CLINICS

READERS OPINION

Medical information technologies can increase quality and reduce costs

Sigfrido Burgos

University of South Alabama, College of Medicine, Mobile/AL, USA.

Email: sigfridoburgos@southalabama.edu
Tel.: 001 251 414-8143

Patients and healthcare providers are continually exposed to a healthcare system powered by medical information technologies. One of the first technologies showing promise is electronic health records (EHRs). Basic and advanced EHR systems facilitate access to essential clinical information, such as patient demographic characteristics, patient-physician encounters, laboratory and imaging results, and physicians' notes, and allow the computerized provider-order entry of medications, which checks orders against patient information to flag potential allergic reactions, dosage errors, and drug interactions. Additionally, evolving functionalities allow for the entry of laboratory test orders and nursing orders as well as clinical-decision support, including information about relevant clinical practice guidelines, clinical reminders, and guidance and safety alerts. However, EHRs go beyond documentation because they encompass coding functions, the ability to create and export invoices, the automated creation of consultation and patient letters, electronic prescribing, and task tracking, all of which translate into greater money and time savings for patients and providers (1-3).

Today, many EHR systems allow for electronic communications among providers within the same organization, while others allow for secure messaging between healthcare providers and patients. These patient-provider communications vary from requests to refill prescriptions to reports of symptoms requiring prompt medical assessment. In some instances, systems maintained by different entities share information about patients through health information exchange networks. Healthcare providers adopting EHRs have reported improvements in the quality of care they provide. In fact, as momentum gathers, the creation of unique EHR-related national patient-safety goals may provide a renewed push for patient-safety initiatives in a technology-enabled healthcare system (4).

EHRs hold considerable promise to potentially reduce injuries by preventing harmful medical errors and mitigate malpractice claims. Modern telecommunications between a physician and a patient are often sufficient to establish the relationship necessary for post-consultation feedback. Additionally, messaging systems may help to prevent medical errors and adverse events by allowing patients to easily vocalize clinically significant concerns that they do not believe warrant a hospital visit (5).

As the use of EHRs grows, it stands to reason that failure to adopt a functional EHR system may constitute a deviation from the standard of patient care. This standard is normally defined by reference to what is customary among physicians in the same specialty in similar settings. Once a critical mass of healthcare providers adopts EHRs, others may need to follow. This rationalization assumes that the cost-benefit calculus of adopting medical information technologies is reasonable, so that harm and injuries are prevented at an efficient cost.

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