

Are Electronic Medical Records a Cure for Health Care?

CASE STUDY

During a typical trip to the doctor, you'll often see shelves full of folders and papers devoted to the storage of medical records. Everytime you visit, your records are created or modified, and often duplicate copies are generated throughout the course of a visit to the doctor or a hospital. The majority of medical records are currently paper-based, making these records very difficult to access and share. It has been said that the U.S. health care industry is the world's most inefficient information enterprise.

Inefficiencies in medical record keeping are one reason why health care costs in the United States are the highest in the world. In 2012, health care costs reached \$2.8 trillion, representing 18 percent of the U.S. gross domestic product (GDP). Left unchecked, by 2037, health care costs will rise to 25 percent of GDP and consume approximately 40 percent of total federal spending. Since administrative costs and medical recordkeeping account for nearly 13 percent of U.S. health care spending, improving medical recordkeeping systems has been targeted as a major path to cost savings and even higher quality health care. Enter electronic medical record (EMR) systems.

An electronic medical record system contains all of a person's vital medical data, including personal information, a full medical history, test results, diagnoses, treatments, prescription medications, and the effect of those treatments. A physician would be able to immediately and directly access needed information from the EMR without having to pore through paper files. If the record holder went to the hospital, the records and results of any tests performed at that point would be immediately available online. Having a complete set of patient information at their fingertips would help physicians prevent prescription drug interactions and avoid redundant tests. By analyzing data extracted from electronic patient records, Southeast Texas Medical Associates in Beaumont, Texas, improved patient care, reduced complications, and slashed its hospital readmission rate by 22 percent in 2010.

Many experts believe that electronic records will reduce medical errors and improve care, create less paperwork, and provide quicker service, all of which will lead to dramatic savings in the future, as much as \$80 billion per year. The U.S. government's short-term goal is for all health care providers in

the United States to have EMR systems in place that meet a set of basic functional criteria by the year 2015. Its long-term goal is to have a fully functional nationwide electronic medical recordkeeping network. The consulting firm Accenture estimated that approximately 50 percent of U.S. hospitals are at risk of incurring penalties by 2015 for failing to meet federal requirements.

Evidence of EMR systems in use today suggests that these benefits are legitimate. But the challenges of setting up individual systems, let alone a nationwide system, are daunting. Many smaller medical practices are finding it difficult to afford the costs and time commitment to upgrading their recordkeeping systems. In 2011, 71 percent of physicians and 90 percent of hospitals in the United States were still using paper medical records. Less than 2 percent of U.S. hospitals had electronic medical record systems that were fully functional.

It's also unlikely that the many different types of EMR systems being developed and implemented right now will be compatible with one another in 2015 and beyond, jeopardizing the goal of a national system where all health care providers can share information. No nationwide software standards for organizing and exchanging medical information have been put in place. And there are many other smaller obstacles that health providers, health IT developers, and insurance companies will need to overcome for electronic health records to catch on nationally, including patients' privacy concerns, data quality issues, and resistance from health care workers.

Economic stimulus money provided by the American Recovery and Reinvestment Act was available to health care providers in two ways. First, \$2 billion was provided up front to hospitals and physicians to help set up electronic records. Another \$17 billion was available to reward providers that successfully implement electronic records by 2015. To qualify for these rewards, providers must demonstrate "meaningful use" of electronic health record systems. The bill defines this as the successful implementation of certified e-record products, the ability to write at least 40 percent of all prescriptions electronically, and the ability to exchange and report data to government health agencies.

But in addition to stimulus payments, the federal government plans to assess penalties on practices