



5301 ALPHA ROAD SUITE 80 - 25  
Dallas, TX 75240  
Tel: +1-800-418-6824  
Fax: +1-972-301-8845  
Website: <https://onetouchemr.com>

# Usability Test Report for OneTouch EMR 3

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*Based on: NISTIR 7742 Common Industry Format for Usability Test Reports*

OneTouch EMR 3

Date (s) of Usability Tests:

08/01/2018 till 08/17/2018 - Initial SED report

11/21/2022 till 11/26/2022 - (a)(6), (a)(7) and (a)(8) removed

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Report Prepared By: Robert Abbate

Phone Number: 800-418-6824

Email Address: [meaningfuluse@onetouchemr.com](mailto:meaningfuluse@onetouchemr.com)

Mailing Address: 5301 ALPHA ROAD SUITE 80 - 25, Dallas, TX 75240

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## 1. Executive Summary

A usability test of OneTouch EMR 3, a full clinical EHR module for providers in an ambulatory setting covering multiple specialties, was conducted multiple times over the years and. **Initially the testing was done on August 13 to August 17, 2018, then from November 21 till November 26, 2022 and finally November 04 till November 08, 2024** in Dallas, TX over remote tele-conferencing sessions using Skype, GotoMeeting and Google Meet. The purpose of this study was to test and validate the usability of the current user interface and provide evidence of usability in OneTouch EMR 3 as the EHR under Test (EHRUT). During the usability test, 10 healthcare providers (including an Administrator) matching the target demographic criteria served as participants and used OneTouch EMR 3 in simulated, but representative tasks. The administrator conducted the study and managed overall progress.

The study focused on measuring the effectiveness of, efficiency of, and satisfaction with OneTouch EMR 3 among a sample of participants representing current and potential users of the system. Performance data was collected on thirty-five (38) tasks typically conducted on an HER in the following nine (9) areas. Tasks created were based upon the criteria specified within the test procedure structure for evaluating conformance of Electronic Health Record (EHR) technology to the certification criteria defined in certification criteria identified in 45 CFR Part 170 Subpart C of the Health Information Technology: ONC Certification Criteria for Health IT.

- a) 170.315(a)(1) CPOE – Medications
- b) 170.315(a)(2) CPOE – Laboratory
- c) 170.315(a)(3) CPOE – Diagnostic Imaging
- d) 170.315(a)(4) Drug-drug, Drug-allergy Interaction Checks
- e) 170.315(a)(5) Demographics
- f) 170.315(a)(14) Implantable Device List
- g) 170.315(b)(2) Clinical Information Reconciliation and Incorporation
- h) 170.315(b)(3) Electronic Prescribing
- i) 170.315(b)(11) Decision support interventions

During the 180 minute one-on-one usability test session (three of total sessions), each participant was greeted by the administrator and thanked for volunteering their time to participate in the survey. The administrator introduced the test and instructed participants to complete a series of tasks (given one at a time) using OneTouch EMR. During the testing, the administrator timed the test and, along with data loggers, recorded user performance data on paper and electronically. The administrator did not give the participant assistance in how to complete the task.

The following types of data were collected for each participant:

- Number of tasks successfully completed within the allotted time without assistance.
- Time to complete the tasks
- Number and types of errors
- Path deviations
- Participants' verbalizations
- Participants' satisfaction ratings of the systems

All participant data was de-identified – no correspondence could be made from the identity of the participant to the data collected. Following the conclusion of the testing, participants were asked to complete a post-test questionnaire and were compensated with a \$120 for their time. Various recommended metrics, in accordance with the examples set forth in the NIST Guide to the Processes Approach for Improving the Usability of Electronic Health Records, were used to evaluate the usability of OneTouch EMR.

Results of the study indicated that the OneTouch EMR was satisfactory with regards to effectiveness and efficiency and that the participants were very satisfied with the system.

## 2. Introduction

The EHR tested for this study was OneTouch EMR 3. The application is cloud based Electronic Health Record for the Ambulatory settings only. The software is designed to the ONC Certification Criteria for Health IT objectives for the Ambulatory setting. The usability testing attempted to represent realistic exercises and conditions with actual users of the EHR.

The purpose of this study was to test and validate the usability of the current user interface and provide evidence of usability in OneTouch EMR 3 as the EHR under Test (EHRUT). To this end, measures of effectiveness, efficiency and user satisfaction, such as time on task, deviations from optimal path, and errors were captured during the usability testing.

## 3. Method

### 3.1. Participants

A total of 10 participants were tested on OneTouch EMR. Participants in the test were physicians and a registered nurse in an ambulatory setting with varied specialties including gastroenterology and internal medicine, and an administrator with hospital and ambulatory setting experience. No participants had any prior experience with OneTouch EMR. Participants were recruited by OneTouch EMR Administrative Staff.

In addition, participants had no direct connection to the development of or organization producing the EHRUT(s). Participants were not from the testing or supplier organization. Participants were given the opportunity to have the same orientation and level of training as the actual end users would have received. For the test purposes, end-user characteristics were identified and translated into an ID numbers so that the participant remains anonymous, and the individual's data cannot be tied back to individual identities.

Recruited participants had a mix of backgrounds and demographic characteristics conforming to the recruitment screener. The following is a table of participants by characteristics, including demographics, professional experience, computing experience and user needs for assistive technology. Participant names were replaced with Participant IDs so that an individual's data cannot be tied back to individual identities.

User ID	Gender	Age	Education	Occupation /Role	Professional Experience	Computer Experience	Product Experience	Assistive Technology Needs
OT01	Male	40-49	Associate degree	Clinical Assistant	50	72	24	No
OT02	Female	30-39	Bachelor's Degree	Clinical Assistant	48	240	48	No
OT03	Male	40-49	Master's Degree	Physician's Assistant	60	220	48	No
OT04	Female	50-59	Associate degree	Clinical Assistant	48	180	36	No
OT05	Male	20-29	Master's Degree	Physician's Assistant	60	120	18	No
OT06	Male	40-49	Doctorate Degree (e.g., MD, DNP, DMD, PhD)	MD	120	220	48	No

<b>OT07</b>	Male	20-29	Bachelor's Degree	RN	96	220	30	No
<b>OT08</b>	Female	40-49	Bachelor's Degree	RN	84	210	24	No
<b>OT09</b>	Male	60-69	Trade/technical/v ocational training	Clinical Assistant	160	200	32	No
<b>OT10</b>	Male	30-39	Master's Degree	Admin	126	240	48	No

**List of participants to test tasks (1-24)**

User ID	Gender	Age	Education	Occupation /Role	Professional Experience	Computer Experience	Product Experience	Assistive Technology Needs
<b>OT11</b>	Male	20-29	Bachelor's Degree	RN	90	200	30	No
<b>OT12</b>	Female	50-59	Bachelor's Degree	RN	90	180	24	No
<b>OT13</b>	Male	30-39	Doctorate degree (e.g., MD, DNP, DMD, PhD)	MD	125	240	48	No
<b>OT14</b>	Male	50-59	Master's Degree	Physician's Assistant	60	80	24	No
<b>OT15</b>	Female	30-39	Associate Degree	Clinical Assistant	42	210	52	No
<b>OT16</b>	Male	30-39	Bachelor's Degree	Physician's Assistant	68	260	46	No
<b>OT17</b>	Female	30-39	Associate degree	Clinical Assistant	58	190	38	No
<b>OT18</b>	Male	30-39	Master's Degree	Clinical Assistant	45	125	15	No
<b>OT19</b>	Male	40-49	Trade/technical/v ocational training	Admin	150	200	30	No
<b>OT20</b>	Male	40-49	Master's Degree	Clinical Assistant	110	240	54	No

**List of participants to test tasks (25-38)**

### 3.2. Study Design

Overall, the objective of this test was to uncover areas where the application performed well – that is, effectively, efficiently, and with satisfaction – and areas where the application failed to meet the needs of the participants. The data from this test may serve as a baseline for future tests with an updated version of the same EHR and/or comparison with other EHRs provided the same tasks are used. In short, this testing serves as both a means to record or benchmark current usability, but also to identify areas where improvements must be made.

During the usability test, participants interacted with OneTouch EMR. Each participant used the system in the same location, and was provided with the same instructions. The system was evaluated for effectiveness, efficiency and satisfaction as defined by measures collected and analyzed for each participant:

- Number of tasks successfully completed within the allotted time without assistance.
- Time to complete the tasks
- Number and types of errors
- Path deviations
- Participants' verbalizations
- Participants' satisfaction ratings of the systems

Same study design is used when testing for b.11 i.e. tasks 25 till 38.

### 3.3. Tasks

A number of tasks were constructed that would be realistic and representative of the kinds of activities a user might do with this EHR, and representative of the functionality required for ONC Certification Criteria for Health IT, including:

- 1) Record a Patient Demographic information
- 2) Modify and Display Patient Demographic Information
- 3) Use CPOE to record Medication
- 4) Use CPOE to change and display Medication
- 5) Use CPOE to record new Lab order
- 6) Use CPOE to change and display Lab order
- 7) Use CPOE to record Imaging order
- 8) Use CPOE to change and display Imaging order
- 9) Prescribe a new medication that would be contraindicated to patient allergy (drug-allergy interaction)
- 10) Prescribe a medication that would be contraindicated to the patient medication (drug-to-drug interaction)
- 11) Configure a health maintenance plan for each or a combination of the following: problem list, medication list, demographics, and/or lab tests and results, vital signs and a combination of two.
- 12) Enroll a patient in one health maintenance plan based on a diagnosis in their active problem list
- 13) Record and Parse a UDI in implantable device list
- 14) Access UDI device information and Change device status
- 15) Incorporate CCDAs to create new patient
- 16) Conduct reconciliation of Medication, Allergies and Problems
- 17) Generate new CCDAs with reconciled data
- 18) Create a new Prescription
- 19) Cancel Prescription
- 20) Change Prescription
- 21) Refill prescription
- 22) Receive fill status notification
- 23) Request and receive medication history information
- 24) Adjust Severity level of drug-drug interaction
- 25) User selects (activates/adds/enables/configures) evidence-based DSI using any of the required elements alone or in combination
- 26) User records source attributes for evidence-based DSI
- 27) User changes source attributes for evidence-based DSI
- 28) User accesses source attributes for evidence-based DSI
- 29) User triggers Decision Support Intervention(s) based on any of the required elements alone or in combination
- 30) User accesses source attributes for triggered evidence-based DSI
- 31) User triggers Decision Support Intervention(s) based on the problems, medications, allergies and intolerances incorporated from a transition of care/referral summary C-CDA file using (b)(2) functionality (if applicable)
- 32) User provides feedback for a triggered evidence-based DSI
- 33) User exports feedback data in a computable format, including the data identified in (b)(11)(ii)(C) at a minimum (intervention, action taken, user feedback provided (if applicable), user, date, and location)
- 34) User selects (activates/adds/enables/configures) Predictive DSI using the required USCDI data elements
- 35) User records user-defined source attributes for a Predictive DSI
- 36) User changes user-defined source attributes for a Predictive DSI
- 37) User accesses user-defined source attributes for a Predictive DSI

### 38) User triggers a user-supplied Predictive DSI

Tasks were selected based on required measures for ONC Certification Criteria for Health IT, frequency of use, and representative of commonly performed tasks. These tasks are listed in Appendix D with task time and Optimal Paths. Tasks from 25 till 38 were performed by a second group of users in November, 2024 for “170.315(b)(11) Decision support interventions” testing.

### 3.4. Procedures

Upon arrival, participants were greeted and were then assigned a participant ID. To ensure that the test ran smoothly, two staff members participated in this test, the usability administrator and the data logger. The administrator moderated the session including administering instructions and tasks. The administrator also monitored task times, obtained post-task rating data, and took notes on participant comments. A second person served as the data logger and took notes on task success, path deviations, number and type of errors, and comments.

Participants were instructed to perform the tasks:

- As quickly as possible making as few errors and deviations as possible
- Without assistance; administrators were allowed to give immaterial guidance and clarification on tasks, but not instructions on use.
- Without using a think-aloud technique

Task timing began once the administrator finished reading the question. The task time was stopped once the participant indicated they had successfully completed the task. Following the session, the administrator gave the participant the post-test questionnaire and questions. Participants’ demographic information, task success rate, time on task, errors, deviations, verbal responses, and post-test questionnaire were recorded into a spreadsheet. Scoring is discussed below in the Data Scoring section.

Same procedure was used for tasks 25 till 38 tested in November, 2024 for “170.315(b)(11) Decision support interventions” testing.

### 3.5. Test Location and Environment

The testing was conducted at OneTouch EMR head office in Dallas, TX via remote setting where participants were isolated from other participants in the study. The application was setup by OneTouch EMR Support Staff according to the OneTouch EMR documentation describing system setup and preparation. The application is a cloud-based, and the participants performed the tasks in the demo database using “test” user accounts and “test” patients. Each participant was assigned a unique user name and password to login.

Although OneTouch EMR is accessible through any web browser, for consistency and uniformity each participant used Google Chrome as the web browser during the testing. The administrator was also present in remote session with the participant to facilitate the test while the data logger was overlooking remote session in order to see both the participant’s progress and activity. Technically, the system performance (i.e. response time) was representative to what actual users would experience in a field implementation. Additionally, participants were instructed not to change any of the default system settings (such as color scheme, display settings, and font size).

### 3.6. Test Forms and Tools

During the usability test, various documents and instruments were used, including:

- 1) Participant Demographic form (Appendix A)
- 2) Moderator’s Guide (Appendix B)

- 3) Post-test System Satisfaction Questionnaire
- 4) Preliminary Questionnaire

The Moderator’s Guide was devised to be able to capture required data. Each test was observed by the data logger. The data collected was recorded in a spreadsheet.

### 3.7.Participant Instructions

The participant instructions were read from the Moderator’s Guide, which is available in Appendix B: Moderator’s Guide.

### 3.8.Usability Metrics

According to the NIST Guide to the Processes Approach for Improving the Usability of Electronic Health Records, EHR’s should support a process that provides a high level of usability for all users. The goal is for users to interact with the system effectively, efficiently, and with an acceptable level of satisfaction. To this end, metrics for effectiveness, efficiency, and user satisfaction were captured during the usability testing.

The goals of the test were to assess:

The goals of this test were to assess:

- 1) The efficiency of OneTouch EMR by measuring the length of time it takes for a user to complete the task; and the success of task completion.
- 2) The efficiency of OneTouch EMR by measuring the path deviations taken by the user during the task.
- 3) The efficiency of the OneTouch EMR by measuring the average task time and path deviations.
- 4) The effectiveness of OneTouch EMR by measuring the number and types of errors experienced by the user during the task.
- 5) The satisfaction of the user with OneTouch EMR by logging their comments on the task.

### 3.9.Data Scoring

The table below details how tasks were scored, errors evaluated, and the time data analyzed.

Measures	Rationale and Scoring
<b>Effectiveness: Task Success</b>	A task was counted as a "success" if the participant was able to achieve the correct outcome, without assistance, within the time allotted on a per task basis.
<b>Effectiveness: Task Failure</b>	If the participant abandoned the task, did not reach the correct answer, or performed it incorrectly, the task was counted as a failure. No task times for failed tasks were used in calculations.
<b>Effectiveness: Task Deviations</b>	The participant's path (i.e. steps) through the application was recorded. Deviations occur if the participant, for example, went to a wrong screen, clicked on an incorrect menu item, followed an incorrect link, or interacted incorrectly with an on-screen control. The task deviations were rated on a scale of 1 = no deviations, 2 = minor deviations, 3 = major deviations.
<b>Efficiency: Task Time</b>	Each task was timed from when the administrator said "Begin" until the participant said "Done." If the participant failed to say "Done," the time was stopped when the participant ceased performing the task. Only task times for tasks that were successfully completed at or under the target time were included in the average task time analysis. Average time per task was calculated for each task.
<b>Satisfaction: Task Rating</b>	Participant's subjective impression of the ease of use of the application was measured by administering both a simple post-task question as well as post-session questionnaire. After each task, the participant was asked to rate "Overall, this task was" on a scale of 1 (very difficult) to 5 (very easy) using likert scale. These data are averaged across participants per task. Common convention is that average ratings for systems judged easy to use should be 3.3 or above.

To measure participants' confidence in and likeability of OneTouch EMR overall, the testing team administered the System Usability Scale (SUS) post-test questionnaire that included questions like "I thought the system was easy to use," and "I would imagine that most people would learn to use this system very quickly." See full System Usability Score questionnaire in Appendix C.

## 4. Results

### 4.1. Data Analysis and Reporting

The results of the usability test were calculated according to the methods specified in the Usability Metrics section above. Participants who failed to follow session and task instructions had their task relevant data excluded from the analysis. The only exclusions were made for individual tasks but not for an entire study. The usability testing results for OneTouch EMR are detailed below. The results should be seen in light of the objectives and goals outlined in the study Design section. Task times are mentioned in seconds.

Task	Mean Task Time	SD	Completion Rate (%)	Mean # Path Deviations	SD	Mean Task Satisfaction	SD
Record a Patient Demographic information	02:53	29	100%	0.5	0.71	4.5	0.71
Modify and Display Patient Demographic Information	02:20	26	100%	0.3	0.48	4.5	0.71
Use CPOE to record Medication	00:52	14	100%	0.2	0.42	4.7	0.48
Use CPOE to change and display Medication	00:49	14	100%	0.2	0.42	4.7	0.48
Use CPOE to record new Lab order	00:44	11	100%	0.1	0.32	4.9	0.32
Use CPOE to change and display Lab order	00:45	9	100%	0.0	0.00	4.9	0.32
User CPOE to record Imaging order	00:41	10	100%	0.2	0.42	4.8	0.42
User CPOE to change and display Imaging order	00:46	9	100%	0.0	0.00	4.8	0.42
Prescribe a new medication that would be contraindicated to patient allergy (drug-allergy interaction)	00:25	10	100%	0.3	0.48	4.6	0.70
Prescribe a medication that would be contraindicated to the patient medication (drug-to-drug interaction)	00:26	9	100%	0.2	0.42	4.7	0.67
Configure a health maintenance plan for each or a combination of the following: problem list, medication list, demographics, and/or lab tests and results, vital signs and a combination of two.	03:17	20	70%	0.8	1.23	3.8	1.03
Enroll a patient in one health maintenance plan based on a diagnosis in their active problem list	00:51	7	90%	0.5	0.97	4.2	0.79
Record and Parse a UDI in implantable device list	01:01	10	100%	0.4	0.70	4.5	0.71
Access UDI device information and Change device status	00:28	4	100%	0.1	0.32	4.9	0.32

<b>Incorporate CCDA to create new patient</b>	03:16	39	70%	0.8	1.23	3.8	1.32
<b>Conduct reconciliation of Medication, Allergies and Problems</b>	03:17	23	90%	0.8	1.23	3.9	0.99
<b>Generate new CCDA with reconciled data</b>	02:57	7	100%	0.5	0.71	4.3	0.82
<b>Create a new Prescription</b>	03:04	13	70%	0.8	1.03	3.6	1.35
<b>Cancel Prescription</b>	00:24	4	100%	0.0	0.00	5	0.00
<b>Change Prescription</b>	02:04	7	90%	0.6	0.70	3.8	1.03
<b>Refill prescription</b>	02:03	8	100%	0.6	0.70	3.6	1.17
<b>Receive fill status notification</b>	00:20	3	100%	0.0	0.00	5	0.00
<b>Request and receive medication history information</b>	00:20	2	100%	0.0	0.00	4.8	0.42
<b>Adjust the severity level of drug-drug interaction</b>	00:28	2	100%	0	0.00	5	0.00
<b>User selects (activates/adds/enables/configures) evidence-based DSI using any of the required elements alone or in combination.</b>	01:59	10	90%	0.5	0.71	4	0.82
<b>User records source attributes for evidence-based DSI.</b>	00:27	6	100%	0	0	4.7	0.48
<b>User changes source attributes for evidence-based DSI.</b>	00:52	10	90%	0.3	0.48	3.90	0.99
<b>User accesses source attributes for evidence-based DSI.</b>	00:20	4	100%	0.5	0.71	4.30	0.82
<b>User triggers Decision Support Intervention(s) based on any of the required elements alone or in combination.</b>	03:04	13	80%	0.9	1.10	3.60	1.17
<b>User accesses source attributes for triggered evidence-based DSI.</b>	00:21	3	100%	0	0.00	5.00	0.00
<b>User triggers Decision Support Intervention(s) based on the problems, medications, allergies and intolerances incorporated from a transition of care/referral summary C-CDA file using (b)(2) functionality (if applicable).</b>	00:57	9	90%	0.6	0.70	3.80	1.03
<b>User provides feedback for a triggered evidence-based DSI.</b>	00:27	5	100%	0.6	0.70	3.60	1.17
<b>User exports feedback data in a computable format, including the data identified in (b)(11)(ii)(C) at a minimum (intervention, action taken, user feedback provided (if applicable), user, date, and location).</b>	00:20	3	100%	0	0.00	5.00	0.00
<b>User selects (activates/adds/enables/configures) Predictive DSI using the required USCDI data elements.</b>	02:02	9	90%	0.1	0.32	4.80	0.42
<b>User records user-defined source attributes for a Predictive DSI.</b>	00:28	3	100%	0	0.00	5.00	0.00
<b>User changes user-defined source attributes for a Predictive DSI.</b>	00:58	7	100%	0.3	0.48	4.20	0.79

<b>User accesses user-defined source attributes for a Predictive DSI.</b>	00:21	4	100%	0	0.00	4.70	0.48
<b>User triggers a user-supplied Predictive DSI.</b>	00:20	4	100%	0	0.00	4.70	0.48

As Table above shows, relative to optimal performance standards as defined by OneTouch, participant performance in the OneTouch EMR usability test was quite satisfactory. The overall average task completion rate was ninety-seven (96) percent.

## 4.2. Discussion of the Findings

Overall, the participants performed the tasks in the expected amount of time as a new user of the system, or faster. All tasks were performed successfully either the first or second try with little to no deviation. The participants' verbal comments and feedback regarding areas of improvement coincide with their overall rating of the task.

### 4.3. Effectiveness

Of the thirty-eight (38) tasks presented, a large majority of the tasks were successfully completed by all of the participants. Over all of participants, the mean successful task competition rate was very high with an overall average rate of ninety-seven (96) percent indicating that in general the participants had little or no difficulty completing the tasks.

### 4.4. Efficiency

Participants who successfully completed tasks generally completed those tasks within an acceptable time. Some tasks were completed more quickly than the calculated optimal time, while some tasks took slightly longer than expected. The tasks that took the longest required the participants to navigate more to a particular portion of a page, interact with a workflow, locate and select specific actions and controls. Some of those tasks as discussed below:

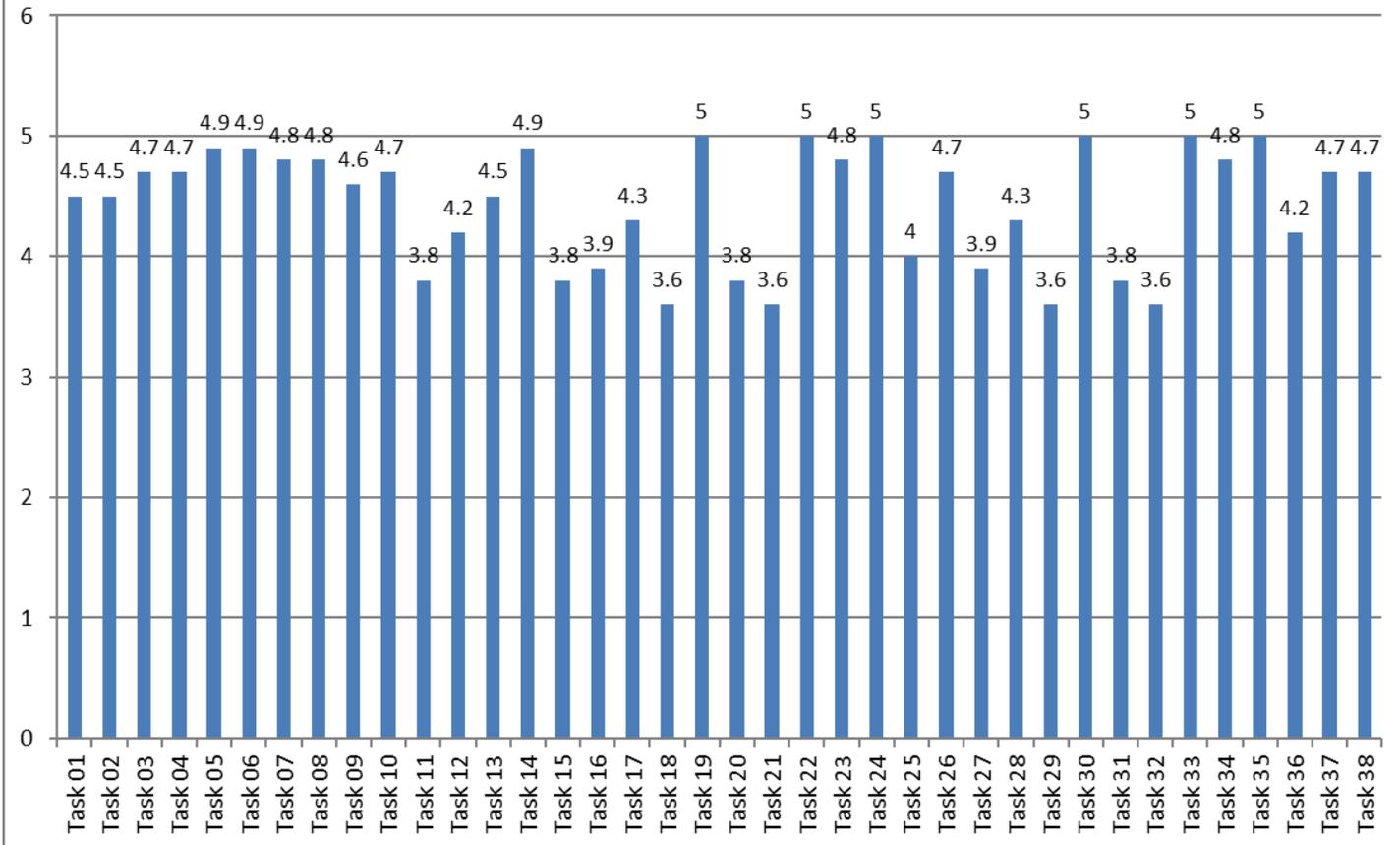
There were some non-system factors that lead to lower expectation outcomes. For example, new workflows for functions unrelated to real world experience or introduced into the system. Some of them are as below:

- CCDA Import and Reconciliation Process
- Implantable device recording by a UDI and system parses rest of the detail via API
- Configuring CDS Intervention rules based on different elements

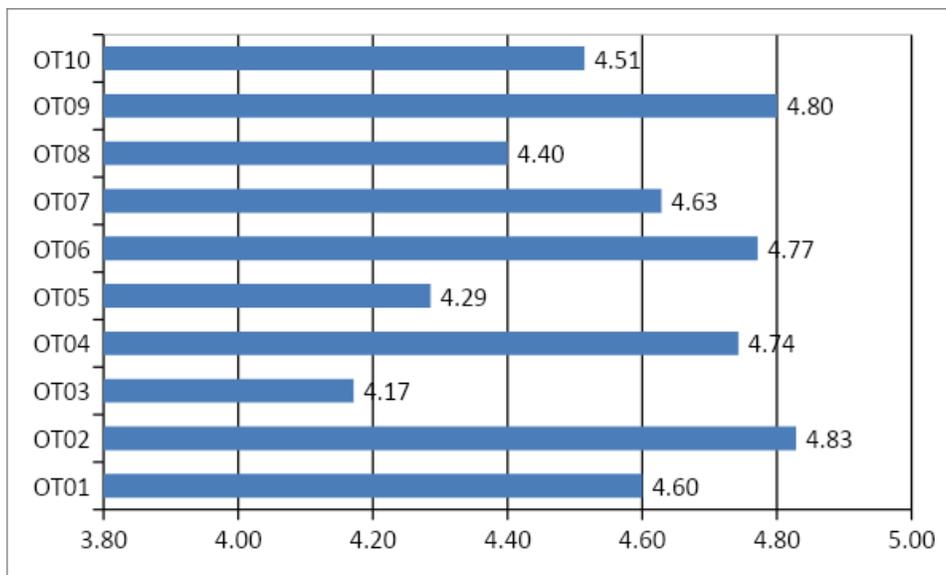
### 4.5. Satisfaction

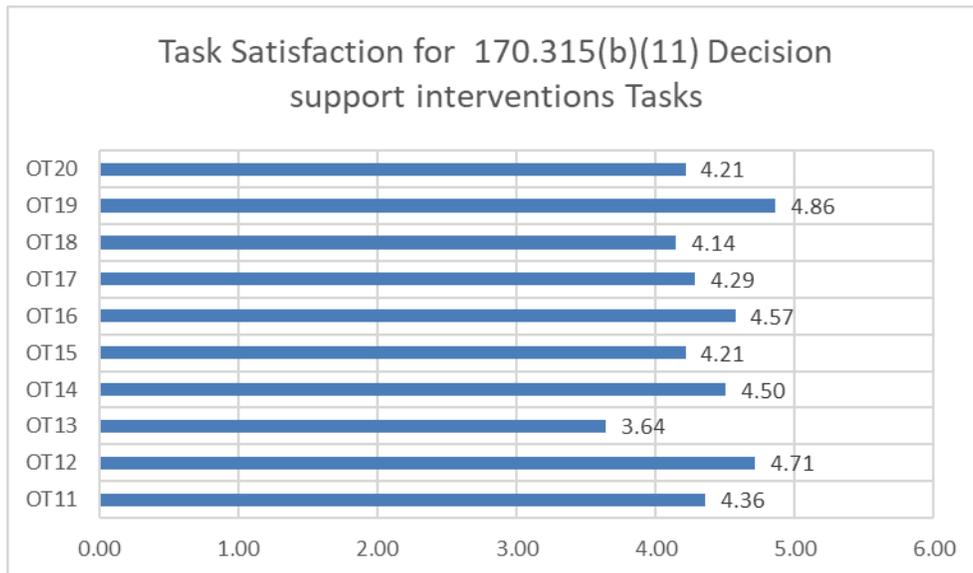
Participants verbally indicated their satisfaction with the ease of use for each task using a likert scale of "1" ("Very Difficult") to "5," ("Very Easy"). As the figure below shows individual task satisfaction ranged from a low of 3.6 out of 5 on Tasks (18, 21, 29, 32) to a high of 5 out of 5 on Tasks (19, 22, 24, 30, 33 and 35). The overall average task satisfaction was 4.45 indicating that overall the participants were well satisfied with their tasks.

## Average Task Satisfaction



In general, the participants were very satisfied with the ease of use of the OneTouch EMR. The following chart displays overall satisfaction for each participant:





The System Usability Scale (SUS) is a simple, 10-item Likert-type attitude scale providing a global subjective assessment of usability from the user’s perspective (John Brooke at Digital Equipment Company developed the SUS in 1986). The SUS scale is scored from 0 to 100; scores above 68 represent systems with above average usability, scores over 80 are considered better than average.

The average total SUS score for the OneTouch EMR was sixty-nine (69.6) and ranged from a low of sixty (60) and a high of ninety (90). Overall, participants rated their satisfaction with the OneTouch EMR system to be above average and given the high individual satisfaction ratings and excellent task performance data.

#### 4.6. Major Findings

This evaluation demonstrated that OneTouch EMR is a usable system with a relatively short learning curve. Participants with lesser amounts of experience using different portions of OneTouch before the study experienced little initial difficulty understanding the navigation and information architecture. Participants with more experience were able to solve most tasks without difficulty or error. After doing repeated steps on various tasks, the users could locate where they needed to go in the system quicker, as most screens are laid out in the similar fashion, making it easier for users to navigate to different areas of OneTouch EMR.

#### 4.7. Areas for Improvement

The overall task success rate was quite high which indicates that most of the system is highly usable and does not require major improvements. There is however always a room for improvement and certain areas can be enhanced to increase task completion rate and increase user satisfaction.

- Improved Task Workflow

Some of the areas require the user to navigate into multiple sub-tabs or navigate to multiple pages before a task can be performed. This can be improved by introducing a wizard-like style so that the user is aware of the overall progress of the task and has full control on the task being performed.

Some extra hints/help text may be introduced so that users can easily understand the task and complete it.

- Streamline User interface

There is a need for improvement in eRX screens as they do not look consistent with the workflow of other application areas.

## 4.8.Risks Identified

This evaluation demonstrated that OneTouch EMR is a usable system with a relatively low risk and learning curve. The following tasks were identified with a higher risk along with their descriptions.

- Difficulty in locating information on the screen leading to incorrect text entry.
  - Tasks11: Configure a health maintenance plan for each or a combination of the following: problem list, medication list, demographics, and/or lab tests and results, vital signs and a combination of two.
  - Task 18: Create a new Prescription
  - Task 21: Refill prescription
- Position of the UI element on screen might cause users to miss while adding information to the forms.
  - Task25: User selects (activates/adds/enables/configures) evidence-based DSI using any of the required elements alone or in combination.
  - Task11: Configure a health maintenance plan for each or a combination of the following: problem list, medication list, demographics, and/or lab tests and results, vital signs and a combination of two.
- DSI might not trigger if the proper fields are not checked in the UI.
  - Task 29: User triggers Decision Support Intervention(s) based on any of the required elements alone or in combination.
  - Task31: User triggers Decision Support Intervention(s) based on the problems, medications, allergies and intolerances incorporated from a transition of care/referral summary C-CDA file using (b)(2) functionality (if applicable).

The table below lists the tasks in numerical rating from 1 to 100, where 100 indicates the highest risk and 1 indicates the lowest risk.

Task	Risk Value
<b>Configure a health maintenance plan for each or a combination of the following: problem list, medication list, demographics, and/or lab tests and results, vital signs and a combination of two.</b>	65
<b>User triggers Decision Support Intervention(s) based on any of the required elements alone or in combination.</b>	60
<b>User triggers Decision Support Intervention(s) based on the problems, medications, allergies and intolerances incorporated from a transition of care/referral summary C-CDA file using (b)(2) functionality (if applicable).</b>	60
<b>Enroll a patient in one health maintenance plan based on a diagnosis in their active problem list</b>	45
<b>Create a new Prescription</b>	40
<b>Refill prescription</b>	40
<b>User selects (activates/adds/enables/configures) evidence-based DSI using any of the required elements alone or in combination.</b>	35
<b>Prescribe a new medication that would be contraindicated to patient allergy (drug-allergy interaction)</b>	25
<b>Prescribe a medication that would be contraindicated to the patient medication (drug-to-drug interaction)</b>	25
<b>Incorporate CCDA to create new patient</b>	25

<b>Conduct reconciliation of Medication, Allergies and Problems</b>	25
<b>User records source attributes for evidence-based DSI.</b>	25
<b>User changes source attributes for evidence-based DSI.</b>	25
<b>User provides feedback for a triggered evidence-based DSI.</b>	25
<b>User selects (activates/adds/enables/configures) Predictive DSI using the required USCDI data elements.</b>	25
<b>Record a Patient Demographic information</b>	10
<b>Modify and Display Patient Demographic Information</b>	10
<b>Use CPOE to record Medication</b>	10
<b>Use CPOE to change and display Medication</b>	10
<b>Use CPOE to record new Lab order</b>	10
<b>Use CPOE to change and display Lab order</b>	10
<b>User CPOE to record Imaging order</b>	10
<b>User CPOE to change and display Imaging order</b>	10
<b>Record and Parse a UDI in implantable device list</b>	10
<b>Access UDI device information and Change device status</b>	10
<b>Generate new CCDAs with reconciled data</b>	10
<b>Cancel Prescription</b>	10
<b>Change Prescription</b>	10
<b>Adjust the severity level of drug-drug interaction</b>	10
<b>User records user-defined source attributes for a Predictive DSI.</b>	10
<b>User changes user-defined source attributes for a Predictive DSI.</b>	10
<b>User triggers a user-supplied Predictive DSI.</b>	10
<b>Receive fill status notification</b>	0
<b>Request and receive medication history information</b>	0
<b>User accesses source attributes for evidence-based DSI.</b>	0

<b>User accesses source attributes for triggered evidence-based DSI.</b>	0
<b>User exports feedback data in a computable format, including the data identified in (b)(11)(ii)(C) at a minimum (intervention, action taken, user feedback provided (if applicable), user, date, and location).</b>	0
<b>User accesses user-defined source attributes for a Predictive DSI.</b>	0

To mitigate the risk of high risk tasks, users should pay more attention to the UI elements to input the data and make sure all the relevant elements are checked/inputted accordingly. For example, tasks 11, 18 and 21 pose the major risk in OneTouch EMR 3. This is due to the fact that the screens are complex and have many UI elements to import. Missing or choosing an incorrect checkbox/radio button might not produce the desired results.

The screens for tasks 11 and 25 have a checkbox that triggers the intervention for all patients. So, if the user does not choose that checkbox then no intervention will be triggered. So, users should check that checkbox to make sure that the intervention triggers as soon as the form is filled in and submitted.

## 5. Appendices

### 5.1. Appendix A

#### Participant Demographic Questionnaire

Please complete the following information for the Usability Study

Participant ID#: \_\_\_\_\_

#### Age group

20-29 \_\_\_\_\_

30-39 \_\_\_\_\_

40-49 \_\_\_\_\_

50-59 \_\_\_\_\_

60-74 \_\_\_\_\_

75 and older \_\_\_\_\_

Your current title: \_\_\_\_\_

How long have you held this title (years): \_\_\_\_\_

What is your primary work environment?

Private Practice/Office \_\_\_\_\_%

Ambulatory Surgery Center \_\_\_\_\_%

Hospital \_\_\_\_\_%

Have you ever used an EHR?

Yes: \_\_\_\_\_ No: \_\_\_\_\_

If yes, how many and for how long:

\_\_\_\_\_

**Indicate your primary use and frequency of the following tasks within the EHR you currently use:**

(Frequently, Sometimes, Never)

Create/modify/review medication orders: \_\_\_\_\_

Create/modify/review Lab orders: \_\_\_\_\_

Create/modify/review Dx Study orders: \_\_\_\_\_

Drug/Drug/Allergy interaction checks: \_\_\_\_\_

Adjust severity level of drug/drug interactions: \_\_\_\_\_

Record/update patient medications list: \_\_\_\_\_

Review patient medications list: \_\_\_\_\_

Record/update patient medication allergies list: \_\_\_\_\_

Prescribe medications: \_\_\_\_\_

Reconcile patient's active medications, problems and/or allergies \_\_\_\_\_

Configure Clinical Decision support guidelines: \_\_\_\_\_

View Clinical Decision support guidelines/recommendations: \_\_\_\_\_

## 5.2. Appendix B

### Moderator's Guide to conducting Usability Test for OneTouch EMR

Administrator: \_\_\_\_\_

Data Logger: \_\_\_\_\_

Date/Time: \_\_\_\_\_

Participant Number: \_\_\_\_\_

#### Prior to testing:

- Confirm schedule with participants
- Ensure EHRUT lab environment is running properly

#### Prior to each participant:

- Reset application

#### Prior to each task:

- Reset application to starting point for next task

#### After all testing:

- Confirm all data has been properly recorded in spreadsheet

### Orientation (10 minutes)

Thank you for participating in this study. Our session today will last 00 minutes. During that time you will take a look at an electronic health record system.

I will ask you to complete a few tasks using this system and answer some questions. We are interested in how easy (or how difficult) this system is to use, what in it would be useful to you, and how we could improve it. You will be asked to complete these tasks on your own trying to do them as quickly as possible with the fewest possible errors or deviations. Do not do anything more than asked. If you get lost or have difficulty I cannot answer or help you with anything to do with the system itself. Please save your detailed comments until the end of a task or the end of the session as a whole when we can discuss freely. I did not have any involvement in its creation, so please be honest with your opinions. The product you will be using today is OneTouch EMR, Version 3. Some of the data may not make sense as it is placeholder data.

All of the information that you provide will be kept confidential, and your name will not be associated with your comments at any time.

Do you have any questions or concerns?

### **Individual Task Instructions**

Have the demonstration URL account open to the login page at the beginning of each participant's session. Provide login credentials and the test patient they will be using for each task.

"For each task, I will read the description to you and say "begin." At that point please perform the task as instructed and say "done" once you believe you have successfully completed the task. If you feel you have not completed the task successfully and will not be able to, please say "done" anyways, and we can discuss in detail your impressions of the task afterwards. We will use the same login information and the same test patient. There will be an appointment on the schedule for this patient. Let's begin."

### **Task 1: Record Patient Demographic information**

**Instructions:** Record a patient's preferred language, date of birth, birth sex, race, ethnicity, sexual orientation and gender identity as shown in the screen below:

Dashboard Patients Schedule Messaging Reports Administration Preferences Help Logout

Search Charts  
Add Patient  
Encounters  
Orders  
Refill Summary  
Lab Results Summary

Patient Chart

General Information Medical Information At Refill Summary

Test M One, age: 47 (MRN: 100501, Female, DOB: 01/01/1971) [Return to encounter](#)

Demographics Patient Preferences Advance Directives Insurance Information Guarantor Records Appointments

Import CCR/CCD/CCDA

MRN: 100501

First Name: \* Test

Middle Name: M

Last Name: \* One Suffix:

Previous Name/Birth Name:

DOB: \* 2 01/01/1971

Sex: \* 3 Female

Ethnicity: \* 5 Not Hispanic or Latino

Races: \* 4 White

Sub Races: \* European

Preferred Language: \* 1 English

Gender: \* 7 Female

Sexual Orientation: \* 6 Straight or heterosexual

Photo: Image Not Available. Drag and drop image to upload

Driver License: Image Not Available. Drag and drop image to upload

Select Photo... Select Driver License...

Custom Patient ID:

Driver License/ID:

Driver License State: Same as Address?  Yes  No

Marital Status: Select Marital Status

SSN:

Guardian's Name:

Emergency Contact:

Emergency Phone:

**Time Allotted:** 180 Seconds

**Task Time:**

**Success:**

Easily Completed:	Completed with Difficult or Help:	Not Completed:	Comments:

**Optimal Path:** Patients Menu on Top -> Add Patient -> Enter patient details -> Save

Correct:	Minor Deviations:	Major Deviations:	Comments:

**Observed Errors and Verbalizations:**

**Rating:**

Very Difficult (1)	Difficult (2)	Normal (3)	Easy (4)	Very Easy(5)

**Administrator/Logger Comments:**

**Task 2: Modify and Display Patient Demographic Information**

**Instructions:** Search and display same patient’s (as previously added) record and modify preferred language, date of birth, birth sex, race, ethnicity, sexual orientation and gender identity as shown in the screen below. Once saved, load the patient chart again to verify the modified information.

Dashboard
Patients ▾
Schedule ▾
Messaging ▾
Reports ▾
Administration ▾
Preferences ▾
Help ▾
Logout

**Search Charts**

Last Name:

SSN:

MRN:

Search Charts

Add Patient

Encounters

Orders

Refill Summary

Lab Results Summary

Last Name ▾	First Name	MRN	Sex	DOB	Home Phone	Cell Phone	Status	Quick Visit
Bates	Jeremy	100002	M	08/01/1980	555-723-1544	555-777-1234	New	<input type="button" value="▶"/>
Five	Test	100505	M	05/05/1975			New	<input type="button" value="▶"/>
Four	Test	100504	F	04/04/1974			New	<input type="button" value="▶"/>
Hello	Elias	100507	F	03/15/1982	000-000-0000		New	<input type="button" value="▶"/>
Inkognito	Mister	100508	F	04/07/1980	000-000-0000		New	<input type="button" value="▶"/>
Newman	Alice	100001	F	05/01/1970	555-723-1544	555-777-1234	New	<input type="button" value="▶"/>
One	Test	100501	F	01/01/1971	555-723-1501		New	<input type="button" value="▶"/>
Samoa	Joe	100506	M	09/17/1954	000-000-0000		New	<input type="button" value="▶"/>
Three	Test	100503	F	03/03/1973	816-234-6909		New	<input type="button" value="▶"/>
Twp	Test	100502	M	02/02/1972	555-723-1502		New	<input type="button" value="▶"/>

Display 1-10 of 10

Dashboard Patients Schedule Messaging Reports Administration Preferences Help Logout

Search Charts  
Add Patient  
Encounters  
Orders  
Refill Summary  
Lab Results Summary

Patient Chart

General Information Medical Information At Refill Summary

Joe Samoa, age: 41 (MRN: 100506, Female, DOB: 03/30/1977)  
Add Appointment or Quick Visit

Demographics Patient Preferences Advance Directives Insurance Information Guarantor Records Appointments

Import CCR/CCD/CCDA

MRN: 100506

First Name: \* Joe

Middle Name:

Last Name: \* Samoa Suffix:

Previous Name/Birth Name:

DOB: \* 2 09/17/1954

Sex: \* 3 Male

Ethnicity: \* 5 Not Given/Specified

Races: \* 4 Not Given/Specified

Preferred Language: \* 1 English

Gender: \* 7 Genderqueer, neither exclusively male nor...

Sexual Orientation: \* 6 Choose not to disclose

Photo: Image Not Available. Drag and drop image to upload

Driver License: Image Not Available. Drag and drop image to upload

DOB: \* 2 03/30/1977

Sex: \* 3 Female

Ethnicity: \* 5 Not Hispanic or Latino

Races: \* 4 Native Hawaiian or Other Pacific Islander

Sub Races: \* Samoan

Preferred Language: \* 1 English

Gender: \* 7 Female

Sexual Orientation: \* 6 Lesbian, gay, or homosexual

**Time Allotted:** 150 Seconds

**Task Time:**

**Success:**

Easily Completed:	Completed with Difficult or Help:	Not Completed:	Comments:

**Optimal Path:** Patients Menu -> Search Charts -> Select Patient -> Enter patient details -> Save -> Load Chart -> Verify

Correct:	Minor Deviations:	Major Deviations:	Comments:

**Observed Errors and Verbalizations:**

**Rating:**

Very Difficult (1)	Difficult (2)	Normal (3)	Easy (4)	Very Easy(5)

**Administrator/Logger Comments:**

**Task 3: Use CPOE to record Medication**

**Pre-requisite:** Administrator should load patient chart first

**Instructions:** Record a new medication of “Amoxicillin 500 MG Oral Capsule” and save.

The screenshot shows a patient chart for 'Test M One, age: 47 (MRN: 100501, Female, DOB: 01/01/1971)'. The 'Medications' tab is active, displaying a list of current medications:

Medication	Source	Diagnosis	RxNorm	Start Date	End Date	Status
Amoxicillin 500 MG Oral Capsule, one capsule by mouth every 12 hours	Practice Prescribed		308191			Active
darbepoetin alfa 0.5 MG/ML [Aranesp], once a week, injection	Practice Prescribed		576586			Active
Acetaminophen 500 MG Oral Tablet [Tylenol], one tablet by mouth as needed for 10 days	Practice Prescribed		209459			Active
cefTRIAxone 250 MG/ML, twice daily	Practice Prescribed		563973			Active

Below the list is an 'Add New' button, highlighted with a red box and a red arrow. To the right is a 'Medications' form with fields for Medication, RxNorm, Diagnosis, SIG (with a dropdown menu), Quantity, Refill Allowed, Start Date, End Date, Source, Order Generated By, Provider, Status, and Comments. The form also includes 'Save' and 'Cancel' buttons.

**Time Allotted:** 60 Seconds

**Task Time:**

**Success:**

Easily Completed:	Completed with Difficult or Help:	Not Completed:	Comments:

**Optimal Path:** Patient Chart -> Medical Information -> Meds -> Add New -> Save

Correct:	Minor Deviations:	Major Deviations:	Comments:

**Observed Errors and Verbalizations:**

**Rating:**

Very Difficult (1)	Difficult (2)	Normal (3)	Easy (4)	Very Easy(5)

## Administrator/Logger Comments:

### Task 4: Use CPOE to change and display Medication

Instructions: Modify existing medication of "Amoxicillin 500 MG Oral Capsule" and save.

Patient Chart

General Information | **Medical Information** | Attachments

Test M One, age: 47 (MRN: 100501, Female, DOB: 01/01/1971)  
Add Appointment or Quick Visit:

Summary | HX | Allergies | Problem List | Labs | Radiology | Procedures | Imm/Injections | Supplies | **Meds** | Health Maintenance | Vitals

**Medications** | Point of Care | Refill Summary

e-Prescribing History |  Patient Reported |  Practice Prescribed |  Transition of Care/Referral |  Show All Medications

Medication	Source	Diagnosis	RxNorm	Start Date	End Date	Status
Amoxicillin 500 MG Oral Capsule , one capsule by mouth every 6 hours	Practice Prescribed		308191			Active
Acetaminophen 500 MG Oral Tablet [Tylenol] , one tablet twice daily for 3 days	Practice Prescribed		209459			Active
Ceftriaxone 500 MG , twice daily	Practice Prescribed		1665004			Active
darbepoetin alfa 0.5 MG/ML [Aranesp] , once a week; injection	Practice Prescribed		576586			Active

Medications | Point of Care | Refill Summary

Medication \* Amoxicillin 500 MG Oral Capsule

RxNorm: 308191

Diagnosis:

SIG: 

1/2	tab	PO	BID	PRN	Manual	one capsule by mouth every 12 hours
1	Tbsp	Inj	QID	With Food		
1-2	tsp	inh	TID	Sparingly	Liberalty	
2	Capsule	Subq	Q1*			
3	Puff(s)	Clac	Q2*			
4	Spray(s)	Topical	Q4*			
5	mg	Oph	Q5*			
6	Drop(s)	Sublingual	Q8*			
7	Box	Vaginal	Q12*			
8	cc		Q2-4*			

Quantity: 12

Refill Allowed:

Start Date:

End Date:

Source: Practice Prescribed

Order Generated By:

Provider: Albert Davis

Status: Active

Comments:

Save Cancel

Medications | Point of Care | Refill Summary

Medication \* Amoxicillin 500 MG Oral Capsule

RxNorm: 308191

Diagnosis:

SIG: 

1/2	tab	PO	BID	PRN	Manual	one capsule by mouth every 6 hours
1	Tbsp	Inj	QID	With Food		
1-2	tsp	inh	TID	Sparingly	Liberalty	
2	Capsule	Subq	Q1*			
3	Puff(s)	Clac	Q2*			
4	Spray(s)	Topical	Q4*			
5	mg	Oph	Q5*			
6	Drop(s)	Sublingual	Q8*			
7	Box	Vaginal	Q12*			
8	cc		Q2-4*			

Quantity: 12

Refill Allowed:

Start Date:

End Date:

Source: Practice Prescribed

Order Generated By:

Provider: Albert Davis

Status: Active

Comments:

Save Cancel

Time Allotted: 60 Seconds

Task Time:

Success:

Easily Completed:	Completed with Difficult or Help:	Not Completed:	Comments:
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Optimal Path: Patient Chart -> Medical Information -> Meds -> Click on Med in grid to modify -> Modify Med -> Save -> Display

Correct:	Minor Deviations:	Major Deviations:	Comments:

Observed Errors and Verbalizations:

Rating:

Very Difficult (1)	Difficult (2)	Normal (3)	Easy (4)	Very Easy(5)

Administrator/Logger Comments:

**Task 5: Use CPOE to record new Lab order**

**Pre-requisite:** Administrator should load patient chart first

**Instructions:** Order a lab test as "CBC (Complete Blood Count)" and enter minimum details to complete the order and Save.

Point of Care

**Outside Labs**

Documents

Test Name:\*

Test Type:

Reason:

LOINC:

CPT:

Priority:

Target Date:  

Specimen:

Patient Instruction:

Comment:

Ordered By:\*

Status:\*

Print and Save

Fax and Save

Save

Cancel

**Time Allotted:** 50 Seconds

**Task Time:**

**Success:**

Easily Completed:	Completed with Difficult or Help:	Not Completed:	Comments:

**Optimal Path:** Patient Chart -> Medical Information -> Labs -> Outside Labs -> Add New -> Save

Correct:	Minor Deviations:	Major Deviations:	Comments:

**Observed Errors and Verbalizations:**

**Rating:**

Very Difficult (1)	Difficult (2)	Normal (3)	Easy (4)	Very Easy(5)

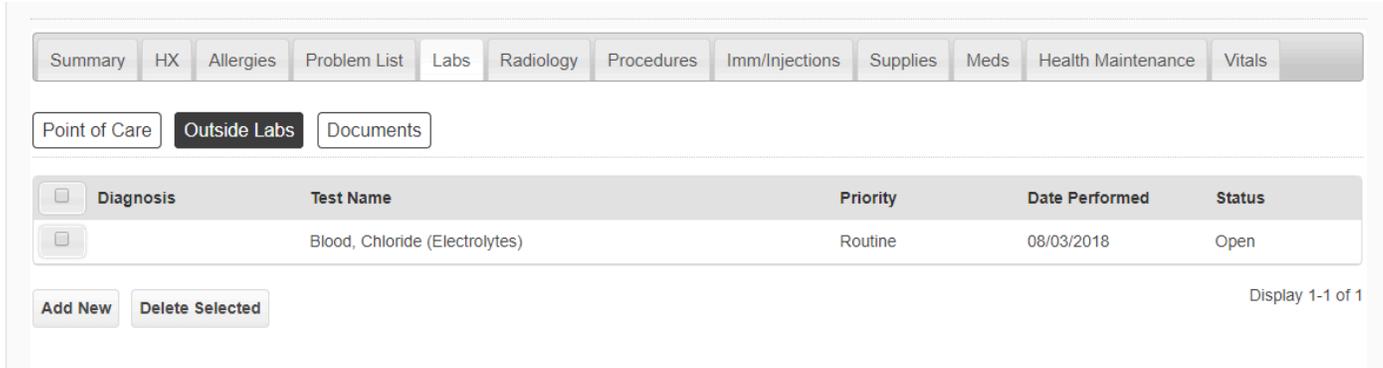
--	--	--	--	--

**Administrator/Logger Comments:**

**Task 6: Use CPOE to change and display Lab order**

**Pre-requisite:** Administrator should load patient chart first

**Instructions:** Change lab test from “CBC (Complete Blood Count)” to “Blood, Chloride (Electrolytes)” and enter minimum details to modify the order and Save to display the modified order (as shown below).



**Time Allotted:** 20 Seconds

**Task Time:**

**Success:**

Easily Completed:	Completed with Difficult or Help:	Not Completed:	Comments:

**Optimal Path:** Patient Chart -> Medical Information -> Labs -> Outside Labs -> Select Order -> Modify -> Save

Correct:	Minor Deviations:	Major Deviations:	Comments:

**Observed Errors and Verbalizations:**

**Rating:**

Very Difficult (1)	Difficult (2)	Normal (3)	Easy (4)	Very Easy(5)

**Administrator/Logger Comments:**

**Task 7: Use CPOE to record imaging order**

**Pre-requisite:** Administrator should load patient chart first

**Instructions:** Order an x-ray of patient’s right knee as “X-ray Knee, Right” and enter minimum details to complete the order and Save.

---

Procedure Name:

# of Views:

Reason:

CPT:

Priority:

Body Site #1:

Laterality:

Patient Instruction:

Comment:

Ordered By:\*

Status:

Test report:

**Time Allotted:** 50 Seconds

**Task Time:**

**Success:**

Easily Completed:	Completed with Difficult or Help:	Not Completed:	Comments:

**Optimal Path:** Patient Chart -> Medical Information -> Radiology -> Outside Radiology -> Add New -> Save

Correct:	Minor Deviations:	Major Deviations:	Comments:

**Observed Errors and Verbalizations:**

**Rating:**

Very Difficult (1)	Difficult (2)	Normal (3)	Easy (4)	Very Easy(5)

--	--	--	--	--

Administrator/Logger Comments:

**Task 8: User CPOE to change and display imaging order**

**Pre-requisite:** Administrator should load patient chart first

**Instructions:** Modify an x-ray of patient’s right knee as “X-ray Knee, Right” to left knee and enter minimum details to modify the order and Save to display the modified order (as shown below).

The screenshot shows a medical software interface with a navigation bar at the top containing tabs for Summary, HX, Allergies, Problem List, Labs, Radiology, Procedures, Imm/Injections, Supplies, Meds, Health Maintenance, and Vitals. Below the navigation bar are three buttons: Point of Care, Outside Radiology (which is highlighted), and Other Results. A table below displays a single radiology order with the following details:

Diagnosis	Procedure Name	Priority	Laterality	Date Performed	Status
<input type="checkbox"/>	X-Ray Knee, Left	Routine	Left	08/03/2018	Open

At the bottom left of the table are two buttons: Add New and Delete Selected. At the bottom right, it says 'Display 1-1 of 1'.

**Time Allotted:** 30 Seconds

**Task Time:**

**Success:**

Easily Completed:	Completed with Difficult or Help:	Not Completed:	Comments:

**Optimal Path:** Patient Chart -> Medical Information -> Radiology -> Outside Radiology -> Select Order -> Modify -> Save

Correct:	Minor Deviations:	Major Deviations:	Comments:

**Observed Errors and Verbalizations:**

**Rating:**

Very Difficult (1)	Difficult (2)	Normal (3)	Easy (4)	Very Easy(5)

Administrator/Logger Comments:

**Task 9: Prescribe a new medication that would be contraindicated to patient allergy (drug-allergy interaction)**

**Pre-requisite:** Administrator should load patient chart first and patient already has a drug allergy added as “warfarin”.

**Instructions:** The physician tries to prescribe “Ciprofloxacin 250mg Tab”, a drug interaction alert will appear (as shown in screenshot).

Drug: \* Ciprofloxacin 250mg Tab ✕ [View Monograph](#) [View Dosage](#)

**WARNING:** possible SEVERE DELAYED reactions: pancreatitis, ileus, gi bleeding, acute generalized exanthematous pustulosis (agep), agranulocytosis, aplastic anemia, pancytopenia, thrombotic thrombocytopenic purpura (ttp), hemolytic anemia, hepatic failure, hepatic necrosis, myocardial infarction, hearing loss, interstitial nephritis, renal failure (unspecified), azotemia, hemorrhagic cystitis, myasthenia gravis, tendon rupture, erythema nodosum, serum sickness, stevens-johnson syndrome, toxic epidermal necrolysis, erythema multiforme, exfoliative dermatitis, vasculitis, hyperkalemia, seizures, suicidal ideation

possible SEVERE EARLY reactions: methemoglobinemia, cardiac arrest, visual impairment, coma, increased intracranial pressure

possible SEVERE RAPID reactions: torsade de pointes, bradycardia, bronchospasm, laryngeal edema, respiratory arrest, anaphylactic shock, anaphylactoid reactions, angioedema

**SEVERE INTERACTION** Lipitor 20mg Tablet: Co-use ciprofloxacin and atorvastatin only if benefit outweighs risk. The risk of developing myopathy during therapy with atorvastatin is increased if coadministered with ciprofloxacin, a CYP3A4 inhibitor. Atorvastatin is metabolized by CYP3A4.

**SOURCE:** Elsevier (gsdd) [Override](#)

Sig: \*  [Show Rx Builder](#)

Quantity: \*  Unit: Tablet Patient Weight:  lb

Days Supply: \*  Refills: \*

Comment:

(for the pharmacist)

**Time Allotted:** 30 Seconds

**Task Time:**

**Success:**

Easily Completed:	Completed with Difficult or Help:	Not Completed:	Comments:

**Optimal Path:** Patient Encounter -> Meds & Allergy-> New e-RX -> Add Drug Detail

Correct:	Minor Deviations:	Major Deviations:	Comments:

**Observed Errors and Verbalizations:**

**Rating:**

Very Difficult (1)	Difficult (2)	Normal (3)	Easy (4)	Very Easy(5)

**Administrator/Logger Comments:**

**Task 10: Prescribe a medication that would be contraindicated to the patient medication (drug-to-drug interaction)**

**Pre-requisite:** Administrator should load patient chart first and patient already has a medication added as “Ferrous Fumarate”.

**Instructions:** The physician tries to prescribe “Levaquin 250mg Tab”, a drug interaction alert will appear (as shown in screenshot).

Medications | Point of Care | Refill Summary

e-Prescribing History |  Patient Reported |  Practice Prescribed |  Transition of Care/Referral |  Surescripts Archive |  Patient Consents |  Show All Medications

Medication	Source	Diagnosis	RxNorm	Start Date	End Date	Status	
Ferrous fumarate 100 MG Oral Tablet , 1 Tab Daily	Patient Reported		310305			Active	
Fluoxetine 10mg Tab , INHALE 1 TABLET BY MOUTH Daily PC	e-Prescribing History			08/08/2018	08/13/2018	Active	<a href="#">Refill</a>

Add New | e-Rx Order Screen Display 1-2 of 2

Drug: \*

WARNING: possible SEVERE DELAYED reactions: agranulocytosis, aplastic anemia, hemolytic anemia, pancytopenia, hepatic failure, hepatic necrosis, erythema multiforme, interstitial nephritis, renal failure (unspecified), rhabdomyolysis, serum sickness, stevens-johnson syndrome, thrombotic thrombocytopenic purpura (ttp), toxic epidermal necrolysis, vasculitis, acute generalized exanthematous pustulosis (agep), pancreatitis, uveitis, myasthenia gravis, tendon rupture, hyperkalemia, seizures, suicidal ideation

possible SEVERE RAPID reactions: torsade de pointes, anaphylactic shock, angioedema, bronchospasm, anaphylactoid reactions, laryngeal edema

possible SEVERE EARLY reactions: cardiac arrest, ventricular tachycardia, visual impairment, coma, increased intracranial pressure, headache

SEVERE INTERACTION Fluoxetine 10mg Tab: Coadministration increases the risk for QT prolongation and torsade de pointes.

SOURCE: Elsevier (gsdd)

Sig: \*

Quantity: \*  Unit:  Patient Weight:

**Time Allotted:** 30 Seconds

**Task Time:**

**Success:**

Easily Completed:	Completed with Difficult or Help:	Not Completed:	Comments:

**Optimal Path:** Patient Encounter -> Meds & Allergy-> New e-RX -> Add Drug Detail

Correct:	Minor Deviations:	Major Deviations:	Comments:

**Observed Errors and Verbalizations:**

**Rating:**

Very Difficult (1)	Difficult (2)	Normal (3)	Easy (4)	Very Easy(5)

**Administrator/Logger Comments:**

**Task 11: Configure a health maintenance plan for each or a combination of the following: problem list, medication list, demographics, and/or lab tests and results, vital signs and a combination of two.**

**Instructions:** From the dashboard, access the health maintenance module of the administration menu and create a new plan for patients with a diagnosis of diabetes, and include an action plan to have their Hemoglobin A1c drawn every 3 months. Activate this plan for all patients.

Health Maintenance Plans | Clinical Alerts | Patient Reminders | Setup Details

Plan Name:\* Diabetes Type 2  Clinical Alerts  Patient Reminders

Description: Diabetes type 2 health maintenance.

Bibliography:

Bibliography Link:\* <https://medlineplus.gov/diabetestype2.html>

Info Link: <https://medlineplus.gov/diabetestype2.html>

Category: Disease Management

Gender: All

From Age: 18 Year(s) 0 Month(s)

To Age: 75 Year(s) 0 Month(s)

Include Rule:  Problem  Medication  Allergy  Patient History  Lab Test Result  Vital Signs

Add  Use Series

**Problem**

Type 2 diabetes mellitus with ophthalmic complications [E11.3]

Exclude Rule:  Problem  Medication  Allergy  Patient History  Lab Test Result  Vital Signs

Goal: Enroll patients aged 18 through 75 years with diabetes mellitus and help them lower their hemoglobin A1c to less than 9.0%.

**Time Allotted:** 180 Seconds

**Task Time:**

**Success:**

Easily Completed:	Completed with Difficult or Help:	Not Completed:	Comments:

**Optimal Path:** Administration Menu -> Health Maintenance -> Health Maintenance Plans -> Add Details (per screenshot) -> Include Rule -> Set Goal -> Set Action Plan -> Save

Correct:	Minor Deviations:	Major Deviations:	Comments:

**Observed Errors and Verbalizations:**

**Rating:**

Very Difficult (1)	Difficult (2)	Normal (3)	Easy (4)	Very Easy(5)

Administrator/Logger Comments:

**Task 12: Enroll a patient in one health maintenance plan based on a diagnosis in their active problem list**

**Pre-requisite:** Load patient chart and enter into patient encounter.

**Instructions:** Inside the encounter note, go to the plan tab and select the Health Maintenance Plan "Cancer Screening", and enroll the patient in this plan.

The screenshot shows the EHR interface for a patient encounter. The top navigation bar includes tabs for Summary, CC, HPI, HX, Meds & Allergy, ROS, Vitals, PE, POC, Results, Assessment, Plan, and Superbill. The 'Plan' tab is selected, showing a plan for 'Routine general medical examination at a health care facility [Z00.00]'. Below this, there are sub-tabs for Labs, Radiology, Procedures, Rx, Referrals, Advice/Instructions, and Health Maintenance. The 'Health Maintenance' sub-tab is active. The Plan Name dropdown is set to 'Cancer Screening', which is highlighted with a red box. The Description field contains the text 'Higher cancer risk due to family history.' There are also checkboxes for 'Clinical Alerts' and 'Patient Reminders', both of which are checked. On the left side, there is an 'Assessment(s)' section with a highlighted entry for 'Routine general medical examination at a health care facility [Z00.00]'. Below this, there are fields for 'F/U' (set to 1) and 'Year(s)', a 'Patient Summary' button, and a 'Patient Declined Summary' checkbox.

**Time Allotted:** 50 Seconds

**Task Time:**

**Success:**

Easily Completed:	Completed with Difficult or Help:	Not Completed:	Comments:

**Optimal Path:** Patient Encounter -> Plan Tab -> Health Maintenance -> Select Plan -> Save

Correct:	Minor Deviations:	Major Deviations:	Comments:

**Observed Errors and Verbalizations:**

**Rating:**

Very Difficult (1)	Difficult (2)	Normal (3)	Easy (4)	Very Easy(5)

**Administrator/Logger Comments:**

**Task 13: Record and Parse a UDI in implantable device list**

**Instructions:** Add a new implantable device list into patient chart. Add surgery as “Cauterization” and UDI “(01)10884521062856(11)141231(17)150707(10)A213B1(21)1234”. Click “Add” to save and parse the device information as shows in second screenshot. Review device description, identifiers, and attributes as shown in second screenshot below.

General Information **Medical Information** Attachments Demo Jones FourtyEight, age: 47 (MRN: 100048, Female, DOB: 05/01/1970) [Add Appointment](#) or Quick Visit:

Summary **HX** Allergies Problem List Labs Radiology Procedures Imm/Injections Supplies Meds Health Maintenance Vitals

Medical History **Surgical History** Social History Family History Conservative Therapy

**Surgical History**

Predefined Favorites:  
None have been entered in Preferences -> Favorite Lists -> Surgeries

Surgery:\*

Type:

UDI:\*

Device Status:

Hospitalization:

From:

To:

Reason:

Outcome:

**Add** Cancel

Dashboard Patients Schedule Messaging Reports Administration Preferences Help Logout

Patient Chart

General Information **Medical Information** At

Search Charts  
Add Patient  
Encounters  
Orders  
Refill Summary  
Lab Results Summary

nes FortyEight, age: 47 (MRN: 100048, Female, DOB: 05/01/1970)  
Appointment or Quick Visit: [Play]

Summary **HX** Allergies Problem List Labs Radiology Procedures Imm/Injections Supplies Meds Health Maintenance Vitals

Medical History **Surgical History** Social History Family History Conservative Therapy

Show Active Devices  Show Inactive Devices

<input type="checkbox"/>	Surgery	Type	Hospitalization	From	To	Reason	Outcome	Other Details
<input type="checkbox"/>	Cauterization	Implantable Device						UDI: (01)10884521062856(11)141231(17)150707(10)A213B1(21)1234 Status: Active Lot Number : A213B1 Serial Number : 1234 Expiration Date : 2015-07-07 Manufacturing Date : 2014-12-31 Di : 10884521062856 GmdnPTName : Polyester suture BrandName : TI-Cron VersionModelNumber : 88863380-82 CompanyName : Covidien LP MRISafetyStatus : Labeling does not contain MRI Safety Information LabeledContainsNRL : false

**Time Allotted:** 60 Seconds

**Task Time:**

**Success:**

Easily Completed:	Completed with Difficult or Help:	Not Completed:	Comments:

**Optimal Path:** Patient Chart -> Medical Information -> HX -> Surgical History -> Add New -> Add Details -> Save -> View

Correct:	Minor Deviations:	Major Deviations:	Comments:

**Observed Errors and Verbalizations:**

**Rating:**

Very Difficult (1)	Difficult (2)	Normal (3)	Easy (4)	Very Easy(5)

**Administrator/Logger Comments:**

**Task 14: Access UDI device information and Change device status**

**Instructions:** The implanted device that you entered in the previous task is expired and should no longer classify as “active” Modify the information for the Bone Void Filler so that the Device Status is set to INACTIVE.

The screenshot shows a medical information system interface. At the top, there is a navigation bar with tabs: Summary, HX, Allergies, Problem List, Labs, Radiology, Procedures, Imm/Injections, Supplies, Meds, Health Maintenance, and Vitals. Below this is another set of buttons: Medical History, Surgical History, Social History, Family History, and Conservative Therapy. The 'Surgical History' section is expanded, showing 'Predefined Favorites: None have been entered in Preferences -> Favorite Lists -> Surgeries'. The main form contains the following fields:

- Surgery: Cauterization
- Type: Implantable Device
- UDI: (01)10884521062856(11)141234(17)150707(10)A213B1(21)1234
- Device Status: Inactive
- Hospitalization: Select Hospitalization
- From: (unknown) (unknown) ( )
- To: (unknown) (unknown) ( )
- Reason: (empty text area)
- Outcome: (empty text area)
- Reported Date: 04/23/2018

At the bottom left, there are 'Save' and 'Cancel' buttons. On the right side of the form, there is a separate 'Device Status: Active' dropdown menu.

**Time Allotted:** 30 Seconds

**Task Time:**

**Success:**

Easily Completed:	Completed with Difficult or Help:	Not Completed:	Comments:

**Optimal Path:** Patient Chart -> Medical Information -> HX -> Surgical History -> Select Device -> Change Device Status -> Save

Correct:	Minor Deviations:	Major Deviations:	Comments:

--	--	--	--

**Observed Errors and Verbalizations:**

**Rating:**

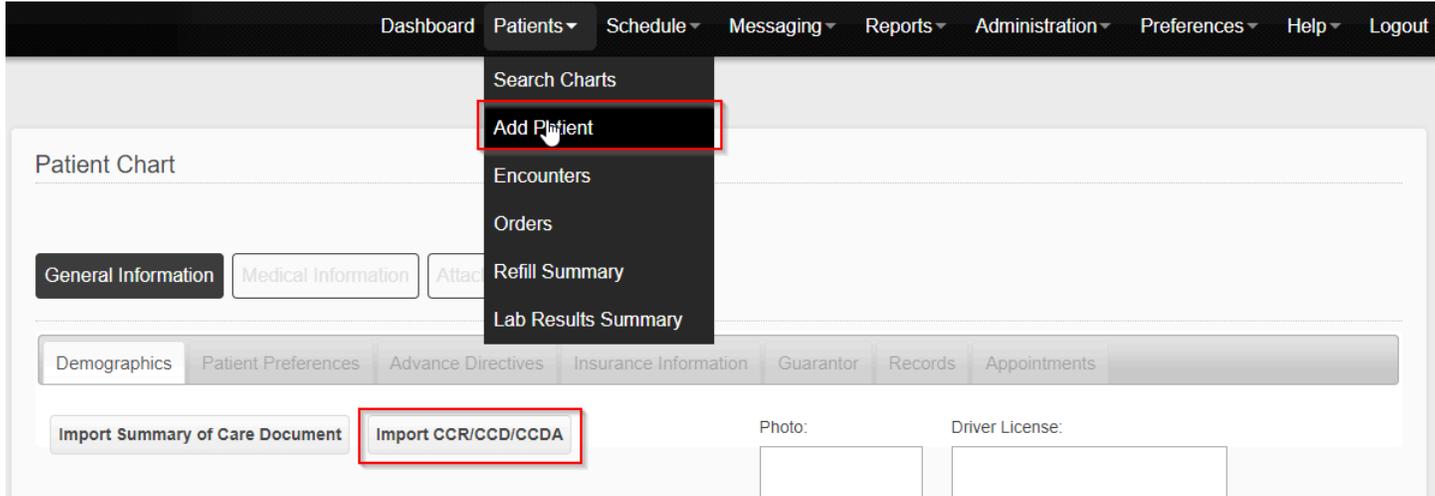
Very Difficult (1)	Difficult (2)	Normal (3)	Easy (4)	Very Easy(5)

**Administrator/Logger Comments:**

**Task 15: Incorporate CCDA to create new patient**

**Prerequisite:** All the users are already give patient CCDA file to import.

**Instructions:** You received a patient CCDA file from a referring doctor. Patient is not already registered with OneTouch so you are going to import this CCDA to create patient record first ( as shown in screenshots below).



Patient Chart

C-CDA View C-CDA MDHT Conformance ONC 2015 S&CC Vocabulary Validation Conformance C-CDA Import/Reconcile

**Table of Contents**

- Allergies
- Encounters
- Immunizations
- Medications
- Treatment Plans
- Reason For Referral
- Problems
- Procedures
- Functional Status
- Results

**Patient:** Myra Jones    **Birth Date:** May 1, 1947    **Birth Sex:** Female  
**Race:** White    **Ethnicity:** Not Hispanic or Latino  
**Preferred Language:** English    **Marital Status:** Married  
**Contact Information:** 1357 Amber Drive, Beaverton, OR US 97006, Tel: (816)276-6909 (Primary Home)    **Patient IDs:** NPI: 1, SSN: 123-10-5230  
**Document ID:** CIRI\_6 1.1.1.1.1.1.1.1.1    **Document Created:** August 13, 2012  
**Document Type:** C-CDA R2 R1.1 Continuity of Care Document  
**Care Provision:** Pnuemonia from August 6, 2012, 00:00 to August 13, 2012, 00:00  
**Primary Care Provider:** Dr. Henry Seven    **Contact Information:** 1002 Healthcare Dr, Portland, OR US 97266, Tel: +1-555-555-5000 (Primary Home)  
**Author:** Dr Henry Seven    **Contact Information:** 1002 Healthcare Drive

Dashboard Patients Schedule Messaging Reports Administration Preferences Help Logout

Patient Chart

C-CDA View C-CDA MDHT Conformance ONC 2015 S&CC Vocabulary Validation Conformance C-CDA Import/Reconcile

Patient in C-CDA does not match any existing patient in the system.

Import Patient

**Time Allotted:** 180 Seconds

**Task Time:**

**Success:**

Easily Completed:	Completed with Difficult or Help:	Not Completed:	Comments:

**Optimal Path:** Patients Menu -> Add Patient -> Import CCR/CCD/CCDA -> Choose CCDA File -> View Patient Information -> Go to CCDA Import/Reconcile Tab -> Import Patient -> Patient Chart

Correct:	Minor Deviations:	Major Deviations:	Comments:

**Observed Errors and Verbalizations:**

**Rating:**

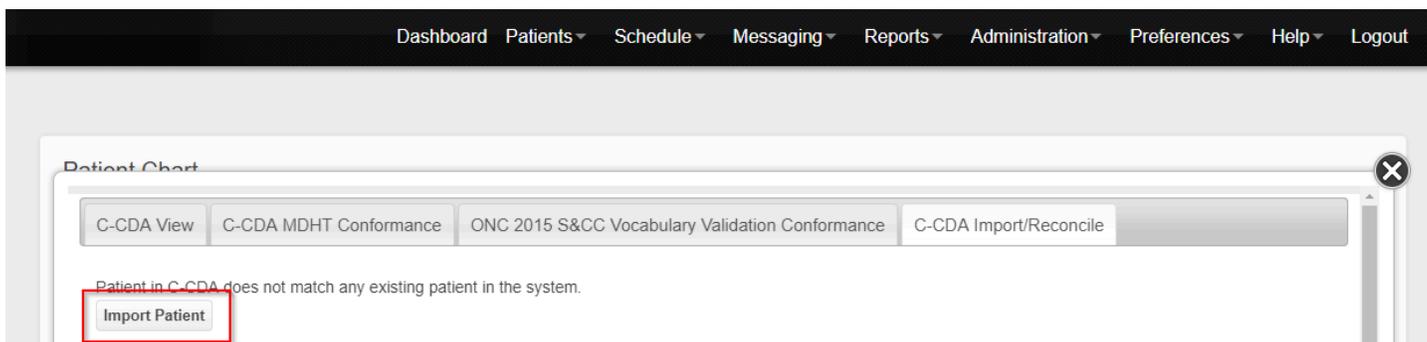
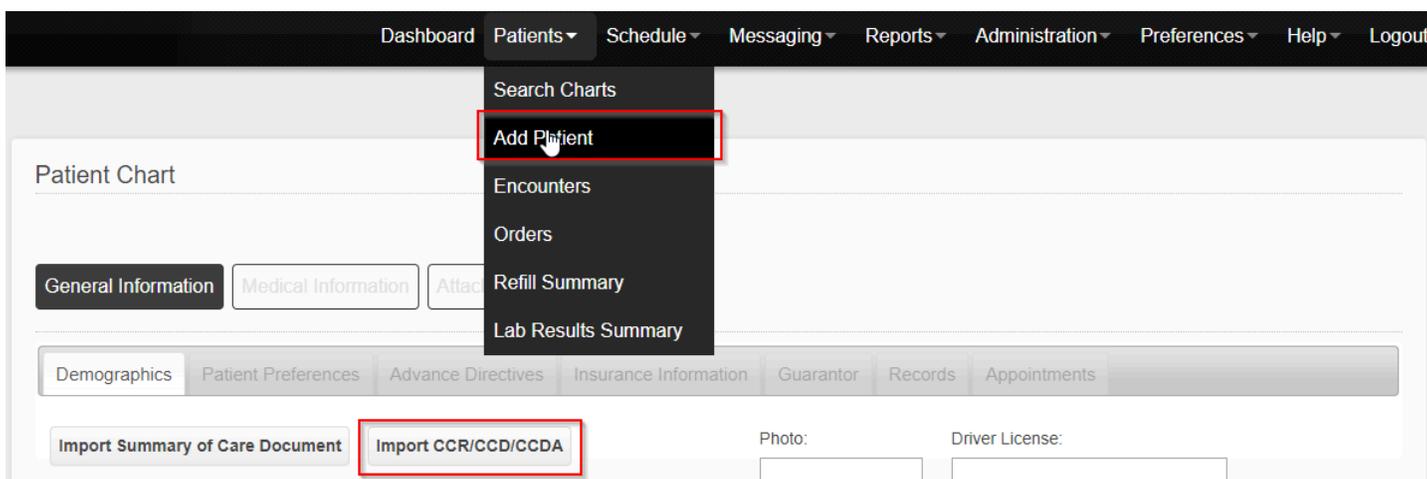
Very Difficult (1)	Difficult (2)	Normal (3)	Easy (4)	Very Easy(5)

**Administrator/Logger Comments:**

**Task 16: Conduct reconciliation of Medication, Allergies and Problems**

**Prerequisite:** All the users are already give patient CCDA file to import and reconcile.

**Instructions:** You created a patient record from CCDA file in previous test. Patient is now already already registered with OneTouch so you are going to import a new CCDA which you recently received from another referring doctor. You are going to import and reconcile Allergies, Medications and Problem for this patient (as shown in screenshots below).



**Medication Allergies**

Patient Record

Codeine (**Merge**)  
• Source: System Admin  
• Last Modification Date : 08/09/2018

Incoming

Aspirin (**Merge**)  
• Source: Dr Henry Seven (Header Author), Henry Seven (Entry Author)  
• Last Modification Date : 08/01/2012 (Header Author Date), 08/01/2012 (Entry Author Date)

Reconciled

Codeine  
• Source: System Admin  
• Last Modification Date : 08/09/2018  
Aspirin  
• Source: System Admin  
• Last Modification Date : 08/09/2018

**Medications**

Patient Record

200 ACTUAT Albuterol 0.09 MG/ACTUAT Dry Powder Inhaler (**Consolidate**)  
• Source: System Admin  
• Last Modification Date : 08/09/2018

Incoming

200 ACTUAT Albuterol 0.09 MG/ACTUAT Dry Powder Inhaler (**Consolidate**)  
• Source: Dr Henry Seven (Header Author), Henry Seven (Entry Author)  
• Last Modification Date : 08/01/2012 (Header Author Date), 08/01/2012 (Entry Author Date)

Reconciled

200 ACTUAT Albuterol 0.09 MG/ACTUAT Dry Powder Inhaler  
• Source: System Admin  
• Last Modification Date : 08/09/2018

**Problems**

Patient Record

Pneumonia (**Merge**)  
• Source: System Admin  
• Last Modification Date : 08/09/2018

Incoming

Asthma (**Merge**)  
• Source: Dr Henry Seven (Header Author), Henry Seven (Entry Author)  
• Last Modification Date : 08/01/2012 (Header Author Date), 08/01/2012 (Entry Author Date)

Reconciled

Pneumonia  
• Source: System Admin  
• Last Modification Date : 08/09/2018  
Asthma  
• Source: System Admin  
• Last Modification Date : 08/09/2018

Reconcile Data

Time Allotted: 180 Seconds

Task Time:

Success:

Easily Completed:	Completed with Difficult or Help:	Not Completed:	Comments:

**Optimal Path: Patients Menu -> Add Patient -> Import CCR/CCD/CCDA -> Choose CCDA File -> View Matching Patient Information -> Go to CCDA Import/Reconcile Tab -> Review Allergies, Medication and Problems -> Reconcile Data -> Patient Chart**

Correct:	Minor Deviations:	Major Deviations:	Comments:

**Observed Errors and Verbalizations:**

**Rating:**

Very Difficult (1)	Difficult (2)	Normal (3)	Easy (4)	Very Easy(5)

**Administrator/Logger Comments:**

**Task 17: Generate new CCDA with reconciled data**

**Instructions:** You created and reconciled patient record from CCDA file in previous two tests. Now you are going to export the patient reconciled data in CCDA format to refer to another doctor (as shown in screenshots below).

Demographics Patient Preferences Advance Directives Insurance Information Guarantor **Records** Appointments

Type of Record.\* **Medical Records**

Select All  
 Demographics  
 Provider's name and office contact info  
 Date and location of visit  
 Advance Directives  
 Allergies  
 Reason for Visit  
 Family Histories  
 Immunizations  
 Injections  
 Cognitive and Functional Status  
 Visit Summary  
 Patient Documents  
 Referral Note

Instructions  
 Health Maintenance  
 Insurance  
 Medications  
 Care Plan  
 Problem List  
 Procedures  
 Referral  
 Radiology  
 Lab Results

Social Histories  
 Vital Signs  
 Goals  
 Medical History  
 Medical Equipment/Implants  
 Assessments  
 Health Concerns

Filter By Date/Range  
 From:  To:

In CCDA format  
**Generate Report**

**Time Allotted:** 180 Seconds

**Task Time:**

**Success:**

Easily Completed:	Completed with Difficult or Help:	Not Completed:	Comments:

**Optimal Path:** Patients Menu -> Search Charts -> Select Patient -> Patient Chart -> Records Tab -> Choose Medical Records -> Select Referral Note -> Check "In CCDA Format" -> Generate Report -> Download CCDA

Correct:	Minor Deviations:	Major Deviations:	Comments:

**Observed Errors and Verbalizations:**

**Rating:**

Very Difficult (1)	Difficult (2)	Normal (3)	Easy (4)	Very Easy(5)

**Administrator/Logger Comments:**

**Task 18: Create a new Prescription**

**Pre-requisite:** Administrator should load patient chart first

**Instructions:** Create a new prescription for patient with diagnosis as “Angina pectoris with documented spasm [I20.1]”. Prescribe medicine as “Procardia XL 30 mg tab”, quantity “53”, Supply as “30” with refills “0”. Select the pharmacy as already selected in Pharmacy Preferences of the patient and send. The four screen shots below shows all the desired steps to take to complete the process.

The screenshot displays a patient chart for Sophia Biscayne, age 61 (MRN: 100701, Female, DOB: 03/21/1957). The interface includes a navigation bar with tabs for General Information, Medical Information, and Attachments. Below this is a secondary navigation bar with tabs for Summary, HX, Allergies, Problem List, Labs, Radiology, Procedures, Imm/Injections, Supplies, Meds, Health Maintenance, and Vitals. The 'Meds' tab is highlighted. Underneath, there are sub-tabs for Medications, Point of Care, and Refill Summary. The 'Medications' sub-tab is selected, showing a list of medication options with checkboxes for e-Prescribing History, Patient Reported, Practice Prescribed, Transition of Care/Referral, Surescripts Archive, Patient Consents, and Show All Medications. A table header is visible with columns: Medication, Source, Diagnosis, RxNorm, Start Date, End Date, Status, and a printer icon. At the bottom left, there is an 'Add New' button and an 'e-Rx Order Screen' button, both highlighted with red boxes. Red arrows indicate the navigation path from 'Medical Information' to 'Meds', then to 'Medications', and finally to 'e-Rx Order Screen'. The text 'Display 0-0 of 0' is visible at the bottom right.

Prescriber: Robert Crawley

Diagnosis: Angina pectoris with documented spasm [I20.1]

**Drug preference list**

None

Drug: \* Procardia XL 30mg Tab

[View Monograph](#)

[View Dosage](#)

Sig: \* Take 1 tablet a day by mouth for seven days, then take 2 tablets by mouth once a day.

[Show Rx Builder](#)

Quantity: \* 53 Unit: Tablet Patient Weight: lb

Days Supply: \* 30 Refills: \* 0

Comment: (for the pharmacy)

Optional:  Compound (free form Rx--NOT a controlled substance)  Dispense as written  Save as My Favorite

[Add to Queue](#)

[Add to Queue](#)

**Pending Medication(s) - Sophia Biscayne, 991 Monroe Avenue, Port Charlotte, FL, 33952, 941-201-1223**

✘ 08/11/2018 20:08 PM Procardia XL 30mg Tab - *Take 1 tablet a day by mouth for seven days, then take 2 tablets by mouth once a day.*  
53 Tablet, 30 Days Supply, 0 Refills, Dispense as written  
Diagnosis: Angina pectoris with documented spasm [I20.1]  
Prescriber: Robert Crawley - 718-392-1212

**Pharmacy preference list**

+ Mail Order Pharmacy 10.6MU NOCS[1629-90 Supply Ln, Chicago, IL] - 3122603142 1629-90 Supply Ln, Chicago, IL, 60622 last used: 2018-05-03 16:00:17 ✘  
3122603142

Sent From: \* Clinic One1

Issue Via: \* Electronic

Issue To: \* Mail Order Pharmacy 10.6MU NOCS[1629-90 Supply Ln,Chicago,IL] - 3122603142

[Issue Queued](#) [Cancel](#)

Medications

Point of Care

Refill Summary

Add New e-Rx Order

Issued

08/11/2018 20:08 PM

Procardia XL 30mg Tab

SIG: Take 1 tablet a day by mouth for seven days, then take 2 tablets by mouth once a day.

Quantity: 53.000 Refills: 0

Mail Order Pharmacy 10.6MU NOCS[1629-90 Supply Ln,Chicago,IL] - 3122603142

Print Rx

Fax Rx

Issue New Rx

Time Allotted: 180 Seconds

Task Time:

Success:

Easily Completed:	Completed with Difficult or Help:	Not Completed:	Comments:

Optimal Path: Patient Chart -> Medical Information -> Meds -> e-Rx Order Screen-> Enter Details (Diagnosis, Drug, Sig, Quantity, Days Supply, Refill , Dispense as written)->Add to Queue-> Enter Pharmacy Details -> Issue Queued ->

Review Order

Correct:	Minor Deviations:	Major Deviations:	Comments:

Observed Errors and Verbalizations:

Rating:

Very Difficult (1)	Difficult (2)	Normal (3)	Easy (4)	Very Easy(5)

Administrator/Logger Comments:

Task 19: Cancel Prescription

**Pre-requisite:** Administrator should load patient chart first

**Instructions:** Prescription created in previous step was a mistake as 0 refills were sent so we have to cancel that prescription.

The screenshot displays a medical software interface with a navigation bar at the top containing tabs for Summary, HX, Allergies, Problem List, Labs, Radiology, Procedures, Imm/Injections, Supplies, Meds, Health Maintenance, and Vitals. Below this is a 'Custom Plan Sections' section with buttons for Medications, Point of Care, and Refill Summary. A row of checkboxes includes e-Prescribing History, Patient Reported, Practice Prescribed, Transition of Care/Referral, Surescripts Archive, Patient Consents, and Show All Medications. The main area is a table of medications with columns for Medication, e-Prescribing History, I201, dates, Status, and actions (Refill, Cancel). A dialog box is overlaid on the table, asking: 'Do you want to send a message to the pharmacy to cancel this prescription? This action cannot be undone (a new Rx would have to be sent)'. The dialog has 'OK' and 'Cancel' buttons. The 'Cancel' button in the table for the 'Adalat CC 30 MG Oral Tablet' row is also highlighted with a red box.

Medication	e-Prescribing History	I201	08/11/2018	09/10/2018	Active	Cancel
Procardia XL 30mg Tab , Take 1 tablet a day by mouth for seven days, then take 2 tablets by mouth once a day.	History				Active	Refill Cancel
Procardia XL 30mg Tab , Take 1 tablet a day by mouth for seven days, then take 2 tablets by mouth once a day.	History				Active	Refill Cancel
Adalat CC 30 MG Oral Tablet , Take 1 tablet a day by mouth for seven days, then take 2 tablets by mouth once a day.	History				Active	Cancel
Procardia XL 30mg Tab , Take 1 tablet a day by mouth for seven days, then take 2 tablets by mouth once a day.	History	Angina pectoris with documented spasm [I20.1]	08/11/2018	09/10/2018	Active	Refill Cancel
Procardia XL 30mg Tab , Take 1 tablet a day by mouth for seven days, then take 2 tablets by mouth once a day.	History	Angina pectoris with documented spasm [I20.1]	08/11/2018	09/10/2018	Active	Refill Cancel
Procardia XL 30mg Tab , Take 1 tablet a day by mouth for seven days, then take 2 tablets by mouth once a day.	History	Angina pectoris with documented spasm [I20.1]	05/03/2018	06/02/2018	Active	Refill
Procardia XL 30mg Tab , Take 1 tablet a day by mouth for seven days, then take 2 tablets by mouth once a day.	History		05/03/2018	06/02/2018	Active	Refill

Buttons: Add New, e-Rx Order Screen

Display 1-7 of 7

Summary HX Allergies Problem List Labs Radiology Procedures Imm/Injections Supplies Meds Health Maintenance Vitals

Custom Plan Sections

Medications Point of Care Refill Summary

e-Prescribing History  Patient Reported  Practice Prescribed  Transition of Care/Referral  Surescripts Archive  Patient Consents  Show All Medications

Medication	Source	Diagnosis	RxNorm	Start Date	End Date	Status	
Procardia XL 30mg Tab , Take 1 tablet a day by mouth for seven days, then take 2 tablets by mouth once a day.	e-Prescribing History	Angina pectoris with documented spasm [I20.1]		08/11/2018	09/10/2018	Active	Refill Cancel
Procardia XL 30mg Tab , Take 1 tablet a day by mouth for seven days, then take 2 tablets by mouth once a day.	e-Prescribing History	Angina pectoris with documented spasm [I20.1]		08/11/2018	09/10/2018	Active	Refill Cancel
Adalat CC 30 MG Oral Tablet , Take 1 tablet a day by mouth for seven days, then take 2 tablets by mouth once a day.	e-Prescribing History	I201		08/11/2018	09/10/2018	Active	Cancelled
Procardia XL 30mg Tab , Take 1 tablet a day by mouth for seven days, then take 2 tablets by mouth once a day.	e-Prescribing History	Angina pectoris with documented spasm [I20.1]		08/11/2018	09/10/2018	Active	Refill Cancel
Procardia XL 30mg Tab , Take 1 tablet a day by mouth for seven days, then take 2 tablets by mouth once a day.	e-Prescribing History	Angina pectoris with documented spasm [I20.1]		08/11/2018	09/10/2018	Active	Refill Cancel
Procardia XL 30mg Tab , Take 1 tablet a day by mouth for seven days, then take 2 tablets by mouth once a day.	e-Prescribing History	Angina pectoris with documented spasm [I20.1]		05/03/2018	06/02/2018	Active	Refill
Procardia XL 30mg Tab , Take 1 tablet a day by mouth for seven days, then take 2 tablets by mouth once a day.	e-Prescribing History			05/03/2018	06/02/2018	Active	Refill

Add New e-Rx Order Screen

Display 1-7 of 7

**Time Allotted:** 30 Seconds

**Task Time:**

**Success:**

Easily Completed:	Completed with Difficult or Help:	Not Completed:	Comments:

**Optimal Path:** Patient Chart -> Medical Information -> Meds -> Highlight prescription to cancel-> Click Cancel Next to Prescription -> Click Ok on the popup box -> Check Status

Correct:	Minor Deviations:	Major Deviations:	Comments:

**Observed Errors and Verbalizations:**

**Rating:**

Very Difficult (1)	Difficult (2)	Normal (3)	Easy (4)	Very Easy(5)

**Administrator/Logger Comments:**

## Task 20: Change Prescription

**Pre-requisite:** Administrator should load patient chart first and load change prescription message received from pharmacy

**Instructions:** Change previously sent prescription dosage information which is returned by pharmacy.

Dashboard for Clinic One1, Clinic One2,... M. Gregson  Advanced [Add Appointment](#) [Add Patient](#)

Schedule for **Rx Authorizations** Show All

**Time**

No Appointment

- Grant Custer - Diclofenac Potassium 50mg Tab - 12:00 AM
- Sophia Biscayne - Procardia XL 30mg Tab \*
- Sophia Biscayne - Procardia 10mg Cap \*
- Sophia Biscayne - Procardia XL 30mg Tab \*

**Messages**

- Pending Rx Refills
- New Lab Results
- Order Feed

**News**

**Many Preschoolers With Asthma Don't Have Meds at Home**

Fri, 10 Aug 2018 13:21:01 EDT  
Just 60% of low-income urban preschoolers with asthma have the medications they need available at home, new findings from the U.S. show.  
*Reuters Health Information*

Rx Authorizations

Request Date: 08/14/2018, 4:08:37 AM

Patient Info

Name: **Grant Custer** (DOB: 2/14/1992)

[Go to Chart >>](#)

Address: 4643 Ryan Road

City, State, Zip: Chester, SD 57016

Phone: 6054891220

Drug Info

Type: CHANGE TO

Prescriber: Michael Gregson (702-281-1312)

2020 Casino Blvd, Las Vegas, Nevada 89101

Drug: Diclofenac Potassium 50 mg Tablet

Sig: \*  

Take 1 tablet by mouth three times a day after food, as needed for pain.

Quantity: \*

Additional Refills: ?\*

Comments:

Issue Method: ELECTRONIC

Issue to: VA Pharmacy 10.6MU , 7723 Jefferson Davis Highway, Arlington, VA, 22201, 703-205-7034

**Time Allotted:** 120 Seconds

**Task Time:**

**Success:**

Easily Completed:	Completed with Difficult or Help:	Not Completed:	Comments:

**Optimal Path:** Dashboard -> Pending Rx Refills -> Click on Rx -> Modify Quantity and Medicine -> Authorize with Changes

Correct:	Minor Deviations:	Major Deviations:	Comments:

**Observed Errors and Verbalizations:**

**Rating:**

Very Difficult (1)	Difficult (2)	Normal (3)	Easy (4)	Very Easy(5)

**Administrator/Logger Comments:**

**Task 21: Refill prescription**

**Pre-requisite:** Administrator should load patient chart first

**Instructions:** Refill the prescription created in previous steps.

Medications Point of Care Refill Summary

e-Prescribing History  Patient Reported  Practice Prescribed  Transition of Care/Referral  Surescripts Archive  Patient Consents  Show All Medications

Medication	Source	Diagnosis	RxNorm	Start Date	End Date	Status	
<a href="#">Procardia 10mg Cap</a> , TAKE 1 CAPSULE BY MOUTH BID PC	e-Prescribing History	Encounter for general adult medical examination without abnormal findings [Z00.00]		08/12/2018	09/01/2018	Active	<a href="#">Refill</a> <a href="#">Cancel</a>
<a href="#">Amoxapine 25mg Tab (generic)</a> , 1 Tab daily	e-Prescribing History	Encounter for general adult medical examination without abnormal findings [Z00.00]		08/12/2018	11/20/2018	Active	<a href="#">Refill</a> <a href="#">Cancel</a>
<a href="#">Procardia XL 30mg Tab</a> , 1 tab daily	e-Prescribing History	Angina pectoris with documented spasm [I20.1]		08/12/2018	09/11/2018	Active	<a href="#">Refill</a> <a href="#">Cancel</a>
<a href="#">Procardia XL 30mg Tab</a> , Take 1 tablet a day by mouth for seven days, then take 2 tablets by mouth once a day.	e-Prescribing History	Angina pectoris with documented spasm [I20.1]		08/11/2018	09/10/2018	Active	<a href="#">Refill</a> <a href="#">Cancel</a>
<a href="#">Procardia XL 30mg Tab</a> , Take 1 tablet a day by mouth for seven days, then take 2 tablets by mouth once a day.	e-Prescribing History	Angina pectoris with documented spasm [I20.1]		08/11/2018	09/10/2018	Active	<a href="#">Refill</a> <a href="#">Cancel</a>
<a href="#">Procardia XL 30mg Tab</a> , Take 1 tablet a day by							

Prescriber: Robert Crawley  
 Diagnosis: Angina pectoris with documented spasm [I20.1]

**Drug preference list**  
 None

Drug: \* Procardia XL 30mg Tab View Monograph View Dosage

Sig: \* Take 1 tablet a day by mouth for seven days, then take 2 tablets by mouth once a day. Show Rx Builder

Quantity: \* 30 Unit: Tablet Patient Weight: lb

Days Supply: \* 10 Refills: \* 0

Comment: *(for the pharmacy)*

Optional:  Compound (free form Rx--NOT a controlled substance)  Dispense as written  Save as My Favorite

Add to Queue

**Time Allotted:** 120 Seconds

**Task Time:**

**Success:**

Easily Completed:	Completed with Difficult or Help:	Not Completed:	Comments:

**Optimal Path:** Patient Chart -> Medical Information -> Meds -> Highlight prescription to refill-> Click Refill Next to Prescription -> Change Details (Quantify and Days Supply) -> Add to Queue -> Enter Pharmacy Details -> Issue Queued -> Review Order

Correct:	Minor Deviations:	Major Deviations:	Comments:

**Observed Errors and Verbalizations:**

**Rating:**

Very Difficult (1)	Difficult (2)	Normal (3)	Easy (4)	Very Easy(5)

**Administrator/Logger Comments:**

**Task 22: Receive fill status notification**

**Pre-requisite:** Administrator should load patient chart first

**Instructions:** After creating and refilling prescriptions in previous steps, now view the Refill Status summary.

Summary	HX	Allergies	Problem List	Labs	Radiology	Procedures	Imm/Injections	Supplies	Meds	Health Maintenance	Vitals
Custom Plan Sections											
Medications	Point of Care	Refill Summary									
Medication	Provider	Refills	Refill/Request Date ▲	Refill Status							
Procardia XL 30mg Tab	Robert Crawley	0	2018-08-12 02:08:10	DENIED							
Procardia XL 30mg Tab	Robert Crawley	0	2018-08-12 02:08:10	AUTHORIZED							
Procardia XL 30mg Tab	Robert Crawley	0	2018-05-03 05:05:35	DENIED							
Procardia XL 30mg Tab	Robert Crawley	0	2018-05-03 02:05:19	DENIED							
Procardia XL 30mg Tab	Robert Crawley	0	2018-05-02 09:05:20	DENIED							

**Time Allotted:** 20 Seconds

**Task Time:**

**Success:**

Easily Completed:	Completed with Difficult or Help:	Not Completed:	Comments:

**Optimal Path:** Patient Chart -> Medical Information -> Meds -> Refill Summary -> View Status

Correct:	Minor Deviations:	Major Deviations:	Comments:

**Observed Errors and Verbalizations:**

**Rating:**

Very Difficult (1)	Difficult (2)	Normal (3)	Easy (4)	Very Easy(5)

**Administrator/Logger Comments:**

**Task 23: Request and receive medication history information**

**Pre-requisite:** Administrator should load patient chart first

**Instructions:** Request and receive medication history information.

Medications Point of Care Refill Summary

e-Prescribing History  Patient Reported  Practice Prescribed  Transition of Care/Referral  Surescripts Archive  Patient Consents  Show All Medications

Medication	Source	Diagnosis	RxNorm	Start Date	End Date	Status	
 Vasotec 10 mg oral tablet , 60	Surescripts Archive	I10	858819		02/01/2022	Completed	
 Lipitor 10 mg oral tablet , 30	Surescripts Archive	E785	617314		02/02/2022	Completed	
 Avalide 150 mg/12.5 mg oral tablet , 30	Surescripts Archive	I10	823934		04/01/2022	Completed	
 Crestor 20 mg oral tablet , 30	Surescripts Archive	E785	859753		02/01/2022	Completed	
 Glucophage 1000 mg oral tablet , 60	Surescripts Archive	E1169	861006		02/01/2022	Completed	
 Lofibra 160 mg oral tablet , 30	Surescripts Archive	E785	603834		03/01/2022	Completed	
 Avalide 150 mg/12.5 mg oral tablet , 30	Surescripts Archive	I10	823934		02/01/2022	Completed	
 Avapro 150 mg oral tablet , 30	Surescripts Archive	I10	153666		02/01/2022	Completed	
 Vasotec 10 mg tablet , 60	Surescripts Archive	I10	858819		02/01/2022	Completed	
 Crestor 20 mg oral tablet , 30	Surescripts Archive	E785	859753		04/01/2022	Completed	
 Amaryl 1 mg oral tablet , 30	Surescripts Archive	E1169	153843		05/01/2022	Completed	
 Crestor 20 mg oral tablet , 30	Surescripts Archive	E785	859753		05/01/2022	Completed	
 Crestor 20 mg oral tablet , 30	Surescripts Archive	E785	859753		03/01/2022	Completed	
 Amaryl 1 mg oral tablet , 30	Surescripts Archive	E1169	153843		03/01/2022	Completed	
 Lofibra 160 mg oral tablet , 30	Surescripts Archive	E785	603834		02/01/2022	Completed	
 Vasotec 10 mg oral tablet , 60	Surescripts Archive	I10	858819		04/01/2022	Completed	
 Lofibra 160 mg oral tablet , 30	Surescripts Archive	E785	603834		05/01/2022	Completed	
 Lipitor 10 mg oral tablet , 30	Surescripts Archive	E785	617314		05/01/2022	Completed	
 Glucophage 1000 mg oral tablet , 60	Surescripts Archive	E1169	861006		05/01/2022	Completed	
 Hydrochlorothiazide 25 mg tablet , 15	Surescripts Archive	I10	310798		05/01/2022	Completed	

Certain information may not be available or accurate in this report for Surescripts Archive items, including items that the patient asked not to be disclosed due to patient privacy concerns, over-the-counter medications, low cost prescriptions, prescriptions paid for by the patient or non-participating sources, or errors in insurance claims information. The provider should independently verify medication history with the patient.

Add New e-Rx Order Screen

Display 1-20 of 37 — 1 2 Next >>

klundeen.onetouchemr.com says  
History Request Denied: Patient never under Provider care. OK

ysisAReallyLongLastNameABCDE — Today is Monday, 11/28/2022  
Reports ▾ Preferences ▾ Help ▾ Logout

Patient Chart

General Information **Medical Information** Attachments 

**BOBZIMBABWAYALPHAPAINUBERDOOBERNAME ZACHARYTYPOGALORE MYLONGLASTNAMEISCRAZYATTHISMANYCHAR**, age: 12 (ID: ONC Pt 12: LongName, MRN: 100173, Male, DOB: 04/01/2010)  
[Add Appointment](#) or Quick Visit: 

Summary HX Allergies Problem List Labs Radiology Procedures Imm/Injections Supplies Meds Health Maintenance Vitals

**Medications** Point of Care Refill Summary

e-Prescribing History  Patient Reported  Practice Prescribed  Transition of Care/Referral  Surescripts Archive  Patient Consents  Show All Medications

Medication	Source	Diagnosis	RxNorm	Start Date	End Date	Status	
<small>Certain information may not be available or accurate in this report for Surescripts Archive items, including items that the patient asked not to be disclosed due to patient privacy concerns, over-the-counter medications, low cost prescriptions, prescriptions paid for by the patient or non-participating sources, or errors in insurance claims information. The provider should independently verify medication history with the patient.</small>							

[Add New](#) [e-Rx Order Screen](#) Display 0-0 of 0

Marked as None

**Time Allotted:** 30 Seconds

**Task Time:**

**Success:**

Easily Completed:	Completed with Difficult or Help:	Not Completed:	Comments:

**Optimal Path:** Patient Chart -> Medical Information -> Meds -> Medications-> SureScripts Archive (check/uncheck)

Correct:	Minor Deviations:	Major Deviations:	Comments:

**Observed Errors and Verbalizations:**

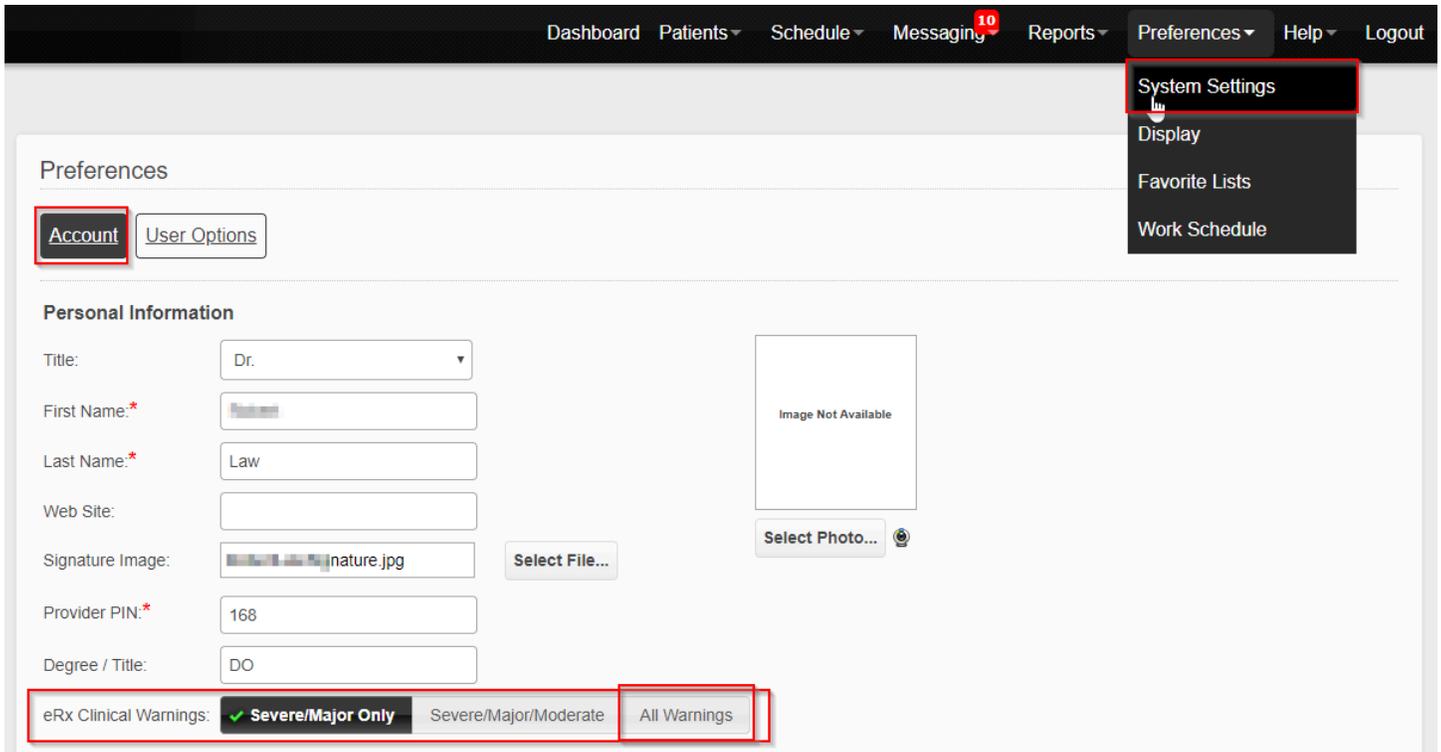
**Rating:**

Very Difficult (1)	Difficult (2)	Normal (3)	Easy (4)	Very Easy(5)

**Administrator/Logger Comments:**

**Task 24: Adjust the severity level of drug-drug interaction**

**Instructions:** Adjust the severity level of drug-drug interaction by going into user preferences and change it to “All Warnings”.



**Time Allotted:** 30 Seconds

**Task Time:**

**Success:**

Easily Completed:	Completed with Difficult or Help:	Not Completed:	Comments:

**Optimal Path:** Preferences Menu -> System Settings -> Account -> Change eRX Clinical Warnings (All Warnings -> Save

Correct:	Minor Deviations:	Major Deviations:	Comments:

**Observed Errors and Verbalizations:**

**Rating:**

Very Difficult (1)	Difficult (2)	Normal (3)	Easy (4)	Very Easy(5)

**Administrator/Logger Comments:**

Use Evidence-Based Decision Support Intervention

**Task 25: User selects (activates/adds/enables/configures) evidence-based DSI using any of the required elements alone or in combination**

**Prerequisite:** Logged in user has administrator role (System Administrator, Practice Administrator, etc)

**Instructions:** Add a new active Health Maintenance Plan that will trigger an alert when a patient is recorded to have a pacemaker of a certain product model with UDI code **(01)00312345678903** as shown below:

Health Maintenance Plans
Predictive DSI
Clinical Alerts
Patient Reminders
Setup Details

Plan Name: 
 Clinical Alerts
  Patient Reminders

Description:

Bibliography:

Bibliography Link:

Info Link:

Category:

Gender:

From Age:  Year(s)  Month(s)

To Age:  Year(s)  Month(s)

Include Rule:
  Problem
  Medication
  Allergy
  Patient History
  UDI
  Procedure

Lab Test Result
  Vital Signs

**Universal Device Identifier**

Exclude Rule:
  Problem
  Medication
  Allergy
  Patient History
  UDI
  Procedure

Lab Test Result
  Vital Signs

Goal:

Frequency: Every  Year(s), Every  Month(s)

Start Date:

End Date:

Plan Action:

Activation Status:  Activate Plan for All Patients

**Time Allotted:** 120 Seconds

**Task Time:**

**Success:**

Easily Completed:	Completed with Difficult or Help:	Not Completed:	Comments:
-------------------	-----------------------------------	----------------	-----------

Optimal Path: Administration Menu on Top -> Health Maintenance -> Add New -> Enter Required Data -> Save

Correct:	Minor Deviations:	Major Deviations:	Comments:

Observed Errors and Verbalizations:

Rating:

Very Difficult (1)	Difficult (2)	Normal (3)	Easy (4)	Very Easy(5)

Administrator/Logger Comments:

### Task 26: User records source attributes for evidence-based DSI

**Prerequisite:** Logged in user has administrator role (System Administrator, Practice Administrator, etc). There should be an existing Health Maintenance Plan for editing.

**Instructions:** Select an existing Health Maintenance Plan by clicking on it and add a source attribute using Add Source Attribute form provided in the resulting page.

The screenshot displays a web application interface for managing Health Maintenance Plans. At the top, there are five navigation buttons: "Health Maintenance Plans" (highlighted), "Predictive DSI", "Clinical Alerts", "Patient Reminders", and "Setup Details". Below the navigation is a table with the following columns: "Plan Name" (with a dropdown arrow), "Category", and "Status". The table contains four rows of data:

Plan Name	Category	Status
<input type="checkbox"/> Acme Pacemaker Maintenance		Activated
<input type="checkbox"/> Generic Plan		Activated
<input type="checkbox"/> Simple Plan		Activated
<input type="checkbox"/> Tobacco Cessation		Activated

At the bottom left of the interface, there are two buttons: "Add New" and "Delete Selected". At the bottom right, there is a page indicator that reads "Display 1-4 of 4".

Plan Name: \*

Acme Pacemaker Maintenance

Clinical Alerts

Patient Reminders

Description:

Bibliography:

Bibliography Link: \*

http://example.com

Info Link:

Category:

Select Category

Gender:

All

From Age:

0 Year(s) 0 Month(s)

To Age:

0 Year(s) 0 Month(s)

Include Rule:

Problem  Medication  Allergy  Patient History  UDI  Procedure  
 Lab Test Result  Vital Signs

Exclude Rule:

Problem  Medication  Allergy  Patient History  UDI  Procedure  
 Lab Test Result  Vital Signs

Goal:

Frequency:

Every 0 Year(s), Every 0 Month(s)

Start Date:

End Date:

Plan Action:

0

Activation Status:

Activate Plan for All Patients

Save Cancel

Source Attributes

Name	Value
No source attributes	

Add Source Attribute

Developer of the intervention

Value:

ACME Corporation

Add

**Time Allotted:** 30 Seconds

**Task Time:**

**Success:**

Easily Completed:	Completed with Difficult or Help:	Not Completed:	Comments:

**Optimal Path:** Administration Menu on Top -> Health Maintenance -> Click on an existing plan in the table ->Add Source Attribute -> Save

Correct:	Minor Deviations:	Major Deviations:	Comments:

**Observed Errors and Verbalizations:**

**Rating:**

Very Difficult (1)	Difficult (2)	Normal (3)	Easy (4)	Very Easy(5)

**Administrator/Logger Comments:**

**Task 27: User changes source attributes for evidence-based DSI**

**Prerequisite:** Logged in user has administrator role (System Administrator, Practice Administrator, etc). There should be an existing Health Maintenance Plan for editing, and also have existing source attributes

**Instructions:** Select an existing Health Maintenance Plan and make changes to any of its existing source attributes by clicking on it.

The screenshot displays a web application interface for managing Health Maintenance Plans. At the top, there are five navigation buttons: "Health Maintenance Plans" (highlighted), "Predictive DSI", "Clinical Alerts", "Patient Reminders", and "Setup Details". Below the navigation is a table with three columns: "Plan Name", "Category", and "Status". The table contains five rows of data:

Plan Name	Category	Status
<input type="checkbox"/> Acme Pacemaker Maintenance		Activated
<input type="checkbox"/> Generic Plan		Activated
<input type="checkbox"/> Simple Plan		Activated
<input type="checkbox"/> Tobacco Cessation		Activated

At the bottom left of the interface, there are two buttons: "Add New" and "Delete Selected". At the bottom right, there is a text indicator "Display 1-4 of 4".

Plan Name: \*

Acme Pacemaker Maintenance

Clinical Alerts

Patient Reminders

Description:

Bibliography:

Bibliography Link: \*

http://example.com

Info Link:

Category:

Select Category

Gender:

All

From Age:

0 Year(s) 0 Month(s)

To Age:

0 Year(s) 0 Month(s)

Include Rule:

Problem  Medication  Allergy  Patient History  UDI  Procedure  Lab Test Result  Vital Signs

Exclude Rule:

Problem  Medication  Allergy  Patient History  UDI  Procedure  Lab Test Result  Vital Signs

Goal:

Frequency:

Every 0 Year(s), Every 0 Month(s)

Start Date:

End Date:

Plan Action:

0

Activation Status:

Activate Plan for All Patients

Save

Cancel

Source Attributes

<input type="checkbox"/> Name	Value
<input type="checkbox"/> Developer of the intervention	ACME Corporation

Delete Selected

Add Source Attribute

Bibliographic citation

Value:

Add

**Source Attributes**

**Edit Source Attribute: Developer of the intervention**

Value:

ACME Research Institute

**Save Changes** **Cancel**

**Time Allotted:** 60 Seconds

**Task Time:**

**Success:**

Easily Completed:	Completed with Difficult or Help:	Not Completed:	Comments:

**Optimal Path:** Administration Menu on Top -> Health Maintenance -> Click on an existing plan in the table -> Click on a Source Attribute -> Make Changes using the Form -> Click Save Changes

Correct:	Minor Deviations:	Major Deviations:	Comments:

**Observed Errors and Verbalizations:**

**Rating:**

Very Difficult (1)	Difficult (2)	Normal (3)	Easy (4)	Very Easy(5)

**Administrator/Logger Comments:**

**Task 28: User accesses source attributes for evidence-based DSI.**

**Prerequisite:** Logged in user has administrator role (System Administrator, Practice Administrator, etc). There should be an existing Health Maintenance Plan for editing, and also have existing source attributes

**Instructions:** Select an existing Health Maintenance Plan and view its source attributes.

The screenshot displays a web application interface for managing Health Maintenance Plans. At the top, there are five navigation tabs: "Health Maintenance Plans" (active), "Predictive DSI", "Clinical Alerts", "Patient Reminders", and "Setup Details". Below the tabs is a table with the following columns: "Plan Name", "Category", and "Status". The table contains four rows of data:

<input type="checkbox"/> Plan Name	Category	Status
<input checked="" type="checkbox"/> Acme Pacemaker Maintenance		Activated
<input type="checkbox"/> Generic Plan		Activated
<input type="checkbox"/> Simple Plan		Activated
<input type="checkbox"/> Tobacco Cessation		Activated

At the bottom left of the interface, there are two buttons: "Add New" and "Delete Selected". At the bottom right, it says "Display 1-4 of 4".

Plan Name: \*

Acme Pacemaker Maintenance

 Clinical Alerts Patient Reminders

Description:

Bibliography:

Bibliography Link: \*

http://example.com

Info Link:

Category:

Select Category ▼

Gender:

All ▼

From Age:

0 ▼ Year(s) 0 ▼ Month(s)

To Age:

0 ▼ Year(s) 0 ▼ Month(s)

Include Rule:

 Problem ▼  Medication ▼  Allergy ▼  Patient History ▼  UDI ▼  Procedure ▼  
 Lab Test Result ▼  Vital Signs ▼

Exclude Rule:

 Problem ▼  Medication ▼  Allergy ▼  Patient History ▼  UDI ▼  Procedure ▼  
 Lab Test Result ▼  Vital Signs ▼

Goal:

Frequency:

Every 0 ▼ Year(s), Every 0 ▼ Month(s)

Start Date:



End Date:



Plan Action:

0 ▼

Activation Status:

 Activate Plan for All Patients

Save

Cancel

**Source Attributes**

<input type="checkbox"/> Name	Value
<input type="checkbox"/> Developer of the intervention	ACME Research Institute

Delete Selected

**Add Source Attribute**Bibliographic citation ▼

Value:

**Time Allotted:** 20 Seconds

**Task Time:**

**Success:**

Easily Completed:	Completed with Difficult or Help:	Not Completed:	Comments:

**Optimal Path: Administration Menu on Top -> Health Maintenance -> Click on an existing plan in the table -> Source Attributes**

Correct:	Minor Deviations:	Major Deviations:	Comments:

**Observed Errors and Verbalizations:**

**Rating:**

Very Difficult (1)	Difficult (2)	Normal (3)	Easy (4)	Very Easy(5)

**Administrator/Logger Comments:**

**Task 29: User triggers Decision Support Intervention(s) based on any of the required elements alone or in combination.**

**Prerequisite:** The Health Maintenance Plan created from Task #25 is active/exists. User is logged in with a clinician role (provider or nurse practitioner).

**Instructions:** Search for any patient with an existing encounter for testing and go to that Patient's Chart. Navigate to the patient's medical information for surgical hx.

Patient Chart

General Information **Medical Information** Attachments

Harry James Potter, age: 44 (MRN: 100969, Male, DOB: 07/31/1980)  
[Add Appointment](#) or Quick Visit: 



Summary **HX** Allergies Problem List Labs Radiology Procedures Imm/Injections Supplies Meds Health Maintenance Vitals  
Custom Plan Sections

Medical History **Surgical History** Social History Family History Conservative Therapy

Surgery Type Hospitalization From To Reason Outcome Other Details

Add New Delete Selected

Display 0-0 of 0

Add a new history entry of Implantable Device Type.

For UDI code use: **(01)00312345678903(21)12345XYZ(11)221101(17)251031**

Patient Chart

General Information

Medical Information

Attachments

Harry James Potter, age: 44 (MRN: 100969, Male, DOB: 07/31/1980)

[Add Appointment](#) or Quick Visit:



Summary

HX

Allergies

Problem List

Labs

Radiology

Procedures

Imm/Injections

Supplies

Meds

Health Maintenance

Vitals

Custom Plan Sections

Medical History

Surgical History

Social History

Family History

Conservative Therapy

Surgical History

Predefined Favorites:

None have been entered in Preferences -> Favorite Lists -> Surgeries

Surgery:\*

Pacemaker installed

Type:

Implantable Device

UDI:\*

(01)00312345678903(21)12345XYZ(11)221101(17)251031

Device Status:

Active

Hospitalization:

Select Hospitalization

From:

(unknown)

(unknown)

(unknown)

To:

(unknown)

(unknown)

(unknown)

Reason:

Empty text area for Reason

Outcome:

Empty text area for Outcome

Add

Cancel

**Validation/Confirmation:** Navigate to any existing encounters for the test patient. In the encounter summary, there should be a clinical alert for Acme Pacemaker Maintenance health plan.

Patient Encounter

The encounter has been closed and no change is allowed. Unlock

[Convenient Medical Care] [Harry James Potter](#), 44 year(s) old (MRN: 100969, Male, DOB: 07/31/1980, Status: [Click to edit](#)) Visit Summary

Summary CCI HPII HXI Meds & Allergy ROS Vitals PE POC Results Assessment Plan Superbill



Encounter Date: 01/14/2022  
 Encounter #: 11  
 Home Phone: 123-123-1231  
 Work Phone:  
 Cell Phone: 555-555-5555  
 Address: 4 Privet Drive, New York, NY 10021  
 Insurance: None on file

**Clinical Alert:** Show All

The patient is a candidate for Acme Pacemaker Maintenance health plan [2]. Please consider asking him/her to enroll in the plan. Responded

Summary tab allows you to get acquainted with your patient before beginning a visit. It's similar to what you might see on left side of a paper chart. Alerts will appear on the top right. [See Video](#)

Addendum User

Addendum

Add New Delete Selected

**Time Allotted:** 180 Seconds

**Task Time:**

**Success:**

Easily Completed:	Completed with Difficult or Help:	Not Completed:	Comments:

**Optimal Path:** Patients Menu -> Encounters -> Click on an Encounter -> Click on the Patient's Name to go the Medical Information of the Patient Charts -> HX tab -> Surgical History -> Add New -> Save

Correct:	Minor Deviations:	Major Deviations:	Comments:

**Observed Errors and Verbalizations:**

**Rating:**

Very Difficult (1)	Difficult (2)	Normal (3)	Easy (4)	Very Easy(5)

**Administrator/Logger Comments:**

**Task 30: User accesses source attributes for triggered evidence-based DSI**

**Prerequisite:** Patient with evidence-based DSI triggered from Task #29

**Instructions:** Go to one of the patient's encounters. Inside the Summary tab, click on the question mark located beside the health maintenance plan name in the Clinical Alerts Section

Patient Encounter

The encounter has been closed and no change is allowed. Unlock

[Convenient Medical Care] [Harry James Potter](#), 44 year(s) old (MRN: 100969, Male, DOB: 07/31/1980, Status: [Click to edit](#)) Visit Summary

Summary CCI HPII HXI Meds & Allergy ROS Vitals PE POC Results Assessment Plan Superbill

 **Encounter Date:** 01/14/2022  
**Encounter #:** 11  
**Home Phone:** 123-123-1231  
**Work Phone:**  
**Cell Phone:** 555-555-5555  
**Address:** 4 Privet Drive, New York, NY 10021  
**Insurance:** None on file

**Clinical Alert:** Show All  
The patient is a candidate for Acme Pacemaker Maintenance health plan [2]. Please consider asking him/her to enroll in the plan. Responded

Summary tab allows you to get acquainted with your patient before beginning a visit. It's similar to what you might see on left side of a paper chart. Alerts will appear on the top right. [See Video](#)

Addendum User

Addendum

Add New Delete Selected

Patient Encounter

Acme Pacemaker Maintenance

**Source Attributes**  
Developer of the intervention  
ACME Research Institute

**Submit Intervention Feedback**

Action Taken:

Location:

Comment/Feedback:

Submit Feedback

Date Encounter Type Location Provider Diagnosis Visit Summary

Alternatively, if a Health Maintenance Plan is already created for the patient, go to the Medical Information section of the Patient Chart, click on the Health Maintenance tab, and click a plan. Then click on the View Source Attributes beside the text field for the Health Maintenance Plan name.

Patient Chart

[General Information](#)
[Medical Information](#)
[Attachments](#)

Harry James Potter, age: 44 (MRN: 100969, Male, DOB: 07/31/1980)
 [Add Appointment](#) or Quick Visit: 


[Summary](#)
[HX](#)
[Allergies](#)
[Problem List](#)
[Labs](#)
[Radiology](#)
[Procedures](#)
[Imm/Injections](#)
[Supplies](#)
[Meds](#)
[Health Maintenance](#)
[Vitals](#)

Custom Plan Sections

[Health Maintenance Plans](#)
[Patient Reminders](#)
[Health Maintenance Flow Sheet](#)

<input type="checkbox"/>	Plan Name	Category	Enrollment Type	Signup Date	Status
<input type="checkbox"/>	Acme Pacemaker Maintenance		By Patient	11/07/2024	In Progress

[Add New](#)
[Delete Selected](#)
Display 1-1 of 1

Patient Chart

[General Information](#)
[Medical Information](#)
[Attachments](#)

Harry James Potter, age: 44 (MRN: 100969, Male, DOB: 07/31/1980)
 [Add Appointment](#) or Quick Visit: 


[Summary](#)
[HX](#)
[Allergies](#)
[Problem List](#)
[Labs](#)
[Radiology](#)
[Procedures](#)
[Imm/Injections](#)
[Supplies](#)
[Meds](#)
[Health Maintenance](#)
[Vitals](#)

Custom Plan Sections

[Health Maintenance Plans](#)
[Patient Reminders](#)
[Health Maintenance Flow Sheet](#)

Plan Name: 
[View Source Attributes](#)

Description:

Category:

**Time Allotted:** 20 Seconds

**Task Time:**

**Success:**

Easily Completed:	Completed with Difficult or Help:	Not Completed:	Comments:

**Optimal Path: Patients Menu -> Encounter -> Click on the Patient's encounter -> Click on the question mark in the Clinical Alerts box**

Correct:	Minor Deviations:	Major Deviations:	Comments:

**Observed Errors and Verbalizations:**

**Rating:**

Very Difficult (1)	Difficult (2)	Normal (3)	Easy (4)	Very Easy(5)

**Administrator/Logger Comments:**

**Task 31: User triggers Decision Support Intervention(s) based on the problems, medications, allergies and intolerances incorporated from a transition of care/referral summary C-CDA file using (b)(2) functionality (if applicable)**

**Prerequisite:** Administrator clears the existing data from the system first. All the users are already give patient CCD file to import trigger CDS intervention and view resource information using info button

**Instructions:** Trigger the CDS interventions/resources based on data elements in the problem list, medication list, and medication allergy list by incorporating patient information from a transition of care/referral summary. First, as per task 24, import a CCD file to create a patient in OneTouch. Then go to patient chart in each of the following sections to view the CDS interventions (as show in three screen shots below) and click on info button next to data elements to view the resource information:

- Problems List
- Medication List
- Medication Allergy List

- Search Charts
- Add Patient
- Encounters
- Orders
- Refill Summary
- Lab Results Summary

Patient Chart

General Information **Medical Information** Attachments

Age: 48 (MRN: 100001, Female, DOB: 05/01/1970)  
Quick Visit:



Summary HX Allergies **Problem List** Labs Radiology Procedures Imm/Injections Supplies Meds Health Maintenance Vitals

Show All Problems

<input type="checkbox"/>	Diagnosis	Start Date	End Date	Occurrence	Comment	Source	Status	Last Modified ▲
<input type="checkbox"/>	Overweight [E66.3]	December, 2006	June, 2007			Patient Reported	Resolved	02/11/2018
<input type="checkbox"/>	Fever, unspecified [R50.9]	June, 2015				Patient Reported	Active	02/11/2018
<input type="checkbox"/>	Chronic rejection of renal transplant	December, 2011				Patient Reported	Active	02/11/2018
<input type="checkbox"/>	Severe hypothyroidism	December, 2006				Patient Reported	Active	02/11/2018
<input type="checkbox"/>	Essential hypertension [I10]	October, 2011				Patient Reported	Active	02/11/2018

Add New Delete Selected

Display 1-5 of 5

touchEMR Dashboard Patients Schedule Messaging Reports Preferences Help Logout

Search Charts  
Add Patient  
Encounters  
Orders  
Refill Summary  
Lab Results Summary

Patient Chart

General Information **Medical Information** Attachments

Age: 48 (MRN: 100001, Female, DOB: 05/01/1970) Quick Visit: [Play]

Summary HX Allergies Problem List Labs Radiology Procedures Imm/Injections Supplies **Meds** Health Maintenance Vitals

**Medications** Point of Care Refill Summary

e-Prescribing History  Patient Reported  Practice Prescribed  Transition of Care/Referral  Surescripts Archive  Patient Consents  Show All Medications

Medication	Source	Diagnosis	RxNorm	Start Date	End Date	Status
Clindamycin 300 MG Oral Capsule , three times a day as needed if pain does not subside/	Practice Prescribed	Fever, unspecified [R50.9]	284215	02/12/2018		Active
Ceftriaxone 100 MG/ML Injectable Solution , BID, Two Times Daily	Practice Prescribed		309090	06/22/2015	06/30/2015	Completed
Tylenol 500 MG Oral Tablet , As needed	Practice Prescribed		209459	06/22/2015	07/01/2015	Completed
Aranesp 0.5 MG per 1 ML Prefilled Syringe , Qwk, Once a week	Practice Prescribed		731241	06/22/2015		Active

Add New e-Rx Order Screen Display 1-4 of 4

Summary CC HPI HX **Meds & Allergy** ROS Vitals PE POC Results Assessment Plan Superbill

Search for allergies, and drugs from the boxes below. A list of suggestions will come up to ensure accurate spelling or you may manually enter your own. [See Video](#) or [Meaningful Use Help](#) (MU)

Drug Allergies?  NONE

Reaction?  Save

Merged  Show All Allergies

**Allergies (reaction)**

- Drug: Penicillin G (hives), 05/09/1980, Status: Active
- Drug: Ampicillin (hives), 05/09/1980, Status: Active

Reconciled by Anna Bates

Current Medications?  NONE

Save

Merged  Show All Medications Hx

**Medications**

- Aranesp 0.5 MG per 1 ML Prefilled Syringe, Qwk, Once a week, #7, Source: Practice Prescribed, 02/11/2018, Status: Active
- Clindamycin 300 MG Oral Capsule, three times a day as needed if pain does not subside/, #1, Source: Practice Prescribed, 02/12/2018, Status: Active

Reconciled by Anna Bates

Time Allotted: 60 Seconds

**Task Time:**

**Success:**

Easily Completed:	Completed with Difficult or Help:	Not Completed:	Comments:

**Optimal Path: Patients Menu -> Search Charts -> Patient Chart -> View (Problems List) -> View Medication List -> View Allergies List -> Click Info Button**

Correct:	Minor Deviations:	Major Deviations:	Comments:

**Observed Errors and Verbalizations:**

**Rating:**

Very Difficult (1)	Difficult (2)	Normal (3)	Easy (4)	Very Easy(5)

**Administrator/Logger Comments:**

**Task 32: User provides feedback for a triggered evidence-based DSI.**

**Prerequisite:** Patient with evidence-based DSI triggered from Task #29

**Instructions:** Submit feedback for the health maintenance plan that was triggered and sent a clinical alert

## Patient Encounter

The encounter has been closed and no change is allowed.

Unlock

[Convenient Medical Care] [Harry James Potter](#), 44 year(s) old (MRN: 100969, Male, DOB: 07/31/1980, Status: [Click to edit](#))

Visit Summary

- Summary
- CCI
- HPI
- HX
- Meds & Allergy
- ROS
- Vitals
- PE
- POC
- Results
- Assessment
- Plan
- Superbill



Encounter Date: 01/14/2022  
Encounter #: 11  
Home Phone: 123-123-1231  
Work Phone:  
Cell Phone: 555-555-5555  
Address: 4 Privet Drive, New York, NY 10021  
Insurance: None on file

### Clinical Alert:

Show All

The patient is a candidate for Acme Pacemaker Maintenance health plan [2]. Please consider asking him/her to enroll in the plan.  Responded

Summary tab allows you to get acquainted with your patient before beginning a visit. It's similar to what you might see on left side of a paper chart. Alerts will appear on the top right. [See Video](#)

### Addendum

<input type="checkbox"/>	Addendum	User
--------------------------	----------	------

Add New

Delete Selected

## Patient Encounter

### Acme Pacemaker Maintenance

#### Source Attributes

Developer of the intervention  
ACME Research Institute

#### Submit Intervention Feedback

Action Taken:

Select action

Location:

Select Location

Comment/Feedback:

Submit Feedback

Time Allotted: 30 Seconds

Task Time:

**Success:**

Easily Completed:	Completed with Difficult or Help:	Not Completed:	Comments:

**Optimal Path:** Patients Menu -> Encounter -> Click on the Patient's encounter -> Click on the question mark in the Clinical Alerts box -> Submit Intervention Feedback

Correct:	Minor Deviations:	Major Deviations:	Comments:

**Observed Errors and Verbalizations:**

**Rating:**

Very Difficult (1)	Difficult (2)	Normal (3)	Easy (4)	Very Easy(5)

**Administrator/Logger Comments:**

**Task 33: User exports feedback data in a computable format, including the data identified in (b)(11)(ii)(C) at a minimum (intervention, action taken, user feedback provided (if applicable), user, date, and location).**

**Prerequisite:** User logged in as a clinician (provider or nurse practitioner) or administrator. Existing health maintenance plan feedback.

**Instructions:** Export report for Health Maintenance Feedback

Reports

Health Maintenance Plans **Health Maintenance Plan Feedback** Clinical Alerts Patient Reminders EHR Launch Apps

Feedback

Plan Name: Heart Disease, Trauma Disorders, C...  
Location: Location 1, Location 2  
Actions: Scheduled, Performed, On Hold, Re...

Feedback Date From:   
Feedback Date To:

Filter

Plan Name	Patient MRN	Location	Action Taken	User	Date
Acme Pacemaker Maintenance	126	Location 1	Scheduled	Pete Demo	September 19, 2024
Asthma	126	Location 1	Performed	William Mayfield	August 20, 2024
BMI Management	120	Location 1	Refused	Demo Doctor	July 15, 2024

Export/Download Results

Display 1-3 of 3

Time Allotted: 30 Seconds

Task Time:

Success:

Easily Completed:	Completed with Difficult or Help:	Not Completed:	Comments:

Optimal Path: Reports Menu -> Health Maintenance -> Health Maintenance Plan Feedback -> Export/Download Results

Correct:	Minor Deviations:	Major Deviations:	Comments:

Observed Errors and Verbalizations:

Rating:

Very Difficult (1)	Difficult (2)	Normal (3)	Easy (4)	Very Easy(5)

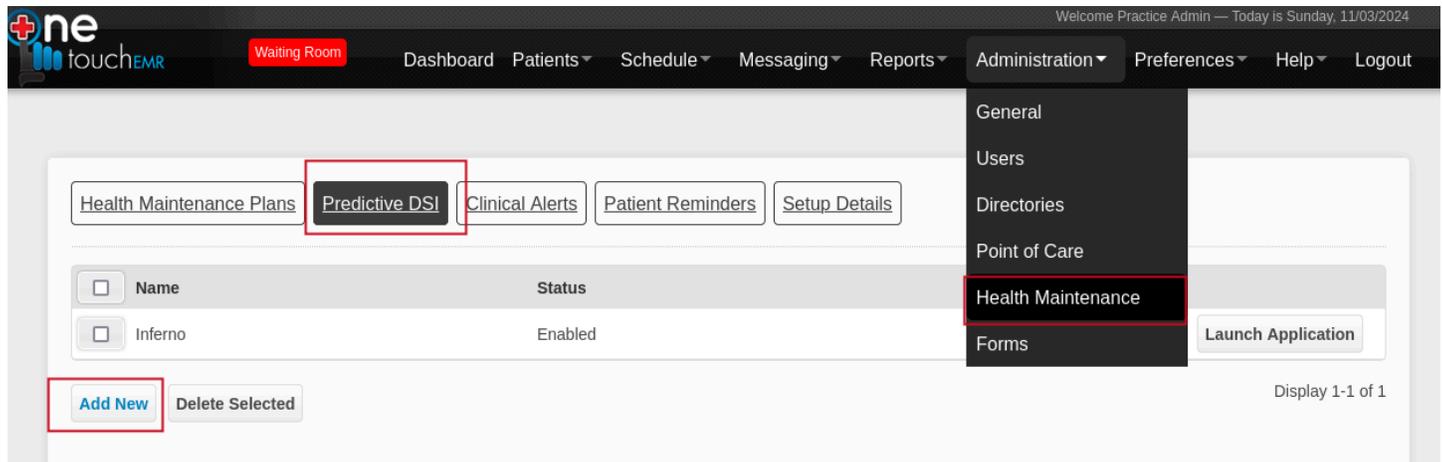
Administrator/Logger Comments:

User-Supplied Predictive Decision Support Intervention

**Task 34: User selects (activates/adds/enables/configures) Predictive DSI using the required USCDI data elements**

**Prerequisite:** Logged in user has administrator role (System Administrator, Practice Administrator, etc).

**Instructions:** Add a new Predictive DSI as shown below. Refer to the third-party application for Redirect and Launch URI details.



Health Maintenance Plans
Predictive DSI
Clinical Alerts
Patient Reminders
Setup Details

### Add New Predictive Decision Support Intervention

Name \*

Description

Client ID \*  Generate Client ID

Client Secret \*  Generate Client Secret

Redirect Uri \*

Launch Uri \*

Scope

Use default / recommended scopes

Status Enabled ▾

Save
Cancel

**Time Allotted:** 120 Seconds

**Task Time:**

**Success:**

Easily Completed:	Completed with Difficult or Help:	Not Completed:	Comments:

**Optimal Path:** Administration Menu on Top -> Health Maintenance -> Predictive DSI -> Add New -> Save

Correct:	Minor Deviations:	Major Deviations:	Comments:

**Observed Errors and Verbalizations:**

**Rating:**

Very Difficult (1)	Difficult (2)	Normal (3)	Easy (4)	Very Easy(5)

**Administrator/Logger Comments:**

### **Task 35: User records user-defined source attributes for a Predictive DSI**

**Prerequisite:** Logged in user has administrator role (System Administrator, Practice Administrator, etc). An existing Predictive DSI app is available for editing.

**Instructions:** Select an existing Predictive DSI and add a Source Attribute named "Pricing" which does not belong to any existing source attribute category (i.e. Other category)

The screenshot shows the OneTouchEMR Practice Admin interface. The top navigation bar includes the logo, a 'Waiting Room' indicator, and menu items: Dashboard, Patients, Schedule, Messaging, Reports, Administration, Preferences, Help, and Logout. The user is logged in as 'Practice Admin' on Sunday, 11/03/2024. The main content area displays a configuration page for Predictive DSIs. At the top, there are tabs for 'Health Maintenance Plans', 'Predictive DSI' (which is selected), 'Clinical Alerts', 'Patient Reminders', and 'Setup Details'. Below the tabs is a table with columns for 'Name' and 'Status'. A single entry is shown: 'Inferno' with a status of 'Enabled'. A red rectangular box highlights the 'Inferno' name and its status. To the right of the 'Inferno' entry are two buttons: 'Source Attributes' and 'Launch Application'. At the bottom left of the table area are buttons for 'Add New' and 'Delete Selected'. At the bottom right, it says 'Display 1-1 of 1'.

Health Maintenance Plans

**Predictive DSI**

Clinical Alerts

Patient Reminders

Setup Details

## Edit Predictive Decision Support Intervention

Name \*

Description

Client ID \*  [Generate Client ID](#)

Client Secret \*  [Generate Client Secret](#)

Redirect Uri \*

Launch Uri \*

Scope

[Use default / recommended scopes](#)

Status

[Save](#) [Cancel](#)

### Source Attributes

<input type="checkbox"/>	Category	Name	Value
<input type="checkbox"/>	External validation process	Party that conducted the external testing	cvcvc

[Delete Selected](#)

Display 11-11 of 11 — [<< Previous](#) [1](#) [2](#)

### Add Source Attribute

Name:

Value:

[Add](#)

Select Other for user-defined source attributes

Time Allotted: 30 Seconds

Task Time:

Success:

Easily Completed:	Completed with Difficult or Help:	Not Completed:	Comments:

Optimal Path: Administration Menu on Top -> Health Maintenance -> Predictive DSI -> Click an item from the list -> Add Source Attribute -> Select "Other" for Category

Correct:	Minor Deviations:	Major Deviations:	Comments:

Observed Errors and Verbalizations:

Rating:

Very Difficult (1)	Difficult (2)	Normal (3)	Easy (4)	Very Easy(5)

Administrator/Logger Comments:

**Task 36: User changes user-defined source attributes for a Predictive DSI**

**Prerequisite:** Logged in user has administrator role (System Administrator, Practice Administrator, etc). An existing Predictive DSI app is available for editing with existing user-defined source attributes.

**Instructions:** Edit an existing user-defined source attribute for a Predictive DSI and change its value.

The screenshot shows the touchEMR software interface. At the top, there is a navigation bar with the touchEMR logo, a 'Waiting Room' indicator, and a menu with items: Dashboard, Patients, Schedule, Messaging, Reports, Administration, Preferences, Help, and Logout. The main content area displays a configuration page for 'Predictive DSI'. There are several tabs: 'Health Maintenance Plans', 'Predictive DSI' (which is active), 'Clinical Alerts', 'Patient Reminders', and 'Setup Details'. Below the tabs is a table with columns for 'Name' and 'Status'. The table contains one entry: 'Inferno' with a status of 'Enabled'. To the right of the 'Inferno' row are two buttons: 'Source Attributes' and 'Launch Application'. At the bottom left of the table area are two buttons: 'Add New' and 'Delete Selected'. At the bottom right, it says 'Display 1-1 of 1'. A red box highlights the 'Inferno' row in the table.

Health Maintenance Plans

**Predictive DSI**

Clinical Alerts

Patient Reminders

Setup Details

### Edit Predictive Decision Support Intervention

Name \*

Description

Client ID \*

[Generate Client ID](#)

Client Secret \*

[Generate Client Secret](#)

Redirect Uri \*

Launch Uri \*

Scope

[Use default / recommended scopes](#)

Status

[Save](#) [Cancel](#)

#### Source Attributes

<input type="checkbox"/>	Category	Name	Value
<input type="checkbox"/>	External validation process	Party that conducted the external testing	cvcvc
<input type="checkbox"/>	Other	Pricing	\$15.00 per evaluation

[Delete Selected](#)

Display 11-12 of 12 — [<< Previous](#) [1](#) [2](#)

#### Add Source Attribute

Select Source Attribute Category

Value:

[Add](#)

Health Maintenance Plans

**Predictive DSI**

Clinical Alerts

Patient Reminders

Setup Details

### Edit Predictive Decision Support Intervention

Name \*

Description

Client ID \*  [Generate Client ID](#)

Client Secret \*  [Generate Client Secret](#)

Redirect Uri \*

Launch Uri \*

Scope

[Use default / recommended scopes](#)

Status

[Save](#) [Cancel](#)

### Source Attributes

**Edit Source Attribute: Pricing**

Category: Other

Name: Pricing

Value:

[Save Changes](#) [Cancel](#)

**Time Allotted:** 60 Seconds

**Task Time:**

**Success:**

Easily Completed:	Completed with Difficult or Help:	Not Completed:	Comments:

**Optimal Path: Administration Menu on Top -> Health Maintenance -> Predictive DSI -> Click an item from the list -> Source Attributes -> Select an item from the Source Attribute List -> Edit the value -> Save**

Correct:	Minor Deviations:	Major Deviations:	Comments:

**Observed Errors and Verbalizations:**

**Rating:**

Very Difficult (1)	Difficult (2)	Normal (3)	Easy (4)	Very Easy(5)

**Administrator/Logger Comments:**

**Task 37: User accesses user-defined source attributes for a Predictive DSI**

**Prerequisite:** User logged in as clinician role (provider or nurse practitioner). At least one Predictive DSI application is enabled.

**Instructions:** Access the list of available EHR Launch apps under the Report -> Health Maintenance Menu. Select a Predictive DSI application among the list and view the source attributes.

The screenshot shows the OneTouch EMR interface. At the top, there is a navigation bar with the logo and user information: "Welcome Dr. Albert Davis — Today is Sunday, 11/03/2024". The navigation menu includes: Dashboard, Patients, Schedule, Messaging (with a notification badge), Reports, Preferences, Help, and Logout. A "Waiting Room" indicator is visible in the top left.

The main content area is titled "Reports" and contains several filter buttons: "Health Maintenance Plans", "Health Maintenance Plan Feedback", "Clinical Alerts", "Patient Reminders", and "EHR Launch Apps" (which is highlighted in green).

Below the filters, the "EHR Launch Apps" section is displayed. It includes a heading "EHR Launch Apps" and a descriptive paragraph: "This page lists external applications that can be launched directly from OneTouch EMR. These apps are integrated following the SMART on FHIR standards, ensuring secure access to various tools and features that extend the capabilities OneTouch EMR."

Under "EHR Launch Client", there is a "Launch Application" button.

Under "Inferno", there is a "Launch Application" button and a link: "Click here to view the source attributes." This link is highlighted with a red box in the original image.

Reports

---

### Source Attributes for Inferno

**Details and Output of the Intervention**

- Name and contact information for the intervention developer  
sdasdasdas
- Funding source of the technical implementation for the intervention(s) development  
fdgdfgdf
- Description of value that the intervention produces as an output  
asdasd
- Whether the intervention output is a prediction, classification, recommendation, evaluation, analysis, or other type of output  
ROLAN

**Purpose of the Intervention**

- Intended use of the intervention  
QQQQQ
- intended patient population(s) for the intervention's use  
asdasdasdasd
- Intended user(s)  
sdfsdfsdfsdf

**Time Allotted:** 20 Seconds

**Task Time:**

**Success:**

Easily Completed:	Completed with Difficult or Help:	Not Completed:	Comments:

**Optimal Path:** Reports Menu on Top -> Health Maintenance -> EHR Launch Apps -> Navigate to any Predictive DSI application -> View Source Attributes

Correct:	Minor Deviations:	Major Deviations:	Comments:

**Observed Errors and Verbalizations:**

**Rating:**

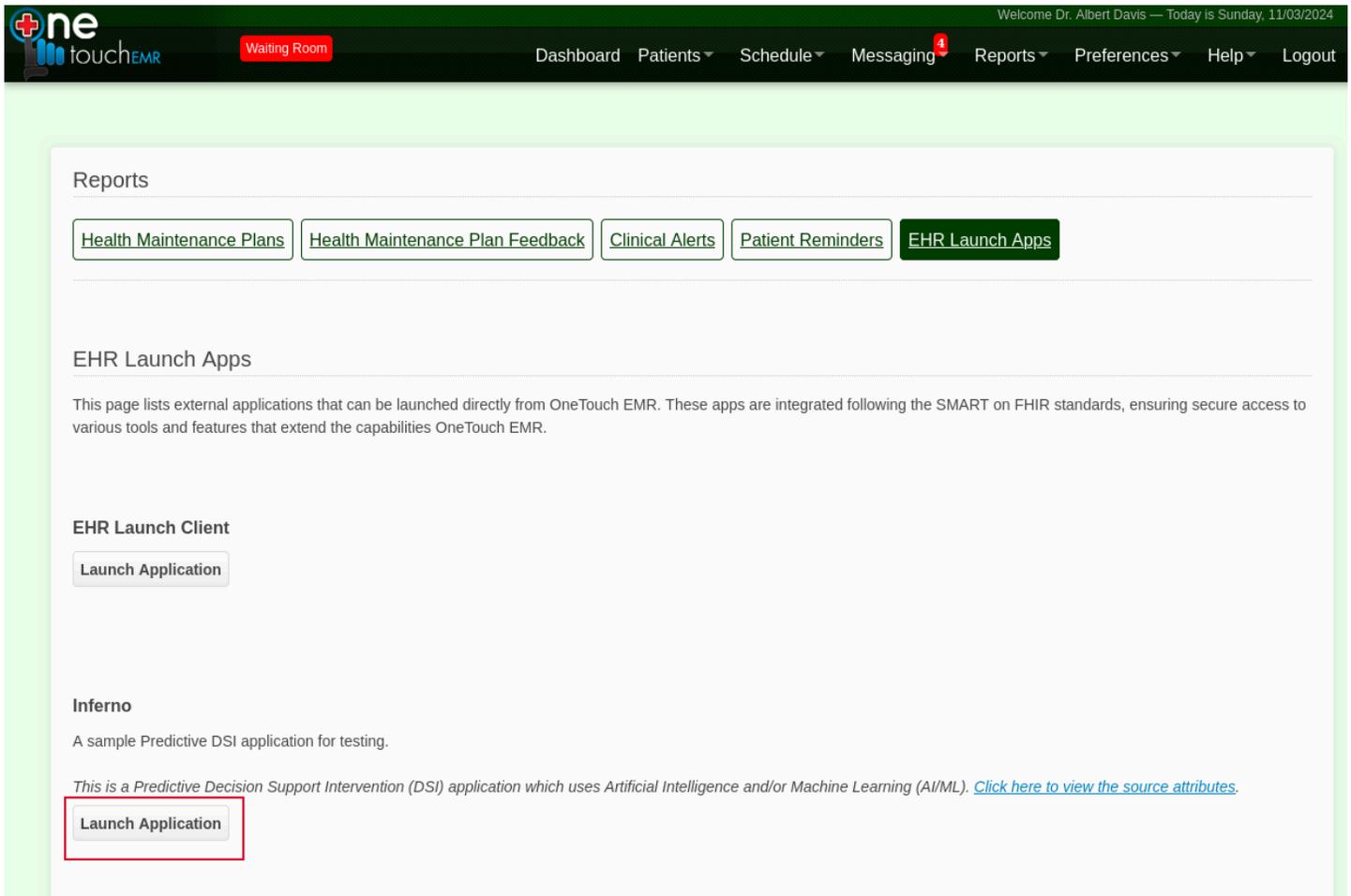
Very Difficult (1)	Difficult (2)	Normal (3)	Easy (4)	Very Easy(5)

**Administrator/Logger Comments:**

**Task 38: User triggers a user-supplied Predictive DSI**

**Prerequisite:** User logged in as clinician role (provider or nurse practitioner). At least one Predictive DSI application is enabled.

**Instructions:** Access the list of available EHR Launch apps under the Report -> Health Maintenance Menu. Select a Predictive DSI application among the list and click Launch Application. Follow the instructions, this includes selecting a patient.



**Time Allotted:** 20 Seconds

**Task Time:**

**Success:**

Easily Completed:	Completed with Difficult or Help:	Not Completed:	Comments:

**Optimal Path: Reports Menu on Top -> Health Maintenance -> EHR Launch Apps -> Navigate to any Predictive DSI application -> Launch Application**

Correct:	Minor Deviations:	Major Deviations:	Comments:

**Observed Errors and Verbalizations:**

**Rating:**

Very Difficult (1)	Difficult (2)	Normal (3)	Easy (4)	Very Easy(5)

**Administrator/Logger Comments:**

### 5.3. Appendix C – System Usability Questionnaire

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I think that I would like to use this system frequently	1	2	3	4	5
2. I found the system unnecessarily complex	1	2	3	4	5
3. I thought the system was easy to use	1	2	3	4	5
4. I think that I would need the support of a technical person to be able to use this system	1	2	3	4	5
5. I found the various functions in this system were well integrated	1	2	3	4	5
6. I thought there was too much inconsistency in this system	1	2	3	4	5
7. I would imagine that most people would learn to use this system very quickly	1	2	3	4	5
8. I found the system very cumbersome to use	1	2	3	4	5
9. I felt very confident using the system	1	2	3	4	5
10. I needed to learn a lot of things before I could get going with this system	1	2	3	4	5

### 5.4. Appendix D – Tasks Performed

Task	Time	Optimal Path
Record a Patient Demographic information	180	4
Modify and Display Patient Demographic Information	150	7
Use CPOE to record Medication	60	5
Use CPOE to change and display Medication	60	6
Use CPOE to record new Lab order	50	6
Use CPOE to change and display Lab order	60	7
User CPOE to record Imaging order	50	6
User CPOE to change and display Imaging order	60	7

Prescribe a new medication that would be contraindicated to patient allergy (drug-allergy interaction)	30	4
Prescribe a medication that would be contraindicated to the patient medication (drug-to-drug interaction)	30	4
Configure a health maintenance plan for each or a combination of the following: problem list, medication list, demographics, and/or lab tests and results, vital signs and a combination of two.	180	8
Enroll a patient in one health maintenance plan based on a diagnosis in their active problem list	50	5
Record and Parse a UDI in implantable device list	60	8
Access UDI device information and Change device status	30	7
Incorporate CCDAs to create new patient	180	8
Conduct reconciliation of Medication, Allergies and Problems	180	11
Generate new CCDAs with reconciled data	180	10
Create a new Prescription	180	9
Cancel Prescription	30	6
Change Prescription	120	6
Refill prescription	120	10
Receive fill status notification	20	4
Request and receive medication history information	30	5
Adjust the severity level of drug-drug interaction	30	6
User selects (activates/adds/enables/configures) evidence-based DSI using any of the required elements alone or in combination	120	5
User records source attributes for evidence-based DSI	30	5
User changes source attributes for evidence-based DSI	60	6
User accesses source attributes for evidence-based DSI	20	4
User triggers Decision Support Intervention(s) based on any of the required elements alone or in combination	180	8
User accesses source attributes for triggered evidence-based DSI	20	4
User triggers Decision Support Intervention(s) based on the problems, medications, allergies and intolerances incorporated from a transition of care/referral summary C-CDA file using (b)(2) functionality (if applicable)	60	7
User provides feedback for a triggered evidence-based DSI	30	5
User exports feedback data in a computable format, including the data identified in (b)(11)(ii)(C) at a minimum (intervention, action taken, user feedback provided (if applicable), user, date, and location)	30	4
User selects (activates/adds/enables/configures) Predictive DSI using the required USCDI data elements	120	5
User records user-defined source attributes for a Predictive DSI	30	6
User changes user-defined source attributes for a Predictive DSI	60	8
User accesses user-defined source attributes for a Predictive DSI	20	5
User triggers a user-supplied Predictive DSI	20	5