

Friend or Foe? Helping Health Care Leadership Reimagine a Healthy EHR Relationship

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We invite you to consider the following scenario. The year is 2025. Clinical staff and physicians at your clinic are singing the praises of the electronic health record (EHR). Relationships between patient-facing staff and information technology (IT) have never been warmer; communication has never been crisper. A sense of optimism displaces a zeitgeist of burnout and powerlessness. Does it seem impossible? Maybe. But it could be our future.

Spurred by the 2009 Health Information Technology for Economic and Clinical Health (HITECH) Act, over 96% of hospitals in America have adopted an EHR,¹ driving a spate of hospital IT spending between 2007 and 2015 that outpaced the growth in overall health care spending.² Hospitals routinely spend 5% to 10% of revenue on information technology and recent estimates project that hospital EHR spending will reach nearly \$10 billion by 2024.³ Despite this considerable financial investment in technology, hospitals often confront a grim reality—EHRs are among the leading causes of clinical staff and physician burnout and misery.⁴ Furthermore, there is evidence, highlighted by Shanafelt et al, that suggests a dose dependence between EHR usability and physician burnout.⁵ It is a tired cliché for clinicians to despondently remark that EHRs are for billing and not patient care.

Considering these challenges, the work by Franks et al is crucial, showing a light at the end of the tunnel and offering hospitals a map to find it.⁶ With only 4 one-hour meetings, the authors describe a process by which 8 interdisciplinary teams generated over 120 recommendations that were able to be actioned over the project timeline.⁶ Critically, as the authors themselves note, nearly 80% of their optimization recommendations did not require IT investment and 35% involved purely non-technical workarounds.⁶ Put differently, over 65% of optimizations could be delivered by modifying

the existing EHR to meet clinical needs.⁶ Most shockingly, almost one-half (44%) of optimizations required no technical investment at all but rather education about existing technology.⁶ Finally, as Frank and colleagues underscored, these optimizations were designed and rolled out solely at a departmental level, without broader organizational buy-in or workflow interruption.⁶

While we are optimistic about these findings, there are several caveats. First, the authors' optimization work was influenced by the COVID-19 pandemic, potentially minimizing the impact of their interventions. Second, these optimizations were developed only 9 months after the institutional EHR "go-live" date. It is uncertain whether similar optimizations can be easily achieved in institutions with a longer EHR history. Finally, this work was limited to the Department of Family Medicine; it would be valuable to expand it to other departments, including those with a more inpatient focus.

Caveats notwithstanding, these findings should motivate broader reflections for hospital leadership. Physicians spend a decade becoming proficient in biologic systems, yet the presumption is that technological systems do not merit dedicated training programs. This has consequences: physicians who self-report receiving poor training are over 3.5 times more likely to report that their EHR does not enable them to deliver quality care.⁷ Innovative training programs, like peer-led ones at Kaiser Permanente, not only bolster physician confidence in their technology but give them back 40 minutes per day.⁸ At the same time, the custom embedded in our culture of accepting suffering at the hands of EHRs as inevitable must change. Although criticisms of the leading EHR vendors' limitations and clunkiness are well founded—when did you last have to read a manual for how to use your cell phone?—Franks et al shows us that many limitations are because of the end user, not the platform. These should be addressed in parallel to continued pressure for EHR vendors to invest in product usability.

Many clinicians may understandably scoff at the idea that an EHR can serve patients; they want to treat patients, not the medical record. Few have used a system that was fully integrated across health care, intuitive, and optimized for their workflows. Yet precedent for such a system exists in health care: at the Veterans Affairs (VA). Despite being one

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of the oldest EHRs, the VA's VistA system has frequently been the top-rated EHR by users,⁹ recognized for enabling quality care.¹⁰ In the words of one user, the reason is simple: "VistA was built by the VA for the people who use it."¹¹ A re-imagined modern EHR could enable us to better connect to our patients when and where most convenient for them (eg, asynchronously), help us synthesize the volumes of data that clinicians drown in, and create closed-loop integrations with organizations that can address the broader social determinants of health of entire communities. It could help heal rather than harm the patient-doctor relationship and enable a shift from spending time wrangling data and checkboxes and back to patient-centered care.

Creating this ecosystem is daunting, but health care needn't invent best practices for implementing technology. There are very clear industry analogues to EHRs in the form of Customer Relationship Management (CRM) databases like Salesforce and HubSpot, which serve similar purposes in terms of tracking people, data, and workflows. The non-health care industry is full of wisdom on what enables a successful technical implementation, including involving the users who will actually use the technology from the beginning, providing high quality training, and hiring experienced support. Unfortunately, the health care industry remains resistant to these lessons. As Franks et al observe, many of the optimizations devised over the course of the study could have been designed before implementation had there been better collaboration between EHR designers and clinical users.⁶

A critical need exists for a workforce fluent in both clinical medicine and technology, capable of understanding clinical needs and effectively communicating them to IT staff. The closest current roles are the so-called EHR "superusers." Although valuable, "superusers" are limited in number, may lack local clinical context, and are costly hires in a tight job market. Moreover, they are often only trained to offer reactive, tactical fixes—they are not empowered organizationally to take ownership of the broader quality of EHR implementation and often lack the deeper technical skills to think through the full technical design and end-to-end workflows of all stakeholders simultaneously. In non-health care technology-enabled companies, heads of product and engineering tackle these deeper questions and are supported by product managers and business analysts. These roles are all conspicuously absent at most health care systems. Hospitals should not rely solely on external hires to close the gap—health care systems that find ways to develop existing staff, democratize access to change making and data, and create technology-friendly cultures will be the future homes of the best talent, clinical care, and research.

Health care systems must undergo a radical shift in their approach to technology. Similar to retail, finance, and airline sectors, health care will inevitably be transformed by technology in the coming decades. Embracing change requires moving beyond viewing technology as a minor secondary competency and reimagining institutions as both clinical and technology organizations, necessitating substantial investment. Committing to this transformation and implementing an organizational strategy to realize this vision will be no small feat, but, on the other end of it, there may be both more light and fewer clicks for all.



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