Study Plan: User Research Interviews with CHIOs and CIOs

Veterans Health Administration

Office of Health Informatics

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## Introduction

Human Factors Engineering (HFE) is developing a website to support the integration of Human-centered Design (HCD) in VAMCs. The site may provide training, work aids, “How To” guides and methods. This website, titled User Experience Guide (UXG) is intended to meet the needs of staff in VAMCs.

Integral to this effort, is the need to understand specifically what types of HCD activities would be valued by management. Human-centered design encompasses a broad set of processes, methods and skills. This study plan proposes a series of interviews in order to determine the areas of most value.

The working hypothesis: CHIO staff at some VAMCs would value guidance on applying UX to their health information system (HIS) reconfiguration projects.

The following assumptions were made, and will be utilized in the user studies to test the hypothesis.

* Some CHIOs want to mature UX competency and practices at their site.
* Maturing UX competency at a VAMC will improve processes and/or outcomes for HIS reconfiguration projects.
* The UX Guide team can provide UX guidance that CHIOs want and can use.
* Some sites already apply ‘UX’ practices that should be disseminated.

Three user studies are proposed.

1. “Day in the life” interviews to help the HCD team understand and frame future studies.
2. Structured interviews with VAMC management who work in the locations that are later on the list for Cerner implementation.
3. Pilot studies with several VAMCs, where the CHIO/CIO is interested in piloting UXG material.

## User Research Objectives

In order to gather the most useful information, recruiting will initially target CHIOs who are interested in maturing UX competency and practices at their site and are not implementing the Cerner solution in the near term.

* Understand the mission of the CHIO office, the roles on a CHIO staff, and the individuals who work with the CHIO office on HIS configuration projects.
* Understand the types of HIS reconfiguration projects for which a CHIO is responsible.
* Understand how HIS reconfiguration projects are identified, carried out, and measured.
* Understand the value system of CHIOs and their staff.
* Explore UX materials likely to be of value to HIS configuration project team.
* Explore opportunities to support CHIOs in process improvement for HIS reconfiguration.
* Identify barriers to adoption (of UX practices and of UX Guide materials).
* Identify current UX practices at VAMCs that might be captured and disseminated through the UX Guide.

## Objectives by Type of Study

Overall

#### “Day in the Life” interviews

* Understand the CHIO/CIO/management plans for informaticist work.
* Gather information on areas which may benefit from HCD work.
* Identify pressure points related to informaticist work.

#### Structured Interviews to Determine Perceived Value of HCD

* Recognize areas in VAMC operations that could benefit from incorporating UCD into their work.
* Prioritize areas based on perceived “pain” to VAMC management and staff.
* Identify what the VAMC management would consider success for the UXG site.
* Assess interest in working with HFE to pilot UXG content.

#### Pilot studies

* Establish appropriate baseline measures.
* Work with CACs to utilize the UXG processes and tools in their current work.
* Use feedback from the pilot sites to improve the UXG.
* Identify other areas that could benefit from additions to the UXG.

## Study Design

The first two studies, “Day in the Life” and Structured Interviews, will be conducted by a trained moderator.

Interview scripts will be developed and approved by HFE prior to the study kick-off.

Remote sessions will be scheduled at the convenience of each participant, and will not exceed the scheduled times.

Participants will be identified in several ways:

* Friends and Family
* Interest Survey distributed by FHIC
* Referrals by Participants

## Study Formats

Participants will agree to be audio recorded, and then receive an introduction to the session. The questions included in the structured interview or discussion guide will be tailored to elicit information needed to meet the study objectives.

Scenario based tasks will not be included in this study plan. Interviews may include a brief overview of the UXG to help familiarize the participant with the topic.

Pilot studies will be designed following the analysis of the first two studies. Pilot sites are envisioned to utilize some or all of these UXG activities, plus additional activities identified during CAC studies:

1. Interview guides
2. Workflow analysis
3. Usability Walkthrough
4. Heuristic evaluation

## 

### Expected Outcomes

Details of the expected outcomes from each type of study are listed, while the overall outcomes will allow the UXG team to make these decisions:

* How can we work with CHIOs/staff to produce UX guidance for HIS configuration projects?
* Are we likely to successful?
* How will success be measured?

### Planned deliverables from the CHIO Study plan include:

* User stories that describe the needs for UX Guide materials.
* Description of the context of intended use of UX Guide materials.
* Study reports.

### Additional study outcomes:

#### “Day in the Life” and Structured Interviews

* Identify potentially valued HCD topics not yet in UXG development roadmap.
* Understand how CHIOs and CIOs will evaluate UXG site.
* Obtain contact details for future participants in user studies.
* Recruit several sites that would be enthusiastic regarding a pilot of the UXG materials in their medical center.

#### Pilot Studies

* Feedback regarding the utility and accessibility of the UXG material.
* Before and after metrics established prior to start of pilot study.
* Additions/deletions to UXG roadmap.

## Time Frame

This table provides relative timings for the key activities for each of the two interview studies. The pilot study time frame will be developed when sites have been identified and scheduled.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Activity | Dependencies | Date Ready | Duration | Responsible |
| Study plan accepted | VA Review | Day 0 | varies | VA |
| Recruiting and scheduling | Potential participant schedules/vacations | Days 1-5 | varies | BAC |
| Test Stimuli Ready | Editorial Team | Day 5 | varies | BAC |
| Interview script approved | VA Review | Day 7 | varies | VA |
| Data collected | Participants | Days 10, 11 | varies | BAC |
| Report readout | Completion of sessions | Day 15 | varies | BAC |
| UXG User Stories developed and prioritized | Feedback session | Days 16-20 | varies | VA/BAC |

## Assumptions

* Proposed user research is dependent on participant recruiting
* Study will be executed by BAC Team

## Risks

* Skype and WebEx technical performance.
* Internet performance.
* Participant scheduling.

## Concurrence

|  |  |  |  |
| --- | --- | --- | --- |
| Document Title & Version | Name | Enter Initials to Concur | Date |
| June User Research UXG site Proposal v3.0 | Stephanie Tallett |  | July 3, 2020 |
|  | Ross Spier |  |  |

Upon receipt of concurrence, the proposal document will be finalized by the addition of signatures collected via email.