THE ROLE OF EHRS IN LONG-TERM ORGANIZATIONAL SUSTAINABILITY

HiMS Health **Information** Management Systems

SUSTAINABILITY

has many meanings. And for us, it's not just a buzzword. At HiMS, we think of sustainability as a particular condition we want to help integrated health care organizations to achieve. Specifically, we want our customers to deliver superior patient outcomes, optimize business performance, and keep their employees fresh and engaged, all for the foreseeable future.

To that end, we create EHR software that empowers every employee of an integrated health care organization to perform at their highest potential. This software captures and synthesizes the best, most accurate, and most timely data about clients, care, and finance to drive intelligent decisions and superior results.

Key activities include setting appointments, empowering patients, capturing important diagnostic information, preparing clinicians for their critical activities, increasing revenue, generating profit, supporting regulatory compliance, and providing regular insights at every level of the org chart. An EHR that enables organizational sustainability also exports and aggregates data across diverse populations for quality-based contracting and HEDIS reporting. While doing all this, the software not only stays out of the user's way, but exponentially raises productivity beyond that achievable by any other means, including competing EHRs.

Inferior EHR technology, on the other hand, has a decidedly negative impact on end users. It leads to clinician burnout and inferior patient outcomes. At HiMS, we've thought deeply about health care workers' interactions with EHR technology. We've observed and interviewed hundreds of users at work in our mission to make our solution useful. A truly useful solution improves morale, which is essential to a high-performing organization.

BURNOUT IS THE OPPOSITE OF SUSTAINABILITY

Specifically, an EHR detracts from the goal of sustainability when it distracts clinicians from their patients. Forms and screens hoard providers' attention throughout the entire patient encounter. Clinicians then spend hours during and after shifts typing, typing, and typing some more to document the gist of what they heard from their patients that day. Despite all that work, clinicians must later dig for patient histories while the patient waits alone in an exam room.

The surgeon general cites lack of human-centered technology as one cause of clinician burnout. "For every hour of direct patient care, physicians currently spend two hours on the Electronic Health Record (EHR) system," his report says. "Nurses spend up to 41% of their time on EHRs and documentation."

Technology promoting sustainability is anti-burnout. It's good for the patient, the organization, and for users. The provider experiences the benefits for the long term.

"With technological innovation, your company can form a sustainable competitive advantage that can help cement your place as a segment or industry leader," writes software developer Ilya Lipovich. That's what we want for our customers.

OpenMinds, a national health care market intelligence firm, says organizations can build a sustainable advantage by focusing on their purpose, values, and strengths. At HiMS, we do that on behalf of our customers. Our purpose is helping improve human health. Our values include the quality of our work and measurable outcomes. Our strengths include technological innovation.

Sustainability in this context starts with UI design, is supported by automation, and is continually improved by analytics, artificial intelligence, and machine learning.

THE IMPACT OF UX AND USABILITY

As we've mentioned in the past, EHRs are ubiquitous because they're useful, at least hypothetically. Usability varies, and the entire user experience – exhilarating or infuriating – makes all the difference. It helps to understand how EHRs got here.

"Many EHR products were designed with billing, payer requirements, and meaningful use criteria in mind rather than clinician use, resulting in a user experience laden with data entry that causes decreased productivity and efficiency, and a diminished patient-physician relationship," researchers wrote in the Journal of the American Medical informatics Association in 2019. That critique still holds true.

Many clinicians find their EHR virtually useless for checking patient histories, deciphering other clinicians' notes, prescribing medication or lab orders, and sharing information with peers. They are forced to carry out these tasks in a rigid, ponderous user interface that demands too much scrolling, clicking, page-switching, and toggling.

To address this problem, we've invested thousands of hours studying how clinicians, psychiatrists, psychologists, assistants, and office staff do their jobs. We've arrived at the conviction that one EHR isn't enough. Every role, if not every user, needs his or her own EHR version. To address this need, we've made our Axiom EHR software configurable and customizable by role.

From a clinical billing clerk to an integrated health system CFO, an Axiom user will be able make the EHR his or her customized application by intuitively arranging functions, features, apps, etc., putting them where they like, hiding the ones they don't need, and driving all of it by voice command if they wish. Not handy with technology? Our Customer Success team can assist. Axiom becomes your own personalized workflow and your own uniquely configured EHR.

THE AI-ENHANCED FUTURE OF EHR SOFTWARE IS ALREADY HERE

With Axiom, priorities for each user appear automatically on a welcome page and dashboard, including the day's meetings, patients, cases, pending lab results, etc. It's a to-do list you don't have to maintain yourself.

Core processes can be mixed, matched, and moved around the interface to reflect the user's role and the individual's preference. Most users can view the majority of their daily activity on one synthesized screen.

You can also access and review an individual patient's integrated health care history this way as well. One simple example of this capability is when a clinician or psychiatrist wants a full picture of a patient's prescriptions for both physical and behavioral health purposes along with the individual's history, pending refills, stops, and starts, all at a glance. Axiom presents this information in one intuitive screen.

These are just some of the ways we've reduced EHR click burden by designing our technology around patient centricity, clinician-driven design, voice-driven integration, and unprecedented support of quality-based care.

Another example of automation is our data-driven 3D map of customers' in-patient facilities, a way for clinicians and administrators to quickly see in graphical form how full a care facility is, who is in each room, how that patient's care is proceeding, and when they might be discharged, etc. Users have grid, card, and map views of these facilities.

With Axiom, any process can be automated. The user can click to convert any common process that entails lots of text, scrolling, toggling, or clicking into a one-click "macro" process. For example, an administrative staffer can create an intelligent automation macro to design a daily report, populate it with the relevant data, save it to a file, email it to a recipient list, and repeat the process every weekday at 9 a.m. Similarly, Axiom integrates robotic process automation throughout forms, claims, and revenue-cycle management operations.

HOW AI AND MACHINE LEARNING ARE CHANGING THE WAY WE WORK

Artificial intelligence is another way Axiom enhances the user experience and automates processes throughout.

One example is our software's listening skills. Axiom and its mobile app, AxiaGram, capture patient-provider conversation and use AI to extract the important information that pertains to the discussion. The software puts the information where it needs to go to in the clinical record, standardizing terms, identifying themes, and analyzing sentiment. The system learns and adapts along the way, optionally offering (but never imposing) potential diagnoses.

A provider at the University of Michigan Health-West estimated that AI helped reduce the time spent with patients typing and clicking from 75 percent to 25 percent.

AI is at least as powerful on the revenue-cycle management side of the EHR. It tackles problems like under-coding, under-documentation, contract management, overbilling, missed claims appeal opportunities, and blind spots (e.g., gaps in records of patients receiving both primary and behavioral health care).

GOOD CHOICES PAY OFF

In a rapidly changing health care environment, developing a sustainable organization is a considerable challenge. But you can increase your chances of success by making strategic technology choices that give you valuable insights on your current activities, and that help you rapidly adapt to changing conditions. Among those important choices is a technology partner committed to data-driven decision making, and who shares your values, vision, and commitment to care. Start with us.