



To: HHS Team
From: Cathy Hu & Sydnei Mayers
Subject: HHS.gov/coronavirus Test Plan
Date: June 24, 2020

Purpose

The purpose of this test plan is to provide our team with detailed information regarding our strategy, objectives, resources required, schedule, and deliverables involved with this usability study. This test plan will serve as a point of reference throughout the entire testing process of HHS.gov/coronavirus and help keep our team on track.

Our team will be communicating primarily with Lauren Sundquist, the representative of the Digital Communications Division at the U.S. Department of Health and Human Services, throughout this project.

This test plan includes:

- Problem Statement and Test Objectives
- Methodology
 - Test Procedure
 - User Profiles
 - Screener
 - Tasks and Scenarios
- Evaluation Methods
- Test Environment and Equipment
- Deliverables
- Appendices
 - Appendix A: Team Checklists
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 - Appendix C: Moderator's Script
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 - Appendix E: Post-Task Questionnaire
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Problem Statement and Test Objectives

The HHS would like to evaluate whether HHS.gov/coronavirus site is usable for general public consumers. The objectives of this study are to:

- Examine if the purpose of the website is clear
- Identify any missing components of the website
- Determine if website content is up to date
- Highlight any additional usability strengths and weaknesses present

Methodology

This section outlines how the test will be performed for each test participant. By following this prescribed methodology, we ensure that we can obtain accurate and consistent usability findings. We will use a consistent procedure, schedule, and participant profile between each test.

Test Procedure

Each test session will begin with the moderator sending a Zoom link to the participant. Once the participant joins the Zoom meeting, the note-taker will be muted with her webcam off and the moderator will begin the test session. The moderator will begin recording the Zoom meeting once the participant signs the consent form (*see Appendix D*) through Google Forms.

After the consent form has been signed, the participant will be asked to share their screen. The participant will also be asked which browser they are using, and then will be directed to HHS.gov/coronavirus to begin the usability test.

From there, the moderator will ask the participant to perform seven total tasks under three scenarios relating to the landing, Testing, Mental Health and Coping, and Telehealth pages. After each task, the participant will be asked to complete a post-task questionnaire (*see Appendix E*) through Google Forms. The note-taker will record the time spent on each task; whether the participant successfully completed each task; and any notable behaviors, quotes, and metrics.

After completing the usability test, the participant will be asked to complete a System Usability Scale evaluation (*see Appendix F*) and a reaction cards evaluation (*see Appendix G*) through Google Forms. Finally the participant will be thanked for their time and the test session will conclude. After the test session, the participants would receive a feedback email asking for their final thoughts on the website and any additional comments they may have.

Number of Participants

We plan to test a total of six participants and will recruit nine participants, three of whom will be backup participants for each age range. The first participant will participate in the pilot test—the results of which may not be included in the final results of the study.

Length of Test Session

Welcome and consent form signing: 5 minutes

Usability test: 28 minutes (4 minutes per task with post-task questionnaire)

SUS evaluation and reaction cards evaluation: 10 minutes

Total time: 43 minutes maximum

User Profiles

Our testing will focus on members of the general population. We plan on testing two participants from each of the three age ranges (18-30, 31-50, and 51+) for a total of six participants. Testing three demographics will allow us to understand the needs and expectations of young adults through middle-aged adults for a government site related to coronavirus.

Screener (see Appendix B)

As we recruit participants, the potential participants will be asked their name, age, contact method(s), available times, and access to a webcam/microphone/quiet place.

Two participants will be selected from each age range in order of screener submission to participate in the test. An additional participant from each age range will be informed that they will be backup participants and all other potential participants will be thanked for their time.

Tasks and Scenarios

Each test will include the following questions:

Scenario: You think you have contracted coronavirus and want to find information about your options for testing.

Task 1: Find what tests are available for COVID-19.

Task 2: Find if testing at home is possible.

Task 3: Find which companies offer community testing in your state.

Scenario: You have been trying to alleviate your strong emotions of fear and worry about your health and the health of your loved ones.

Task 4: Find out what can happen as a result of stress during an infectious disease outbreak.

Task 5: Find the number to call if you are experiencing emotional distress.

Scenario: You are not sure if you are experiencing symptoms of coronavirus and want to speak to your doctor virtually about it.

Task 6: Find which apps you could use to contact your doctor.

Task 7: Find if Medicare provides coverage for virtual services.

Evaluation Methods

In order to record both qualitative and quantitative data, the following evaluation methods will be used:

- Usability test
 - Time spent per task
 - Success or failure per task
 - Participant behaviors, actions, and quotes
- Post-task questionnaire (Google Form)
- System Usability Scale evaluation (Google Form)
- Reaction cards evaluation (Google Form)

Test Environment and Equipment

Each test will be conducted through remote testing with the moderator and note-taker in a Zoom conference with the participant. The Zoom conference will be recorded by the moderator, who will also prompt the participants to think out loud and guide them through each question.

To conduct the tests, we will need the following equipment and materials:

- A copy of the moderator script
- A copy of the test plan
- Google Forms
- Zoom

Deliverables

Upon completion of testing, our results will be compiled onto a PowerPoint deck and formally compiled into a written report. We will then present our PowerPoint to the HHS team and turn our written report in to them. Results may include areas in which the product excels, areas in which users struggled, or bugs that were found within the product. Our team will suggest ways to improve the product, but the primary aim of the project is to simply observe and take note of how end-users use the product.

Appendix A - Team Checklists

Moderator Checklist

Before participant arrives

- Make sure links to the consent form, post-task questionnaire, SUS evaluation, and reaction cards evaluation, and the moderator's script are readily accessible

Consent form

- Explain test purpose
- Go over digital consent form, allow time to read and sign
- Ask for questions and concerns

Testing

- Go over testing process and review how think aloud process works
- Administer usability test with post-task questionnaire

SUS evaluation and reaction cards

- Administer SUS evaluation and reaction cards exercise
- Ask participant if they have any further questions or concerns
- Thank participant for their time

After testing

- Send feedback email

Note-Taker Checklist

Before each test

- Turn on logging computer
- Connect to Zoom in testing room
- Prepare note taking materials
- Record the starting time of the test, date, participant name, and scenario

After each test

- Record the ending time of the test
- Record participant responses to post-test evaluation methods
- Place all material into shared Google Drive

Appendix B - Screener

The screener will be delivered via the following link:

<https://forms.gle/ckoDXVALpm8o72tp9>

1. Please state your name.
2. How old are you?
3. What ways can we reach you? Please provide your email, phone number, etc. We will only be using this info to contact you about testing, no other contact will be made outside of this context.
4. Please list dates and times (9am-9pm) from Thursday, June 25th to Wednesday, July 1st that you would be available to test.
5. Do you have a webcam/microphone that you are able to use to participate in the test?
6. Do you have access to a quiet place for approximately 30 minutes to an hour to assist us with testing?

Appendix C - Moderator's Script

This script was adapted from (Barnum, 2011, pp. 193-195).

Introduction

Hello! Thank you for being here with us today.

My name is Cathy. Sydnei and I are here to evaluate the usability of a government site related to coronavirus. For your information, I am reading from a script to ensure I say the exact same thing to each participant and to ensure that nothing is skipped or missed.

Your participation will help us understand what changes should be made to develop an informative, usable website.

Video Recording Permission (Appendix D)

This session will be recorded. The reason for recording the session is so that we can collect additional data after the test. Please complete the legal consent form to give us permission to record your use of the site. If you have any questions, please feel free to ask.

(Start Zoom recording.)

Introduction to Testing

Before we begin, I will explain how this test will work.

I will ask you to view a government site related to coronavirus and give you tasks to complete. I really appreciate your feedback about your experience, so I would like you to think aloud as you navigate the site. You may want to say things like, "I'm clicking this because..." or "I don't like this because...".

Additionally, this test is meant to evaluate the website, not your abilities. You do not need to know anything about the website beforehand.

Do you have any questions before we begin?

In the center of the Zoom toolbar, there is a large green button that says "share screen". Please click that. Now there will be an option asking which screen you would like to share; please share whichever display you will be using (ie. desktop/screen 1).

Additionally, please tell me which browser you are using.

Thank you. Please navigate to www.HHS.gov/coronavirus.

Testing

I have several tasks for you to complete as we go through the site. Remember, this is not a test of you; it is a test of the website, and I'm very interested in your reactions about it. Please remember to think out loud.

Scenario: You think you have contracted coronavirus and want to find information about your options for testing.

Task 1: Find what tests are available for COVID-19.

Please go to the post-task questionnaire and fill out the questions for Task 1. Please tell us what you are typing and why.

Task 2: Find if testing at home is possible.

Please go to the post-task questionnaire and fill out the questions for Task 2. Please tell us what you are typing and why.

Task 3: Find which companies offer community testing in your state.

Please go to the post-task questionnaire and fill out the questions for Task 3. Please tell us what you are typing and why.

Please return to [HHS.gov/coronavirus](https://www.hhs.gov/coronavirus).

Scenario: You have been trying to alleviate your strong emotions of fear and worry about your health and the health of your loved ones.

Task 4: Find out what can happen as a result of stress during an infectious disease outbreak.

Please go to the post-task questionnaire and fill out the questions for Task 4. Please tell us what you are typing and why.

Task 5: Find the number to call if you are experiencing emotional distress.

Please go to the post-task questionnaire and fill out the questions for Task 5. Please tell us what you are typing and why.

Please return to [HHS.gov/coronavirus](https://www.hhs.gov/coronavirus).

Scenario: You are not sure if you are experiencing symptoms of coronavirus and want to speak to your doctor virtually about it.

Task 6: Find which apps you could use to contact your doctor.

Please go to the post-task questionnaire and fill out the questions for Task 6. Please tell us what you are typing and why.

Task 7: Find if Medicare provides coverage for virtual services.

Please go to the post-task questionnaire and fill out the questions for Task 7. Please tell us what you are typing and why.

Thank you for your feedback. We have a few extra forms for you to fill out in order to help us gather some more data.

SUS Questionnaire (Appendix F)

Please go to the SUS questionnaire. This will help us understand your experience with this website. Additionally, please explain why you are choosing each answer.

Reaction Cards (Appendix G)

Please go to the reaction cards form. This form contains sixteen different words that may be used to describe HHS.gov/coronavirus. Please choose four words from the list that you would use to describe your experience with the site and please elaborate on why you chose those words.

After Testing

Thank you for participating in this test! We really appreciate your feedback and we hope you have a wonderful day.

Appendix D - Consent Form

The consent form will be delivered via the following link:

<https://forms.gle/4TCDYYTG5gmeGMdM6>

The following consent form is adapted from (Barnum, 2011, p. 171).

I hereby give my permission to be videotaped as part of my participation in the coronavirus website usability study at Mercer University.

I understand and consent to the use and release of the video. I further understand that the video recording and any highlights extracted from it may be used for review. Representative video excerpts may also be used within presentations to the client, at professional meetings, and as part of research.

I give up any rights to the video recording and understand that the recording may be used for purposes described in this release form without further permission.

I understand that if for any reason I do not want to continue I can leave at any time during this recording session. I can also deny consent at any time.

If you agree with these terms, please indicate your acceptance by signing below:

Signature (initials)	
Printed Name	
Date	

Appendix E - Post-Task Questionnaire

The post-task questionnaire will be delivered via the following link:

<https://forms.gle/QwuDV9EEdfZu3hG7>

1. How difficult was this task to accomplish?
 - a. Straightforward
 - b. Neutral
 - c. Difficult

2. What made this task easy or difficult for you?

Appendix F - SUS Evaluation

The SUS evaluation will be delivered via the following link:

<https://forms.gle/zXXWr5Es8pBx1dwT8>

System Usability Scale

Instructions: For each of the following statements, mark one box that best describes your reactions to the website *today*.

		Strongly Disagree				Strongly Agree
1.	I think that I would like to use this website frequently.	<input type="checkbox"/>				
2.	I found this website unnecessarily complex.	<input type="checkbox"/>				
3.	I thought this website was easy to use.	<input type="checkbox"/>				
4.	I think that I would need assistance to be able to use this website.	<input type="checkbox"/>				
5.	I found the various functions in this website were well integrated.	<input type="checkbox"/>				
6.	I thought there was too much inconsistency in this website.	<input type="checkbox"/>				
7.	I would imagine that most people would learn to use this website very quickly.	<input type="checkbox"/>				
8.	I found this website very cumbersome/awkward to use.	<input type="checkbox"/>				
9.	I felt very confident using this website.	<input type="checkbox"/>				
10.	I needed to learn a lot of things before I could get going with this website.	<input type="checkbox"/>				

Appendix G - Reaction Cards

The Reaction Cards exercise will be delivered via the following link:

<https://forms.gle/7cwQze5bExtqXvFT8>

Participants will have following positive words to choose from:

- Compelling
- Comprehensive
- Consistent
- Easy to use
- High quality
- Inviting
- Meaningful
- Well organized
- Professional
- Straightforward

These positive words describe an excellent HHS website that allows users to quickly find what they are looking for and navigate through the website with ease.

Participants will have the following negative words to choose from:

- Complex
- Confusing
- Dull
- Hard to use
- Ineffective
- Overbearing
- Poor quality
- Too technical
- Unattractive
- Unrefined

These negative words describe a subpar HHS website that may cause its users to stop accessing the site.