



FACT SHEET

Electronic Prescribing Update

by

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BACKGROUND

There is a public health crisis. The Institute of Medicine (IOM) reports that 7,000 Americans die and 1.5 million Americans are injured annually from preventable medication errors. Cost of errors is \$2 billion/year. Physicians write over 4.5 billion prescriptions each year but almost all are still on paper! Electronic prescribing technology is available, but rarely used. Less than 1 in 5 physicians use e-Prescribing. Small practices and those in rural or inner city settings are far less likely to use electronic prescribing. Only 20% of prescriptions are prescribed electronically, with 80% still handwritten and most of these are still sent by facsimile. The paper process is error prone and inefficient due to illegible handwriting, as well as poor communication by phone and fax tag involving multiple intermediaries and duplication of data entry. Between 1.5-4.0% of prescriptions are in error with serious patient risk and adverse drug events occurring with 5-18% of ambulatory patients. Over 20% of scripts are never filled and patient satisfaction is declining. In a typical physician practice, over 3 hours per day per physician is spent handling phone calls and extra work from prescription issues. In pharmacies, over 4 hours per day (up to 1 call per Rx in some markets with multiple health plans) is spent handling prescription issues. And the problem is getting worse. The number of prescriptions in the U.S. is rapidly increasing. 4 out of 5 patients who visit a physician leave with at least one prescription and over 65% of the U.S. population (91% of Medicare) uses a prescription medication each year. Elderly patients with complex health problems are at the greatest risk as they see multiple different physicians and have complex medication lists.

ELECTRONIC prescribing has been shown to dramatically decrease medication errors (>67%) and improve efficiency (>50%) when it includes the ability to create a prescription electronically and to receive automated decision support during script creation. This includes medication history, eligibility determination, formulary coverage from insurer including co-pay information, prior authorization requirements and clinical decision support including drug interactions, drug-allergy, etc. It should also include the ability to send the script electronically to the pharmacy (NOT by FAX) using standard transmission messaging and the ability to receive/authorize pharmacy initiated-renewals electronically including "fill status" as a measure of compliance (medication history) as well as the ability for the pharmacy to process electronic scripts in their system without data re-entry.

The electronic prescribing process also requires intermediaries for Data Transfer to communicate the prescription information between the software system in the physician offices to the system in the pharmacies, and also for transmitting information to and from PBMs and health plans. Currently, Surescripts is the major provider of communication between physician office software and pharmacies and RxHub is the major provider of communication between the pharmacies and physician software with PBMs and health plans.

BENEFITS

Who benefits from eRx? Everyone! Patients benefit from increased safety, efficiency and better compliance due to lower co-pays. Pharmacies benefit from increased efficiency, improved care, improved patient satisfaction. Payors/PBMs benefit from increased generic/formulary usage, efficiency, Rx compliance and prevention of ADEs (significant reduced costs) and Providers benefit from increased efficiency, improved care, patient satisfaction and potential incentives (pay-for-performance). Unfortunately, the economic benefits are not evenly distributed with Payors receiving the major benefit, but with no cost in buying or implementing the systems. As a result, providers are concerned about the cost of buying, installing, implementing and supporting a system and the current lack of reimbursement for costs, time and resources. They are also concerned about the increased time to use the system that results in reduced productivity (initially), and the increased time required to review warnings, alerts and recommendations (long term). In addition, electronic prescribing is still not considered a routine standard of practice.

What initiatives and incentives can drive future adoption of electronic prescribing? Economic incentives can include grants and loan programs, reimbursement for utilization, Pay for Performance programs, reductions in malpractice insurance premiums, group discounts from Healthcare IT Suppliers. Policy incentives and programs can include accreditation programs (JCAHO 2005 Hospitals' National Patient Safety Goals, others in development), Employer Programs (Leapfrog and others), Medicare support for economic incentives, DOQ-IT, and CCHIT certification of inpatient and ambulatory EMRs.

The Medicare Modernization Act (MMA) includes specific electronic prescribing provisions. These include mandatory national

electronic prescribing standards with initial foundation standards approved in 2005, pilot programs to evaluate further standards in 2006 (results reported in 2007) and finalized standards required for 2009. MMA also encourages physician adoption by requiring modification of anti-kickback regulations for hospital, physician groups and plan administrators to allow them to give out electronic prescribing hardware and training, and allowing plans to pay-for-technology and pay-for-cost effective performance in Medicare Advantage Plans. It also outlines \$50M of federal grant money in 2007 to support physician use of electronic prescribing (but this has not been budgeted). The MMA preempts state laws contrary to the national standards or those that restrict the ability to carry out the new law.

Interim Results From five CMS electronic Prescribing Pilots recently became available and showed that several standards are now ready to be included with the previous foundation standards although some further concerns and recommendations were included for each. Med History, Formulary and Benefits and Prescription Fill Status Notification were all recommended to be included as ready for adoption. Standards that were felt to not be ready for adoption included Prior Authorization, Structured and Codified Sig (instructions on how to take the drug) and RxNorm – (standard for name, dose and form of drugs). Recommended updates were also made to SCRIPT v8.1 standard. Other findings from the pilots included the realization that the prescriber staff (“surrogate prescribers”) played a much more important role in the process than anticipated and electronic prescribing never fully replaces the need for paper-based prescribing completely and it causes a shift in pharmacy and clinician work flow. The pilots found that long term care sites reported a reduction in new prescription rates which may indicate reduction in accumulation of multiple medications.

There are several new and expanded programs to promote electronic prescribing adoption. The NEPSI Coalition made up of multiple large corporate sponsors plans to provide free web-based electronic prescribing to physicians within the next year. Their product, called eRx NOW™, is described as simple, web-based electronic prescribing software that can be used securely over any computer.

In addition, the Surescripts network now reports that over 95% of the nation’s community pharmacies have systems certified to connect to their Pharmacy Health Information Exchange™ and that all major physician technology vendors in the U.S. are certified. They now categorize electronic prescribing products for their ability to provide several specific levels of functionality (formulary information, electronic refills, medication history, etc) and have also created another level of “Gold” certification for vendors who include further specific support, experience and functionality to improve adoption.

CCHIT (Certification Commission for Health Information Technology) now includes basic functions of electronic prescribing in their requirements for ambulatory EMR certification starting in 2007 with additional functionality planned for each year going forward. They have partnered with Surescripts for the certification process.

During periods of emergency, licensed professionals who have registered on ICERx.org can now log into the online prescription database, where they will have access to evacuee prescription history information, the script provider’s name, the pharmacy that filled it as well as clinical alerts, including drug interaction, therapeutic duplication and elderly dosing alerts, and clinical pharmacology drug reference information, including drug monographs, interaction reports and a drug identifier tool.

The Iraq Supplemental Spending Bill signed into law in May 2007 includes a provision on electronic Prescribing that requires physicians prescribing medications under the Medicaid program to use tamper resistant prescription pads or fill prescriptions electronically or they will not be reimbursed. Effective date of this provision is September 30, 2007.

THE SOLUTION

So, what is needed to solve these complex healthcare challenges facing our nation:

1. Increased funding and support for physicians to help them buy and implement systems;
2. Increased reimbursement for physicians to help compensate for the added economic burden of the extra time needed to handle the information provided from electronic prescribing;
3. Further refinement of Stark exemptions to allow other organizations to help defray these costs;
4. Educational campaigns to increase awareness for physicians, pharmacists and the public to increase demand;
5. Funding of physician champions and other leaders to act as examples to their peers and funding of implementation teams to help evaluate and assist medical practices and pharmacies with adoption;
6. Funding of regional health information networks to incorporate electronic prescribing to help promote regional networks of pharmacies and physicians to use electronic prescribing;
7. Non-economic incentives or mandates for payors to push them to fund electronic prescribing efforts with the requirement that they support projects that include all regional payors, physicians and patient populations; and
8. Further efforts to move forward standards and certification of electronic prescribing systems.