

adjudication just like when you pay using a credit card, because claim data would be sent immediately and diagnostic and procedure code information are automatically entered.

VistA is far from the only option for doctors and hospitals starting the process of updating their records. Many health technology companies are eagerly awaiting the coming spike in demand for their EMR products and have developed a variety of different health record structures. Humana, Aetna, and other health insurance companies are helping to defray the cost of setting up EMR systems for some doctors and hospitals. Humana has teamed up with health IT company Athenahealth to subsidize EMR systems for approximately 100 primary care practices within Humana's network. Humana pays most of the bill and offers further rewards for practices meeting governmental performance standards. Aetna and IBM, on the other hand, have launched a cloud-based system that will pool patient records and can be licensed to doctors both inside and outside of Aetna.

There are two problems with the plethora of options available to health care providers. First, there are likely to be many issues with the sharing of medical data between different systems. While the majority of EMR systems are likely to satisfy the specified criteria of reporting data electronically to governmental agencies, they may not be able to report the same data to one another, a key requirement for a nationwide system. Many fledgling systems are designed using VistA as a guide, but many are not. Even if medical data are easily shared, it's another problem altogether for doctors to actually locate the information they need quickly and easily. Many EMR systems have no capacity to drill down for more specific data, forcing doctors to wade through large repositories of information they don't need to find the one piece of data that they do need. EMR vendors are developing search engine technology intended for use in medical records. Only after EMR systems become more widespread will the extent of the problems with data sharing and accessibility become clearer.

The second problem is that there is a potential conflict of interest for the insurance companies involved in the creation of health record systems. Insurers are often accused of seeking ways to avoid or delay paying health care claims.

While most insurers are adamant that only doctors and patients will be able to access data in these systems, many prospective patients are skeptical. A May 2012 survey conducted by Harris Interactive found that only 26 percent of U.S. adults wanted

their medical records converted from paper to electric. Most of those surveyed worried about the security of electronic records, the potential for misuse of personal information, and the inability of physicians to access patient records during a power or computer outage. Worries about privacy and security could affect the success of EMR systems and quality of care provided. One in eight Americans have skipped doctor visits or regular tests, asked a doctor to change a test result, or paid privately for a test, motivated mostly by privacy concerns. A poorly designed EMR network would amplify these concerns. Finally, evidence is mounting that electronic health records may be contributing to rising Medicare costs by making it easier for hospitals and physicians to bill for services that were not actually provided. Some electronic health record programs allow doctors to automatically cut and paste the same examination findings for multiple patients or bill for procedures that never took place. More controls and federal oversight are required to make electronic medical record systems produce the results that were originally intended.

Sources: Nicole Lewis, "Healthcare Cost Cutting Hinges on IT," *Information Week*, August 10, 2012; Reed Abelson, Julie Creswell, and Griffin J. Palmer, "Medicare Bills Rise as Records Turn Electronic," *The New York Times*, September 21, 2012; Neil Versel, "Consumers Still Wary of Electronic Health Records," *Information Week*, August 9, 2012; Ken Terry, "Docs May Overestimate EHR Capabilities," *Information Week Health Care*, August 2012; Steve Lohr, "Seeing Promise and Peril in Digital Records," *The New York Times*, July 17, 2011; Russ Britt, "Digital Health Push Woos Tech Firms, Pains Doctors, MarketWatch, June 2, 2011; Marianne Kolbasuk McGee, "Better Clinical Analytics Means Better Clinical Care," *Information Week*, May 21, 2011; Eric Engleman, "More Physicians Adopting Electronic Health Records, U.S. Reports," *Bloomberg News*, April 26, 2011; Jeff Goldman, "Implementing Electronic Health Records: Six Best Practices," *CIO Insight*, March 7, 2011; Robin Lloyd, "Electronic Health Records Face Human Hurdles More than Technological Ones," *Scientific American*, April 16, 2011; Katherine Gammon, "Connecting Electronic Medical Records," *Technology Review*, August 9, 2010; Tony Fisher and Joyce Montanari, "The Current State of Data in Health Care," *InformationManagement.com*, June 15, 2010; and Jacob Goldstein, "Can Technology Cure Health Care?," *The Wall Street Journal*, April 13, 2010.

CASE STUDY QUESTIONS

1. Identify and describe the problem in this case.
2. What management, organization, and technology factors are responsible for the difficulties in building electronic medical record systems? Explain your answer.
3. What is the business, political, and social impact of not digitizing medical records (for individual physicians, hospitals, insurers, patients, and the U.S. government)?
4. What are the business and social benefits of digitizing medical recordkeeping?
5. Are electronic medical record systems a good solution to the problem of rising health care costs in the United States? Explain your answer.