

Healthcare Marketing Research & Insights Case Study

COVID-19 Care Navigation and EMR/EHR Clinician-Workflow Research

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ABSTRACT

This case study documents a twelve-week, mixed-methods research program examining how patients seek local COVID-19 care and health information, and, in a companion study, how physicians navigate the electronic health record (EMR/EHR) during clinical documentation. Evidence was drawn from a survey of 122 respondents, nine in-depth interviews, iterative usability and RITE testing, competitive analysis, and supervised contextual inquiry with clinicians at a Dearborn, Michigan hospital. Findings identified information architecture and findability as the primary drivers of user confusion in the patient-facing tool, and clinical-documentation friction as the principal source of provider burden in the EMR/EHR. Research-informed design and workflow recommendations produced a twenty-three percent lift in user satisfaction and a prioritized set of workflow-efficiency opportunities for clinicians. The study is presented here in a format suitable for healthcare marketing and consumer digital innovation stakeholders, and closes with a proposed measurement framework to convert one-time findings into an ongoing insights practice.

1. PROBLEM AND OPPORTUNITY

During the COVID-19 pandemic, individuals seeking health information and services faced meaningful barriers to timely, accurate, and localized guidance on testing, treatment, and prevention — barriers with the potential to delay care and increase health risk. A competitive review indicated that existing consumer applications offered breadth of information but lacked map-based, real-time local awareness. The opportunity was to develop a trustworthy digital tool capable of recommending nearby clinics and hospitals and surfacing credible local guidance, thereby reducing time-to-care and improving patient confidence in the information presented.

2. RESEARCH OBJECTIVES

- Identify barriers that prevent patients from locating accurate, local COVID-19 information and care.
- Determine how to streamline access to nearby testing and treatment facilities.
- Evaluate which product features and information structures best support informed patient decision-making.
- Understand, in a companion clinical study, how physicians interact with the EMR/EHR and where documentation workflows create friction.

3. METHODS AND DATA SOURCES

The study employed a mixed-methods design combining generative and evaluative research. Data sources are summarized in Table 1.

TABLE 1. RESEARCH METHODS AND EVIDENCE BASE

METHOD	SAMPLE	PURPOSE
Survey	n = 122	Establish baseline needs, information-seeking behavior, and provider-selection preferences.
In-depth interviews	n = 9 (7 aged 20s; 2 aged 50s)	Explore mental models, trust signals, and decision drivers when locating care.
Usability testing	Iterative rounds	Evaluate task success and comprehension of the prototype.
RITE testing	Iterative rounds	Rapidly iterate on interface changes between sessions.
Competitive analysis	Peer applications	Identify market gaps and points of differentiation.
Contextual inquiry	Physicians, Dearborn MI hospital	Observe EMR/EHR use in clinical setting; supervised PHI exposure.

All research was conducted under academic supervision. Clinical fieldwork was conducted with clinician oversight and attention to patient privacy.

4. KEY FINDINGS

1. **Information architecture was the principal barrier to patient decision-making.** Iterative usability and RITE testing demonstrated that users could not reliably determine which providers the tool was recommending — the central decision the product existed to support.
2. **The map interface, though central to the value proposition, was insufficiently discoverable.** Users rarely scrolled far enough to encounter it during initial sessions.
3. **Labeling and terminology introduced misinterpretation.** Several terms carried unintended meaning for participants and shaped how they evaluated care options.
4. **Interaction affordances were unclear.** Drag-and-drop behavior was not visually evident, which interrupted task completion.
5. **Competitive gap presented a clear differentiation opportunity.** Peer applications provided extensive information but did not integrate map-based, real-time local awareness — the primary unmet need surfaced by patients.

5. RECOMMENDATIONS AND OUTCOMES

Findings were translated into design and workflow recommendations, summarized in Table 2. The cumulative impact of the research-informed redesign was a twenty-three percent improvement in reported user satisfaction.

TABLE 2. INSIGHT, RECOMMENDATION, AND OBSERVED OUTCOME

INSIGHT	RECOMMENDATION	OUTCOME
Users could not identify recommended providers.	Visually distinguish recommendations; add persistent home and back navigation.	Validated in RITE re-testing; reduced confusion.
The map was discovered too late in the session.	Surface the real-time map tracker above the fold.	Improved discovery of the core value

		proposition.
Terminology was misread.	Rewrite copy against users' mental models.	Clearer comprehension in follow-up testing.
Weak interaction affordances.	Make interactions explicit and visually discoverable.	Smoother task completion.

6. COMPANION STUDY: EMR/EHR CLINICIAN WORKFLOW

A companion contextual inquiry was conducted with physicians at a hospital in Dearborn, Michigan, with supervised protected health information (PHI) exposure. The objective was to observe how clinicians work within the electronic health record during patient documentation and to identify sources of friction. Observations were synthesized into prioritized recommendations intended to streamline clinical documentation and reduce provider burden. Fieldwork adhered to the supervising clinician's protocols and preserved patient privacy.

7. PROPOSED MEASUREMENT FRAMEWORK

To translate these one-time findings into an ongoing insights and measurement practice suitable for marketing and consumer digital innovation stakeholders, the following instrumentation is proposed:

- **Usability KPIs.** Task success rate and time-to-locate-care as leading indicators of the tool's functional effectiveness.
- **Funnel analysis.** Drop-off across search, provider view, and contact steps to identify optimization opportunities.
- **Satisfaction and loyalty measures.** Customer satisfaction (CSAT) and Net Promoter Score (NPS) tracked over time, with significance testing on pre- and post-change comparisons.
- **Source and channel attribution.** Analysis of how patients arrive at the tool, informing channel investment.
- **Executive reporting.** Consolidation of the above into a recurring dashboard for marketing and product leadership, supporting continuous improvement.

8. CONCLUSION

Rigorous mixed-methods research surfaced actionable, quantified findings for both patients seeking local care and clinicians working within the EMR/EHR. The recommendations delivered a measurable improvement in patient-facing satisfaction and a defensible set of workflow priorities for the clinical setting. Extending the study through the proposed measurement framework would convert these results into an ongoing analytics practice suitable for a healthcare marketing and consumer digital innovation team.