eHealth Initiatives Improve Patient Care, Cut Costs

Disasters like Hurricane Katrina produced a number of difficult lessons, including insights about the importance of electronic medical records. Dealing with the painful aftermath of Katrina was even harder on people with medical challenges, since millions of paper medical records were lost forever in the storm. Without records to guide their treating physicians, people battling ongoing illnesses like cancer were unable to continue their radiation or chemotherapy until they underwent new diagnostic tests. Potentially lifesaving treatment was delayed until test results gave doctors the information they needed to restart treatment. One New Orleans resident who had nearly completed an arduous regimen of chemotherapy to treat breast cancer had to start the treatment all over again, as all her medical records had been lost in the hurricane.

Contrast this with the experience of a Tennessee man diagnosed with an aggressive form of cancer, who sought a second opinion from Memphis cancer specialists. Rather than immediately ordering a new battery of tests to confirm the diagnosis, his doctor logged on to the MidSouth eHealth Alliance, a health information exchange (HIE) that lets Memphis area hospitals share patient medical records. The doctor discovered that the requisite tests had already been performed and that the results were instantly available through the HIE’s electronic database. Using existing test results, he was able to quickly confirm the patient’s diagnosis without subjecting him to additional and unnecessary discomfort.

Financial Incentives for Healthcare Providers

For years experts have argued that the U.S. could offer better and more cost-effective health care if it could find a way to electronically aggregate patient records – often scattered in the far-flung file drawers and hard drives of family medical practices, specialists’ offices, clinics, pharmacies and hospitals – and make them readily available to healthcare providers everywhere. The technology is available, and now the federal government is offering healthcare providers lucrative financial incentives to create and share electronic medical records.

The American Reinvestment and Recovery Act (ARRA) established millions in stimulus dollars to improve healthcare quality and reduce costs. Physicians can earn from $44,000 to $64,000 over five years from Medicare and Medicaid if they adopt approved electronic health records systems by 2011, and hospitals can earn millions.

AT&T is at the forefront in helping healthcare providers to qualify for this stimulus funding by achieving the “meaningful use of technologies” outcomes required by ARRA – improving service quality, safety and efficiency and reducing health disparities; engaging patients and families; improving care coordination; improving public health; and ensuring adequate privacy and security protections for personal health information. AT&T has developed a modular and incremental approach to adopting health information technology that gives physicians and other providers access to best-of-breed applications, including ePrescribing, telemedicine, PACS images, lab results, radiology reports, and others. Our multi-vendor approach lets healthcare providers share information easily and securely to meet stringent HIPAA requirements.
**Faster Treatment, Lower Costs**

Physicians with access to electronic medical records can immediately view anyone’s medical history, enabling faster and more complete diagnoses. Making records available online reduces the time spent tracking down and sharing hard-copy medical records and eliminates the need for duplicative medical tests, which reduces healthcare costs. Health information exchanges help minimize costly mistakes, giving physicians all relevant information about a patient, including, for example, allergies to certain types of medicine.

Electronic medical records are becoming a vital part of patient care with the development of regional HIEs like the one used in Memphis. Dozens are springing up across the country, representing the leading edge of the growing eHealth movement, which seeks to use information technology to improve the quality and reduce the cost of health care.

It’s not just medical records that have become electronic. Another common eHealth initiative is ePrescribing, which lets physicians use the Internet and other online tools to create and sign prescriptions electronically. eHealth experts say ePrescribing can reduce medical errors, decrease pharmacy costs and increase efficiency, in part by giving prescribers real-time information about potential drug interactions and allergies and eliminating mistakes associated with the interpretation of handwritten prescriptions. ePrescribing reduces the need for phone calls between doctors and pharmacists and provides patients with safer care.

And telemedicine is a third eHealth tool that takes advantage of telecommunications technology to enable long-distance patient consultations and delivery of clinical diagnosis and other medical services. After the devastating earthquake in Haiti, physicians at the University of Miami’s temporary tent hospital in Port-au-Prince used teleconferencing and amateur radio transmissions to consult with specialists back in Miami and other U.S. locations as they treated thousands of earthquake victims. Even when there’s no disaster, telemedicine reduces the need for travel by patients and physicians, facilitates faster and more consistent treatment of injuries and illnesses, and allows some patients to be treated at home rather than in a hospital.

**States Take the Lead**

State governments are providing leadership in bringing to reality eHealth’s promise of broadly shared electronic medical records. As partners with the federal government in administering Medicaid and the State Children’s Health Insurance Program and as employers of millions, states are among the largest buyers of healthcare services in the country. Rising healthcare costs, which now consume over 17% of U.S. gross domestic product, have a direct impact on their budgets. “We have to be involved in this,” says Dave Goetz, commissioner of finance and administration for the state of Tennessee, who oversees its eHealth Advisory Council. “Making health care more effective and affordable is a worthwhile goal for us as a purchaser and as a government” Cara Campbell, a policy analyst for the National Governors Association’s Center for Best Practices notes, “States perceive health information exchanges to be the top priority for the next two years.”

Tennessee is among the leaders of the movement to create statewide HIEs. Tennessee Gov. Phil Bredesen made creating a statewide infrastructure to advance health information exchange a key component of his efforts to improve health care for Tennessee patients. In 2006, Gov. Bredesen issued Executive Order 35, creating the e-Health Advisory Council and leading to establishment of the Office of e-Health Initiatives. The e-Health Advisory Council immediately began working to facilitate and accelerate the adoption of health information technology and ePrescribing in Tennessee, with the goal of improving the quality, efficiency, safety and effectiveness of health care.

In 2007, the State negotiated a 10-year agreement with AT&T for the provision of its statewide production network, NetTN. NetTN provides a secure, statewide broadband infrastructure to hundreds of state agencies, local governments, and educational institutions in Tennessee. As part of the NetTN contract, Tennessee worked with AT&T to develop a secure private network for authorized clinicians called the Tennessee eHealth Network, the nation’s first statewide eHealth network.

The Tennessee eHealth Network offers high-speed broadband capabilities with security protocols and service performance levels guaranteed to clinicians at state-negotiated rates. The eHealth Network has been expanded to provide enhanced information services, including the ability to access state registries.

AT&T has long been at the forefront of eHealth, creating a cloud-based VPN-based portal for the network’s users; Covisint, a division of Compuware Corporation, worked with AT&T to provide a dual-factor, user-authentication protocol to further ensure the privacy and security of the system.

**A National Solution**

Ultimately, forward-thinking healthcare professionals and policymakers envision a day when Americans will be able to reap the benefits of a national HIE, and if governments do not make it happen, private enterprises might. AT&T is among the companies working on a solution. Healthcare Community Online from AT&T is a patented, cloud-based health information exchange and collaboration portal. The highly secure solution integrates patient data from various sources into a single patient view, providing real-time access to patient information and eHealth applications over the world’s most powerful...
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and advanced IP/Multiprotocol Label Switching (MPLS) network. It also provides secure access for caregivers to patient information and eHealth applications such as electronic medical records whenever and wherever it is needed to provide care.

AT&T has also partnered with Microsoft® and Covisint to develop a nationwide HIE aimed at individual users, allowing them to use the Microsoft HealthVault™ platform to store their personal health information and share it with any healthcare provider connected to the AT&T Healthcare Community Online. “It’s not that difficult to create a regional data repository that is beneficial to consumers,” observes Tom Eng, founder and president of Helia.com and the eHealth Institute, a private charitable organization that promotes eHealth initiatives. “But knowing how mobile people are, you really need to make this a national and eventually a global solution.”

Developing the appropriate financial incentives to spur widespread adoption will help, and federal and state governments are working to create them. The federal government has earmarked millions in stimulus dollars to spur widespread adoption of electronic medical records and the exchange of health information, with the goal of improving healthcare quality and reducing costs.

Tennessee is helping to facilitate and accelerate the adoption of health information technology through the state’s Physician Connectivity Grant program, with the goal of improving care and reducing costs. Since 2007, Tennessee has helped more than 2,000 health care providers and pharmacists in Tennessee purchase hardware and software to engage in health information exchange, including electronic prescribing.8

Tennessee is now one of the top five states for year-over-year growth of electronic prescribing adoption. More than 2 million prescriptions are routed electronically in the state, or 4 percent of all prescriptions issued. Tennessee’s electronic prescribing success led Surescripts®, the nation’s largest electronic prescribing network, to present Gov. Bredesen with a SafeRx Award for the state in mid-2009.7

Building a Healthy Foundation

Demonstrating its commitment to helping healthcare organizations improve operational efficiencies and enhance patient care, AT&T is expanding its AT&T Healthcare Community Online (HCO) solution to include a dynamic portal with pre-integrated applications.

AT&T HCO provides communities, hospitals and large healthcare systems the foundation necessary to support the meaningful use of health information technology. AT&T HCO makes information available for use in clinical decision support with tools that work to reduce medical errors and improve the quality of care.8 The solution helps healthcare providers as well as state and federal government agencies save time and costs by utilizing the existing infrastructure and integrating it with new applications to enable community-wide exchange of electronic medical records.

AT&T HCO offers secure, single sign-on access to pre-integrated clinical, financial and administrative applications, including labs, reporting, ePrescribing, billing systems, patient registries, medical images, electronic medical records and other data. With the click of a mouse, users may access software applications in a highly secure environment.

“AT&T is committed to serving technology needs across the continuum of healthcare – from patients to physicians to providers,” said Xavier Williams, senior vice president, AT&T GEM (Government, Education and Medical) Markets. “AT&T HCO is just one example of how we understand and are addressing the unique needs of healthcare professionals working to protect and improve the health and well being of their patients and the community at large.”

With HCO, physicians and medical staff have real-time access to a patient’s health records and relevant applications that allow them to provide faster and more accurate diagnosis at the point of care. That, of course, is the great promise of eHealth, and the reason that government organizations and private entities alike are pursuing its implementation.

Notes

1. In Haiti, Practicing Medicine From Afar, by Milt Freudenheim, New York Times, February 8, 2010
2. AT&T Delivers Enhanced Communications to the University of Tennessee, March 11, 2010, press release.
3. ibid
4. AT&T, Covisint and Microsoft to Deliver Nationwide Health-Information Exchange Connecting Patient and Provider Communities; June 23, 2008 press release
5. AT&T, Covisint and Microsoft to Deliver Nationwide Health-Information Exchange Connecting Patient and Provider Communities; June 23, 2008 press release
6. Tennessee Tries To Clear Path for Health Information Exchange by Don Mooradian; March 29, 2010, HealthLeaders-InterStudy’s Tennessee Health Plan Analysis, Winter, Vol. 22 No. 1
7. Surescripts Releases Annual State Rankings and Progress Reports Detailing E-Prescribing Use and Adoption Statistics For All 50 States, press release; June 22, 2009
8. AT&T Expands Healthcare Community Online to Improve Patient Care, February 25, 2010, press release

For more information contact your AT&T Representative or visit us at www.att.com/healthcare.