# Introduction

The User Experience (UX) Guide website was conceived as an organizational resource intended to enable positive user experiences with VHA health information technology (HIT) systems by promoting human-centered approaches to system design, development, assessment, and implementation.

The HFE team plans to revamp, expand, and enhance the current UX Guide to promote the use and adoption of human-centered design practices within the VHA OHI and has asked the BAC team to support these efforts.

# Objectives

The project objective for this initial effort is to transfer knowledge and for the BAC team to understand what UX Guide work has already been achieved and what work the govt. HFE team wants to accomplish next. The outcome (report) of this initial project will be a summary of the VHA HFE team’s vision, objectives, and summary of components.

# Study Design & Schedule

The study design will include discrete tasks intended to meet the objectives above and produce the final report.

| Tasks | Timing |
| --- | --- |
| Task 1 – Scoping and Proposal  Discussions with the UX Guide Product Manager were held to understand the objectives and expectations. Two meetings of 1-hour each with UX Guide Product Manager were held, along with other communications via email. This Proposal document will be delivered as a draft for comments to UX Guide Product Manager for review and feedback will be integrated to produce a Final Proposal.  Since this effort is primarily for sharing of information, a study plan is not required. Once the final Proposal is approved, work will commence.  **Deliverables**: Approved Proposal for UX Guide Stakeholder Needs Assessment Human Factors Support | 1 week  Project Kickoff:  Within a week of project approval:   **Week 1** |
| Task 2 – Stakeholder Interviews  Conduct interviews with the UX Guide stakeholders. There are currently four identified stakeholders and the interviews may occur separately or as a group and will be limited to 1-1.5 hours each. These interviews will delve into the vision for the website, intended user groups and context of use, feedback on current design and content, and expectations for timing/schedule for new features. Total interview durations will not exceed 6 hours. | Week 1\* |
| Task 3 - Familiarization of Past and Current UX Guide Work  Several activities are planned for the BAC team to get familiar with the UX Guide current state and familiar with projects envisioned to support the objectives for the website: Review of current UX Guide website The BAC team will review the website to get familiar with the layout, interactions, navigation, workflows, and content currently online. This review will be limited to 2-4 hours. Demo of UXG content delivery system The UX Guide Product Manager will demo the content delivery system (WordPress site and themes), describe any constraints and limitations, and discuss the support sought for future enhancements. This demo is expected to be 1 hour long. Discuss potential new features/requirements Meet with UX Guide Product Manager for 1-2 hours, who will describe how UX Guide content might be structured to promote VA adoption of human-centered design through:   * Published VA practices such as HFE’s BoK methods/tools, NCPS methods/tools (such as HFMEA), tools from Veterans Experience Office, HFE’s newly acquired ISO standards). * A shared vocabulary among VA organizations and among related roles (HF engineers, UX professionals, Clinical Informaticists, and various VAMC roles). * Alignment with an education and training strategy (including planned HFE training to CHIO staff, CDS evaluation training, etc.). * Discuss how the UX Guide team might identify suitable content (environmental scan, receiving artifacts from HFE studies), develop new content, and ensuring content quality prior to publication to the UX Guide (assigning a strength of evidence rating, ensuring appropriate use terms, HFE’s peer-review and white-glove process). * The UX Guide Product Manager will demo how the UX Guide might represent and manage user needs captured from user research studies, from Usability Toolkit project work, and from other means.  Overview of Usability Toolkit Receive an overview of the Usability Toolkit project -- an ongoing effort to engage with VA project teams to better understand the work, challenges, and needs of HIS configuration project teams. This will be a demonstration that will take 1 hour. Discuss needs for a UX Guide steering committee Discuss the need for a UX Guide Steering committee consisting of representatives from various program offices. This will be a meeting lasting 30 minutes. | Week 1 - 2 |
| Task 4 - Conduct a preliminary environmental scan for possible UXG content  Conduct a preliminary environmental scan to identify potential UX Guide content and to inform stakeholder ideation. The environmental scan will be time boxed to 8 hours and should include:   1. Information resources that should be considered when looking for new content (to reference or link to in the UX Guide). For example: [https://www.healthit.gov](https://www.healthit.gov/), <https://www.ahrq.gov/>, <https://sbmi.uth.edu/nccd/ehrusability/> 2. Various types of content to consider for inclusion in the UX Guide    * to describe and link to (such as the [Usability Change Package](https://www.healthit.gov/sites/default/files/playbook/pdf/usability-change-plan.pdf) and [General Design Principles for EHRs](https://sbmi.uth.edu/nccd/ehrusability/design/guidelines/principles/))    * or to modify and reference (such as the [ONC Test Procedure](https://www.healthit.gov/topic/certification-ehrs/2015-edition-test-method)) 3. Examples of online content for key UX Guide content types    * Content libraries      + User Personas      + Patient Care Scenarios      + Interaction Design Principles for health information systems    * Playbooks      + Applying Value Management to clinical workflow reengineering      + Applying HCD to health information system configuration projects    * Education and role-based training modules      + Key concepts explained      + UX techniques (tools, templates, video snippets, etc.) appropriate for non-technical users      + Human Factors methods descriptions (to inform users about technical activities common (or recommended) in health information system projects)    * Glossary of terms and definitions | Week 1 - 2 |
| Task 5 – Finalize Report for Study Package  **Deliverables:**   1. UX Guide purpose / vision 2. High-level summary and prioritization of UXG components and work efforts to meet the vision. 3. List of potential UX Guide content from the environmental scan. | Week 2 - 3 |
| Task 6 – Debrief | Week 3\* |
| **TOTALS**  **Tasks 1 – 6** | **2-3 weeks\***  **FP = 2.0** |

\* Timing is dependent on the stakeholder availability for conducting interview and UX Guide Product Manager’s review of the report (see Assumption 1 below).

# Assumptions/Dependencies

1. The activities above and the timing of completing each activity are dependent on availability of stakeholders and the UX Guide Product Manager to meet with BAC team within the time frames defined above. The UX Guide Product Manager and BAC team are not available on Federal Holidays. We do not anticipate Federal Holidays will impact the schedule.
2. The UX Guide Product Manager has up to 30 days to review the study report before the study is marked as ‘Completed’. We assume the UXG team lead will review the report and participate in a Debrief meeting during Week 4 of the project.

# Concurrence

* Collected via email, with signatures and date.
* Concurrence indicates that both BAC team and the sponsor agree on the objectives of the study before work begins to ensure that the results of the study address program office needs, including timeline.

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A study plan is established after Government HFE Lead and Sponsor concurrence of the study proposal is acquired. Studies are scheduled once the study plan is approved by the Government HFE Lead.

**Study Plan minimally includes:**

1. Purpose of Study
   1. Study objectives
   2. Applicable methods, tools, and resources
2. Session Script(s) or questions for users (questionnaire)
   1. Target number and types of participants (for various user roles)
3. Data Collection and Analysis Approach
   1. Task success criteria if performing tasks
4. Project Timeline and Milestones
   1. Sponsor connection points to review progress, risks, and responsibilities
5. Other Project-specific Parameters, such as:
   1. Test procedures
   2. Scenarios
   3. Personas

**Study Report:**

1. Format. The Study Report format (visual or written) shall vary depending on the study type (such as wireframes for design related studies) and customer preferences and can range from an Adobe InDesign, Adobe PDF, Excel workbook, a PowerPoint presentation, a Word document, diagrams, web content or other visual format.
2. Agreement of Format. The Contractor shall acquire agreement from the Government HFE Lead and Sponsor on format prior to execution and identify and communicate the key characteristics required to meet each stakeholder’s objectives for the study.
3. Section 508 Compliance. Regardless of format, the Contractor shall provide deliverables that are 508 Accessibility compliant
4. Editable and Reusable. All deliverables shall be text editable by the Government, including reusable components for future work.
5. Ownership. All materials, including written and visual products produced by the Contractor shall be owned by the Government and be submitted using approved templates or branding.
6. Slide Overview of Each Study. Studies including briefings and disposition of findings are expected to be associated with a PowerPoint presentation to support collaborative decision-making to identify solutions to usability problems.
7. Data Analysis. Studies including data analysis and collection of numerous quantifiable information elements are expected to be associated with an Excel workbook providing raw data and analyses summaries.
8. Written Reports. The HFE minimum expectation for written reports shall follow this structure, adapted from the Human Factors and Ergonomics Society (HFES) conference proposal requirements (http://cms.hfes.org/Events/Annual-Meeting/Call-for-Proposals.aspx#Forms), and are expected to be associated with a Word document:
   1. Introduction: General statement to orient the reader to the specific problem and context, study personnel, background information, and relevant literature.
   2. Method: How the study was conducted, including participants, apparatus, and procedure (e.g., any tasks completed by participants).
   3. Results: Summarize the data collected, list any findings1, and/or include visual products2 such as mock-ups.
   4. Discussion: Describe your analysis of the results, the implications, pertinent evidence-based recommendations, and study limitations and next steps.
   5. References: Provide full references for all citations used in the proposal in current edition American Psychological Association (APA) style.
9. Internal HFE Work Efforts. For internal HFE operations work, the Government HFE Lead will determine if study proposals and plans are required in addition to the work item (visual or written report) itself.

The Contractor shall deliver the Government HFE Lead approved proposal, study plan, and study report to the Sponsor, and perform a study debriefing call to answer questions should the Sponsor require. Sponsors have 30 days to review the study report before studies are marked as ‘Completed’.

**After Action Report and Lessons Learned Journal**

The Contractor shall also perform an After-Action Review (AAR) and submit entries to the Lessons Learned Journal (LLJ) for all applicable opportunities for improvement for each study task which the Contractor was actively engaged, including facilitating the AAR meeting, and document the materials in a Working Product, and include the study sponsor in the session. (See pages 14-15 of the IDIQ PWS for more details).