EHR USABILITY TEST REPORT

Simplify EMR, Version 4.0

Report based on: ISO/IEC 25062:2006 Common Industry Format for Usability Test Report

1. EXECUTIVE SUMMARY

A usability test of Simplify EMR v4.0 was conducted on July 2019 at Genensys headquarters, 7269 Winding Lake Circle, Oviedo FL 32765. The purpose of this study was to test and validate the usability of the current user interface and provide evidence of it in the EHR Under Test (EHRUT).

During the test, a total of 12 healthcare personnel including physicians and administrative staff members matching the target demographic criteria served as participants and used Simplify EMR v4.0 in simulated, but representative tasks.

This study collected performance data for 14 tasks conducted on the EHR including:

1. Record, review and modify medication orders
2. Record, review and modify lab orders
3. Record, review and modify radiology orders
4. Record, review and modify medication allergy list
5. Record medication order and drug-drug interaction
6. Record medication order and drug-allergy interaction
7. Record and modify demographics information
8. Record, review and modify problems
9. Record and modify a clinical decision support rule
10. Trigger and override a clinical decision support rule
11. Add an implantable device
12. Inactivate an implantable device
13. Clinical information reconciliation and incorporation
14. E-prescribe a medication

During the 50 minutes of one-on-one usability test, every participant was welcomed by the overseer. They were requested by the administrator to review and sign an informed consent. Also, they were told that they can withdraw at any time. The majority of the participants had prior knowledge of the system. After the introduction, the participants were requested to complete a series of tasks (one at a time) using the EHRUT. The administrator timed the test and recorded the participants performance electronically. No assistance was given to the participants to complete their tasks.

Below are the types of data 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
- Participant's verbalizations
- Participant's system satisfaction ratings

Since it was a voluntary activity, no participant was compensated. After the successful completion of testing, participants were requested to rate their respective tasks and the application. Each participant's privacy was ensured, none of them could be identified from the data collected. Evaluation was done on

the basis of examples in NIST guide to the process approach for improving the usability of electronic health records.

Based on the participants' performance, the system's subjective satisfaction is scaled as 88.92%. Moreover, below the qualitative observations were made:

1.1 Major Findings

Participants for the most part observed the Simplify EMR to be instinctive. They were satisfied with the design and technology which led them to complete their tasks efficiently and quickly.

1.2 Areas for Improvement

Feedback provided by the participants was extremely appreciated and helped us to evaluate the application through their perspective. Some participants suggested front-end improvements which we have taken into consideration.

2. INTRODUCTION

The EHRUT tested for this study was Simplify EMR, Version 4.0. The EHRUT is designed to provide services including Electronic Health Records, Practice Management System, Scheduling, Billing, Patient Portal, Chronic Care Management, Medical Transcription, Communications and Transitional Care Management. The usability test represented realistic scenarios and practices.

The purpose of this study was to evaluate the system's current user interface and provide an evidence of usability of EHRUT. System's interface should be designed and contain the functionalities as per the usability standard of NISTIR 7741.

Task success, task time, path deviation, time deviation, task errors and ratings were recorded during the usability testing. The goal was to assess the product's efficiency, level of user satisfaction and system's potency.

3. METHOD

3.1 Participants

A total of 12 participants were tested on the EHRUT. Most of the participants were clinical employees and configuration specialists. Participants did not belong to the testing or supplier organization, neither had any direct connection with the development of the EHRUT. Participants were given the same level of system exposure and training that is given to the end users.

All of the participants were chosen according to the demographic and background criteria defined in NISTIR 7741 guidelines and instructions. Below is the table of participant characteristics, including their demographics, professional experience and user needs for assistive technology etc. Names were replaced with participant IDs in order to ensure the individual privacy.

ID	Gender	Age	Education	Occupation/ Role	Professional Experience (months)	Computer Experience (months)	Product Experience (months)	Assistive Technology Needs
P1	Male	40-49	Trade/Technical/ Vocational Training	Clinical Informatics Coordinator	90	240	36	No
P2	Male	30-39	Master's Degree	Office/ IT Manager	60	240	24	No
P3	Male	30-39	Doctorate Degree (e.g. MD-DNP-DMD-PhD)	Internal Medicine	55	180	48	No
P4	Male	20-29	Trade/Technical/ Vocational Training	Medical Assistant	60	96	8	Yes
P5	Female	50-59	Master's Degree	EHR Analyst	144	204	40	No
P6	Female	40-49	Doctorate Degree (e.g. MD-DNP-DMD-PhD)	Pediatrician	120	170	20	No
P7	Male	30-39	Master's Degree	EMR Coordinator	132	155	18	No
P8	Male	50-59	Associate Degree	LPN	180	265	30	No
P9	Male	20-29	Bachelor's Degree	RN	35	90	12	No
P10	Female	20-29	High School graduate-diploma or equivalent e.g. GED	Medical Assistant	6	96	15	No
P11	Female	30-39	Bachelor's Degree	RN	120	228	72	No
P12	Female	30-39	Doctorate Degree (e.g. MD-DNP-DMD-PhD)	Physician	72	240	48	No

The test was scheduled to be 50 minutes long with short breaks of 5-10 minutes for debriefing.

3.2 Study Design

The goal was to explore the positive and negatives of the application; where the system performed well and the participants were able to execute their tasks smoothly and without requiring any assistance or confusions on the application side. As well as the areas where the participants faced hurdles due to some reason. The participants only used Simplify EMR which helped the administrator to record and benchmark the current usability of the system. Participant satisfaction with the application was analyzed on the basis of below the measures:

- Number of tasks successfully completed within the allotted time without assistance: 128
- Time to complete the tasks: 32
- Number and types of errors: 20
- Path deviations (Average): 1.32
- Participant satisfaction ratings of the system: 88.92

3.3 Tasks

Below is the list of tasks that were performed by the participants:

Task 1: Access John's current medication list that contains Amoxicillin 500MG. Update this medication with another antibiotic. The details are given below:

Drug Name	Ceftriaxone 250 MG
Frequency	Daily
Dose	2 tablets
Route	Oral

Task 2: Create a lab order to investigate blood culture with below tests:

- CBC with Ordered Manual Differential Panel – Blood (57782-5)
- Tobacco IgE Ab RAST class [Presence] in Serum (16056-4)

Modify the Tobacco Serum test with below changes:

Diet: Fasting

Task 3: Create a radiology order to investigate a cardiovascular condition with below test:

- ELECTROCARDIOGRAM COMPLETE – (93000)

Task 4: Add Mandol medication allergy to John's current allergies list:

Allergy	Mandol
Reaction	Stomach cramps
Medication	Mandol 100 MG

Task 5: Prescribe Mandol to John and view alert.

Task 6: An alert of drug-drug interaction should appear upon creating a prescription of below. Override the alert as "Can be overridden" and prescribe the medication:

Drug Name	Augmentin 125 MG
Frequency	3
Dose	1 tablet
Route	Oral

Task 7: Modify John's DOB, Marital Status, Preferred Language and Race:

Date of Birth	10/10/1988
Marital Status	Married
Preferred Language	English
Race	White

Task 8: Review John's current problem list that contains spiking fever and insomnia. John confirms that he no longer has spiking fever. Therefore, remove it from the list and mark it as resolved. Add another problem, throat irritation.

Task 9: Create a new clinical decision support rule based on the table below:

Title	Rule MU3
Rule Type	Medications
Medications	Ibuprofen 200 MG
Race	White
Gender	Male
Alert Note	Patient counselling advised

Task 10: Trigger the created rule by adding the respective details to John's profile. Alert should be overridden by marking it as done.

Task 11: Add a 'pacemaker' implantable device in the patient's chart.

Task 12: Mark the added implantable device as inactive.

Task 13: Import the patient's CCDA in the application and reconcile his medications, allergies and problems.

Task 14: Review clinical decision support alert and e-prescribe the required medication of John.

All the tasks were selected from the study by NIST.

3.4 Procedures

As the participants arrived, they were welcomed by the Genensys management. Their identity check was ran and IDs were allocated.

All participants reviewed and signed an informed consent. A delegate from the test group verified the signatures.

In order to make sure that the test ran smoothly, two individuals from the test team participated in the test, the usability administrator and the data logger. The staff had prior experience of usability practice for 5 to 30 years, with educational backgrounds of medical and post-graduation. The administrator who conducted the session took notes on task times, post-task rating data, participant comments as well as giving instructions and administering tasks. Whereas the data logger took notes on task success, path deviations, number and type of errors and comments.

Below is the manner in which participants were required to perform their tasks:

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

Participants were handed a hard copy of the tasks. Administrator read the instructions and questions to the participants and began to calculate the time, timer was stopped after a participant indicated of completing their task.

Participant demographic information, task success rate, time, errors and deviations were logged in an excel spreadsheet provided by SLI compliance.

Below the screenshot depicts how demographics for the participants were recorded:

Image 1: Participant demographic data

Below the screenshot depicts how characteristics for each measure was recorded and calculated:

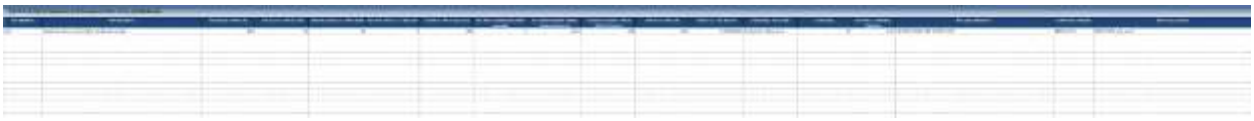

Image 2: CPOE Medications task recording

Participants were given post-test questionnaire to record their ratings of the tasks and system. Also, they were thanked individually for their participation.

3.5 Test Location

The testing facility had a waiting area and a quiet room with a table and computer system assigned for each participant. It also had a separate computer for the administrator to record the session. No other

person was allowed in the test room other than the administrator and the participants. Other observers and the data logger worked from a separate room where they could see the participant's screen. Safety instructions and evacuation plans were in place and were made visible to the participants.

3.6 Test Environment

The EHRUT is typically used in a healthcare office or facility. In this case, the testing was performed at Genensys headquarters. The testing was conducted on Intel® Core i7 desktop computers with operating system as Windows 10. The participants used a mouse and a keyboard to interact with the system. Every system had a 21" screen size with the resolution of 1920x1080. The application was prepared by Genensys staff as per the documentation describing the system set-up and preparation. The application itself was running on Genensys Cloud, using a demo database on LAN connection. The system response time was the same as to what actual users would experience in a field implementation. Participants were also instructed not to change the system's default settings (such as control of font size).

3.7 Test Forms and Tools

Below are the documents used during the usability test:

- Informed consent
- Participant instructions sheet
- System Usability Scale (SUS) questionnaire
- Excel spreadsheet (Data Logging)

3.8 Participant Instructions

Below are the instructions that the administrator read aloud to all the participants:

Thank you all for your time and for participating in this study today. Your input is highly valuable. This session is going to last 50 to 55 minutes. During this time, you will be using an instance of the EHR. I'd like to request you to complete a few tasks using this system and answer some questions. You should try to complete the tasks as quickly as possible and with minimum errors. Please follow the instructions closely and complete the tasks on your own. Please be sure that our goal is not to test you, but our system. This means that if you face some sort of difficulty in completing your task, it is an indication that something needs to be improved in the system. I will be here if you need specific help but I won't be able to assist you in using the application or completing your task.

Through this study, we are exploring how easy or difficult our system is, how is it useful to our users and the margins of improvement in it. The information you share will be kept confidential and your name will not be associated with your comments at any time. Any participant is free to withdraw at any time during the test if necessary.

After the procedural instructions, participants were introduced with the EHR. As their first task, they were given 10 minutes to explore the application and make comments. Once the task was completed, the administrator gave below the instructions:

For each task, I will be reading the instructions to everyone and raise poll which will end as per time associated with task. After the task completion, another poll will be raised to collect data and feedback for each participant. I'd like to request that you not talk aloud or verbalize while you are doing the tasks.

Participants were then given 14 tasks to complete.

3.9 Usability Metrics

According to the NIST guidelines, EHR should contain a process that provides a high level of usability for all users. The goal is for the users to be able to use the system to their ease in an efficient and satisfactory manner. Metrics for effectiveness, efficiency and user satisfaction were captured during the usability testing. The goals of the test were to analyze the below:

- Effectiveness of Simplify EMR v4.0 by measuring participant success rates and errors
- Efficiency of Simplify EMR v4.0 by measuring the average task time and path deviations
- Satisfaction with Simplify EMR v4.0 by measuring ease of use ratings

3.10 Data Scoring

Below is a table detailing how tasks, errors and time were analyzed:

Measures	Rationale and Scoring
Effectiveness (Task Success)	When a participant completed their task within the allotted time, achieved the expected outcome and did not require assistance, it was considered as 'Success'. Total number of successes were recorded for each task and divided with the total number of times that task was attempted. The results are provided as a percentage. Task times were recorded for successes. Observed task times divided by the optimal time for each task is a measure of optimal efficiency. Optimal task performance time, as benchmarked by expert performance under realistic conditions, is recorded when constructing tasks. Target task times used for task times in the Moderator's Guide must be operationally defined by taking multiple measures of optimal performance and multiplying by some factor (1.3) that allows some time buffer because the participants are presumably not trained to expert performance. Thus, if expert, optimal performance on a task was "60" seconds then allotted task time performance was "60*1.3=78" seconds. This ratio should be aggregated across tasks and reported with mean and variance scores.
Effectiveness (Task Failures)	If the participant quit the task, could not complete, performed incorrectly or reached the end of allotted time before successful completion, the task was counted as 'Failure'. Total number of errors were calculated for each task and divided with the total number of times the task was attempted. Not all deviations would be counted as errors. This should also be expressed as the mean number of failed tasks per participant. On a qualitative level, an enumeration of errors and error types should be collected.
Efficiency (Task Deviations)	Participant's workflow (steps) while performing a task was recorded. Deviations occurred in cases such as going on a wrong screen, clicked on an incorrect menu item, followed an incorrect link or interacted incorrectly with an on-screen control. This path was compared to the optimal path. Total number of steps in the observed path is divided with the total number of optimal steps to provide a ratio of path deviation. It is highly recommended that task deviations be reported. Optimal paths (procedural steps) should be recorded when constructing tasks.
Efficiency (Task Time)	Each task was timed from when the administrator said, "Begin" until the participant said, "Done." If he or she failed to say, "Done," the time was stopped when the participant stopped performing the task. Only task times for tasks that were successfully completed were included in the average task time analysis. Average time per task was calculated for each task. Variance measures (standard deviation and standard error) were also calculated.
Satisfaction	Participant's subjective impression of the ease of use of the application was measured by post-task questions and post-session questionnaire.

(Task Rating)	After each task, the participants were requested to rate the task on a scale of 1 (very difficult) to 5 (very easy). These data are averaged across participants. Common convention is that average ratings for system's easy to use should be 3.3 and above. To measure participants' likeability of Simplify EMR v4.0, the testing team administered the System Usability Scale (SUS) post-test questionnaire. Questions included, 'I think I would like to use this system frequently', 'I thought the system was easy to use' and 'I would imagine that most people would learn to use this system very quickly'.

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. Data for the participants who failed to follow the session or task instructions was excluded from the analysis.

The data should produce actionable results that, if corrected, should produce positive impact on user performance. The usability testing results for the EHRUT are detailed below:

Task

Task	**Task Success** (Mean)	**Path Deviations** (Observed/Optimal)	**Time Deviations** (Observed/Optimal)	**Task Errors** (Mean)	**Task Rating** (Mean)
Record, review and modify medication orders	91	1.22	1.6	8.33	90
Record, review and modify lab orders	100	1.2	1.25	0	85
Record, review and modify radiology orders	91	1.33	1.19	0	85
Record, review and modify allergy list	83.3	1.18	1.33	16.3	75
Record medication order and drug-drug interaction	91	1.16	1.25	8.33	90
Record medication order and drug-allergy interaction	91	1.08	1.33	8.33	75
Record and modify demographics information	100	1.25	1.20	0	95
Record, review and modify problems	100	1.12	1.28	0	95

Record and modify a clinical decision support rule	83.3	1.11	1.1	16.3	85
Trigger and override CDS rule	91	1.25	1.2	8.33	90
Add an implantable device	91	1.11	1.13	8.33	85
Inactivate an implantable device	100	1.2	1.18	0	100
Clinical information reconciliation and incorporation	83.3	1.18	1.21	16.3	85
e-prescribe a medicine	75	1.12	1.11	25	70

Task time deviation was calculated as: Observed time taken by 12 participants/ Optimal time taken by 12 participants

Task path deviation was calculated as: Number of observed steps taken by 12 participants/ Number of optimal steps taken by 12 participants

The result of SUS (system usability scale) measured the participants' satisfaction with the system. For a task whose performance score is 83.3 is considered as broadly interpreted, scores under 65 represented the system's poor usability and scores over 85 were considered as above average.

Effectiveness

Based on the task success for all the 14 tasks, effectiveness of Simplify EMR v4.0 was calculated as 90.12%.

Efficiency

Most of the participants were able to complete their tasks within the allotted time, whereas some were not able to do so. Those who could not complete their tasks, stated that it was because of their wrong interpretation of instructions. Efficiency of Simplify EMR v4.0 was measured based on the average path deviation i.e. 1.2 and average time deviation i.e. 1.31.

Satisfaction

In terms of satisfaction, Simplify EMR v4.0 was rated by the participants as 89%.

4.2 Discussion of Findings

4.2.1 Task 1: Record, review and modify medication orders

Participants had to add a new medication, review patient's current medications and update one of the added medications from the chart.

Major Findings

Participants were able to complete the task within the allotted time without requiring any assistance.

Areas for Improvement

No major suggestions were given as the participants found the task quick and easy.

4.2.2 Task 2: Record, review and modify lab orders

Participants were asked to add a specific lab order and update a pending lab order.

Major Findings

Some of the participants had trouble adding details but most of them completed the task successfully.

Areas for Improvement

No major suggestions other than interface improvement were suggested.

4.2.3 Task 3: Record, review and modify radiology orders

Participants were asked to add a new radiology order to investigate cardiovascular condition and review the current radiology orders.

Major Findings

Due to the workflow's similarity between lab and radiology orders, some of the participants had difficulty adding details.

Areas for Improvement

No major suggestions other than interface improvement were suggested.

4.2.4 Task 4: Record, review and modify allergy list

Participants were asked to add a new medication allergy, review the existing allergies and update one.

Major Findings

Due to the workflow's similarity between medications and allergies component, participants found it easy and completed the task in a very short time.

Areas for Improvement

No major suggestions were given as the participants found the task to be quick and easy.

4.2.5 Task 5: Record medication order and drug-drug interaction

Participants were asked to create a medication order, review drug-drug interaction alert and override it after entering specified comments.

Major Findings

Since the alert notification is quite visible and the user cannot proceed without taking care of it, therefore the participants were able to execute the task quite easily.

Areas for Improvement

No major suggestions were given as the participants found the task to be quick and easy.

4.2.6 Task 6: Record medication order and drug-allergy interaction

Participants were asked to create a medication order, review drug-allergy interaction alerts and override it after entering specified comments.

Major Findings

Due to the similarity between the previous task and this, participants were able to execute it easily.

Areas for Improvement

No major suggestions were given as the participants found the task to be quick and easy.

4.2.7 Task 7: Record and Modify Demographics

Participants were asked to update demographics for a specific patient.

Major Findings

All the participants were able to complete this task within the allotted time.

Areas for Improvement

No major suggestions were given as the participants found the task to be quick and easy.

4.2.8 Task 8: Record, review and modify problems

Participants were asked to add a specific problem in patient's record, review the existing problem list and update one of them.

Major Findings

Most of the participants completed the task in a very short time.

Areas for Improvement

No major suggestions were given as the participants found the task to be quick and easy.

4.2.9 Task 9: Record and modify a clinical decision support rule

Participants were asked to create a new clinical decision support rule with specific information.

Major Findings

Most of the participants were able to complete the task within the allotted time. Whereas, some found it slightly difficult to create a clinical decision support rule.

Areas for Improvement

Some of the participants who had difficulty completing the task were those who did not or had less experience with the product, they were convinced that if they had sufficient experience, they could have completed the task easily. They suggested addition of tooltips in the user interface to be able to understand the terms more easily.

4.2.10 Task 10: Trigger a clinical decision support rule

Participants were asked to review CDS alert for the patient and override it by adding specific comments.

Major Findings

Participants found this task comparatively easier than creating a clinical decision support rule.

Areas for Improvement

No major suggestions were given as the participants found the task to be quick and easy.

4.2.11 Task 11: Add an implantable device

Participants were asked to add an implantable device for a patient.

Major Findings

Almost all of the participants found the task straightforward and completed it within the allotted time.

Areas for Improvement

No major suggestions were given for improvement.

4.2.12 Task 12: Inactivate an implantable device

Participants were asked to inactivate the previously added implantable device for the patient.

Major Findings

Participants found this task extremely easy and completed it in a very short time.

Areas for Improvement

No suggestions for improvement were given.

4.2.13 Task 13: Clinical information reconciliation and incorporation

Participants were asked to import a CCDA file for an existing patient and then reconcile its medications, problems and allergies.

Major Findings

Some of the participants found this task to be difficult as they were not able to complete it in the allotted time.

Areas for improvement

Suggestions were given to improve the workflow for reconciliation.

4.2.14 Task 14: E-prescribe a medicine

Participants were asked to prescribe a medicine according to the CDS alert.

Major Findings

Those who were unable to identify the CDS alerts found the task to be tricky. Most of the participants were able to execute it without any troubles.

Areas for Improvement

Participants suggested that alert notification needs to be more easily visible.

5. APPENDICES

Below is the list of the appendices provided:

1. Sample recruiter screener
2. Participant demographics
3. Non-disclosure agreement (NDA) and informed consent form
4. System usability scale questionnaire

5.1 Appendix 1: Recruiter form

The purpose of a recruiter form is to ensure that the participants selected belong to the target population as closely as possible.

Recruiting Script

Hello, my name is _____, calling from Simplify EMR. We are recruiting individuals to participate in a usability study for our electronic health record. We would like to ask you a few questions to see if you qualify and would like to participate. This should not take more than a couple of minutes. This is strictly for research purposes and would be a voluntary act from your side. Can I ask a few questions?

1. Have you participated in Simplify EMR usability testing previously?
   a. Yes
   b. No

   If yes, please describe.

2. Do you or anyone in your home, have a commercial interest in electronic health record software or usability research? (if yes, disqualified)
   a. Yes
   b. No
3. What age group do you belong to?
   a. <20
   b. 20-29
   c. 30-39
   d. 40-49
   e. 50-59
   f. 60-69
   g. 70-79
   h. ≥80
4. Do you require any assistive technologies to use a computer? (if yes, disqualified)
   a. Yes
   b. No

5.2 Appendix 2: Participant demographics

Name _____

Gender _____

Address _____

Phone # _____

Email _____

Organization _____

1. What is your current role?
   a. Analyst
   b. Application Coordinator
   c. Certified Nursing Assistant (CNA)
   d. CEO, CMIO, CIO, etc.
   e. Consultant
   f. Director
   g. Information Technology
   h. Licensed Practical Nurse (LPN)
   i. Marketing/Communications
   j. Medical Assistant (MA)
   k. Nurse
   l. Nurse Practitioner (NP)
   m. Office Manager
   n. Pharmacist
   o. Physician
   p. Physician Assistant (PA)
   q. Project Manager
   r. SVP, AVP, VP, etc.
   s. Trainer
   t. Other (please specify)
2. How long have you held this position?
   a. <5 years
   b. 5-10 years
   c. 10-20 years
   d. >20 years
3. What environment do you work in? (if inpatient or emergency department, disqualified)
   a. Inpatient
   b. Emergency Department

c. Ambulatory

4. What is your highest level of education?
   a. High school graduate/GED
   b. Some college
   c. College graduate
   d. Postgraduate
   e. Other
5. How many years of experience do you have using computers for personal and professional activities (e.g. reading news, shopping/banking, programming/word processing, research, access EHR etc.)
   a. <5 years
   b. 5-10 years
   c. 10-20 years
   d. >20 years
6. How do you capture patient data in your organization? (if primarily on paper, disqualify)
   a. Primarily on paper
   b. Primarily electronically
7. What is your specialty? (if physician and specialty is Radiology, Ophthalmology and Pathology, disqualify)
8. Are you a fluent English speaker?
   a. Yes
   b. No

5.3 Appendix 3: Non-disclosure agreement and informed consent form

Non-Disclosure Agreement (NDA)

The participant acknowledges his/her voluntary participation in today's usability study may bring the participant into possession of confidential information. The term 'Confidential Information' means all technical and commercial information of a proprietary or confidential nature which is disclosed by Simplify EMR, or otherwise acquired by the participant, in the course of today's study.

By way of illustration, but no limitation, confidential information includes trade secrets, possesses, formulae, data, know-how, products, designs, drawings, computer aided design files and other computer files, computer software, ideas, improvements, inventions, training methods and materials, marketing techniques, plans, strategies, budgets, financial information, or forecasts.

Any information the participant acquires relating to this product during this study is confidential and proprietary to Simplify EMR and is being disclosed solely for the purposes of the participant's participation in today's usability study. By signing this form, the participant acknowledges that s/he will not receive any compensation for feedback as this is a voluntary act and will not disclose this confidential information obtained today to anyone else or any other organizations.

Participant name: _____

Signature: _____ Date: _____

Informed Consent

Genensys would like to thank you for participating in this study. The purpose of this study is to evaluate an electronic health record. If you decide to participate, you will be asked to perform several tasks using the prototype and give your feedback. The study will last about 60 minutes.

Agreement

I understand and agree that as a voluntary participant in the present study conducted by Genensys I am free to withdraw consent or discontinue participation at any time. I understand and agree to participate in the study conducted and videotaped by the Genensys.

I understand and consent to the use and release of the videotaped by Genensys. I understand that the information and videotape is for research purposes only and that my name and image will not be used for any purpose other than research. I relinquish any rights to the videotape and understand the videotape may be copied and used by Genensys without further permission.

I understand and agree that the purpose of this study is to make software applications more useful and usable in the future.

I understand and agree that the data collected from this study may be shared with outside of Genensys and its client. I understand and agree that data confidentiality is assured, because only de-identified data i.e. identification numbers not names – will be used in analysis and reporting of the results.

I agree to immediately raise any concerns or areas of discomfort with the study administrator. I understand that I can leave at any time.

Please check one of the following:

☐ YES, I have read the above statement and agree to be a participant.

☐ NO, I choose not to participate in this study.

Signature: _____ Date: _____

5.4 Appendix 4: System usability scale questionnaire

Strongly Disagree				Strongly Agree
1	2	3	4	5

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 I would need the support to be able to use this system

1	2	3	4	5

5. I found that various functions in this system were well integrated

1	2	3	4	5

6. I thought there was too much Inconsistency in the system

1	2	3	4	5

7. I would imagine that most people would learn to use this system quickly

1	2	3	4	5

8. I found the system 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 the system