**Interface**

* Number of symptoms to be checked is likely 3
  + Should create an interface with 1 symptom, 3 symptom, and 5 symptoms for focus groups and usability testing
* Bottom has series of icons for graph, rating, help, settings
* Include Fletcher Allen Health Care at the top of the app

**Design Principles**

* Each feature of the app should be ***BULLET PROOF*** in its implementation. Use should be intuitive and without error. It is better to spend additional time perfecting a single feature than developing a second feature.
* The app is intended for repeated use such that ***speed takes priority***. Features that slow down the speed with which screens pop up or symptoms are recorded should be considered for removal.
* The app is meant to be used repeatedly such that ***each recording session should take no more than 2 minutes to complete***. 2 minutes should be the upper limit.

**Features**

* Symptom Ratings:

Overview: User is presented with a static page that asks a single question. A single response style is presented underneath – responses can be 1 of 3 formats: Slider, Radio Button, Check Box. Between 1-3 questions are presented at a time. Sliders are anchored on both ends for a “positive” and “negative” end. The sliders are each in a rectangle with the rating in the middle.

* + Questions will be delivered in a branching logic format. For example,
    - Screen 1 - Q1: “Right now are you?”
      * Thinking about the Trauma (Radio Button: Yes / No)
      * Having negative thoughts (Radio Button: Yes / No)
      * Feeling like something bad is happening (Radio Button: Yes / No)
      * None of the above (Radio Button: Yes / No)
    - If none of the above: Go to Q2
    - For Each Yes: “How distressing is?” (Slider: 0 – 100 for each)
      * “Thinking about the trauma”
      * “Having negative thoughts”
      * “Feeling like something bad is happening”
    - For each prior response: “Were these related to the trauma?”
      * Thinking about the Trauma (Radio Button: Yes / No)
      * Having negative thoughts (Radio Button: Yes / No)
      * Feel like something bad is happening (Radio Button: Yes / No)
    - Screen 1 – Q2: “Right now…”
  + Sliders use an underlying 0-100 scale
  + Anchored from “Positive” to “Negative”
  + ~~Background color changes from Neon Green to Bright Red as color slides to Negative (tied in units of 20?)~~
  + ~~Smiley face goes from Happy (positive) to Frowney (negative) as rating slides (tied in units of 20?)~~
  + Bottom of the slider has a “submit” button, which logs all of the responses
    - Responses should be logged after the slider has been moved and not touched for 5 seconds
  + After an assessment is completed, a thank you feedback message should pop-up that praises them for effort
    - “Thank you for letting us know how you are doing!”
    - Should have 10-20 praise statements that vary after delivery
    - Should NOT be tied to their specific symptoms at this point
  + Current concern – at the end of an assessment, participants will be asked “Could you let us know what your biggest concern is at the moment?” and be given a text box to enter in their current concern. The text should be captured as it is entered.
    - Last questions of all assessments.
    - Not mandatory or required: Participants should be able to hit next without having to enter this if they would rather not complete this component.

* Reminders to make rating
  + Pop up on a random schedule throughout the day
  + Pop up takes you to the symptom log screen
  + Maximum number of reminders is 3 (but should be able to be changed - more frequent at the start)
  + Questions on pop up are oriented towards “Right Now”
    - “How much pain are you in right now?”
  + Only log one random assessment per day. If the person makes an entry, then no random more monitoring for that day.
  + A second assessment will appear every day between the hours of 7PM – 10PM. This assessment will ask the same questions but anchored to the day. This appears regardless of whether or not they did the random assessment.
    - “On average, how much pain were you in today?”
* Graphs (OPTIONAL)
  + Graph data that has been entered as line/bar graph
  + Provide line/bar graphs for each symptom that is monitored
  + Each bar/dot on the graph should be the color that it was logged
  + Provide overall score which is the average of all the different domains
* Help (OPTIONAL)
  + Tips and advice about how to deal with common issues
  + Will be static screens and potentially premade video clips
* Settings
  + Options to change the frequency of reminders (1-5)
  + ~~Option to change the number of ratings per day (1-3)~~
  + Option to change demographics that were entered initially
  + Option to change color scheme (?)
  + Option to turn off reminders (should be big for folks that want to opt out early on)
* Do Not Disturb
  + Overview: This feature stops the use of app for a given period of time. This should be thought of as a “do not disturb” feature to be used when the participant will be unable to complete an assessment for a given period of time.
  + Should have a timer appear (use standard iPhone timer) to set how long the app should not trigger a reminder.
  + Option to end DND mode early (e.g., Set DND for 2 hours, but are able to respond after 1 hour, can stop DND).
* Demographic log
  + Appears when app is first used and not again
  + Asks for age, gender, race, trauma type (MVA, gunshot, sexual assault, physical assault, other - write in), health insurance carrier
  + Can be changed in the settings tab

**Additional Notes**

Slider to monitor symptoms.

Way to remind individuals to enter symptoms. Should be on random schedule. With up to three reminders per day.

Thank them for making a reminder each time. Need to make it seem as though they are communicating with someone. No one likes to put data into the black hole. (Text message study with effective because text messages communication. App communication is not something that is normative yet.) To that point maybe have a reminder to say that app has been sent to hospital and reviewed. Would be great to actually have this correspond with wind databases checked by a provider.

Transmission of data over secure protocol. Best it could be done immediately. But could be done via email or connection to computer. All apps will have data plans and sell connections. Probably easier to send us email. Over secure connection.

Slider background changes color with increase or decrease in symptoms. Red most severe green least severe.

Face corresponds to slider as well. Happy face least severe :-( most severe. Maybe use emotional identification faces to help with this.

Tracking based on symptom report. Dot reflected color of symptoms. Can superimpose happy faces above each dot

Way to aggregate symptoms across all domains. Can look at domain or average of each domain.

Opening screen asks for demographic information (age, gender, race, trauma type).Goal of this piece is to create a large database of recovery trajectories for different subgroups. Way to aggregate data across different factors.

Also collect insurance information. Must make it clear that insurance information will not be transmitted. The purpose of the insurance pieces to identify potential providers down the line who may be helpful to them.

Potential way to use aggregates to show normative recovery line. Help individual see where they are relative to other people who have been through similar experiences and have similar demographics.

Tone of whole app should be conversational and friendly. Not clinical.

Feedback should be given based on ratings. Just encouraging to start. Real strategies to take place after a few six sets of negative comments. Could be reflective of how the doctor feels about the person – I'm happy you're doing better! Or sounds like this is a tough time for you. To make sure that the supportive comments don't come across as potentially condescending – focus group this.

Will definitely need to do usability study. With about 10 or so individuals. Perhaps 10 in the lab. And then another 10 of actual patients.

Map of providers? Would be ultimate sequence. But could be challenging at this point.

Need to develop a reward system to incentivize recovery data entry. Some type of point system? Or perhaps some type of incentive in the community. Give card to Amazon? Or Walmart? Or city market? Maybe as a raffle? Every five data point entered get to a raffle ticket. And at the end of every month we get out three $10 Amazon gift cards. Person with more tickets get higher chances of winning. Need to figure out sustainable plan for keeping the gift cards in place. The could be worth it for incentives. Don't want to encourage people to do this forever. Although that would be great data collection!

Leader boards? Probably not because of confidentiality issues.

Opportunities for social connections? Or other type of social networking integration? Like Facebook or Twitter? Potentially could be used to incentivize data entry unclear how to do this without breaking confidentiality.