E-Prescribing Work Group
Report and Recommendations
June 16, 2009

Charge

- Determining the current status of e-prescribing, from both the prescriber and dispensing pharmacy point of view.
- Identifying barriers to e-prescribing.
- Study the start up and sustainability costs (e.g., hardware, software, and training costs), and potential sources of resources to support the essential needs of pharmacies in the state of Nebraska to participate and support e-prescribing.
- Making recommendations to promote the adoption of e-prescribing by all parties involved in the e-prescribing process.
- Identifying and disseminating best practices.

Background

Current status of e-prescribing

The use of e-prescribing grew significantly in the United States and Nebraska in 2008. However, e-prescriptions still constitutes only a small percentage of new prescriptions and renewals. Surescripts' 2008 *National Progress Report* (available at www.surescripts.com) found:

- By the end of 2008, there were 74,000 active prescribers (or 12.1% of all office-based prescribers), up from 36,000 at the end of 2007 and 16,000 in 2006.

- Nationwide, prescriptions routed electronically grew to 68 million (or 4% of eligible prescriptions) in 2008, up from 29 million (or 2% of eligible prescriptions) in 2007. In 2007 in Nebraska, 0.48% of all eligible prescriptions were e-prescribed. Eligible prescriptions do not include prescriptions for controlled substances and pre-authorized refills on existing prescriptions.

- By the end of 2008, increased participation by payers in e-prescribing enabled access to prescription benefit and history information for 65 percent of patients in the U.S.

- In Nebraska, approximately 61% of pharmacies accept e-prescriptions. Approximately 82% of chain or other corporate owned pharmacies accept e-prescriptions. Approximately 38% of independently owned pharmacies accept e-prescriptions (data from Surescripts website, accessed April 28, 2009).

A survey of 612 Nebraska physicians carried out by the Creighton Health Services Research Program and the Nebraska Medical Association in March 2008 (*Status of Health Information Technology in Nebraska* available at www.chrp.creighton.edu) found:

- 8.7% of respondent physicians report they e-prescribe; of these, 59% report daily use of e-prescribing.

- Of 53 respondent physicians who e-prescribe, a very large proportion still report using the following traditional methods to generate and deliver prescriptions to pharmacies:

    o 85.5% report patients taking handwritten prescription to the pharmacy;
    o 89.9% report telephoning prescriptions to the pharmacy;
    o 89.9% report faxing prescriptions faxed to the pharmacy.

- Physician attitude about the accuracy and completeness of e-prescriptions was positive to uncertain.

- Physician attitude about the efficiency of e-prescribing was mainly uncertain, but leaning negative.

Barriers to E-Prescribing

Costs. For both pharmacies and physicians, costs are a significant barrier to e-prescribing.

Pharmacies

Transaction fees ($0.20 - $0.35 per transaction). Refills are free, so the transaction cost for prescriptions with multiple refills can be amortized over multiple dispensings. As the number of e-prescriptions grows, the cost per transaction may eventually be reduced. Transaction fees are charged by the pharmacy's software vendor. However, pharmacists argue that traditional methods of prescription generation and delivery have zero transaction fees for initial prescription fills and refill. Approximately half of the transaction fee goes to Surescripts, the intermediary e-prescribing network developed by the National Association of Chain Drug Stores (NACDS) and the National Community Pharmacists Association (NCPA). SureScripts merged with RxHub, a network founded by the nation's three largest PBMs.

Software fees. Costs incurred by pharmacies include one time start-up fees to software vendor (~ $500) and monthly charges to software vendor ($30+ per month). Surescripts reports there are 35 – 40 e-prescribing packages available for pharmacies.

Additional optional fees. Viewing patient information through NeHII or another health information exchange may involve additional fees.

Fees mentioned above that are charged to pharmacies do not include costs incurred for pharmacy management software systems.

Physicians

E-prescribing software. Surescripts reports there are approximately 350 e-prescribing systems available for physicians. Examples include:

- A free stand-alone e-prescribing system is available through the National e-Prescribing Patient Safety Initiative (NEPSI).

- Through NeHII, physicians can subscribe to a bundle of services which include e-prescribing, an EMR lite, virtual health record, and the ability to push information to other providers for just over $50 a month. Lower cost options are also available through NeHII.

- Full electronic medical record systems which integrate e-prescribing can cost from $25,000 to over $100,000 per physician.

- Sam's Club has begun offering electronic medical record systems for $25,000 per physician, and $10,000 per additional physician.

Medicare Incentives. Costs for many physicians may be partially offset by Medicare incentives for e-prescribing.

- Physicians may be eligible to receive incentive payments on office fees charged for their Medicare Part B who are also enrolled in a Medicare Part D Prescription Drug Plan.

- Bonus incentives for Medicare Part B patients only are:

  o 2009 – 2010: 2%
  o 2011 – 2012: 1%

- Penalties for not adopting e-prescribing (Medicare Part B patients only):

  o 2012: -1%
  o 2013: -1.5%
  o 2014 and beyond: -2%

- Estimates of incentive payments resulting from e-prescribing for Medicare Part B patients are in the $1,500-$1,600 range per physician per year during 2009 – 2010.

- Additional incentives of up to $44,000 will be available to qualifying physicians for "meaningful use" of full electronic medical record systems beginning in 2011.

Changes to Work Processes. E-prescribing requires both physicians and pharmacists to make changes in their work processes, which can temporarily reduce productivity for some, cause others to return to traditional means of prescribing, and prevent others from adopting the technology.

Controlled Substances: The DEA currently prohibits electronic transmission of controlled substances. Consequently, physicians and pharmacies must maintain dual processes. Physicians are still required to write prescriptions for controlled substances. This is can be a major work flow impediment in the physician's office. Consequently, this can be part of the rationale that physician's use for not converting to e-prescribing. Pharmacies must maintain a dual prescription filing systems - paper for controlled substances and electronic for all other prescriptions. Dual filing systems for pharmacies can result in impediments to efficient work flow.

Education, Training, and Prior Negative Experiences. Another barrier is a lack of education, training, and knowledge of the e-prescribing process. Adequate training can reduce errors and frustration. Discussions between pharmacists, physicians, and physician staff can improve understanding of the e-prescribing process and identify ways to improve the process. Past negative experiences with e-prescribing can also be a barrier.

Standards. Although much progress has been made in developing standards for e-prescribing and certifying e-prescribing systems, further development is needed in order to reduce e-prescribing errors. The Certification Commission for Health IT (CCHIT) will begin certifying stand alone e-prescribing systems in 2009. Additional criteria will be incorporated into the

certification process in 2010 and beyond. Electronic medical record certification by CCHIT includes many e-prescribing functions. Surescripts certifies both e-prescribing systems for physicians and pharmacy systems. The Healthcare Information Technology Standards Panel (HITSP) has developed a number of standards for e-prescribing.

Errors

E-prescribing is reducing some types of medication errors, but may not eliminate all sources of errors. E-prescribing errors include but are not limited to: 1) wrong patient; 2) wrong drug; 3) wrong strength; and 4) wrong directions. These errors have resulted in some pharmacists turning off the e-prescribing software function.   An informal survey of Nebraska pharmacists conducted by the Nebraska Pharmacists Association found that 75% of those responding currently use e-prescribing in some form, and that 65% of those responding that use e-prescribing experienced errors.   Sources of errors identified included software functionality, untrained personnel in physician offices using the system, input errors by physicians, not being able to request refills via e-prescribing software, and system communication errors. A 2008 report from the Creighton Health Services Research Program funded through a Dyke Anderson Patient Safety Grant from the Nebraska State Board of Pharmacy (available at http://chrp.creighton.edu/) found that pharmacists reported both a reduction in some types of errors and new sources of errors due to e-prescribing. Pharmacists reported that e-prescribing reduced legibility problems and provided more accurate and complete information. New sources of errors included inaccurate information provided, system incompatibilities, and errors due to wrong drop down menu selections. It is believed that some of these new types of errors are due to incompatibilities that exist between physician e-prescribing software and pharmacy dispensing software.

Role of Intermediaries

The role and value of intermediaries generated considerable debate within the E-Prescribing Work Group. The discussion brought attention to the concerns of independent pharmacists over transaction costs and e-prescribing errors due to incompatibilities that exist between physician e-prescribing software and pharmacy dispensing software. The Nebraska Pharmacists Association (NPA) is opposed to the mandatory use of intermediaries or switches to facilitate e-prescription transactions. The NPA believes the use of switches requires pharmacies to bear unnecessary e-prescription transmission costs. The NPA recommends direct communication between prescriber and pharmacy to lower the cost of e-prescribing. The NPA's position on intermediaries is in opposition to the positions of several national organizations. The National Association of Chain Drug Stores (NACDS), National Council for Prescription Drug Programs (NCDPD), Surescripts, and eRx Network submitted comments supporting the use of intermediaries. The majority of the members of the E-Prescribing Work Group had questions about the risks and complexity of establishing direct connections between pharmacies and prescribers.

Recommendations

The eHealth Council recognizes that patient safety is complex.   While e-prescribing is an essential tool, it does not guarantee patient safety.

- Pharmacists, physicians, and the general public should be educated about the potential impact of e-prescribing with regard to:
    - Patient Safety – both recognized safety improvements and the newly emerging errors associated with the adoption of this technology;
    - Workplace efficiency in the pharmacy and physician's office – both improved efficiencies realized and new inefficiencies introduced in the local workplace context;
    - Workflow issues related to the migration of e-prescribing;
    - Costs to pharmacists and physicians of implementing e-prescribing.

- Training and education of physicians and pharmacists by professional associations, institutes of higher education and other venues about the proper use of e-prescribing technologies and processes in daily practice in order to reduce e-prescribing errors and optimize patient care quality should be encouraged.

- Pharmacist access to patient information should be encouraged either through NeHII or other health information exchanges.

- A forum to initiate a dialog among physicians, physician staff, pharmacists, vendors, and intermediaries on the e-prescribing process, costs involved, potential sources of errors, and best practices should be convened.

- The State of Nebraska should seek ways to provide resource support for participation in e-prescribing to independent pharmacies.

- Physicians should be provided information on incentive programs which support participation in e-prescribing and/or the implementation of EMRs.

- The integration of e-prescribing with the use of EMRs in physician offices should be encouraged. Although stand-alone e-prescribing systems can be used effectively, research has shown that integration of e-prescribing with an EMR system often leads to greater improvements in quality of care.

- The eHealth Council should establish a sustainable mechanism to identify and disseminate best practices related to patient safety and quality improvement in e-prescribing.

- The eHealth Council and other stakeholders should work together to identify sources of e-prescribing errors and to address those sources.

- The State of Nebraska and other stakeholders should support efforts to remove regulatory obstacles related to the e-prescribing of controlled substances.

- Stakeholders in Nebraska and in the United States should encourage further development of e-prescribing standards to reduce errors. This should include standards that require compatibility between prescribing software and pharmacy dispensing software.

- The State of Nebraska should explore connecting Nebraska's Medicaid program through its pharmacy benefit manager to Surescripts to provide benefit and prescription history information.

Actions

- The Nebraska Medical Association and the Nebraska Pharmacists Association are tentatively planning an initial forum to discuss issues related to e-prescribing in June.

- The Nebraska Pharmacists Association will promote the use of the Pharmacy E-Prescribing Experience Reporting Portal (PEER Portal) at www.pqc.net/eprescribe to report e-prescribing errors.

- The eHealth Council and the e-Prescribing Work Group identified a potential barrier to e-prescribing in a Nebraska statute that requires pharmacists to keep paper copies of prescriptions.   The Nebraska Pharmacists Association worked to have legislation introduced which would allow pharmacists to keep copies of prescriptions in a readily retrievable format.   Lt. Governor Sheehy provided a letter supporting the provision in LB 220 to the Health and Human Services Committee. LB 220 was amended into LB 195 and was passed by the Legislature and presented to the Governor on May 18.

Members

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- Kevin Borcher, Nebraska Methodist Health System & Nebraska State Board of Pharmacy
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- Kevin Conway, Nebraska Hospital Association
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- Clint Williams, Blue Cross and Blue Shield of Nebraska (also representing NeHII)