Task Analysis

Identify all the individual tasks the end product might address

- The system allows the users to save the patient's information in a local database with a timestamp by clicking the appropriate button.
- The system allows the users to save the patient's information using voice recognition.
- The system allows the users to save the patient's information by clicking or box checking on pre-defined answers.
- The system allows the users to save the patient's information by typing on the tablet if voice recognition or box checking is not appropriate.
- The system allows the users to recall the patient's information for a user-specific time block.
- The system will present a summary of the user's input to the user upon request, for example, by selecting a button.
- The system allows the users to save the patient's information by body system category.

Begin by making each task a goal

- The users should be able to save the patient's information by body system categories efficiently.
- The users should be able to save all necessary information with a timestamp by using one of the three input methods (typing, checkboxes, and voice) provided by the system.
- The users should be able to recall the patient's information for a user-specified time block from the local database.

What is/are the high-level activity(ies)?

- The user should be able to save the patient's information.
- The user should be able to recall the patient's information.
- The user should be able to add a new patient to the system if needed (set up).

What steps are involved in doing that activity?

- Saving the patient's information
    - The users assess the patient first and gather his/her information.
    - The users open the application on an Android device.
    - The users add the patient's information to the system.
        - The users can use checkboxes for stock answers.

        - The users can use typing or voice recognition for free text input.
    - The users save the patient's information by clicking the save button.

- Recalling the patient's information
    - The users open the application on an Android device.
    - The users enter the desired time block.
    - The users request entries from the database by clicking a button.

- Adding a new patient to the system (set up)
    - The users open the application on an Android device.
    - The users enter the patient's information (diagnosis/medication/etc)
    - The users save information to the system by clicking the save button.

What needs to be done by the user?

- The users need to gather the patient's information.
- The users need to enter the patient's information.
- The users need to recall the patient's information.
- The users need to write down the narrative notes based on the information provided by the Android device.

What needs to be done by the technology?

- The technology needs to accept the user's input by voice recognition.
- The technology needs to accept user's input by typing and clicking buttons.
- The technology needs to save the patient's information in a local database within a time stamp.
- The technology needs to allow the users to enter the patient's information by body system categories.

What needs to be done by anyone else (support, caretaker, etc)?
Who else is involved in the task?

- Family members should be allowed to easily review the saved information about the patient at any time.

Any preconditions? dependencies? Background knowledge?

- No background knowledge should be needed for using the application.
- Knowing how to use tablets/smartphones is an advantage, and we guess the majority population should be familiar with this technology.

What must happen or be done first to make it possible? Set up?

- The patient's information should be entered into the system (diagnosis/medication/etc).
- The users can pre-define "stock answers" according to the patient.

In what environment is the task performed? (Where? What kind? Noisy, dirty, dangerous, crowded?)

- It depends on the patient and where he/she wants to go.
- The environment will mostly be the patient's house, which is clean, quiet, safe, and comfortable to the patient.
- The environment can also be recreational places such as the theatre, which is probably noisy, crowded, and not as clean as the patient's house.

How often is the task performed?

- It depends on the user's working schedule.
- It depends on when the users want to recall the patient's information from the database.
- It depends on the patient's condition.
- It depends on the regular intervals when the users usually save the patient's information.

What are its time or resource constraints?

- The technology should allow the users to input the information before they forget it.
- The technology should be available to use (ex. battery usage) when there is some emergency.
- The technology should be available to accompany the user throughout their day.
- The technology should be easy to carry for a single person.
- The technology should not be easily broken.

What can go wrong? – exceptions, errors, emergencies

- The app can crash or the Android device can be broken.
- The users might not be able to save the patient's information properly.
- The device might run out of battery or memory.
- The users might lose the device.
- The users might accidentally delete the data.
- Data could be saved with the wrong time stamp.
- Etc.

Define your likely general requirements: user interface, size, weight, material, battery life, color, speed, temperature, air pressure, water, chemical, maintenance, product life, etc.

- The Android device will be a Nexus tablet.
- The device size should be big enough to easily check a box or type a text.
- The battery should last through one shift (usually 8 hours).
- The device should be waterproof.
- The device should not be easily broken, for example, it should still has proper functionality when falling from moderate heights.
- The application should be self-explanatory for the user.
- The user interface should be appropriately sized in order to make all functionality accessible. For example, all text should be readable (appropriate font size).
- The color of the interface for the application should be appropriate for the user.