

Usability Test

Participant Instructions

Preliminary Questionnaire

Before beginning the EHR tasks we would like to collect some information for participant classification purposes. Again, all of the information that you provide will be kept confidential and your name will not be associated with your data at any time.

Please take a moment to complete the Participant Questionnaire found in your test packet. If you have any questions, please do not hesitate to ask.

Below is a brief scenario that goes along with the tasks that you will be asked to complete. Once again we must emphasize that we are not testing you or your ability to use the system- we are evaluating the usability of the system. We are not able to instruct or provide you with help on how to use each application or how to complete each task. You will be taken to the starting point for each task. Once you have completed a task please do not attempt to do more than what is instructed.

Test System Access

The system you will be using today will test specific applications within the CliniComp|EHR. Since we are testing specific functionality the data may not make sense as it is a placeholder. The workflow may not seem complete, or it may not make sense compared to your normal work processes.

Username: **UTxx** (replace xx with two-digit participant number)
Password: **123**
Patient name: **Test, Patientxx** (first name includes your two-digit participant #)

Scenario

James is a 65 year old male presenting to the hospital after suffering a near fall at home. He tripped and had a near fall, but hit his left hand against the edge of the counter and is now complaining of left hand pain. There is some bruising and swelling noted to the posterior aspect of his left hand with a small 3cm lac to his 4th metacarpal.

Task 1: First Impression

Please log in to the system using your assigned username and password. From the first page please select the PRODUCTION unit and double click on your assigned patient name. This is the patient record that you will be working with.

****Please don't click on anything more****

What do you notice?

What are you able to do here?

At first glance is anything that you would expect missing?

Task 2: Demographics

You are interviewing the patient and need to ask a few demographic questions. Under the demographic tab, please chart the following details:

Date of Birth: 01/15/1951
 Sexual Orientation: Straight of heterosexual
 Gender Identity: Identifies as Male

Task 3: Clinical Decision Support (CDS)

From the information you entered in Task 2 there is a new notification. Please respond to the system’s CDS notification and place an order based on the recommendation.

Task 4: Medication Allergy List and Reconciliation

The patient states that he is allergic to something, but that he was seen at another health facility and had a reaction to another medication that he cannot recall. Please import and reconcile the outside list as well as his known medication allergy listed below:

Type: Drug
 Drug Name: Penicillin G Sodium
 Symptoms: Skin Rashes Hives
 Severity: Mild

Task 5: Medication List and Reconciliation

The patient has provided his home medications, in addition to information from the other health facility. Please import and reconcile his medications into one list. (Two list into one)

Patient’s home medications:

Drug Name: ASPIRIN CHEWABLE {81MG TBCH}
 Dose: 81mg
 Route: PO
 Frequency: Daily

Drug Name: CLOPIDOGREL {75MG TAB} (PLAVIX)
 Dose: 75mg

Route: PO
 Frequency: Daily

Task 6: Computerized Physician Order Entry (CPOE)- Diagnostic Imaging

- A. The patient needs a diagnostic imaging study of his hand. Using CPOE, place an order for an x-ray including the following details:

Diagnostic: X-ray: Hand, right
 Frequency: x1
 Priority: STAT
 Provider: Eagle, John MD

- B. The x-ray tech comes to you stating that the order for your patient is for the wrong side. Using CPOE, please rewrite the order to the correct laterality.

Diagnostic: X-ray: Hand, left

Task 7: CPOE- Medications

- A. The patient said he would like something for pain. You see in CPOE that Tylenol was ordered earlier, but has not yet been given to him. You decide that you are going to give him a different medication for pain. Using CPOE, place an order for the medication detailed below:

Medication: ACETAMINOPHEN/CODEINE #3 U/D {30/300MG TAB} (TYL #3)
 Frequency: x1
 Priority: STAT
 Provider: Eagle, John MD

- B. An order decision support has appeared for a possible drug-drug interaction. Please review and how you will proceed.

- C. As stated in Task 7A, Tylenol was ordered for the patient, but never given to him. Since he took the Tylenol #3 you need to cancel regular Tylenol order. Using CPOE, please discontinue the medication that is listed below:

Medication: Tylenol {325mg TAB} (TYLENOL)
 Details: 650 mg PO x1 STAT
 Status: Active

Task 8: CPOE- Laboratory

Since the patient is taking Plavix daily, you want to check if his range is therapeutic. Using CPOE, place an order for the lab that is listed below:

Laboratory Order: Prothrombin Time / International Normalized Ratio (PT/INR)
 Frequency: x1
 Priority: STAT

Provider: Eagle, John MD

Task 9: Implantable Device List

The patient states he had a left hip replacement. You recall that there have been major hip replacement recalls for DePuy, Stryker, and Zimmer implant products. Please verify that the patient’s implantable device list is current, his hip replacement is not one of those from a manufacturer listed above, and then mark that you have reviewed it.

Task 10: Problem List

After reviewing the radiology results, document the patient’s new diagnosis that is listed below as well as upload and reconcile his problem list that was provided from another facility. (Two list into one)

Date: 07DEC2016
 Problem: Closed fracture of metacarpal bone (disorder)
 Status: Active
 Acute/Chronic: Acute
 Diagnosed Date: 07DEC2016

Task 11: Medication Reconciliation

Please complete the discharge medication reconciliation and mark what medications will be continued and stopped by following the instructions listed below:

Tylenol: STOP
 Plavix: Continue
 Lipitor: Continue
 Aspirin: Continue

Task 12: e-Prescribing

The patient is now ready to go home and is requesting pain medication. He would like to use another pharmacy instead of the one that is currently listed in the system. Using eRx, place an order for the medication below as well as change his pharmacy as requested:

Medication: INDOMETHACIN {25MG CAP} (INDOCIN)
 Directions: take 5ml PO Q6H PRN for pain
 Quantity: 500
 Form: Mililiter
 Refills: None

 Pharmacy: VA Pharmacy 10.6MU

Final Question and Comments

- What was your overall impression of this EHR application?
- What aspects of the system did you like most?
- What aspects of the system did you like least?
- Were there any features that you were surprised to see?
- What features did you expect to encounter but did not see? That is, is there anything that is missing in this application?
- Compare this system to other systems you have used.
- Would you recommend this system to your colleagues?

System Usability Scale (SUS) Questionnaire

Please take a moment to complete the SUS Questionnaire.

In 1996, Brooke published a “low-cost usability scale that can be used for global assessments of systems usability” known as the System Usability Scale or SUS.¹ Lewis and Sauro (2009) and others have elaborated on the SUS over the years.²

SUS is technology independent and has since been tested on hardware, consumer software, websites, cell-phones, IVRs and even the yellow-pages.

¹ Brooke, J.: SUS: A “quick and dirty” usability scale. In: Jordan, P. W., Thomas, B., Weerdmeester, B. A., McClelland (eds.) Usability Evaluation in Industry pp. 189--194. Taylor & Francis, London, UK (1996). SUS is copyrighted to Digital Equipment Corporation, 1986.

² Lewis, J R & Sauro, J. (2009) "The Factor Structure Of The System Usability Scale." in Proceedings of the Human Computer Interaction International Conference (HCII 2009), San Diego CA, USA