



# The Content Audit: Agony and Ecstasy

Julie Stromberg  
Sr. Content Strategist  
Fearless

# Introduction

**Julie Stromberg**

**[jstromberg@fearless.tech](mailto:jstromberg@fearless.tech)**

**CMS Slack: @jstroms**

- Sr. Content Strategist with Fearless
- Currently partnered with the Center for Medicaid and CHIP Services (CMCS)
- Member of the Content Support Center pilot team



# Overview

What's a content audit?



**“A web content audit is an accounting of the web content your organization currently has online.”**

**Kristina Halvorson**

*Content Strategy for the Web*



# The Basics

## **Content audits are best for answering:**

- What is the content about?
- Who is the content for?
- What is the intended purpose?
- Is the content clear, usable, and readable?
- Does the content contain a compelling call to action or next step?

## **The best time to do a content audit:**

- During the discovery phase of a project (Sprint 0)
- Agnostic of a project as a content effort all its own



# The Lego Analogy

## They are the way

- Which pieces were used?
- How many pieces?
- What's the inner structure?
- Was there a plan developed for putting them together?



# The Lego Analogy

## What we didn't know

- The pink brain brick
- Some pieces were actually missing because the person skipped a step
- **There's a lot of content involved here!**



**Content audits help ensure alignment to user needs and organizational goals.**

**Content problems are ours to solve together.**

**Fearless CS Team**



# Conducting a Content Audit

Let's find the pink brain brick



# Getting started

## **The Agony**

Reviewing and analyzing content isn't difficult, but it can be time consuming and feel a bit tedious.

## **The Ecstasy**

Rallying the entire working team and organization around broken links, outdated copy, and a renewed understanding of intended content purpose is invaluable.

## **And in the government space**

Starting off a project with a content audit is a great way for contractors to get up to speed. An initial content audit also empowers government partners to make fully informed decisions regarding goals and direction.



# Content Audit Types

Quantitative	Qualitative	Custom
<b>Also known as a “content inventory,” this is a list of all the content you have. Just like the inventory of products in a store.</b>	<b>Goes a bit deeper than an inventory and seeks to also assess the quality and effectiveness of the content.</b>	<b>Assess what you want to learn, identify criteria, and then proceed to a develop audit plan specifically for your project’s needs.</b>

## **Can this be automated?**

You might be thinking “hey, I bet some of the agony can be offset by robots.” The answer is yes, and no. Web crawlers and other tools can be helpful. However, human insight provides an in-depth look that robots simply can’t provide.



# Quantitative Audit Attributes

## What to Record

ID#	Source	Last Update
Title/Topics	Technical Home	Language
URL	Metadata	Description
Format	Analytics	Other
Ownership	Purpose	



# Qualitative Audit Attributes

## What to Record

Usability

Accuracy

Brand/Voice Adherence

Findability

Audience

Readability

Knowledge Level

Organizational Value

Other

### Tip

Use rating scales and predefined lists to make your qualitative audit measurable and the results shareable.



# Content Audit Criteria

Attribute	Cell Values	Research Question	What to Record
Topic	<Topic 1> <Topic 2> <Topic 3>	What is this content about?	Primary topic; note secondary.
Purpose	<Inform> <Persuade> <Unknown> <Other>	What is the intended purpose of this content?	Primary purpose; not secondary.
Ownership	<Name> <Department> <Agency>	Who is responsible for ensuring the content is accurate and up to date?	Note specific person or role if known.



# Audit Format

## **The Agony**

A spreadsheet tends to work best as they allow you to set criteria as column headers and record content in rows.

## **The Ecstasy**

If you then need to share findings outside of the working team, a report or presentation based on the spreadsheet might be best.

## **And in the government space**

Figure out what works best for your team and the folks who can benefit from what you've learned during the auditing process.



# Content Audit in Action

Case Study One: Lean Quantitative

CMCS T-MSIS Operations Dashboard & Data Quality Tool



# Executive Summary

## **The problem**

States had to go to two different locations in order to check if their Medicaid and CHIP data files had transferred to CMS correctly.

## **How might we**

Consider a longer-term plan of how the two experiences might integrate so that state users can access desired data in one place.



# Executive Summary

The Content Support Center was asked to consider the longer-term strategy from a content-focused perspective. Several contractors were already working on different aspects of the project

**Intended audience:** State employees responsible for collecting and submitting monthly Medicaid data files to CMS.

**First thing we did?** A content audit of the existing experience.

**Where did it lead?** We realized that it was too early to bring us in. Because of the knowledge gained, a meaningful conversation occurred.



# Lean Quantitative Audit

- 20 screens
- Some “screens” were tabs within tabs on one screen
- Each tab had so much content that they needed to be audited individually

The screenshot shows a web application interface for CMS.gov. The main content area is titled "T-MSIS Priority Items Overview" and provides a high-level overview of error counts for TPIs. A reporting period dropdown is set to "May 2020". Below this, there are two tables: "Errors by TPI Number" and "Errors by File Types".

TPI (May 2020)	Error Count
TPI-01	0
TPI-02	0
TPI-05	4
TPI-07	0



# Lean Qualitative Criteria

Attribute	Cell Values	Research Question	What to Record
Format	<Copy> <Table> <Field> <Other as observed>	What content elements are on the page/screen	Element name
Description	<Description of the content element>	What does the content element convey or do?	Primary message or function
Link	<Destination>	Where does the link go?	Where the link takes the user
Notes	<Observations about content element>	What is observed about this content element?	Any issues or key aspects about the content element



# Lean Quantitative Audit

- Sitemap
- Each screen has its own tab
- Basic criteria
- Format (ex. copy, filter, tab, tool tip, table)
- Description
- Notes
- Links (if applicable)

The screenshot shows a Google Sheet titled "OD Content Audit Current State 111220". The main content is a "CMS CSC Operations Dashboard" with a version number "D1.0". The dashboard is structured as a tree diagram with six levels:

- Level 1: Landing Page (Default National View)
- Level 2: File Overview, File Status, Summary, System Metrics
- Level 3: Landing Page (State View)
- Level 4: Errors, Data Quality, Missing Values, Jobs, Files, Summary
- Level 5: (Empty)
- Level 6: (Empty)

The tree structure is visualized with shaded cells: Level 1 is a single cell; Level 2 has four cells under Level 1; Level 3 has one cell under Level 2; Level 4 has six cells under Level 3; Level 5 and Level 6 are empty. The bottom of the sheet shows a tab bar with tabs for "OD Site Map", "State Missing Values", "National File Overview", "National File Status", "National Summary", "National System Metrics", "State Errors", and "State Data Quality".





# Lean Quantitative Audit

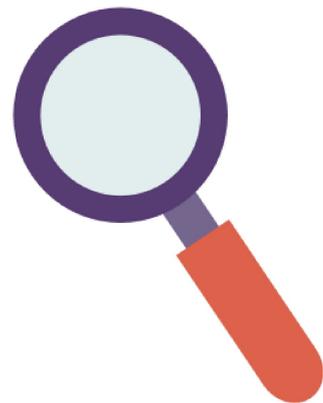
## Notes Examples

“Automatically downloads an Excel file of National data”

“Missingness? Wondering about use of this term.”

“Not sure how this link works. It goes to the ‘Errors Overview’ tab on the ‘Errors’ page of the Alabama section of the OD. Is this just an example of how to get state-specific data? There doesn't seem to be any way to specify which state.”

“Can delete ‘Please click here for.’”



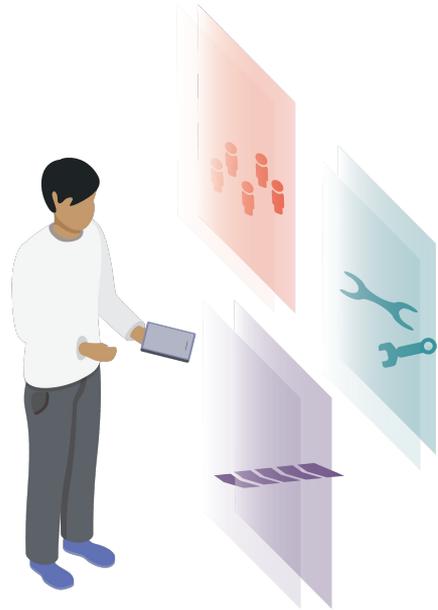
# Lean Quantitative Audit

## Benefits

- The least “agonizing” option, BUT
- Works best when the goal is to familiarize with what’s already there
- Good option for experiences with a varied amount of content elements
- Helpful for itemizing and checking if content elements function as they should

## Content Tip

Consider what your criteria might be for this type of audit.



# Content Audit in Action

Case Study Two: Qualitative  
CMCS T-MSIS Analytic Files (TAF)



# Executive Summary

## **The problem**

The current experience on Medicaid.gov is working for current needs when it comes to housing MACBIS TAF. But the desire is to expand so that MACBIS can share even more.

## **How might we**

Create an experience on Medicaid.gov to accommodate a larger, and constantly growing, TAF collection.



# Executive Summary

The Content Support Center was asked to partner with the primary statistician and owner of the existing Medicaid.gov pages with the goal of establishing an experience that could accommodate existing and future files.

**Intended Audience:** Internal CMS employees and external researchers

**First thing we did?** A sitemap and content audit of existing pages and others in the section.

**Where did it lead?** We ended up consolidating two pages, adding one (thus keeping the same footprint), removing outdated messaging, and creating a content library experience.



# Qualitative Audit

Let's get a team together to audit this whole section!

We were here (MACBIS)

- Ran a crawler
- Crawler did not pick up every page within the section
- Had to manually reconcile crawler findings with actual number of pages

An official website of the United States government

## Medicaid.gov

Keeping America Healthy

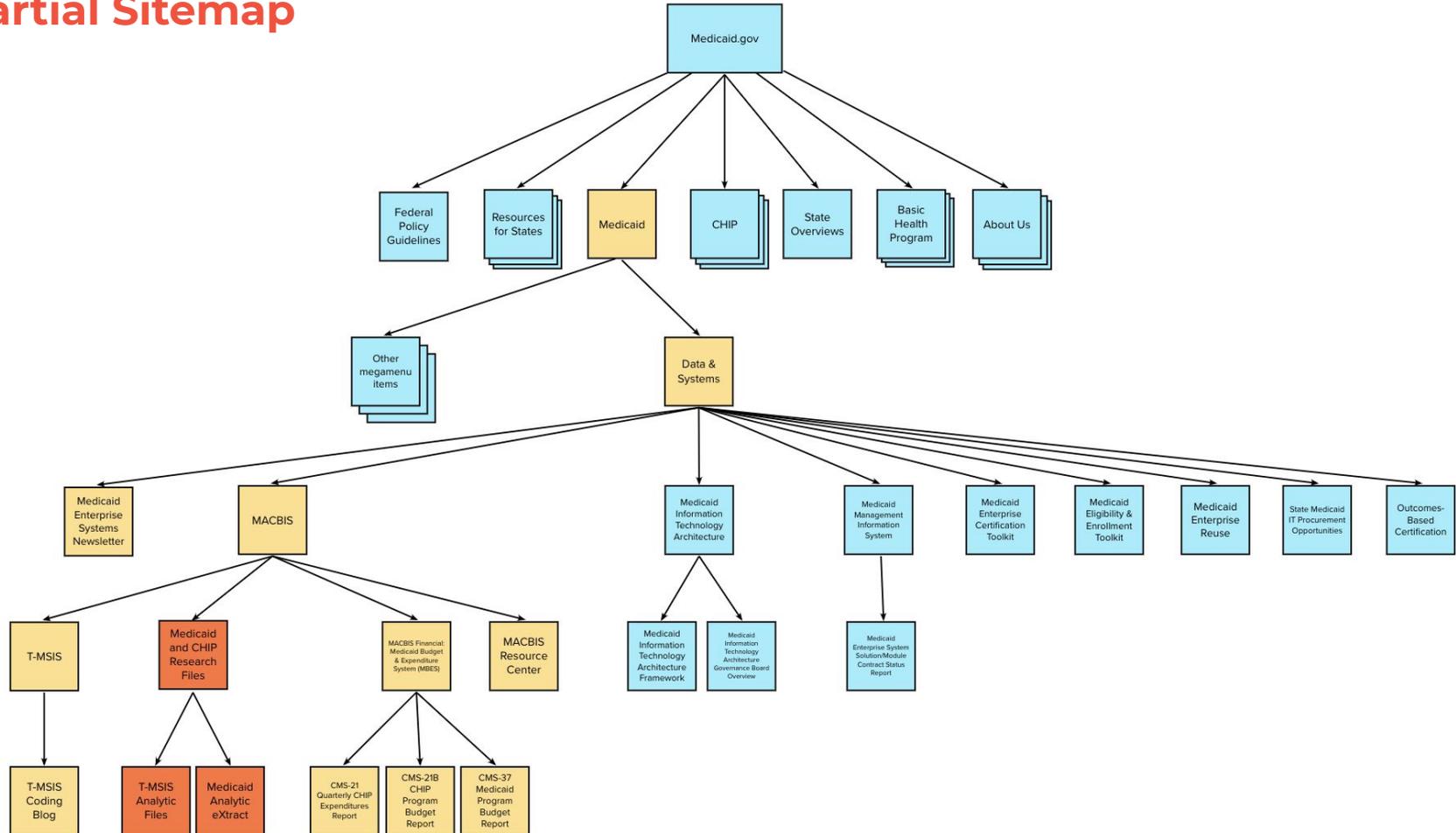
Q Search | Archive | Site Map | FAQs

- Federal Policy Guidance
- Resources for States
- Medicaid**
- CHIP
- Basic Health Program
- State Overviews
- About Us

<b>Medicaid State Plan Amendments</b>	<b>Access to Care</b> Access Monitoring Review Plans	<b>Program Integrity</b> National Correct Coding Initiative Affordable Care Act Program Integrity Provisions	<b>Cost Sharing</b> Cost Sharing Exemptions Out of Pocket Costs
<b>Indian Health &amp; Medicaid</b> History Indian Health Care Improvement Act American Recovery & Reinvestment Act Tribal Affairs Guidance & Resources	<b>Outreach Tools</b> Supporting Enrollment Efforts Helping Connect Enrollees to Care Living Well	<b>Quality of Care</b> Medicaid Managed Care Improvement Initiatives Performance Measurement Releases & Announcements	<b>Enrollment Strategies</b> Continuous Eligibility Express Lane Eligibility Lawfully Residing Immigrant Children & Pregnant Women Presumptive Eligibility
<b>Home &amp; Community Based Services</b> Home & Community Based Services Authorities HCBS Training Guidance Statewide Transition Plans Technical Assistance	<b>Program Information</b> Medicaid & CHIP Eligibility Levels Medicaid & CHIP Enrollment Data Medicaid & CHIP Marketplace Interactions Targeted Enrollment Strategies Eligibility Verification Policies	<b>Section 1115 Demonstrations</b> About 1115 Demonstrations How States Apply Transparency 1115 Demonstration Monitoring & Evaluation State Waivers List 1115 Substance Use Disorder Demonstrations Coronavirus Disease 2019 (COVID-19): Section 1115 Demonstrations	<b>Managed Care</b> Managed Care Authorities Enrollment Report Managed Care Entities Guidance Managed LTSS Profiles & Program Features Technical Assistance
<b>Eligibility</b> Estate Recovery MAC Conversion Plan Seniors & Medicare and Medicaid Enrollees Verification Plans Minimum Essential Coverage Spousal Impoverishment Medicaid Third Party Liability & Coordination of Benefits Medicaid Eligibility Quality Control Program	<b>Financial Management</b> Payment Limit Demonstrations Disproportionate Share Hospitals Medicaid Administrative Claiming State Expenditure Reporting for Medicaid & CHIP Provider Preventable Conditions Actuarial Report on the Financial Outlook for Medicaid Section 223 Demonstration Program to Improve Community Mental Health Services	<b>Data &amp; Systems</b> Medicaid Enterprise Systems Newsletter MACBIS Medicaid Information Technology Architecture Medicaid Management Information System Medicaid Enterprise Certification Toolkit Medicaid Eligibility & Enrollment Toolkit Medicaid Enterprise Reuse Health Information Technology Health Information Exchange IT Procurement Opportunities Outcomes-Based Certification	<b>Benefits</b> Alternative Benefit Plans Autism Services Behavioral Health Services Dental Care Early and Periodic Screening, Diagnostic, and Treatment Hospice Benefits Mandatory & Optional Medicaid Benefits Prevention Telemedicine
<b>Prescription Drugs</b> Branded Prescription Drug Fee Program Medicaid Drug Policy Drug Utilization Review Federal Upper Limit Medicaid Drug Rebate Program Pharmacy Pricing Program Releases State Drug Utilization Data State Prescription Drug Resources Retail Price Survey	<b>Long Term Services &amp; Supports</b> Health Homes Person-Centered Hospital Discharge Model Person-Centered Planning Grants State Profile Tool Grant Balancing Long Term Services & Supports Integrating Care Employment Initiatives Institutional Long Term Care Money Follows the Person PACE Alternatives to Psychiatric Residential Treatment Facilities Demonstration Reports & Evaluations Self-Directed Services Testing Experience & Functional Tools demonstration Workforce Initiative		



# Partial Sitemap



# Existing Page Example

An official website of the United States government

**Medicaid.gov**  
Keeping America Healthy

Search | Archive | Site Map | FAQs

Federal Policy Guidance | Resources for States | Medicaid | CHIP | Basic Health Program | State Overviews | About Us

Home » Medicaid » Data & Systems » MACBIS » Medicaid & CHIP Research Files » T-MSIS Analytic Files

MACBIS

Transformed Medicaid Statistical Information System (T-MSIS)

**Medicaid & CHIP Research Files**

**T-MSIS Analytic Files**

Medicaid Analytic eXtract

MACBIS Financial: Medicaid Budget & Expenditure System (MBES)

MACBIS Resource Center

## Transformed Medicaid Statistical Information System (T-MSIS) Analytic Files (TAF)

The Transformed Medicaid Statistical Information System (T-MSIS) Analytic Files (TAF) Research Identifiable Files (RIF) are a research-optimized version of T-MSIS data and serve as a data source tailored to meet the broad research needs of the Medicaid and CHIP data user community. These files include data on Medicaid and Children's Health Insurance Program (CHIP) enrollment, demographics, service utilization and payments.

The TAF RIF consist of the Annual Demographic and Eligibility (DE) File, providing information on the demographic, eligibility, and enrollment characteristics of Medicaid and CHIP beneficiaries, and four claim types: Inpatient, Long Term Care, Pharmacy, and Other Services.

The Centers for Medicare & Medicaid Services (CMS) created several resources to support researchers in their use of the TAF RIF, including TAF technical guidance and data quality products.

To obtain access to the files, please see the [Research Data Assistance Center \(ResDAC\)](#) website for information on completing a data use agreement and requesting TAF RIF data. The ResDAC website provides a centralized source of information on CMS datasets.

## TAF User Support & Data Quality (DQ) Materials

- TAF Technical Guidance: Annual Demographic & Eligibility (DE) File



# Qualitative Criteria

Attribute	Cell Values	Research Question	What to Record
Page ID	<Number>	N/A	Progressive number
Page Title/Name	<Title/Name>	N/A	Title of page
Page URL	<URL>	N/A	Page URL
Purpose	<Inform> <Persuade> <Unknown> <Other>	What is the intent of the content?	Select a word that best describes the intent of the content
Ownership	<Name>	Who is the decision maker regarding this content?	Name of key decision maker



# Qualitative Criteria

Attribute	Cell Values	Research Question	What to Record
Accuracy	<1 - No> <2 - Somewhat> <3 - Yes>	Is the content accurate?	Selection
Readability	<1 - No> <2 - Somewhat> <3 - Yes>	Is the content readable and easy to comprehend?	Selection
Findability	<1 - No> <2 - Somewhat> <3 - Yes>	Is this content easy to find?	Selection
Notes	<Observations about content>	What is observed about this content?	Any issues or key aspects about the content



# Qualitative Audit

- Read every word
- Followed every link; review where it goes (another page, PDF, etc.)
- Noted what makes sense, what doesn't; which links work, which don't; etc.
- Rated each page for accuracy, readability, and findability

PAGE ID	PAGE NAME	PAGE URL	PURPOSE	OWNERSHIP	ACCURACY	READABILITY	FINDABILITY	NOTES
1.0	Medicaid	<a href="https://www.medicaid.gov/medicaid/index.html">https://www.medicaid.gov/medicaid/index.html</a>	Inform	N/A	3 - YES	3 - YES	3 - YES	General overview page; lots of links
1.1	Data and Systems	<a href="https://www.medicaid.gov/medicaid/data-systems/medicaid-and-chip-business-information-solution/index.html">https://www.medicaid.gov/medicaid/data-systems/medicaid-and-chip-business-information-solution/index.html</a>	Inform	N/A	3 - YES	3 - YES	2 - SOMEWHAT	Who are all of the intended audiences? Do they know about this group within CMS to find it by name?
1.2	Medicaid and CHIP Business Information Solution	<a href="https://www.medicaid.gov/medicaid/data-systems/index.html">https://www.medicaid.gov/medicaid/data-systems/index.html</a>	Inform	N/A	3 - YES	2 - SOMEWHAT	2 - SOMEWHAT	Does the research community outside of CMS know what "MACBIS" is? The link label for this in "Medicaid" mega menu in main nav uses the acronym and some of the content in this section is intended for access by researchers outside of CMS.
1.2.1	Transformed Medicaid Statistical Information System (T-MSIS)	<a href="https://www.medicaid.gov/medicaid/data-systems/transformed-medicaid-statistical-information-system-msis/index.html">https://www.medicaid.gov/medicaid/data-systems/transformed-medicaid-statistical-information-system-msis/index.html</a>	Inform	N/A	2 - SOMEWHAT	2 - SOMEWHAT	2 - SOMEWHAT	Would someone know to go homepage > MACBIS to this page? Also, if MSIS is the older version, is it necessary to keep mentioning it? Perhaps it might be time to fully shift over to T-MSIS
1.2.1.1	T-MSIS Coding Blog	<a href="https://www.medicaid.gov/medicaid/data-and-systems/msis-coding-blog/index.html">https://www.medicaid.gov/medicaid/data-and-systems/msis-coding-blog/index.html</a>	Inform	N/A	3 - YES	3 - YES	2 - SOMEWHAT	Same comments regarding findability. This is a nice blog format with search and filter features. Posts provide helpful updates and information about T-MSIS
1.2.2	Medicaid & CHIP Research Files	<a href="https://www.medicaid.gov/medicaid/data-systems/medicaid-chip-research-files/index.html">https://www.medicaid.gov/medicaid/data-systems/medicaid-chip-research-files/index.html</a>	Inform	Jessie Parker	3 - YES	2 - SOMEWHAT	2 - SOMEWHAT	Content here focuses a lot on the history of what led up to T-MSIS. Is this content still necessary?
1.2.2.1	Transformed Medicaid Statistical Information System (T-MSIS) Analytic Files (TAF)	<a href="https://www.medicaid.gov/medicaid/data-systems/medicaid-chip-research-files/transformed-medicaid-statistical-information-system-tmsis-analytic-files-taf/index.html">https://www.medicaid.gov/medicaid/data-systems/medicaid-chip-research-files/transformed-medicaid-statistical-information-system-tmsis-analytic-files-taf/index.html</a>	Inform	Jessie Parker	3 - YES	2 - SOMEWHAT	2 - SOMEWHAT	A lot of information here. Hierarchy seems like it could flow in a more user friendly way. Lots of links. Could be consolidated with content from Medicaid & CHIP Research Files page.
1.2.2.2	Medicaid Analytic eExtract (MAX) General Information	<a href="https://www.medicaid.gov/medicaid/data-systems/medicaid-chip-research-files/medicaid-analytic-eextract-max-general-information/index.html">https://www.medicaid.gov/medicaid/data-systems/medicaid-chip-research-files/medicaid-analytic-eextract-max-general-information/index.html</a>	Inform	Jessie Parker	3 - YES	3 - YES	2 - SOMEWHAT	This covers data from before 2015 which is not mentioned in the copy. No links between this page and the T-MSIS TAF page.
1.2.3	MACBIS Financial: Medicaid Budget & Expenditure System (MBES)	<a href="https://www.medicaid.gov/medicaid/data-systems/medicaid-financial-medicaid-budget-expenditures-system-mbes/index.html">https://www.medicaid.gov/medicaid/data-systems/medicaid-financial-medicaid-budget-expenditures-system-mbes/index.html</a>	Inform	N/A	2 - SOMEWHAT	3 - YES	2 - SOMEWHAT	Like T-MSIS, timing is topic. Content here focuses on something that is "going to happen" but no timeframe is provided.
1.2.3.1	CMS-21 Quarterly CHIP Expenditures Report	<a href="https://www.medicaid.gov/medicaid/data-systems/medicaid-financial-medicaid-budget-expenditures-system-mbes/cms-21-quarterly-chip-expenditures-report/index.html">https://www.medicaid.gov/medicaid/data-systems/medicaid-financial-medicaid-budget-expenditures-system-mbes/cms-21-quarterly-chip-expenditures-report/index.html</a>	Inform	N/A	3 - YES	3 - YES	2 - SOMEWHAT	Descriptions of, and links to, budget and expenditure reports related to Medicaid and CHIP.
1.2.3.1.1	CMS-21 Annual CHIP Expenditures Reports	<a href="https://www.medicaid.gov/medicaid/data-systems/medicaid-financial-medicaid-budget-expenditures-system-mbes/quarterly-chip-expenditures-report-cms-21/cms-21-annual-chip-expenditures-reports/index.html">https://www.medicaid.gov/medicaid/data-systems/medicaid-financial-medicaid-budget-expenditures-system-mbes/quarterly-chip-expenditures-report-cms-21/cms-21-annual-chip-expenditures-reports/index.html</a>	Inform	N/A	3 - YES	3 - YES	2 - SOMEWHAT	Descriptions of, and links to, budget and expenditure reports related to Medicaid and CHIP.





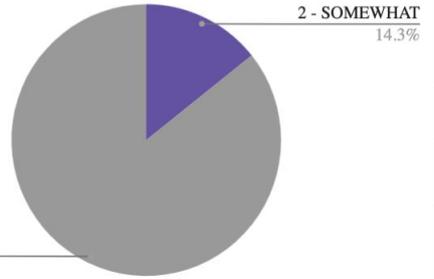


H21 fx

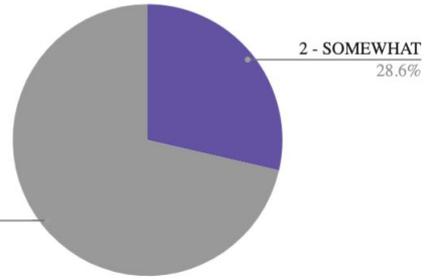
### T-MSIS Analytic Files (TAF)

SECTION	ACCURACY	#	%	READABILITY	#	%	FINDABILITY	#	%
MACBIS	1 - NO	0	0%	1 - NO	0	0%	1 - NO	0	0%
	2 - SOMEWHAT	2	14%	2 - SOMEWHAT	4	29%	2 - SOMEWHAT	13	93%
	3 - YES	12	86%	3 - YES	10	71%	3 - YES	1	7%

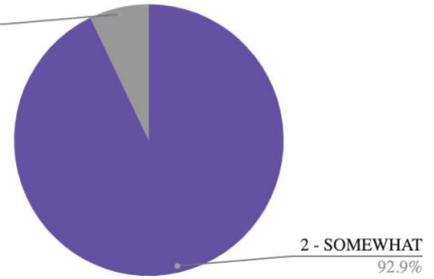
#### Accuracy



#### Readability



#### Findability



# Qualitative Audit

## Notes Examples

“Does the research community outside of CMS know what ‘MACBIS’ is? The link label for this in ‘Medicaid’ mega menu in main nav uses the acronym and some of the content in this section is intended for access by researchers outside of CMS.”

“This covers data from before 2015 which is not mentioned in the copy. No links between this page and the T-MSIS TAF page.”

“A lot of information here. Hierarchy seems like it could flow in a more user friendly way. Lots of links. Could be consolidated with content from Medicaid & CHIP Research Files page.”



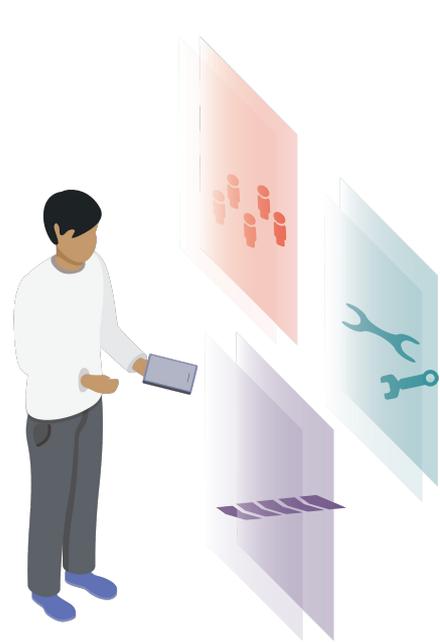
# Qualitative Audit

## Benefits

- A bit higher on the agony scale, BUT
- Works best when the goal is to understand and evaluate content
- Good option for experiences that are heavy on the messaging side
- Helpful for recording and assessing if content is performing as intended

## Content Tip

Consider what your criteria might be for this type of audit.



# The Wrap Up

So you've completed your audit, now what?



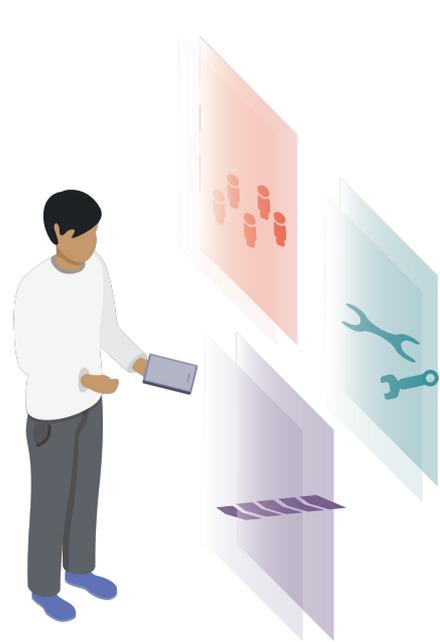
# Post-audit Analysis

## Sharing what you learned

- Synthesize all notes
- Create visualizations of ratings
- Map all content findings to organizational goals; identify what is working, what is not
- Consider user needs and determine recommendations for next steps (ex. content research and/or testing opportunities)
- Draft report

### Content Tip

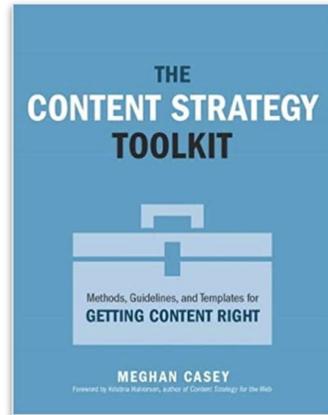
Report should resonate with stakeholder so consider format.



# Resources

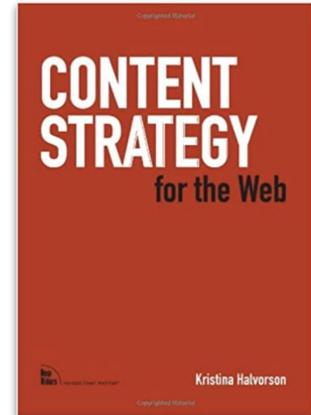
To what, and who, we owe this presentation

*The Content  
Strategy Toolkit*  
by Meghan Casey



“The Blue Book”

*Content Strategy  
for the Web*  
by Kristina  
Halvorson



“The Red Book”



# Fearless

[hello@fearless.tech](mailto:hello@fearless.tech)

**8 Market Place, Suite 304  
Baltimore, MD 21202**

**fearless.tech  
(410) 394-9600**

DUNS #: 829602304, Cage Code: 5BS71  
Certifications: Maryland MBE/DBE, SDB,  
8(a) Certified  
NAICS Codes: 541330 541430 541490  
541511 541512 541519 541990