

Uplifting Primary Care Through the Electronic Health Record

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The electronic health record (EHR) system is now an integral part of primary care practice and is an important facilitator of high-quality health care.^{1,2} We highlight 4 papers in this issue that allow us to understand the current state of EHR use, identify unmet needs, provide evidence on their potential to uplift clinical practice and research, and their future potential to improve patient outcomes and address the perpetual problem of the “forgetful health system”.³⁻⁶

Although numerous studies have focused on assessing clinician experience with their EHR systems, few have in parallel obtained the patient’s perspective. Meltzer et al,³ in a survey of health practitioners and their patients from 2 primary care sites, finds discrepancies in experience and attitudes regarding EHR use between patient and clinician. Clinicians provide a poorer self-assessment of patient experience compared with the patients themselves. For example, 53.5% of practitioners report listening less due to EHR use, whereas 97% of patients find practitioners listened carefully. Another finding to reflect on from this survey is that spending more than 2 out-of-office hours per week working in the EHR is associated with increased burnout. The study also highlights the need to improve EHR user experience, including innovations to reduce documentation burden via voice recognition, predictive reporting/logging, artificial intelligence, and other emerging technologies.

In a survey of over 4,500 clinicians, Timmins et al⁴ find that in a substantial number of practices primary and secondary care continue to operate in silos. The study finds in a more motivated group of primary care clinicians, over 20% of clinicians seldom/never send clinical information to specialists and 35% seldom/never receive useful information from specialists. This communication gap that stands in a background of growing complexity in disease presentations and management is concerning. It is a symptom of what I refer to as a “forgetful health system” where patients need to repeat their medical resumes each visit and clinicians need to re-enter the

same detail recorded in other systems resulting in inefficiencies, reducing safety, and promoting burnout. Developing single national EHR systems such as in Iceland, or mandating interoperability throughout the health system as done by the US Center for Medicare and Medicaid Services are a few possible solutions to facilitate ease in sharing of health records among clinicians.⁷

Another study in this issue by Cohen et al⁵ assesses the usability of an EHR-integrated home blood pressure visualization tool and provides evidence of the benefits of having out-of-office health monitoring data link to EHR systems. Through use of video recording, the study shows that such tools can be timesavers in patients with controlled disease, giving clinicians and patients time to discuss other health concerns. This encouraging result is especially timely with the rise of wearables and consumer health technologies.⁹ Also, rising digital health literacy including in the elderly, driven by the COVID-19 pandemic, means that having reliable out-of-office patient data becomes more possible than ever, facilitating more data-driven personalized medicine. At the same time, as the study alludes to, both clinicians and patients need to be more prepared before the consult to realize this benefit.

Beyond clinical practice, EHR can facilitate more effective primary care research. Bunce et al⁶ present practical tips on developing an EHR-embedded card study from scratch that allows responses to be linked with EHR data automatically when required. This was shown to improve response rates and data quality. This study demonstrates that by leveraging EHRs, primary care can reduce the burden on users to partake in research and facilitate more higher-quality primary care research at scale.

Health care is rapidly changing and going digital. Studies in this issue highlight the many benefits change can bring, from increasing patient engagement in their own care to improving the quality of much needed primary care research. However, we need to be able to measure these benefits through fit-for-purpose metrics in order to motivate practices to adopt them and measure any possible unintended consequences on health equity, wellbeing of users, and those with lower technological literacy and socioeconomic status. Broadly, these metrics include those measuring EHR user experience and clinician burden from digital technologies, interoperability across the health system, interoperability of consumer wearables and at home devices with clinical software, and quality of multidisciplinary communication and

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handovers between clinicians. Examples of metrics include the number of out-of-office hours per week spent in the EHR (used in Meltzer et al study³) and number of electronic referrals with complete resumes/medical records. In time, best practice goals for these metrics can be determined and linked to reimbursement and other rewards to accelerate achievement of the above benefits to clinicians, patients, and the health system.



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Manuscripts with the potential to change how clinicians practice medicine are particularly welcome. Topics should relate to care of patients in the primary care setting. Specific topics may include—but are not limited to—abortion, transgender sexual and reproductive health, the impact of the COVID pandemic and telemedicine, counseling, policy, and advances or innovations in clinical practice around sexual and reproductive health. Manuscripts should specifically state how findings might apply to or change practice. [Submit your manuscript](#) soon for consideration.