Psychotherapy Tool and Psychotherapy Tracker

Veterans Health Administration

Office of Health Informatics

Date Modified 2/25/2020

Contents

[Introduction 1](#_Toc522269890)

[Study Details 1](#_Toc522269891)

[Application Description 1](#_Toc522269892)

[Study Objectives 1](#_Toc522269893)

[Method Overview 2](#_Toc522269894)

[Study Design 2](#_Toc522269895)

[Tasks: 2](#_Toc522269896)

[Task Name: 2](#_Toc522269897)

[Task Name: 2](#_Toc522269898)

[Preliminary Schedule 3](#_Toc522269899)

[Assumptions and Constraints 3](#_Toc522269900)

[Appendix A: Participant Demographics and Background Information 4](#_Toc522269901)

[Appendix B: Study Materials 5](#_Toc522269902)

[Appendix C: Study Scripts 6](#_Toc522269903)

# Introduction

[The first two heading levels get their own paragraph, as shown here. Headings 3, 4, and 5 are run-in headings used at the beginning of the paragraph.]

## Study Details

* Study Author(s): Janey Barnes
* HF Point of Contact: Kyle Maddox, Ross Speir
* Application: Psychotherapy Measurement Feedback System
* Study Sponsor: Psychotherapy Dr. Chris Crowe
* Developer POC: Unknown
* Devices(s): Clinician facing applications are desktop applications; Patient facing application

is TBD

## Application Description

The purpose of this section is to make clear the rationale for conducting the study by providing a context for the study objectives.

This section should include a brief overview of the application and the functionality being tested. It should specify the users for which the application is intended, the usage environment, and work goals the application is intended to enable. For instance, is the application intended to be 'walk up and use' or will training and documentation be available for users. If Usability Requirements have been specified for the application, then relevant requirements will be listed in this section.

The current state of the Department of Veterans Affairs Mental Health Services includes no systematic means of tracking VA psychotherapy services or Veteran clinical responses. Understanding, documenting, and continually improving the quality of VA psychotherapy services depends on routine collection of minimally necessary information to link:

* The Veteran’s mental health conditions and problems that are the focus of psychotherapy sessions,
* The psychotherapy services provided, and
* Veteran reported outcomes.

Collecting this essential information provides the basis for a robust quality management system for quality assurance and quality improvement.

In addition, the Office of Mental Health would like to use the Psychotherapy Measurement Feedback System for management decisions e.g., determining if providers should receive training on a specific therapy treatment versus hiring additional providers with experience in the specific therapy treatment in order to meet veterans’ needs.

The Psychotherapy Measurement Feedback System consists of the Psychotherapy Tracker + Psychotherapy Tools. The Psychotherapy Tracker

* Identifies the condition or problem that is the focus of the psychotherapy session
* Captures Veteran reported outcome measures
* Captures a description of the psychotherapy services delivered.

The Psychotherapy Tools include

* Decision support tools to inform clinical judgement and improve Veteran outcomes
* Identification of Veterans who are at increased risk for drop out, limited clinical benefit, or deterioration
* Generates of practice-based evidence.

This plan describes the activities associated with providing Human Centered Design (HCD) process to the design, development, and pilot testing to the following components for the Psychotherapy CDS and Tracker. We anticipate HCD activities will implement and effective, agile-like design and development process that spans releases.

## Study Objectives

The study objectives represent the shared, high-level understanding between the HF practitioners and the program office requesting services of the purpose for conducting the study, the expected outcomes (i.e. the type of results that will be provided) and how the results are expected to be used (for instance, to inform a redesign or baseline performance measures). Below is sample text (in italics).

The objective of this study was to uncover areas where the application performed well – that is, effectively, efficiently, and with satisfaction – and areas where the application failed to meet the needs of the participants. The data from this test may serve as a baseline for future tests with an updated version of the same electronic health record (EHR) and/or comparison with other EHRs provided the same tasks are used. In short, this testing serves as a means to record or benchmark current usability and to identify areas where improvements must be made.

Project objectives include

* Specify value measures and intended outcomes i.e., User Perspective Key Performance Indicators (KPIs), Clinical Stakeholder priority measures, and alignment with CIDMO value measures
* Identify key factors of the context of intended use factors that could impact product usability and utility
* Rapid prototype design and usability assessment to produce requirements
* Support the development and piloting of VistA version of application (and monitor)
* Specify evaluation criteria (test scenarios, baseline measures), manage usability/safety risks, and outline the evaluation strategy for implementing solutions into VistA and Cerner sites

# Method Overview

## Study Design

The proposed application of a HCD process includes discrete activities to address the objectives and result in a MVP Tracker and Tools to be used in a pilot (beta-test) with VistA.

* To specify value measures and intended outcomes i.e., User Perspective Key Performance Indicators (KPIs) we will conduct stakeholder and user interviews. This objective could also be addressed with interactive workshops and/or online surveys.
* To identify context of use factors that could impact usability we will conduct observations and interviews of intended users of the Psychotherapy Tracker and Tools.
* The specification of evaluation criteria (test scenarios, baseline measures) for VistA and Cerner solutions will be a product of the activities described above.
* We will include rapid prototype design and usability assessment to produce requirements and to iterate the design of the Psychotherapy Tracker and Tools.
* We will work with a development and test team to inform the development and pilot (beta-testing) the VistA version of application (and monitor).

## Tasks:

Provide a list and brief description of the tasks participants carried out as part of this study.

### Task Name: Discovery Research

#### Description

Discovery Research aimed at specifying value measures and intended outcomes, identifying the context of use factors that could impact usability, and specifying evaluation criteria for VistA and Cerner solutions.

Potential discovery activities include (not listed in any particular order)

* review of previous user research conducted by the HFE team
* review/participate in demonstration of similar solutions
* rapid prototyping workshop planned for January 14-16, 2020 (HF Researcher + Interaction Designer)
* observation and interviews of intended Psychotherapy Tracker and Tools users (e.g., potential site visit to Durham VA)
* Leverage a VA statistician to mine VA data to create a representative set of MH patient personas / patient cases.

#### Success Criteria

1. User interface design requirements in the form of low fidelity journey map, wireframes, and initial rapid prototype.

### Task Name: Rapid Prototype and Usability Assessment Iterations

#### Description

Rapid prototype and usability assessment iterations will be planned and executed that will inform the development of the VistA version of the application to be used in pilot (beta-testing). Usability assessment iterations include

* TBD site(s) (e.g., Palo Alto VA) in-person and/or remote usability assessment with low fidelity prototype
  + 6 participants in user groups defined for the MVP (e.g., psychotherapist, prescriber, manager).
  + One hour sessions.
* Additional in-person usability assessments with “implementation equivalent application” in sandbox using rigor of a summative validation usability assessment with a goal of n=15 participants per user groups. This set of usability assessments might be conducted simultaneously.
* One hour sessions.

.

#### Success Criteria:

1. Updated prototype for each round of testing (2), usability test plans and reports (2).

### Task Name: Beta-Testing at Pilot Site(s)

#### Description:

Support the development and piloting of the VistA version of the application at pilot sites.

#### Success Criteria:

1. Pilot site is able to build the MVP Psychotherapy Measurement Feedback System.

# Preliminary Schedule

The following timeframes are provided to plan, execute, and report on the study. A complete session schedule will be included in the final report.

Table 1 Preliminary Schedule

|  |  |  |  |
| --- | --- | --- | --- |
| Task |  | Responsible Party(ies) | Date |
| Discovery Research | Initial Show and tell with low fidelity prototypes created based on requirements | HFE Team and Core Psychotherapy Team | Completed requirements March 2, 2020 |
| Rapid Prototyping and Usability Assessment 1 | Plan and execute User Feedback via Skype with core team and potential end users who are not part of the core team  Rapid prototyping iteration included in this task. | HFE Team and Core Psychotherapy Team | March 3 – March 16 |
| Usability Assessment Iteration 2 | Plan and execute User Feedback (in person or via Skype) with up potential end users who are not part of the core team.  Rapid prototyping iteration included in this task | HFE Team and Core Psychotherapy Team | March 17 - March 24, 2020 |
| Deliver initial Build Kit for CPRS Tool and CDS Tool to each Pilot Site for Review.  Support Pilot Site with Build Requirements | Finalize build kits for each app i.e.,   * The prototypes show the user interface. * How is this really going to launch? * Finalize information that will be provided to Partner Site? | HFE Team and Pilot Site CACs | March 25, 2020 - March 31, 2020 |

\*Dates are tentative and may change based on scheduling and other constraints.

## Assumptions and Constraints

Considerations to discuss with the HFE team include

* Ensure alignment of functional capabilities and data quality between the Cerner and VistA ‘reminder dialog’ applications. (this is Dr. Crowe’s priority – but this seems like research, not operations). HFE focus is on the solution for legacy VistA sites. However, user needs and context of use information will be shared for Cerner-based solution.
* Benchmark the technology intervention (pre-, post-implementation) AND efficacy of psychotherapies. We may engage w/ HSRD for this objective.
* Supports team-based care. Dr. Crowe does not expect this solution to be limited to BHIP. All sites have some level of team-based Mental Health care that the solution must support.
* Business Owner defined Strategic Analytics for Improvement and Learning (SAIL) metrics will be based on appropriate care delivery (clinical practice guidelines, including Veteran Preference)
* Publications (this work needs to be shared)
* HFE team member wants to consider publication/presentation of this project work. Publication support must be defined in a separate task in the Contractor Tracker. all publications associated with HFE projects will be coordinated through HFE. Roll out to community (part of the Mission Act)
  + HFE team member described this as TBD. Activities associated with roll out to community (part of the Mission Act) are not included in the activities described in this document.

Assumptions and Dependencies include:

* Patients may use My HealtheVet to input associated data e.g., diary. This patient generated data might inform the CDS or Dashboard. The patient My HealtheVet is out of scope for the activities proposed in this document.
* The project timeline is to deliver a Minimal Viable Product to the 4 partner sites for their Beta test in March 2020. This means deliver artifacts that CACs need to build the PTool in CPRS. This is an aggressive schedule.
* The need to ensure alignment of functional capabilities and data quality between the Cerner and VistA ‘reminder dialog’ applications is a priority of the Business owner. HFE focus is on the solution for legacy VistA sites. However, user needs and context of use information will be shared for Cerner-based solution.
* Benchmark the technology intervention (pre-, post-implementation) AND efficacy of psychotherapies is not included in the scope of this proposal. HFE may engage with HSRD for this objective.
* The application will support team-based care. Dr. Crowe does not expect this solution to be limited to BHIP. All sites have some level of team-based Mental Health care that the solution must support.
* Business Owner defined Strategic Analytics for Improvement and Learning (SAIL) metrics will be based on appropriate care delivery (clinical practice guidelines, including Veteran Preference)
* HFE team member wants to consider publication/presentation of this project work. Publication support must be defined in a separate task in the Contractor Tracker. All publications associated with HFE projects will be coordinated through HFE. Roll out to community (part of the Mission Act)
* Activities associated with roll out to community (part of the Mission Act) are not included in the activities described in this document.
* SMART on FHIR applications allow Dr. Crowe to pull data from the data warehouse (and other locations) and can be programmed to do almost anything we want but it requires a developer and product manager and is probably outside the scope of HFE’s initial effort. It might be the case that we develop a solution now (via reminder dialog) and work towards the SMART on FHIR application as a follow-up once we proof of concept the tool.

Risks include

* Delivering a MVP to the 4 partner sites for their Beta test in March 2020 is an aggressive schedule and without full availability of all team members and stakeholders, it is doubtful if we will meet this timeline.
* The patient data collection piece needs a decision about which option – eScreen, BHL, MHA, paper documents, etc),

*Other project risks will be specified and managed.*