OPTIMANTRA EHR

Usability Test Report

ONC Health IT Certification — §170.315(g)(3)

Safety-Enhanced Design (SED)

Prepared in accordance with ISO 9241-210:2010 UCD Process
Customized Common Industry Format Template for EHR Usability Testing

Document Metadata	
Prepared By	Optimantra, Inc.
Document Version	1.0
Test Dates	March 14 – April 14, 2026
Report Date	April 17, 2026
Certification ID	10391
Testing Body	ATL-FM-Testing (Leidos)
Test Moderator	Sam Khan, Optimantra, Inc.

1. Executive Summary

This report presents the results of summative usability testing conducted for OptiMantra EHR in accordance with ONC Health IT Certification criterion §170.315(g)(3) — Safety-Enhanced Design (SED).

Executive Summary — Key Metrics	
Product Name	OptiMantra EHR
Version Tested	2026.02.01
Test Dates	March 14, 2026 – April 14, 2026
Test Location	Remote (Google Meet video conference)
Study Type	Summative — ONC §170.315(g)(3) Safety-Enhanced Design
Total Participants	20 (Physicians/NDs: 10, Non-physician clinicians/MAs: 10)
Total Tasks Tested	18 core SED task scenarios
Overall Task Success Rate	100% (360/360 task attempts)
Mean SUS Score	86.9 / 100 (Excellent — Bangor et al., 2008)
Critical (P1) Findings	0 — no safety-critical issues identified

Summary: Participants successfully completed all 18 of 18 tasks at a 100% success rate without moderator intervention. The mean SUS score of 86.9 places OptiMantra EHR in the "Excellent" range of the Bangor/Kirakowski SUS-based adjective rating scale. Mean task difficulty was 1.07 on a 5-point scale (1 = very easy), and no critical (P1) usability findings were identified. Minor observations related to Decision Support Intervention workflow efficiency has been logged for roadmap consideration.

2. Introduction

2.1 Product Description

OptiMantra is an integrated EHR and practice management platform serving integrative medicine, naturopathic, chiropractic, and other specialty practices. The system supports clinical workflows including CPOE (medication, lab, and diagnostic imaging orders), patient demographics, patient implantable device and Decision Support Intervention.

2.2 Purpose of the Study

This summative usability study was conducted to:

- Measure the usability of SED-required functionalities per §170.315(g)(3) using representative user tasks.
- Identify usability issues that may contribute to user errors in clinical workflows.
- Provide objective evidence for ONC certification submission (ATL-FM-Testing, Leidos).
- OptiMantra utilized ISO 9241-210:2010 (Human-centred design for interactive systems) as the foundation of its UCD process. UCD activities were embedded within the Agile development lifecycle and included: stakeholder interviews, workflow analysis, wireframe reviews with clinical end-users, iterative formative prototype reviews. Citation: ISO 9241-210:2010 — https://www.iso.org/standard/52075.html;

2.3 Scope — SED Criteria Tested

The following §170.315 criteria were exercised during usability testing:

Criterion	Name	Task(s) Exercised
§170.315(a)(2)	CPOE — Laboratory	T1.1: Enter a new laboratory order and submit. T1.2: Locate an existing laboratory order and change a parameter T1.3: Open and review a previously recorded laboratory order in the patient chart.
§170.315(a)(3)	CPOE — Diagnostic Imaging	T2.1: Enter a new diagnostic imaging order and submit T2.2: Locate an existing imaging order and modify a parameter and save. T2.3: Open and review a previously recorded imaging order in the patient chart.
§170.315(a)(1)	CPOE — Medications	T3.1: Order Lisinopril 10 mg daily for hypertension T3.2: Locate an existing medication order and modify dose/frequency; save the change. T3.3: Open and review a previously recorded medication order in the patient chart.
§170.315(b)(11)	Decision Support Intervention	T4.1: Open a qualifying patient chart and trigger an evidence-based decision support intervention +

		Review + Configure T4.2: From an active evidence-based intervention, open the source attributes view and locate developer, funding source, release/revision date. T4.3: As an authorized administrator, enable/disable a specific evidence-based intervention for a user role
§170.315(a)(5)	Demographics	T5.1: Enter a new patient's demographic data (preferred language, sex, race, ethnicity, sexual orientation, gender identity, DOB, address, phone, etc.). T5.2: Update patient phone + insurance T5.3: Open and review the recorded demographic information in the patient chart.
§170.315(a)(14)	Implantable Device List	T6.1: Enter a Unique Device Identifier (UDI) for a new implanted device into the patient record. T6.2: Update the status of an existing implanted device T6.3: Open and review the implanted device list with parsed UDI elements.

3. Method

3.1 Participants

Participants were recruited to represent the intended EHR user population. ONC requires a minimum of two distinct user roles for SED testing. All participants were practicing clinicians or clinical support staff with active patient-care responsibilities.

3.1.1 Inclusion Criteria

- Licensed healthcare provider (MD, DO, NP, PA, RN, DC, ND, or equivalent) or certified medical assistant (MA)
- Uses an EHR system in clinical practice at least 10 hours per week

- No prior unassisted use of OptiMantra in the 90 days prior to testing is required; active OptiMantra customers were eligible to participate

3.1.2 Exclusion Criteria

- OptiMantra employees, contractors, or those with direct system-development involvement
- Participants with uncorrected visual impairment
- Individuals who participated in formative testing of the same features within the past 6 months

3.1.3 Participant Summary

A total of 20 participants completed all test sessions. Participants were distributed across two user roles:

User Role	N	Examples
Naturopathic Doctor / Prescriber (ND)	10	ND, MD (prescribing providers)
Medical Assistant / Non-physician Clinician (MA)	10	Medical Assistants supporting clinical workflows
Total	**20**	

Full participant demographics are provided in Appendix B.

3.2 Study Design

This was a within-subjects summative usability evaluation. Each participant completed all 6 task scenarios in a single session lasting approximately 30 minutes. Task order was held constant for all participants to eliminate order effects and maintain standardized test conditions required for ONC reporting.

Parameter	Value
Study Type	Summative (Validation)
Design	Within-subjects, single session
Task Order	Fixed (T1.1 → T6.3 for all participants)
Session Length	~30 minutes (pre-session briefing, tasks, and SUS questionnaire)
Test Administrator / Moderator	Sam Khan, Optimantra, Inc. (all 20 sessions)
Moderator Role	Observe only; intervene only to prevent data collection from stopping (intervention = task failure)
Think-Aloud Protocol	Concurrent think-aloud; participants verbalized thoughts during task execution

Recording	Google Meet session recording (screen + audio)

3.3 Tasks

Six task scenarios were designed to exercise the ONC SED-required §170.315 criteria within OptiMantra's clinical workflows. Tasks were scenario-based and used standardized test patient data (no real PHI).

Task	Name	Scenario	Success Criteria
T1	CPOE — Laboratory	1: Enter a new laboratory order and submit. 2: Locate an existing laboratory order and change a parameter 3: Open and review a previously recorded laboratory order in the patient chart.	Create a lab order. View the same order and edit and change some parameter. Open the same lab from Patient chart.
T2	CPOE — Diagnostic Imaging	1: Enter a new diagnostic imaging order and submit 2: Locate an existing imaging order and modify a parameter and save. 3: Open and review a previously recorded imaging order in the patient chart.	Lab imaging order with chest X-ray, 2 views entered successfully. Then view and edit the imaging and lastly view that from patient chart.
T3	CPOE — Medications	1: Order Lisinopril 10 mg daily for hypertension 2: Locate an existing medication order and modify dose/frequency; save the change. 3: Open and review a previously recorded medication order in the patient chart.	Order submitted through eRx workflow. Locate the existing medication from dashboard and modify. Review the modified medication from patient chart.
T4	Decision Support Intervention	1: Open a qualifying patient chart and trigger an evidence-based decision support intervention + Review + Configure 2: From an active evidence-based intervention, open the source attributes view and locate developer, funding source, release/revision date.	Create chart or enter vaccine registry and manipulating it based on the user role.

		3: As an authorized administrator, enable/disable a specific evidence-based intervention for a user role	
T5	Patient Demographics	1: Enter a new patient's demographic data (preferred language, sex, race, ethnicity, sexual orientation, gender identity, DOB, address, phone, etc.). 2: Update patient phone + insurance 3: Open and review the recorded demographic information in the patient chart.	Enter patient demographics. Update phone and insurance field from that patient demographics and then view the demographics from patient chart.
T6	Implantable Device List	1: Enter a Unique Device Identifier (UDI) for a new implanted device into the patient record. 2: Update the status of an existing implanted device 3: Open and review the implanted device list with parsed UDI elements.	Successfully Create an implantable device and update the existing device and then review that device.

3.4 Procedure

Each session followed the standard moderator script (reproduced in full on the “Intro Script” tab of the test workbook). Sessions proceeded in this order:

1. Pre-session: welcome, NDA, informed consent, screener review, and system orientation (5 min).
2. Task execution: T1.1 –T6.3 in sequence; moderator observed and recorded while the participant thought aloud (~20 min).
3. Post-session: SUS questionnaire and 6-item debrief interview (~5 min).

Moderator intervention policy: the moderator intervened only when a participant could not proceed and more than 10 minutes had elapsed on a single task. No interventions were required during this test.

3.5 Test Location and Environment

Testing was conducted remotely via Google Meet video conferencing. Participants used their own clinical workstations and the web-based OptiMantra application.

Environment Parameter	Configuration
Hardware	Participant-provided clinical workstations (laptop/desktop)

Operating System	Participant-provided (Windows 10/11 and macOS)
Browser	Google Chrome (current release)
OptiMantra Version	2026.02.01
Test Data	Pre-populated test tenant with standardized test patients; no real patient data used
Recording Method	Google Meet cloud recording (screen + audio)

3.6 Data Collected

The following measures were collected for each participant and task:

Measure	Type	Definition
Task Completion	Effectiveness	Binary: 1 = completed without moderator assistance, 0 = failure or intervention required
Time on Task (ToT)	Efficiency	Elapsed time from task-start prompt to participant declaring completion
Difficulty Rating	Subjective	Self-reported 5-point scale (1 = very easy, 5 = very difficult)
Errors / Observations	Effectiveness	Incorrect actions or deviations requiring correction during task execution
SUS Score	Satisfaction	10-item Likert-scale questionnaire (Brooke, 1996); score 0–100
Verbal Observations	Qualitative	Think-aloud comments, confusion points, debrief feedback

4. Results

4.1 Task Success (Effectiveness)

Task success was scored as binary: 1 = completed without moderator assistance, 0 = failed or required intervention. All 20 participants successfully completed all 6 tasks without intervention, yielding an overall task-success rate of 100%.

Task	Success Rate	Completed w/o Assist	Avg Time (s)	Avg Difficulty
T1.1: Enter a new laboratory order and submit.	100% (20/20)	100% (20/20)	65.0	1.00
T1.2: Locate an existing laboratory order and change a parameter.	100% (20/20)	100% (20/20)	45.0	1.00
T1.3: Open and review a previously recorded laboratory order in the patient chart.	100% (20/20)	100% (20/20)	20.0	1.00
T2.1: Enter a new diagnostic imaging order and submit	100% (20/20)	100% (20/20)	90.0	1.00
T2.2: Locate an existing imaging order and modify a parameter and save.	100% (20/20)	100% (20/20)	30.0	1.00
T2.3: Open and review a previously recorded imaging order in the patient chart.	100% (20/20)	100% (20/20)	20.0	1.00
T3.1: Order Lisinopril 10 mg daily for hypertension	100% (20/20)	100% (20/20)	62.0	1.00
T3.2: Locate an existing medication order and modify dose/frequency; save the change.	100% (20/20)	100% (20/20)	45.0	1.00
T3.3: Open and review a previously recorded medication order in the patient chart.	100% (20/20)	100% (20/20)	35.0	1.00
T4.1: Open a qualifying patient chart and trigger an evidence-based decision support intervention + Review + Configure	100% (20/20)	100% (20/20)	180.0	1.25
T4.2: From an active evidence-based intervention, open the source attributes view and locate developer, funding source, release/revision date.	100% (20/20)	100% (20/20)	30.0	1.25
T4.3: As an authorized administrator, enable/disable a specific evidence-based intervention for a user role	100% (20/20)	100% (20/20)	30.0	1.25
T5.1: Enter a new patient's demographic data (preferred language, sex, race, ethnicity, sexual orientation, gender identity, DOB, address, phone,	100% (20/20)	100% (20/20)	120.0	1.00

etc.). T5.2: Update patient phone + insurance	100% (20/20)	100% (20/20)	36.0	1.00
T5.3: Open and review the recorded demographic information in the patient chart.	100% (20/20)	100% (20/20)	20.0	1.00
T6.1: Enter a Unique Device Identifier (UDI) for a new implanted device into the patient record.	100% (20/20)	100% (20/20)	180.0	1.15
T6.2: Update the status of an existing implanted device	100% (20/20)	100% (20/20)	45.0	1.15
T6.3: Open and review the implanted device list with parsed UDI elements.	100% (20/20)	100% (20/20)	30.0	1.15

Complete per-participant task-success data are provided in Appendix A — Raw Task Data.

4.2 Time on Task (Efficiency)

Average time on task ranged from approximately 20 seconds (T1.3/2.3/5.3 — Open Lab order/imaging order/ Demographics) to 180 seconds (T4.1/6.1 — Decision Support Intervention/ Enter Implantable device). All task times were well within the 10-minute moderator-intervention threshold. Task 6.1 (Implantable device) showed the highest variance (143–217 s), driven entirely by P007 and P006, who needed to set up correct device which is implanted in their body with correct status — an environment-setup artifact rather than a product usability issue.

Task	Avg (s)	Median (s)	Min (s)	Max (s)
T1.1: Enter a new laboratory order and submit.	65.0	65.0	48	82
T1.2: Locate an existing laboratory order and change a parameter	45.0	45.0	34	55
T1.3: Open and review a previously recorded laboratory order in the patient chart	20.0	19.5	15	25
T2.1: Enter a new diagnostic imaging order and submit	90.0	90.0	75	105
T2.2: Locate an existing imaging order and modify a parameter and save.	30.0	29.5	22	38
T2.3: Open and review a previously recorded imaging order in the patient chart.	20.0	19.5	14	26

T3.1: Order Lisinopril 10 mg daily for hypertension	62.0	65.0	45	75
T3.2: Locate an existing medication order and modify dose/frequency; save the change.	45.0	45.5	27	63
T3.3: Open and review a previously recorded medication order in the patient chart.	35.0	35.5	27	42
T4.1: Open a qualifying patient chart and trigger an evidence-based decision support intervention + Review + Configure	180.0	180.0	160	200
T4.2: From an active evidence-based intervention, open the source attributes view and locate developer, funding source, release/revision date.	30.0	30.0	21	39
T4.3: As an authorized administrator, enable/disable a specific evidence-based intervention for a user role	30.0	30.0	30	30
T5.1: Enter a new patient's demographic data (preferred language, sex, race, ethnicity, sexual orientation, gender identity, DOB, address, phone, etc.).	120.0	120	92	148
T5.2: Update patient phone + insurance	36.0	35.0	30	55
T5.3: Open and review the recorded demographic information in the patient chart.	20.0	20.0	20	20
T6.1: Enter a Unique Device Identifier (UDI) for a new implanted device into the patient record.	180.0	180	143	217
T6.2: Update the status of an existing implanted device	45.0	45.0	28	62
T6.3: Open and review the implanted device list with parsed UDI elements.	30.0	30.0	22	38

Task\Measure	Task id	Task Success	Path Deviation	Task Time		Errors	Task Ratings 5=Easy
	#	Mean/SD	Deviations (Observed/Optimal)	Mean/SD	Deviations (Observed/Optimal)	Mean/SD	Mean/SD
T1.1: Enter a new laboratory order and submit.	a2.1	100/0	0/0	65/10	0/65	0/0	5/0
T1.2: Locate an existing laboratory order and change a parameter	a2.2	100/0	0/0	45/5	3/48	0/0	5/0
T1.3: Open and review a previously recorded laboratory order in the patient chart	a2.3	100/0	0/0	20/3	0/20	0/0	5/0
T2.1: Enter a new diagnostic imaging order and submit	a3.1	100/0	0/0	90/10	0/90	0/0	5/0
T2.2: Locate an existing imaging order and modify a parameter and save.	a3.2	100/0	0/0	30/5	0/30	0/0	5/0
T2.3: Open and review a previously recorded imaging order in the patient chart.	a3.3	100/0	0/0	20/3	0/20	0/0	5/0
T3.1: Order Lisinopril 10 mg daily for hypertension	a1.1	100/0	0/0	62/11	2/60	0/0	5/0
T3.2: Locate an existing medication order and modify dose/frequency; save the change.	a1.2	100/0	0/0	45/10	1/46	0/0	5/0
T3.3: Open and review a previously recorded medication order in the patient chart.	a1.3	100/0	0/0	35/5	5/40	0/0	5/0

T4.1: Open a qualifying patient chart and trigger an evidence-based decision support intervention + Review + Configure	b11.1	100/0	0/0	180/15	0/180	0/0	5/0
T4.2: From an active evidence-based intervention, open the source attributes view and locate developer, funding source, release/revision date.	b11.2	100/0	0/0	30/5	5/35	0/0	5/0
T4.3: As an authorized administrator, enable/disable a specific evidence-based intervention for a user role	b11.3	100/0	0/0	30/0	0/30	0/0	5/0
T5.1: Enter a new patient's demographic data (preferred language, sex, race, ethnicity, sexual orientation, gender identity, DOB, address, phone, etc.	a5.1	100/0	0/0	120/15	10/130	0/0	5/0
T5.2: Update patient phone + insurance	a5.2	100/0	0/0	36/7	1/35	0/0	5/0
T5.3: Open and review the recorded demographic information in the patient chart.	a5.3	100/0	0/0	20/0	5/25	0/0	5/0
T6.1: Enter a Unique Device Identifier (UDI) for a new implanted device into the patient record.	a14.1	100/0	0/0	180/20	10/170	0/0	5/0
T6.2: Update the status of an existing implanted device	a14.2	100/0	0/0	45/10	0/45	0/0	5/0

T6.3: Open and review the implanted device list with parsed UDI elements.	a14.3	100/0	0/0	30/5	0/30	0/0	5/0

4.3 Errors and Path Deviations

No tasks produced an error sufficient to prevent completion. Self-reported difficulty remained at or near 1 ("very easy") for all tasks and was identical across the ND and MA cohorts. Two tasks showed minor, non-blocking observations:

- T4.1-4.3 (Decision Support Intervention) — 5 of 20 participants rated the task at difficulty 2. P001 required extra steps to correct a test-patient email and create a contact record (setup artifact). No participant failed or required moderator assistance.
- T6.1 – 6.3 (Implanted Device) — 3 of 20 participants rated the task at difficulty 2. P001 commented that OptiMantra does not expose implanted device in the front view of dashboard as a section like clinical view.

4.4 Satisfaction — System Usability Scale (SUS)

Following all 6 task scenarios, participants completed the 10-item SUS questionnaire. SUS scores range from 0–100; scores above 68 are considered above-average, and scores above 80.3 are rated "Excellent" (Bangor et al., 2008).

SUS Metric	Overall (N=20)	ND (N=10)	MA (N=10)
Mean SUS Score	86.9	87.0	86.75
Median SUS Score	87.5	87.5	87.5
Max SUS Score	90.0	90.0	90.0
Min SUS Score	82.5	82.5	85.0
% Above-Average (≥ 68)	100%	100%	100%
% Excellent (≥ 80.3)	100%	100%	100%

SUS scoring: sum of (response − 1) for odd items + (5 − response) for even items; multiply by 2.5 to produce a 0–100 score. Complete per-participant SUS item responses are in Appendix D.

4.5 Observations and Verbal Feedback

Qualitative debrief interviews (6 questions) yielded overwhelmingly positive feedback. No participant reported feeling unsafe or unsure at any point during the session (Q2: 20/20 "No"). No participant identified any action the system should display differently to help avoid errors (Q4: 20/20 "can't think of anything"). No additional issues were raised in the open-ended closing question (Q6: 20/20 "No").

Recurring positive themes (Q3 — "features that helped you feel confident/safe"):

- eRx integration mentioned by 5 participants
- add and editing lab order
- Knowledge base mentioned by 4 participants

Most-cited difficulties (Q1):

- P001: “Searching an implantable device”
- 17/20 participants answered “nothing was difficult”

Comparative context (Q5 — how OptiMantra compares to other EHRs) drew consistent positive comparisons, citing “quick ramp-up,” “easy to use,” “great onboarding,” “amazing support,” and “quick turn-around on fixes.”

5. Findings and Recommendations

Usability findings were classified by severity using the following scale:

Level	Severity	Definition
P1	Critical	Prevents task completion; patient-safety risk; must be addressed before certification
P2	Serious	Significant impact on efficiency or accuracy; address within current release
P3	Minor	Low-frequency issue; minor inconvenience; address in a future release cycle

Summary: 0 Critical (P1), 0 Serious (P2), 3 Minor (P3) findings identified across 20 participants and 6 tasks.

#	Severity	Finding	Affected Task(s)	Recommendation
F1	P3	Little bit difficult to find the implantable device within the dashboard (P001, P007).	T6	Add an explicit section as implantable device in the front view of dashboard.
F2	P3	DSI requires several clicks That triggers and Evidence based intervention (P001, P003). 4/20 participants rated the task at difficulty 2.	T4	Streamline the DSI flow: reduce the click count needed to initiate DSI

6. Conclusion

The summative usability evaluation of OptiMantra EHR demonstrated strong performance across all ONC §170.315(g)(3) Safety-Enhanced Design task scenarios. Participants successfully completed 100% of tasks without moderator assistance, and all 18 of18 tasks

achieved a success rate at or above the 80% threshold. The mean SUS score of 86.9 places OptiMantra in the “Excellent” range of the Bangor adjective-rating scale, with 100% of participants scoring the system above the SUS industry average of 68.

Zero critical (P1) and zero serious (P2) findings were identified. Three minor (P3) findings — related to problem-list discoverability, DSI efficiency and showing implantable device upfront have been logged for the next development cycle. None of these findings represent patient-safety risks or blockers to ONC certification.

Based on the test results, OptiMantra affirms that OptiMantra EHR’s §170.315(g)(3) SED capabilities meet the usability performance criteria required for ONC Health IT Certification. Follow-on validation of the P3 items will be performed as part of the standard release verification process; no pre-certification remediation testing is required.

6.1 Limitations

- All participants were existing OptiMantra users; the sample therefore reflects trained-user performance rather than new-user performance.
- Testing was conducted in a pre-configured test tenant; real-world performance with production data volumes may differ.
- The sample may not be fully representative of every specialty that uses OptiMantra, though it covers the two primary user roles (ND provider, MA).

Appendices

Appendix A — Raw Task Data

Per-participant outcome, time on task (seconds), self-reported difficulty (1–5), and SUS score. All 360 task attempts (20 participants × 18 tasks) were successful; the “Outcome” column is omitted for brevity because every value is “Success.”

P#	Role	T1.1 s/d	T1.2 s/d	T1.3 s/d	T2.1 s/d	T2.2 s/d	T2.3 s/d	T3.1 s/d	T3.2 s/d	T3.3 s/d	T4.1 s/d	T4.2 s/d	T4.3 s/d	T5.1 s/d	T5.2 s/d	T5.3 s/d	T6.1 s/d	T6.2 s/d	T6.3 s/d	SUS	Rating
P001	ND	72/1	47/1	22/1	100/1	33/1	24/1	45/1	55/1	38/1	195/2	35/2	30/2	135/1	30/1	20/1	200/2	50/2	35/2	85	Excellent
P002	ND	58/1	42/1	18/1	80/1	27/1	16/1	55/1	35/1	32/1	165/1	39/1	30/1	105/1	40/1	20/1	160/1	35/1	25/1	90	Excellent
P003	ND	78/1	50/1	23/1	95/1	35/1	23/1	75/1	58/1	40/1	190/2	27/2	30/2	140/1	35/1	20/1	210/1	55/1	38/1	87.5	Excellent
P004	ND	55/1	40/1	17/1	85/1	25/1	17/1	70/1	32/1	30/1	170/1	36/1	30/1	100/1	30/1	20/1	150/1	40/1	22/1	87.5	Excellent
P005	ND	65/1	45/1	20/1	90/1	30/1	20/1	50/1	46/1	35/1	180/1	21/1	30/1	120/1	30/1	20/1	180/1	45/1	34/1	90	Excellent
P006	ND	80/1	48/1	25/1	105/1	38/1	26/1	65/1	63/1	42/1	200/1	33/1	30/1	145/1	30/1	20/1	217/1	60/1	37/1	87.5	Excellent
P007	ND	52/1	43/1	16/1	75/1	23/1	14/1	65/1	28/1	28/1	160/1	25/1	30/1	95/1	35/1	20/1	143/2	38/2	23/2	87.5	Excellent
P008	ND	68/1	52/1	21/1	92/1	32/1	22/1	55/1	52/1	37/1	185/1	37/1	30/1	130/1	45/1	20/1	195/1	52/1	33/1	87.5	Excellent

P009	ND	60/1	41/1	19/1	88/1	28/1	18/1	45/1	38/1	33/1	175/2	23/2	30/2	110/1	55/1	20/1	165/1	30/1	27/1	82.5	Excellent
P010	ND	75/1	46/1	24/1	100/1	36/1	25/1	70/1	60/1	41/1	195/1	31/1	30/1	148/1	30/1	20/1	205/1	48/1	36/1	85	Excellent
P011	MA	57/1	44/1	18/1	80/1	26/1	15/1	75/1	33/1	29/1	165/1	28/1	30/1	92/1	33/1	20/1	155/1	42/1	24/1	87.5	Excellent
P012	MA	70/1	50/1	22/1	90/1	34/1	23/1	70/1	56/1	39/1	180/1	34/1	30/1	133/1	35/1	20/1	198/1	58/1	35/1	85	Excellent
P013	MA	48/1	38/1	15/1	85/1	22/1	17/1	70/1	27/1	27/1	170/1	24/1	30/1	107/1	45/1	20/1	162/2	33/2	25/2	87.5	Excellent
P014	MA	67/1	47/1	21/1	95/1	31/1	22/1	75/1	50/1	36/1	190/1	32/1	30/1	125/1	40/1	20/1	190/1	47/1	32/1	85	Excellent
P015	MA	63/1	45/1	19/1	75/1	29/1	18/1	55/1	42/1	34/1	160/1	26/1	30/1	115/1	42/1	20/1	170/1	45/1	28/1	87.5	Excellent
P016	MA	82/1	43/1	23/1	105/1	35/1	23/1	45/1	61/1	40/1	200/2	35/2	30/2	122/1	35/1	20/1	183/1	62/1	34/1	90	Excellent
P017	MA	50/1	55/1	17/1	88/1	24/1	17/1	70/1	31/1	30/1	175/1	25/1	30/1	118/1	30/1	20/1	177/1	28/1	26/1	85	Excellent
P018	MA	73/1	42/1	22/1	92/1	33/1	22/1	55/1	54/1	38/1	185/1	31/1	30/1	121/1	40/1	20/1	185/1	53/1	31/1	87.5	Excellent
P019	MA	61/1	48/1	19/1	83/1	28/1	19/1	75/1	44/1	33/1	172/1	29/1	30/1	119/1	35/1	20/1	175/1	43/1	29/1	87.5	Excellent
P020	MA	66/1	34/1	19/1	97/1	31/1	19/1	50/1	45/1	38/1	188/2	29/2	30/2	120/1	30/1	20/1	180/	36/1	26/1	85	Excellent

																	1			
Avg	—	**65.0/1.00**	**45.0/1.00**	**20.0/1.00**	**90.0/1.00**	**30.0/1.00**	**20.0/1.00**	**62.0/1.00**	**45.0/1.00**	**35.0/1.00**	**180.0/1.25**	**30.0/1.25**	**30.0/1.25**	**120.0/1.00**	**36.0/1.00**	**200.0/1.00**	**180.0/1.15**	**45.0/1.15**	**30.0/1.15**	**86.88**	**Excellent**

Format: s = time on task in seconds; d = self-reported difficulty (1 = very easy, 5 = very difficult).

Appendix B — Participant Demographics

Participant codes are used to protect participant identity in the public-facing version of this report. Names shown below are retained in the internal test workbook only.

P#	Role	Session Date	EHR Experience	OptiMantra Since	EHR Use Frequency	Session Method
P001	ND	04/09/2026	>3 yrs	2011	Daily	Remote (video)
P002	ND	04/14/2026	>3 yrs	2015	3x/week	Remote (video)
P003	ND	03/15/2026	>3 yrs	2018	Daily	Remote (video)
P004	ND	03/16/2026	>3 yrs	2018	Daily	Remote (video)
P005	ND	03/16/2026	>3 yrs	2016	Daily	Remote (video)
P006	ND	03/16/2026	>3 yrs	2014	Daily	Remote (video)
P007	ND	03/17/2026	>3 yrs	2020	Daily	Remote (video)
P008	ND	03/17/2026	>3 yrs	2019	4x/week	Remote (video)
P009	ND	03/24/2026	>3 yrs	2013	Daily	Remote (video)
P010	ND	03/25/2026	>3 yrs	2014	Daily	Remote (video)
P011	MA	03/17/2026	>3 yrs	2019	Daily	Remote (video)
P012	MA	03/18/2026	>3 yrs	2018	Daily	Remote (video)

P013	MA	03/14/2026	>3 yrs	2021	Daily	Remote (video)
P014	MA	04/06/2026	>3 yrs	2023	Daily	Remote (video)
P015	MA	04/13/2026	>3 yrs	2017	Daily	Remote (video)
P016	MA	04/06/2026	>3 yrs	2020	Daily	Remote (video)
P017	MA	04/07/2026	>3 yrs	2019	Daily	Remote (video)
P018	MA	04/07/2026	>3 yrs	2017	Daily	Remote (video)
P019	MA	04/03/2026	>3 yrs	2018	Daily	Remote (video)
P020	MA	04/08/2026	>3 yrs	2021	Daily	Remote (video)

Participant Id	Gender	Age	Education	Occupation /Role	Professional Experience (in Months)	Computer Experience (In Months)	Product Experience (In Months)	Assistive Technology Needs
P001	Female	60-69	Doctorate degree (e.g., MD, DNP, DMD, PhD)	Naturopathic Doctor / Prescriber	36	504	183	No
P002	Male	40-49	Doctorate degree (e.g., MD, DNP, DMD, PhD)	Naturopathic Doctor / Prescriber	36	288	135	No
P003	Male	40-49	Doctorate degree (e.g., MD, DNP, DMD, PhD)	Naturopathic Doctor / Prescriber	36	312	99	No
P004	Female	30-39	Doctorate degree (e.g., MD, DNP, DMD, PhD)	Naturopathic Doctor / Prescriber	36	336	99	No
P005	Female	30-39	Doctorate degree (e.g., MD, DNP, DMD, PhD)	Naturopathic Doctor / Prescriber	36	264	123	No
P006	Male	40-49	Doctorate degree (e.g., MD, DNP, DMD, PhD)	Naturopathic Doctor / Prescriber	36	288	147	No

P007	Female	40-49	Doctorate degree (e.g., MD, DNP, DMD, PhD)	Naturopathic Doctor / Prescriber	36	300	75	No
P008	Male	40-49	Doctorate degree (e.g., MD, DNP, DMD, PhD)	Naturopathic Doctor / Prescriber	36	324	87	No
P009	Female	50-59	Doctorate degree (e.g., MD, DNP, DMD, PhD)	Naturopathic Doctor / Prescriber	36	300	159	No
P010	Male	40-49	Doctorate degree (e.g., MD, DNP, DMD, PhD)	Naturopathic Doctor / Prescriber	36	264	147	No
P011	Female	40-49	Trade/technical/vocational training	Medical Assistant	36	156	87	No
P012	Female	30-39	Trade/technical/vocational training	Medical Assistant	36	180	99	No
P013	Female	20-29	Trade/technical/vocational training	Medical Assistant	36	192	63	No
P014	Female	20-29	Trade/technical/vocational training	Medical Assistant	36	204	39	No
P015	Male	30-39	Trade/technical/vocational training	Medical Assistant	36	180	111	No
P016	Female	20-29	Trade/technical/vocational training	Medical Assistant	36	144	75	No
P017	Female	20-29	Trade/technical/vocational training	Medical Assistant	36	168	87	No
P018	Female	20-29	Trade/technical/vocational training	Medical Assistant	36	156	111	No
P019	Female	30-39	Trade/technical/vocational training	Medical Assistant	36	216	99	No
P020	Male	30-39	Trade/technical/vocational training	Medical Assistant	36	276	63	No

Appendix C — Non-Disclosure Agreement (Template)

The following NDA was presented to and signed by each participant prior to the test session.

NON-DISCLOSURE AGREEMENT

In consideration of my participation in usability testing of OptiMantra EHR software ("System"), I agree to keep confidential all information related to the System, including but not limited to its features, functionality, design, and user interface. I understand that the System contains proprietary and confidential information of Optimantra, Inc. and that I am not authorized to disclose, reproduce, or distribute any such information. I agree that session recordings and observations from this session may be used solely for internal product development and ONC certification purposes. Participant Signature: _____ Date: _____ Printed Name: _____ Participant Code: P_____

Appendix D — System Usability Scale (SUS) Questionnaire

Participants completed the 10-item SUS questionnaire. Responses use a 5-point Likert scale: 1 = Strongly Disagree, 5 = Strongly Agree.

P#	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	SUS	Rating
P001	5	1	5	2	4	1	4	1	5	4	85	Excellent
P002	5	1	5	1	5	1	5	1	5	5	90	Excellent
P003	5	1	5	2	5	1	5	1	5	5	87.5	Excellent
P004	5	1	4	2	5	1	5	1	5	4	87.5	Excellent
P005	5	1	5	1	5	1	5	1	5	5	90	Excellent
P006	5	1	5	2	5	1	5	1	5	5	87.5	Excellent
P007	5	1	5	1	5	1	4	1	5	5	87.5	Excellent
P008	5	1	5	2	5	1	5	1	5	5	87.5	Excellent
P009	4	1	5	2	4	1	5	1	5	5	82.5	Excellent
P010	5	1	5	2	4	1	5	1	5	5	85	Excellent
P011	5	1	5	2	5	1	5	1	5	5	87.5	Excellent
P012	5	1	4	2	5	1	5	1	5	5	85	Excellent
P013	5	1	5	1	5	1	4	1	5	5	87.5	Excellent
P014	5	1	5	2	4	1	5	1	5	5	85	Excellent
P015	5	1	5	1	4	1	5	1	5	5	87.5	Excellent
P016	5	1	5	2	5	1	5	1	5	4	90	Excellent
P017	5	1	4	2	5	1	5	1	5	5	85	Excellent
P018	5	1	5	1	5	1	4	1	5	5	87.5	Excellent
P019	5	1	5	2	5	1	5	1	5	5	87.5	Excellent
P020	5	1	5	1	4	1	4	1	5	5	85	Excellent
Mean	**4.95**	**1.00**	**4.85**	**1.65**	**4.70**	**1.00**	**4.75**	**1.00**	**5.00**	**4.85**	**86.88**	**Excellent**

SUS Scoring: For odd-numbered items (1,3,5,7,9): score = (response − 1). For even-numbered items (2,4,6,8,10): score = (5 − response). Sum all 10 converted scores and multiply by 2.5 to obtain the SUS score (0–100). Score ≥ 68 = above-average usability; ≥ 80.3 = "Excellent" (Bangor et al., 2008).

SUS item text (for reference):

#	Statement	Scale

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

Appendix E — Informed Consent Form

The following consent form was provided to each participant prior to the test session.

INFORMED CONSENT FOR USABILITY RESEARCH
Study: OptiMantra EHR Usability Testing — ONC §170.315(g)(3) SED You are being asked to participate in a research study conducted by Optimantra, Inc. to evaluate the usability of the OptiMantra EHR system. Your participation is voluntary and you may withdraw at any time without penalty. What you will do: • Complete 18 clinical scenario tasks using the OptiMantra EHR in a test environment (no real patient data) • Think aloud during tasks and complete a satisfaction questionnaire afterward • Allow screen and audio recording of your session (recordings will be used only for internal analysis and ONC certification submission) Data use: All data collected is confidential. You will be identified only by a participant code (P001, P002, etc.) in any reports. No PHI or personal clinical data will be used. I consent to participate in this study and to have my session recorded for analysis purposes. Signature: _____ Date: _____ Printed Name: _____ Participant Code: P_____

Appendix F — Participant Screener

The following screener was used during participant recruitment. Candidates were disqualified if they did not meet all inclusion criteria.

#	Screening Question	Qualifying Answer
1	Are you a currently licensed healthcare provider or credentialed medical assistant (MD, DO, NP, PA, RN, DC, ND, MA, or equivalent)?	Yes

2	Do you use an electronic health record (EHR) system in your clinical practice at least 10 hours per week?	Yes
3	Are you currently employed by or under contract with Optimantra, Inc. or any affiliated entity (outside of normal customer use)?	No
4	Do you have any uncorrected visual impairment that would prevent you from reading standard 12pt text on a computer screen?	No
5	What is your primary clinical role?	ND /MA
6	How many years have you been using EHR systems in your clinical practice?	Recorded for demographics

Appendix G — Participant Incentives

Each participant received a thank-you honorarium in the form of a $50 Amazon gift card. Gift cards were distributed within 5 business days of session completion.

P#	Role	Session Date	Incentive Type	Amount	Status
P001	ND	04/09/2026	Amazon gift card (electronic)	$50	Delivered
P002	ND	04/14/2026	Amazon gift card (electronic)	$50	Delivered
P003	ND	03/15/2026	Amazon gift card (electronic)	$50	Delivered
P004	ND	03/16/2026	Amazon gift card (electronic)	$50	Delivered
P005	ND	03/16/2026	Amazon gift card (electronic)	$50	Delivered
P006	ND	03/16/2026	Amazon gift card (electronic)	$50	Delivered
P007	ND	03/17/2026	Amazon gift card (electronic)	$50	Delivered
P008	ND	03/17/2026	Amazon gift card (electronic)	$50	Delivered
P009	ND	03/24/2026	Amazon gift card (electronic)	$50	Delivered
P010	ND	03/25/2026	Amazon gift card (electronic)	$50	Delivered
P011	MA	03/17/2026	Amazon gift card (electronic)	$50	Delivered

P012	MA	03/18/2026	Amazon gift card (electronic)	$50	Delivered
P013	MA	03/14/2026	Amazon gift card (electronic)	$50	Delivered
P014	MA	04/06/2026	Amazon gift card (electronic)	$50	Delivered
P015	MA	04/13/2026	Amazon gift card (electronic)	$50	Delivered
P016	MA	04/06/2026	Amazon gift card (electronic)	$50	Delivered
P017	MA	04/07/2026	Amazon gift card (electronic)	$50	Delivered
P018	MA	04/07/2026	Amazon gift card (electronic)	$50	Delivered
P019	MA	04/03/2026	Amazon gift card (electronic)	$50	Delivered
P020	MA	04/08/2026	Amazon gift card (electronic)	$50	Delivered