



Electronic Health Records and Health Information Exchange: The Rx for an Ailing Healthcare System

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Any way you look at it, the healthcare system is hurting. About 16 percent of the U.S. gross domestic product goes to medical care – that’s more than any other nation on the planet. Yet, this country ranks 29th in infant mortality, 48th in life expectancy and 19th out of 19 industrial nations in preventable deaths. According to *The New England Journal of Medicine*, nearly 31 cents of every U.S. healthcare dollar goes toward administrative and other similar costs. The question is: How can we create a system that both reduces costs and improves patient care?

We believe the answer comes from equipping each of the stakeholders in patient care with the right information, in the right structure, at the right time to affect the course of care, and optimize health outcomes. One of the first critical steps is the adoption of Electronic Health Records (EHR) and a comprehensive Health Information Exchange (HIE) system. The benefit of such a program is not simply reducing paper, but creating an accessible information portal that enables physicians to coordinate care, use clinical research to devise the best treatments, encourage prevention and better manage chronic conditions. It’s a system that works by changing the behavior of payers, physicians and the patients themselves.

The Doctor Is In

First, a little clarification. The words “Electronic Health Records” are often interpreted to mean different things. For some, it’s the equivalent of an Electronic Medical Record, software purchased by a doctor that provides some clinical information and acts as a receptacle for patient information-tracking within the confines of that practice. Others relate EHR to Personal Health Records, a product that enables an individual to capture and manage his or her specific healthcare data. Most often, this product is provided by an employer or payer.

For the purpose of this paper, EHR relates to something much broader – namely, a system-wide health record that takes data through a Health Information Exchange. The EHR contains all patient data and follows the individual wherever he or she goes. The HIE pulls in data relating to that patient from the insurance company or government agency, from hospitals and physician offices, labs, pharmacies and other sources of clinical and administrative data. Then, using clinical best practices from organizations such as the American Medical Association, it analyzes the patient information and derives alerts and recommendations to turn the data into actionable information. As a result, a fragmented healthcare environment is transformed into a single portal where data are consolidated and recommendations are provided at the point of care.

Here’s a simple scenario to illustrate some of the benefits: Bob is a diabetic on Medicaid. He’s not feeling well, so he goes to a doctor where he’s asked to fill out a form, recount his medical history and provide dosage details of the prescription drugs he takes – the accuracy of which is only as strong as Bob’s memory. Because this patient is a diabetic, the doctor automatically orders a blood glucose test, which diabetics need every six months. Unless Bob has regularly seen the same doctor, he has no accurate way of knowing that Bob had that test four months ago. He makes a diagnosis based on what he sees in the office and on that test.

If the state had had a comprehensive EHR/HIE system in place, as soon as Bob walked in the office, the physician would have had access to his medical history, the dates of his blood glucose tests, clinical lab results and all the data he needs to efficiently recommend and take action with the best course of treatment. The doctor is empowered to make more-informed medical judgments, the payer is no longer burdened with the costs of redundant tests, and the patient gets the right treatment more quickly.

The integrated clinical data are more than a “nice to have” resource. They drive the standardization of medical treatments, which reduces large variances – in treatment and cost – from institution to institution. According to a recent study conducted by Dartmouth College’s Institute for Health Policy and Clinical Practice, as much as 30 percent of U.S. medical spending, or approximately \$700 billion, does nothing to improve care. Consistent medical approaches to similar conditions work to reduce that waste.

Electronic Health Records and Health Information Exchange

A More Successful Operation

A comprehensive Electronic Health Record and Health Information Exchange solution also can integrate administrative functions, including automating authorization, eligibility inquiries, e-prescribing and others. By combining the provision of electronic health records and clinical decision support with automation and easy access to administrative functions, significant program and administrative savings can be achieved.

So, how much can an entity save by eliminating manual administrative processes? By automating authorization and other administrative functions, the State of Missouri was able to reduce the costs of its Medicaid program by more than \$117 million per year – all while improving the level of patient care.

The same technology can add efficiency at the pharmacy level. For example, let's say Bob, from our earlier example, is given a prescription to fill. He goes to his local pharmacy, where he's told that this particular prescription requires a prior authorization. The pharmacist calls the recipient's provider, who is with another patient; when reached, the provider calls the state or state's PBM. When the doctor can break free, he stops what he's doing, acquires the authorization and only then can the prescription be filled. Meanwhile, the patient sits waiting, without his prescription, or heads home without the medicine only to get it later – and the costs for this transaction escalate with each additional step taken.

Conversely, in the State of Missouri and other EHR and automated prior authorization programs, providers can quickly check the prescription drug list status and determine if a drug will meet pre-approval criteria before sending the prescription. In addition, physicians and pharmacists are advised automatically of any potential adverse drug interactions. Again, patient care improves, providers save time and payers reduce costs.

Xerox took over the State of Florida's Medicaid Management Information System and replaced the State's point-of-sale system with a state-of-the-art, real-time Prescription Drug Claim System. Not only was prior authorization on prescription drugs reduced from two weeks to 24 hours, but pharmacy spending was also decreased by a full \$200 million per year.

An Ounce of Prevention

Preventing catastrophic illness is good business. It preserves quality of life for the patient and reduces costs for the payer. A regularly scheduled foot exam for a diabetic costs far less than an amputation. Addressing the underlying causes of heart disease – namely, smoking, diabetes, high cholesterol and high blood pressure – costs considerably less than the \$450 billion spent annually on treating the disease itself.

So, how does a state create a proactive approach to wellness?

The answer is certainly complex, and will involve many systematic and policy changes. A critical step can be achieved through abandoning the unmanaged fee-for-service model and moving to a pay-for-performance and care management system, in which states incent providers for regularly scheduled preventive care, and enlist these providers into a team effort, working with the program staff and care managers. A comprehensive EHR/HIE system supports this model by establishing protocols and sending gap-in-care alerts, based on evidence-based medical guidelines, to the place where it matters the most – the point of care. The result? Proactive patient care, reduced costs and, most importantly, a healthier population.

The next iteration of this concept is the medical home and medical village. In urban areas, the medical home is the primary care provider that is the central point for a patient's health care. It has access to all records – dental, hospital, pharmacy, psychiatric – everything within the medical village of healthcare specialists. The medical home is the quarterback of care – charged with focusing on prevention and, when necessary, coordinating care among the various providers.

Electronic Health Records and Health Information Exchange

In less-densely populated areas, such as Alaska, the responsibilities are spread among the members of the medical village, sharing information to form a community of cohesive patient care. Technology is the force that drives this community and powers the medical home, as well.

The Diagnosis and Treatment

Creating and implementing an Electronic Health Records program is as streamlined as the solution itself. Since interoperability is key, Xerox solution implementation begins by understanding who all the stakeholders are and what role they play in the medical ecosystem. For the State of Alabama, for example, we worked with a group of stakeholders the State had assembled, including Blue Cross of Alabama, lab companies, a number of hospitals, providers of medical software, and physician groups enrolled in the Medicaid program.

After collecting these data and identifying the scope and breadth of the combined applications, Xerox performed a gap analysis to see where our base system required enhancement.

As soon as this information is mined, Xerox begins the implementation process, integrating with clinical protocols, pharmaceutical providers and the insurer base. This comprehensive collection of data provides continuity-of-care records and analytics for all patients, even those whose eligibility changes on and off the Medicaid system. Every part of the system contains the highest security protocols and is 100 percent HIPAA-compliant.

Critical to success is the deployment of an HIE, a platform and set of interoperability standards and technologies that allow for the seamless collection and assembly of clinical and administrative health data, as well as real-time access to shared, but not stored, health information managed by external stakeholders participating in the exchange.

A Healthy Outlook

Xerox's hybrid approach to Electronic Health Records and Health Information Exchange will transform healthcare one state at a time – improving patient outcomes, eliminating administrative burdens and lowering the cost of care. This same type of solution has applications beyond state Medicaid programs. It can be deployed nationally and has numerous commercial applications, as well.

Better information means smarter care. We already have the tools in place to create that 21st century, high-performance healthcare system – one that both delivers healthy savings and promotes a healthier population. The future of healthcare is now. And the diagnosis is better than ever.

You can learn more about us at www.xerox.com/businessservices.

