Electronic Prescribing in Minnesota

What is e-Prescribing?
Electronic prescribing or “e-prescribing” is secure bidirectional electronic information exchange between prescribing providers, pharmacies, payers/PBMs, directly or through an intermediary network. The goal is to enable better clinical decisions and medication management, to reduce errors, and to improve patient satisfaction.

What are the benefits of e-prescribing?
E-prescribing improves the quality of patient care because it enables a provider to electronically send an accurate and understandable prescription directly from the point of care to a pharmacy. E-prescribing is a way to:

- Improve the quality, safety and cost-effectiveness of the entire prescribing and medication management process.
- Reduce potential adverse drug events and related costs.
- Reduce burden of callbacks and rework needed to address possible errors and clarify prescriptions.
- Increase efficiency of the prescription process and convenience for the patient/consumer.

Research has shown that e-prescribing reduces medication error rates by almost sevenfold in community-based office practices, including near elimination of errors due to illegibility. A reduction in medication errors due to investments in health information technology and health information exchange from 1997-2007, saved the U.S. Department of Veterans Affairs $4.64 billion by decreasing drug-event related hospitalizations and outpatient visits.

Status of e-Prescribing in Minnesota
Minnesota measures the status of e-prescribing three ways: 1) e-prescribing transactions, 2) pharmacies e-prescribing and 3) prescribers e-prescribing. Figure 1 shows the significant increase since 2008 in the number of e-prescribing transactions including new prescriptions and refills.

Figure 1. Trends in e-Prescribing in Minnesota*

![Graph showing trends in e-prescribing transactions from December 2008 to December 2013.]

*Includes new prescriptions and refill transactions

Figure 2 shows increases in the percentage of pharmacies e-prescribing. More than nine in ten of Minnesota’s pharmacies are e-prescribing, including 97% of chain pharmacies and 90% of non-chain pharmacies.

Figure 2. Trends in e-Prescribing among Minnesota Pharmacies

![Graph showing trends in the percentage of pharmacies e-prescribing from December 2008 to December 2013.]

*Excludes medical device manufacturer pharmacy class
**Includes independent, franchise, and government pharmacy class
Figure 3 shows the percentage of clinics and hospitals (prescribers) e-prescribing. Ninety-one percent of clinics were e-prescribing in 2015, and 90% of hospitals were e-prescribing for discharges in 2014.

**Figure 3. Minnesota Clinics and Hospitals e-Prescribing**

- Clinics (N=1,175) 91%
- Hospitals* (N=130) 90%

* Non-federal acute care hospital prescriptions, reflecting discharge prescriptions and not inpatient order entries

**Minnesota’s e-Prescribing Requirements**

In 2008, the Minnesota Legislature enacted an e-prescribing mandate in order to improve quality outcomes and efficiency in health care. The mandate requires prescribers, pharmacists and pharmacies, and pharmacy benefit managers to be e-prescribing by January 1, 2011.³

The Drug Enforcement Administration (DEA) released a Final Rule that became effective on June 1, 2010, allowing the electronic prescribing of controlled substances (EPCS). This final rule contains complex requirements that both e-prescribing point-of-care vendors and pharmacy software vendors must meet before facilitating or allowing EPCS. Because of this complexity, it is anticipated it will take time for e-prescribing applications to be programmed and certified per DEA guidelines.

**Actions to Address Gaps in e-Prescribing**

Minnesota health systems and pharmacies have achieved nation-leading rates of e-prescribing. However, gaps in use of some specific transactions have been reported by providers and pharmacists, potentially affecting patient health and safety. In 2014, the Minnesota e-Health Initiative e-Prescribing Workgroup convened to address these issues. In February 2015, the Initiative released *A Practical Guide to Electronic Prescribing, Edition 2* to support prescribers, pharmacies and others in achieving the benefits of e-prescribing.⁴

Integration of e-prescribing services with electronic health record (EHR) systems is essential to long-term success. MDH supports all providers in the adoption and use of EHR systems that incorporate e-prescribing functionality. It also encourages providers to meet meaningful use requirements in order to qualify for meaningful use incentive payments to offset implementation costs. MDH offers an interest-free EHR loan program to support providers across the continuum of care.⁵

E-prescribing is an important aspect of e-health and health care reform. As e-prescribing workflows and messaging are optimized by prescribers and pharmacists, consumers will experience improved clinical decisions, medication management and consumer satisfaction.

**About the Data**

Data for this factsheet are provided by the Minnesota e-Health Profile in the MDH Office of Health Information Technology, the Office of the National Coordinator, and Surescripts.

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5. MDH Office of Rural Health and Primary Care, at [http://www.health.state.mn.us/divs/orhpc/funding/#ehrloan](http://www.health.state.mn.us/divs/orhpc/funding/#ehrloan)