

Introduction to Electronic Health Records (EHRs)

Q: What is the typical functionality of an EHR?

A: The Institute of Medicine³ has identified eight core capabilities that EHRs should possess. They are as follows:

- Health information and data: Immediate access to key information, such as patients' diagnoses, allergies, lab test results, and medications, improves the ability for doctors and other health care providers to make sound clinical decisions in a timely manner.
- Result management: The ability for all doctors and other providers participating in the care of a patient in multiple settings to quickly access new and past test results would increase patient safety and the effectiveness of care.
- Order management: The ability to enter and store orders for prescriptions, tests, and other services in a computer-based system will enhance legibility, reduce duplication, and improve the speed with which orders are executed.
- Clinical decision support (CDS): Using reminders, prompts, and alerts, CDS would improve compliance with best clinical practices, ensure regular screenings and other preventive practices, identify possible drug interactions, facilitate diagnoses and treatments, and reduce the frequency of adverse events.
- Electronic Communication and Connectivity: Improved communication among doctors, providers and other partners, such as laboratory, pharmacy, and radiology professionals, can enhance patient safety and quality of care. Electronic communication tools, such as e-mail and web messaging, have been shown to be effective in facilitating communication both among providers and with patients, thus allowing for greater continuity of care.
- Patient support: Tools that give patients access to their personal health records and provide interactive patient education, will encourage greater involvement of patients in their own health care.
- Administrative processes: Computerized administrative tools, such as scheduling systems, would greatly improve practices' efficiency and provide more timely service to patients.
- Reporting: Electronic data storage that employs discreet data will enable health care organizations to respond more quickly to federal, state, and private reporting requirements, including those that support patient safety and monitor public health.

Q: Why should providers invest in an EHR?

A: Many medical practices and hospitals are making the move to EHRs. Storing health records electronically allows for quick retrieval of patient information by doctors, other providers and staff whenever and wherever necessary. EHRs are also an efficient tool for

³ "Key Capabilities of an Electronic Health Record System," Institute of Medicine Committee on Data Standards for Patient Safety: http://www.providersedge.com/ehdocs/ehr_articles/Key_Capabilities_of_an_EHR_System.pdf

searching, tracking and analyzing information. This is especially important in today's health care system, where care guidelines are multiplying, and patients are often on an ever-more complex care regimen. Furthermore, unlike paper records, EHRs are not bulky, do not take up costly space, and do not require labor-intensive methods to maintain, retrieve and file.

According to the [Medical Records Institute's Sixth Annual Survey of Electronic Health Record Trends and Usage](#), the following factors, in priority order, are driving the need for Electronic Health Records in medical practices:

1. Improve clinical processes or workflow efficiency
2. Improve quality of care
3. Improve clinical documentation to support appropriate billing service levels
4. Share patient information among health care practitioners and professionals
5. Reduce medical errors (improve patient safety)
6. Provide access to patient records at remote locations
7. Improve clinical data capture
8. Establish a more efficient and effective information infrastructure as a competitive advantage
9. Contain or reduce health care delivery costs
10. Meet the requirements of legal, regulatory, or accreditation standards
11. Facilitate clinical decision support

A survey in the *New England Journal of Medicine* found that a large majority of physicians using electronic records reported benefits to the quality of care:⁴

- 82% said they improved the quality of clinical decisions
- 86% said they helped in avoiding medication errors
- 85% said they improved the delivery of preventative care

Q: How many providers are using EHRs and other health IT tools in New York?

A: State-specific information is being gathered. National surveys indicate that only 4% of doctors have an extensive, fully functional electronic-records system, and 13% have a basic system. Only 1.5% of hospitals have a comprehensive electronic-records system, and 7.6% have a basic system.¹

⁴ Sources: DesRoches, CM, Campbell, EG, Rao, SR et al., "Electronic Health Records in Ambulatory Care — A National Survey of Physicians," *New England Journal of Medicine*, Volume 359:50-60, July 3, 2008.
Jha, AK, DesRoches, CM, Campbell, EG et al., "Use of Electronic Health Records in U.S. Hospitals," *New England Journal of Medicine*, Volume 360:1628-1638, July 3, 2009