VIEWPOINTS

Health Information Technology: Are We Aware and Engaged?

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A panel program at the 2012 American Society of Health-System Pharmacists (ASHP) Midyear Clinical Meeting in Las Vegas explored potential threats and opportunities facing pharmacists because of the growing use of health information technology (HIT). The session, titled “Replaced by Technology: Could the EMR Materially Reduce the Role of the Pharmacist?” focused specifically on the potential impact of the electronic medical record (EMR), but the discussion following the presentation expanded to other commonly encountered information technologies. In general, attendees’ comments and questions suggested that emerging health information technology presented considerable opportunities to improve the medication use process. Comments and questions also suggested uncertainty and even some concern on how the pharmacist’s role might change with increased adoption of health information technology.

Most of the driving force behind EMR adoption in the United States is coming from the federal government. More specifically, in his 2004 State of the Union Address, then-President George W. Bush stated, “By computerizing health records, we can avoid dangerous medical mistakes, reduce costs, and improve care.”¹ He subsequently created the Office of the National Coordinator for Health Information Technology (ONC) to oversee the nation’s efforts. President Obama continued the effort, allocating over \$30 billion of the American Recovery and Reinvestment Act (ARRA) of 2009 to support implementation of health information technology. Primary domains of the ONC’s efforts include: (1) technical standards to enable information exchange, (2) ensuring privacy and security, (3) fostering physician and hospital adoption and implementation of health information technology, (4) ensuring health information technology supports improved patient care and outcomes, and (5) providing reimbursement to eligible providers and hospitals who implement health information technology.

The term health information technology is a broad term that includes the following systems among others: electronic prescribing, barcode medication administration, electronic medication administration records, automated dispensing and robotics, and electronic patient records. In reality, the vast majority of the ONC’s efforts

and ARRA’s focus is on electronic medical records, a term used interchangeably with the term electronic health records (EHRs). I distinguish between the 2 as follows: the EMR is owned by a provider or healthcare institution and contains information about the care delivered at that site, while the EHR includes a patient’s healthcare information stored in multiple EMRs.

The reality is that the EMR is an emerging technology. No one truly knows how it will impact pharmacy practice. This uncertainty is a plausible explanation for the concern expressed at the ASHP meeting. This uncertainty, however, should not dissuade us from being engaged in efforts to shape the future role of health information technology in pharmacy practice. In fact, health information technology was identified by our pharmacy colleagues as a core pillar to create the optimal pharmacy practice model.² Attendees at this consensus conference indicated that improvements in technology will be required for optimal use of pharmacy resources, including personnel. While this practice model initiative focuses on health system practice, the emerging role of health information technology in the community is also clearly evident.

The Pharmacy e-HIT Collaborative (www.pharmacyhit.org) was formed by 9 pharmacy organizations to articulate and advocate for the pharmacist’s ability to collaboratively contribute to the emerging health information technology infrastructure. The Collaborative’s position is that patient outcomes will be improved if pharmacists are able to access and contribute to the EMR, informing other providers of pharmacists’ patient care activities, and allowing pharmacists full access to the patient’s record. A review of the Collaborative’s *Roadmap for Pharmacy Health Information Technology Integration in US Health Care* reveals a theme of the role of community pharmacists as “bridging the gap between doctor and patient,” especially in those instances where a patient sees multiple specialists.³ For the majority of patients, we know the reality is that more of a patient’s care is delivered between acute care episodes rather than during acute care episodes. Therefore, it is evident that the emerging health information technology infrastructure should enable documentation of pharmacists’ contributions to care so other providers will have access. Additionally,

pharmacists should have full access to a patient's record, regardless of where care was received.

Pharmacy educators are living in a time of unprecedented advancements in how their students will use information technology in patient care. Clearly, the emerging role of health information technology should be guided by research that identifies its true impact on pharmacy practice and patient outcomes. Throughout, we must constantly recognize that technology is ultimately an amoral tool; how we use it determines whether it is "good" or "bad." The future pharmacists who pharmacy educators have in their classes are arguably more technologically savvy than graduates from just a few years ago. While pharmacy students are engaged in the use of Web 2.0 tools like Facebook and Twitter, they likely have not encountered health information technology beyond use of a pharmacy management system as a technician employed in a pharmacy. Pharmacy educators should equip students with core knowledge about

the health information technology they will encounter in practice. They should understand its role, benefits, and limitations as a tool to support their future practice as well as patient care. Through efforts in professional organizations, pharmacy educators should seize opportunities for research, policy development, education, and advocacy as it relates to health information technology.

References

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