Functional Specification Document:

1. Discuss the project overview. What system are you reviewing and plan to make proposed changes to with your FSD.

The system I am reviewing and would make changes to is the Armed Forces Health Longitudinal Technology Application (AHLTA). With the advent of the Electronic Health Record (EHR), there has been a give-and-take relationship with the amount of time needed to complete a patient chart. On one hand, the ability to access labs, diagnostics, and past encounters in just a few moments has ben a tremendous help in the ability to quickly diagnose a patient. However, due to the inherent nature of computers to occasionally "freeze" and need to be restarted, and the increasing bloat that has been added to the records simply because hard drive space is so vast and monetarily cheap, the entry of data into an EHR has at times actually INCREASED the amount of time that is spent charting and taken that time away from treating the patient. Additionally, the security measures and anti-virus software that have been placed on all government computers continue to slow the computers down, making charting a tedious project. As one medic told me years ago, "Sir, you spend more time treating the computer than you do the patient".

There are two issues I would like to change that I found time-consuming on almost every patient encounter I have had. The primary issue I would like to change is how information copies forward (or rather how it does NOT copy forward) from previous encounters to the current encounter. Currently, to copy information forward, the provider must first seek-out a previous encounter that is recent enough to be relevant, yet was completed properly. That encounter must then be copied forward, which takes seven steps. Once that is done, the information must be reviewed with the patient and then changed as necessary.

The next issue I would like solved is how data entry currently works in the Subjective/Objective (S/O) portion of data entry. There are 15 sub-tabs that fall under the S/O tab, five of which are used for every patient (HPI/PFSH, Screening, BH/Other Screening, ROS, and PE). Due to the time it can take for the computer to switch between tabs, the user must ensure each tab is completed without mistakes before moving to the next tab, or waste time going back to a previous tab to change it.

2. What is the goal of the proposed change? In other words – will it improve your clinical workflow, enhance data capture, etc. Please provide me detail about why you think the system needs enhancing.

The primary goal is to decrease the amount of time charting and increase the amount of time examining the patient, diagnosing, and creating a plan of care. Without making any changes to the two items I have described, I found I could lose 5-10 minutes per patient, which is 25-50% of each encounter. To save time during the actual patient encounter, the only current solution is to take notes by hand and then fill-out the AHLTA screens at a later time, either during a lunch break or after all patients have been seen for the day. This means using time at the end of the day to chart instead of responding to telephone consults (T-CONS) and Relay Health email messages.

3. **By making the proposed changes – how will this meet your needs as a provider?**

    As stated in the previous paragraph, the proposed changes will help solve one of the biggest issues all providers face: lack of enough time with a patient.

4. **Provide specific detail on how you would change the present functionality. For example: What would you change on each screen? Would you change the entire workflow? One data element to capture the correct information or possibly add more choices to a list of options?**

    For the copy forward feature, the change I would make is to allow any item entered into a yellow box to automatically copy forward from a previous encounter. The yellow boxes are used to capture patient history, and that information is useful for each visit. The provider should be able to open a new encounter and quickly scan and review this information with the patient and make changes as necessary. Once the screen is closed, the main database should be updated and available for the next patient visit.

    For the S/O tab, my proposal is to combine the five most used tabs into one tab. Rather than clicking individual tabs and waiting for the screen to change, the provider can scroll up or down like is done on any web page or document. To make navigation of a lengthy page even faster, once the S/O tab is opened, a Navigation Tree could be added on the left-hand side of the screen that contains all five names (HPI/PFSH, Screening, BH/Other Screening, ROS, and PE). These would provide quick links to the pertinent areas of the document and aid in increasing speed and efficiency for data entry and review.

5. **Finally – provide mock-ups of the screens you are choosing to enhance. You can either recreate the screen or take screen captures and show the proposed change or changes on each screen.**

    Refer to PowerPoint.