthusiasm for a streamlined editorial review and approval process.
- Overall, research participants felt the new CMS was more efficient and easier to use than the current system.
- For longer-term success (and to account for inherent personnel churn), the CMS needs to be usable for both infrequent/less familiar users and power users alike.
- As we continue to refine the authoring experience, we need to apply the same accessibility standards to the backstage as we do to the front end.

5. Next steps

Next steps

What we're doing next

- Working with Product Owners to establish design and development work
- Socialize this research with DSVA

Thank you!

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