

A. Usability Benchmarking Study

Subject Reference Sheet

- UB studies capture data pertaining to a system's performance and usability (learnability, ease of use, efficiency, safety, and effectiveness) by recording the actions taken by system users during the fulfillment of realistic use case scenarios.
- You (the user) will complete two sets of ePrescribe scenarios:
 - **Normal condition scenarios** – where you complete the scenarios under normal working conditions
 - At the end of each normal condition test, you will be asked to fill out a brief After Scenario Questionnaire (duration: app. 2 minutes)
 - Once you have completed all of the normal condition tests, you will be asked to fill out a Post-Study System Usability Questionnaire (duration: app. 5-10 minutes)
 - **Think aloud scenarios** – where you complete scenarios while 'Thinking Aloud' (verbally stating your thought processes as you complete the scenario tasks)
 - Think aloud comments are analogous to the comments made by a sports play-by-play announcer (all actions are stated aloud as they happen in real time). Such comments will involve: what you are doing (i.e. I'm looking for the file menu); anything that you find confusing (i.e. I'm not sure what to do here); anything you like/dislike about the system or process (i.e. "It takes too long to do this"); and anything you would like to change about the system or process (i.e. "I wish the system had this feature").
- Both the normal condition and think aloud scenarios are described with three forms of notation:
 - **Contextual Information** (written in paragraph form) – describes the scenario background information (i.e. who the patient is, what their medical background is, etc.)
 - **Action Points** (written with green bullet points) – describe tasks for you to perform, using your ePrescribe system

❖ This is an example of an action statement

- If you are not able to perform the action point with your ePrescribe system, state aloud: "Due to system limitations, I cannot perform this task" or "I don't know how to perform this task", and move onto the next task.
- You may not agree with the action or actually need to perform the given action (i.e. you may be asked to lookup information that you already know); however, for the purpose of standardizing the tests, it is asked that you follow through with all indicated actions.
- **Footnotes** (written in the footnotes section of the scenario) – contain additional pieces of information about some of the action points (i.e. information that you are meant to retrieve) or they may contain explanations regarding why a certain action is given.
- At the start of each scenario, state: your name; the current date; the name of the system being tested; and the name of the scenario and condition being tested
- To make the encounters more realistic, you may find it helpful to document patient encounter notes during the scenarios; however, such notes are not essential to the completion of the scenarios
- Create a test folder in which you can save all of the prescriptions that are created in the scenarios. These prescriptions can then be used for future analysis.
- After each scenario, you will be recorded and asked to comment on any additional thoughts you may have about the scenario. This time can be used to: clarify your actions; add any relevant information about the system component that was tested; state what you liked/didn't like about the scenario, etc.