

Usability Testing Report

The Centers for Disease Control and Prevention (CDC), the nation's largest health protection agency, launched **Rx Awareness campaign**, a website for the public to find information about the current opioid epidemic in the United States. To put in perspective, the CDC reported over 42,000 Americans died of opioid overdoses in 2016, with opioid overdose deaths being five times as likely in 2016 than 1999.

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Table of Contents

Executive Summary

Goals

Methodology

- Outreach & Screening
- Personas
- Participant Profiles
- Testing Setup & Post-Test Questions

Results

- Overall Awareness
- Report Findings
- Real Stories

Bugs & Issues

Recommendations & Action Items

Disclaimer

Appendix

- Documentation
- Notable Quotes

Executive Summary

The purpose of this usability test is to determine the effectiveness and overall user experience of the Rx Awareness campaign for young professionals who either work in the healthcare industry or have relevant background knowledge.

The usability test considers the following 3 factors to determine its usefulness.

- Learnability
- Efficiency
- Satisfaction

The participants for this test group are young professionals between 22-32 years of age and are located in Texas, USA. The usability test was conducted virtually over Zoom due to the 2020 COVID-19 lock-down.

- The majority of participants understood the general premise of the opioid epidemic.
- 2 out of 3 test participants had difficulty finding reports over opioid prescription usage.
- The Rx Awareness home page UI design consistently received positive feedback from users.

This research report includes the details of how we conducted our research, the results found, and a brief list of recommended changes to optimize the desktop experience for the CDC campaign.

33%

of participants were able to successfully complete all tasks.

66%

of participants were unable to complete all tasks.

66%

of participants appreciated the UI design.

66%

of participants complained about the difficulty finding specific reports.

33%

of participants had difficulty determining what Rx is about.

66%

of participants would continue using the website.

Goals

Before diving more in-depth, I'll share what the 3 main objectives the usability test aims to understand.

Test existing campaign with target audience.

Although there's various potential target audiences, it is essential to validate that health professionals are able to find the information they are looking for.

Reveal friction points and confusing experiences.

Healthcare professionals, and medical writers are more likely to conduct extensive research and data analysis on the opioid epidemic.

Identify issues with the campaign.

Is the information provided by the Rx Awareness campaign up-to-date on statistical information? Is the accessibility adequate?

Methodology

Outreach & Screening

A few of the users who participated in this test were already personally acquainted with me, and a couple others were individuals from LinkedIn willing to participate in the brief usability test.

Channels Used:

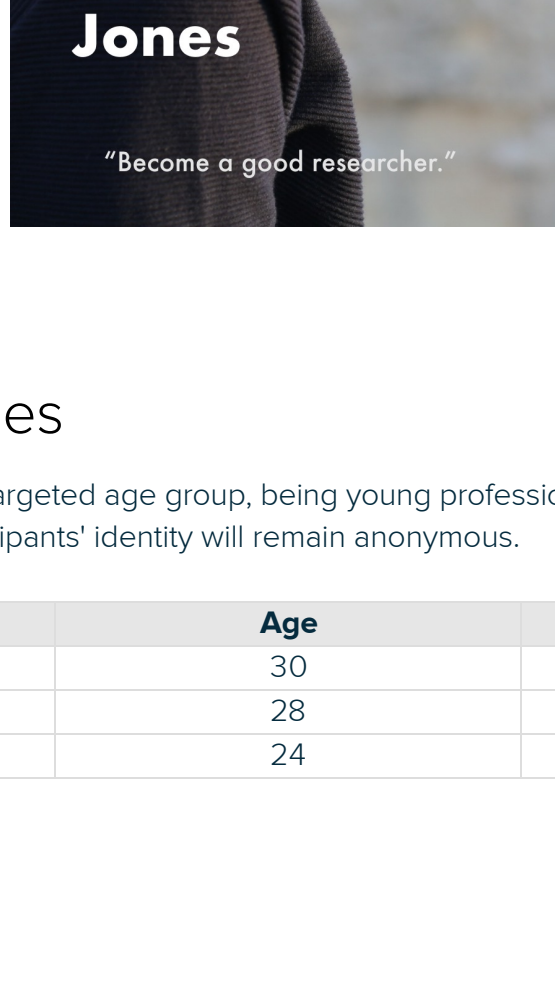
- LinkedIn
- Facebook

Screening Criteria:

- Work in healthcare or strong background knowledge of industry
- Participants are located in Texas
- Between 22-32 years old
- Frequently conduct research on a desktop

Persona

Prior to outreach, a persona was created to help identify and understand the targeted audience.



ABOUT
Ashley is a young professional who relocated to Austin, TX to attend graduate school at UT. For fun, she likes to paint, water her 20 plants, and practice yoga on a daily basis on her porch. She is technically proficient and aspires to be a computer whiz.

AGE 26
OCCUPATION Medical Writer
INCOME \$80k
STATUS Single
LOCATION Austin, TX

NEEDS

- Stay updated on medical news
- More positivity in life
- Conduct in-depth research on various medical topics

FRUSTRATIONS

- Misinformation
- Slow websites
- Poor customer support

WEBSITE ACTIVITY

- Amazon.ca (Daily)
- CBC
- Pinterest
- Mary Olay

CURRENT FEELINGS
Interested Creative

PERSONALITY
HARDWORKING OPTIMISTIC
REALISTIC FUNNY

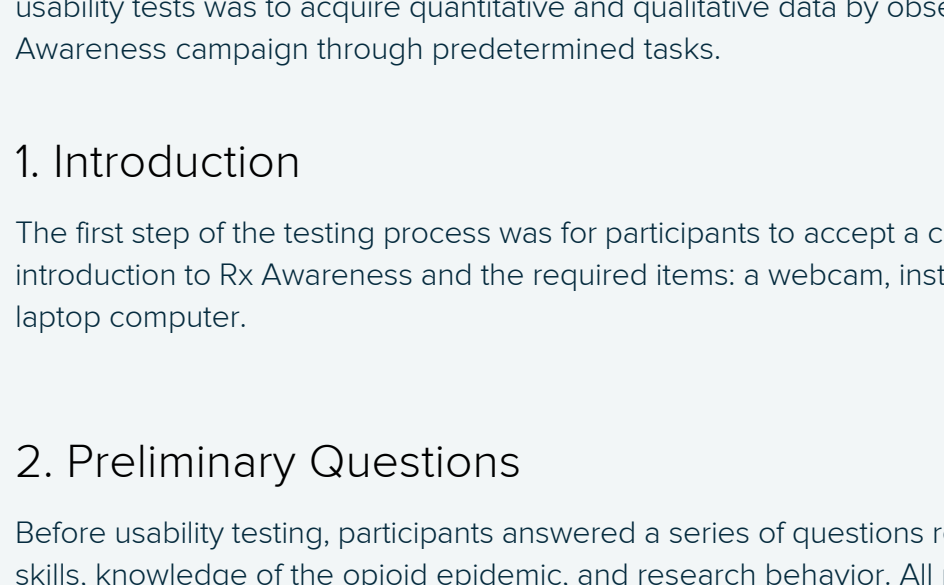
USER PERSONA
Amanda Jones
"Become a good researcher."

Participant Profiles

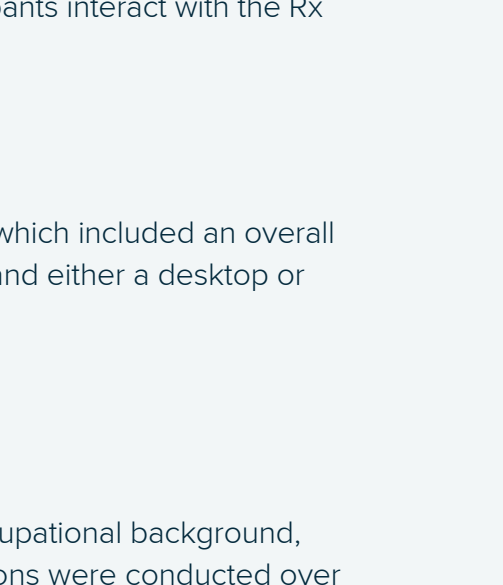
All participants fell under the targeted age group, being young professionals with a bachelor's degree from accredited universities. For privacy reasons, the participants' identity will remain anonymous.

	Age	Gender	Education	Occupation
Participant 1	30	Female	Texas Tech University	Medical Writer
Participant 2	28	Female	Florida State University	Pharmacist
Participant 3	24	Male	University of Texas	Medical Writer

Occupation



Motivations



Skills



Testing Setup & Post-Test Questions

Usability testing was conducted April 2020 remotely on Zoom for 3 participants. User interviews and usability testing were conducted during 3 separate sessions, with each lasting approximately 1 hour. The goal of the usability tests was to acquire quantitative and qualitative data by observing how participants interact with the Rx Awareness campaign through predetermined tasks.

1. Introduction

The first step of the testing process was for participants to accept a confirmation email which included an overall introduction to Rx Awareness and the required items: a webcam, installation of Zoom, and either a desktop or laptop computer.

2. Preliminary Questions

Before usability testing, participants answered a series of questions regarding their occupational background, skills, knowledge of the opioid epidemic, and research behavior. All preliminary questions were conducted over Typeform, a software as a service company that specializes in online form building and online surveys. (For the full list of preliminary questions, refer to Documentation under Appendix.)

- What is your current occupation?
- What credible websites do you use for research?
- What is the primary device you use to conduct research?
- What do you know about the opioid epidemic?
- Do you personally know someone who has been affected by opioid abuse?

3. Tasks

While performing the tasks outlined below, participants were asked to imagine the following scenario:

Ashley, a medical writer in Austin, TX, has received a new assignment at work that requires her to research information about the opioid epidemic. She needs to conduct in-depth research about opioid complications, side effects, and the overall impact it is having on families, and communities. All sources must be credible because it will be added in the appendix section of her assignment. For the writing portion of the assignment, she needs to give a brief presentation to the board of directors at her company. The topic of the article is over the opioid overdose and the impact it has on communities.

- Search for common opioid symptoms to watch out for
- Find testimonials from individuals affected by opioid use
- Find a report on prescription and illicit drug-related risks and outcomes

4. Post-Test Questions

Some retrospective questions concluded the usability test, to gain a deeper understanding of how participants felt about the testing. (For the full list of post-test questions, refer to Documentation under Appendix.)

- How was your overall experience using the CDC Rx Awareness website? Why?
- What was your favorite aspect of the website?
- What was the most confusing part of the test?
- Would you recommend Rx Awareness to a friend or colleague?

Results

During each usability test, the participant's ability to complete each of the tasks was recorded. If the participant found the correct information on the website, the task was marked as complete. However, if the participant was unable to locate the right information, the task was marked incomplete.

With the help of the tasks used for usability testing, it's easier to set categories to organize meaningful data. For example, one of the tasks had participants find a report on prescription and illicit drug-related risks and outcomes. Since it includes the calculated time it took to complete the task and also the task rate success, one of the result categories became *Report Findings*.

- Overall Awareness
- Report Findings
- Real Stories



Overall Awareness

100%

of participants **understood the core** premise and overall concept of opioid abuse.

100%

of participants successfully **completed all tasks** related to the overall concept.

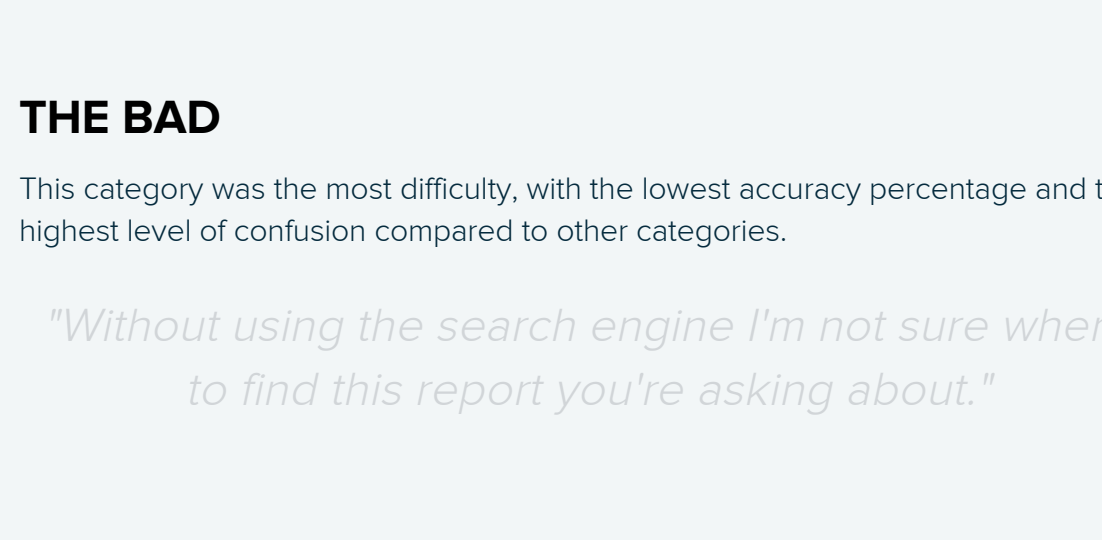
66%

of participants **enjoyed the concept** and the overall experience of using the website.

33%

of participants **experienced difficulty** on finding what Rx Awareness is about.

Breakdown



THE GOOD

The participants understand the significance of the website and what it is about. All basic tasks under this category were completed without any issue.

"Information is categorized in different sections... instead of everything under the home screen. The data is sorted well."

THE BAD

One participant was slightly confused at first what Rx Awareness was about because the header image didn't load initially.

"I don't have much experience with opioid drugs so not sure what to look for."

Report Findings

66%

of participants **understood the core** premise of report findings.

33%

of participants **were unable** to successfully complete all tasks related to report findings.

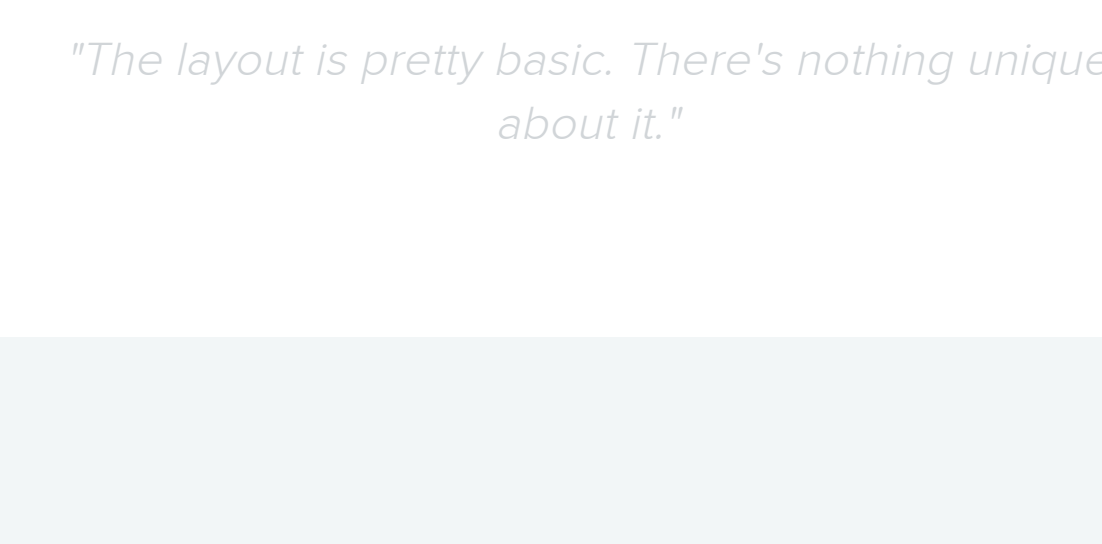
33%

of participants **enjoyed** the overall experience related to finding specific reports.

66%

of participants **had difficulty** finding illicit-drug related reports from the home page.

Breakdown



THE GOOD

This category was the most straightforward, with 100% of participants understanding the core premise of user testimonials.

"Very simple to find because the title is relevant, descriptive, and easy to understand."

THE BAD

Although it was simple for the participants to find facts, it was difficult to keep all of the participants engaged and interested with the task on finding real user stories.

"The layout is pretty basic. There's nothing unique about it."

Bugs & Issues

OVERALL

Throughout all 3 of the usability testing sessions, the participants encountered no software bugs while using the Rx Awareness campaign. However, one participant had some technical difficulties using Zoom during the initial testing setup.

WEBSITE PERFORMANCE

According to PageSpeed Insights, a tool used to analyze website content, the desktop site scored a 96 out of 100. However, all pages served from the Rx Awareness URL have a **moderate** speed compared to other pages in the Chrome UX Experience Report. The same cannot be said for the site's mobile performance, with an overall score of 56 out of 100. (For more information, refer to Documentation under Appendix.)

Recommendations & Action Items

The following are a few recommendations or action items for improving the usability of Rx Awareness based on the conducted analysis of data collected.

OVERALL AWARENESS

- The home page should clarify what are the signs of opioid abuse.
- Which states have highest opioid abuse? It is provided under Opioid Website but there's quite a few click-paths to find this information.
- Participants enjoyed the categorized information on the home page. Consider building on this feature by adding a drop down menu to optimize relevant click-through paths.

REPORT FINDINGS

- When attempting to find prescription and illicit-drug related reports, participants either clicked on Prevent Overdose or Opioid Overdose Website. Consider adding a quick link to reports to improve usability.
- When typing in 'reports' in the search field, the results will extend outside the Rx Awareness Campaign making it difficult to track this type of information.

REAL STORIES

- When attempting to find testimonials from individuals affected by opioid usage, some participants found the User Stories layout outdated. Consider using JavaScript to render animations and GIFs for entertainment.
- Participants enjoyed the UI design on the main page. Consider adding more purple visualizations or icons on other pages.

Disclaimer

Several factors may have affected the results of the usability test. It's important to remember that people bring their own experiences and biases into a test without realizing that they might color their impressions. The list outlines some of the issues that could skew the results.

1. The sample size may not be representative of all people that may use the product.
2. 2 of the 3 participants personally knew the researcher asking the questions.
3. Human error and misinterpretations of qualitative feedback affected the results to slightly but varying degrees.
4. Participants were not allowed to use the search engine in order to determine the usability of navigation through the site map.
5. More tasks and scenarios would have allowed for an increased understanding of usability.
6. Report breakdowns under Results were measured by verbal responses and are meant to be approximations.

Appendix

Documentation

- [Researcher Test Script](#)
- [Test Question List](#)
- [Usability Test Notes](#)
- [Sample Usability Test](#)
- [Pagespeed Insights](#)

Notable Quotes

- "The different colors of the text catches my eye."
- "I like the fact there's a prescription container."
- "Would I recommend this to anyone? Not really..."
- "It would have been easier to use the search engine."

Thank you.

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