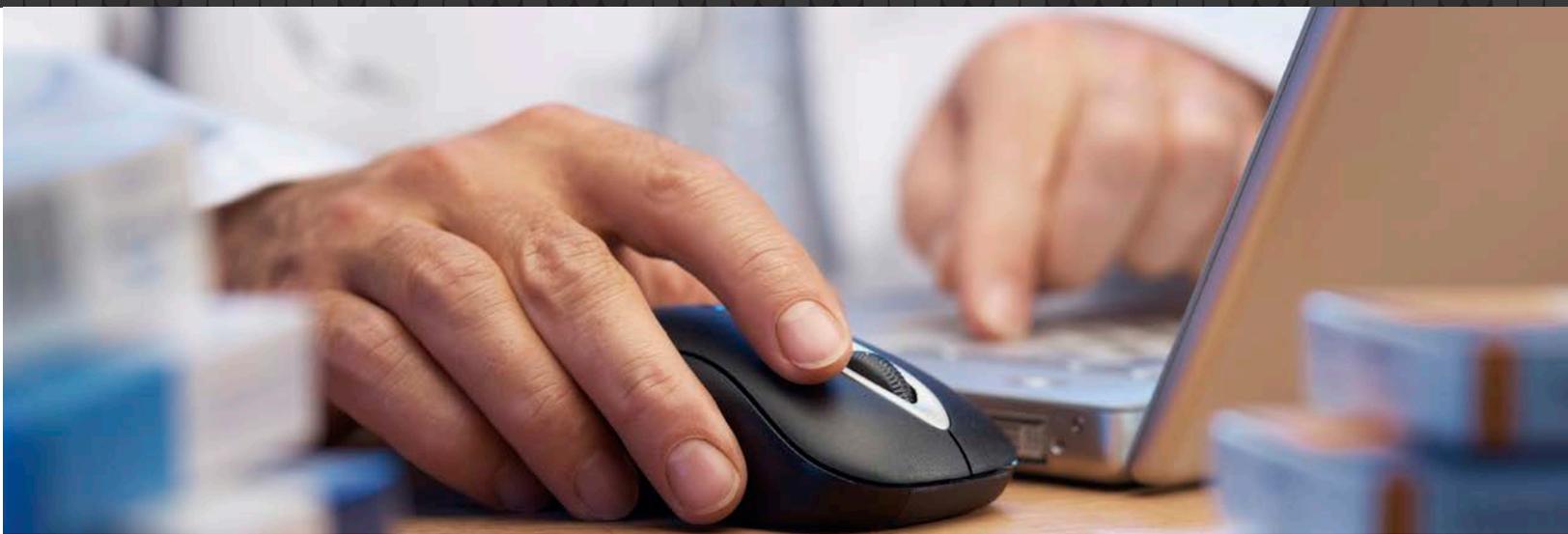




# A Practical Guide to Electronic Prescribing, Edition 2

FEBRUARY 2015





### **Guide 3**

Edition 2, issued February 2015

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#### **A companion to:**

Minnesota Statewide Implementation Plan, 2008

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Guide 1: Addressing Common Barriers (2008)

Guide 2: Recommended Standards (last updated 2011)

***Guide 3: A Practical Guide to Electronic Prescribing (2015 update)***

Guide 4: Effective Use of EHR Systems (2009)

Guide 5: A Practical Guide to Understanding HIE, Assessing Your Readiness and Selecting HIE Options in Minnesota (last updated 2013)

#### **Minnesota e-Health Initiative**

The Minnesota e-Health Initiative is a public-private collaborative whose vision is to accelerate the adoption and use of health information technology in order to improve health care quality, increase patient safety, reduce health care costs and improve public health.

#### **Acknowledgements**

The Minnesota Department of Health thanks the many members of the Minnesota e-Health initiative for their ideas, their expertise and their time in developing this guide. Refer to Appendix A for a listing of workgroup members.

Upon request, this material will be made available in an alternative format such as large print, braille, or digital audio.

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## Introduction

Like many states, Minnesota is working to improve the affordability, access and quality of health care, and the health of its residents. Among the overall strategies for achieving this goal is e-health, or the adoption and effective use of interoperable electronic health record systems and other health information technologies, including electronic prescribing (e-prescribing). The transactions that make up electronic prescribing are key components to achieving interoperability in Minnesota.

Minnesota law requires that, “Effective January 1, 2011, all providers, group purchasers, prescribers, and dispensers must establish, maintain, and use an electronic prescription drug program. This program must comply with the applicable standards in this section for transmitting, directly or through an intermediary, prescriptions and prescription-related information using electronic media” (Minnesota Statutes, section 62J.497). In addition, the 2007 Minnesota Legislature mandated in Minnesota Statute §62J.495 (Electronic Health Record Technology), that “by January 1, 2015, all hospitals and health care providers must have in place an interoperable electronic health records system within their hospital system or clinical practice setting.” This interoperable electronic health record (EHR) mandate includes e-prescribing transactions, therefore e-prescribing among Minnesota providers is expected to be achieved through the use of an EHR.

As of 2014, e-prescribing has become common practice in Minnesota. Ninety-five percent of dispensers, 94% of clinics, and 65% of hospitals are regularly e-prescribing non-controlled substances.<sup>1</sup> About 82 million retail prescription drugs were filled at pharmacies in 2013.<sup>2</sup> An estimated 89% of Minnesota’s new and renewal prescriptions were sent electronically in 2013, up from just 4% in 2008.<sup>3</sup>

We have an opportunity now to build on this tremendous acceptance and adoption of e-prescribing to improve and expand our use of e-prescribing and its related functions to improve patient care, streamline workflow and increase efficiency in the exchange of information. While we have seen great progress in e-prescribing of new prescriptions, there is still room to improve our use of other transactions, such as changing or canceling prescriptions, and more robust use of formulary and benefit information and medication history data.

This guide is designed to support prescribing providers, pharmacists and pharmacies, payers/PBMs and others to achieve the quality and safety benefits of e-prescribing, and to support compliance with Minnesota law. The Minnesota e-Health Initiative published the first edition of this guide in 2009.

<sup>1</sup> Minnesota Department of Health, Office of Health Information Technology, 2014, <http://www.health.state.mn.us/e-health/assessment.html>.

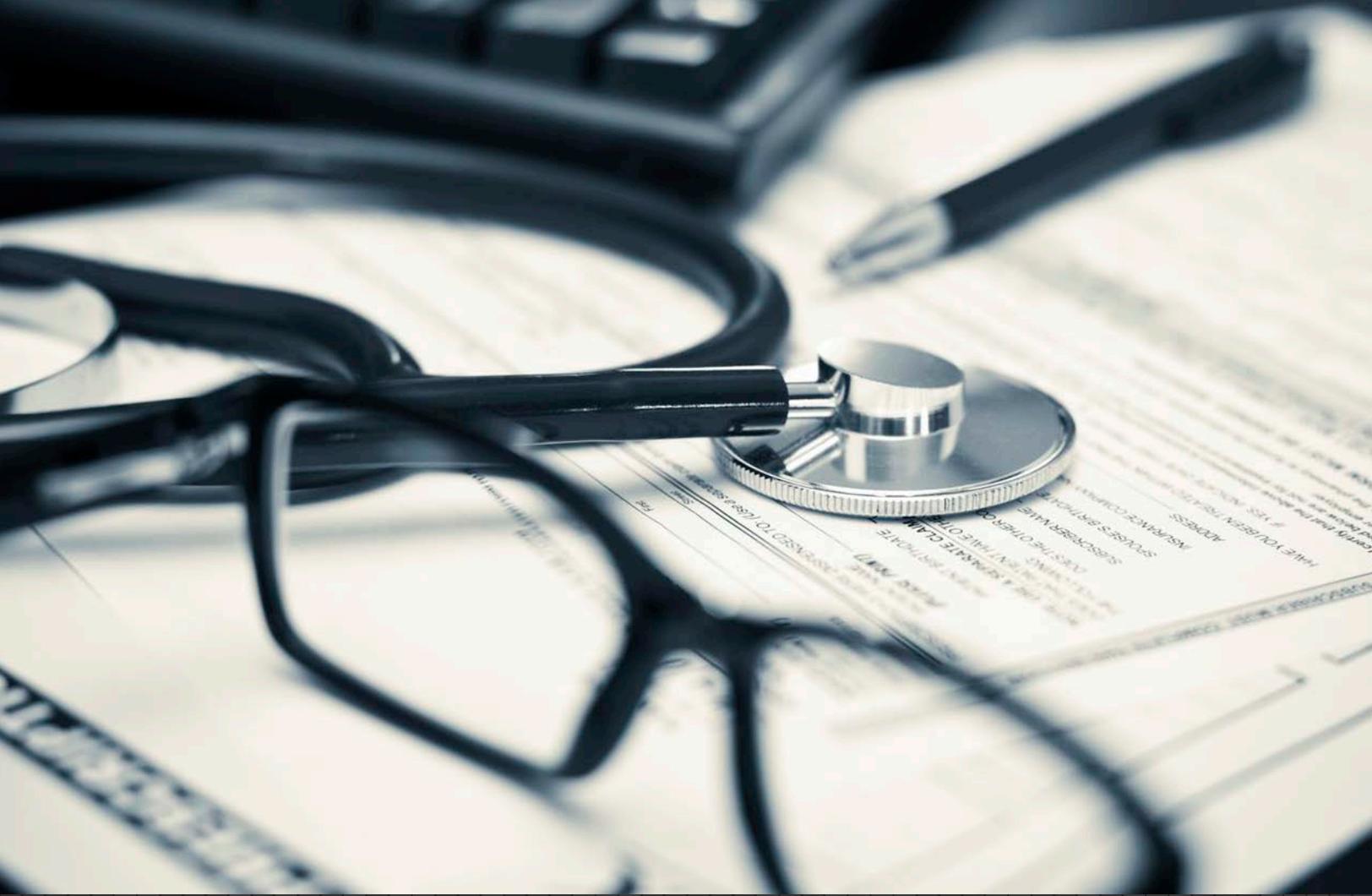
<sup>2</sup> Kaiser State Health Facts, <http://kff.org/other/state-indicator/total-retail-rx-drugs/>, accessed November 4, 2014.

<sup>3</sup> Gabriel MH, Swain M. “E-Prescribing Trends in the United States.” ONC Data Brief, no.18. Washington, DC: Office of the National Coordinator for Health Information Technology, July 2014. Available at: <http://www.healthit.gov/sites/default/files/oncdatabriefe-prescribingincreases2014.pdf>



Adoption of e-prescribing has grown dramatically since that edition was released. Over time there have been regulatory changes, technology updates, and unresolved workflow issues that potentially affect patient health and safety. A group of Minnesota's e-prescribing stakeholders raised issues to the Institute for Clinical Systems Improvement (ICSI) and the Minnesota e-Health Initiative about unintended consequences of these changes and issues. As a result, the Initiative formed a workgroup to study these issues to understand the gaps, barriers, and opportunities, and to provide expert input on updates presented in this guide. Contributors to this workgroup are listed in Appendix A.

This edition of the guide includes background information on e-prescribing, Minnesota's laws, explanation of transactions named in the law, and recommended practices to optimize use of e-prescribing systems and workflows. The information is intended to support all stakeholders in achieving the quality and safety benefits of e-prescribing, to help prescribing providers become eligible for federal financial incentives, and to support compliance with Minnesota law.



## e-Prescribing Background Information

Minnesota's health care and public health community is continually working to improve the affordability, access and quality of health care, and the health status of its citizens. Among the overall strategies for achieving these ambitious goals are the adoption and effective use of interoperable electronic health record systems and other health information technologies, including those for electronic prescribing. The tools and transactions that make up electronic prescribing are key components to achieving interoperability in Minnesota.

Stakeholders are referred to in this guide as:

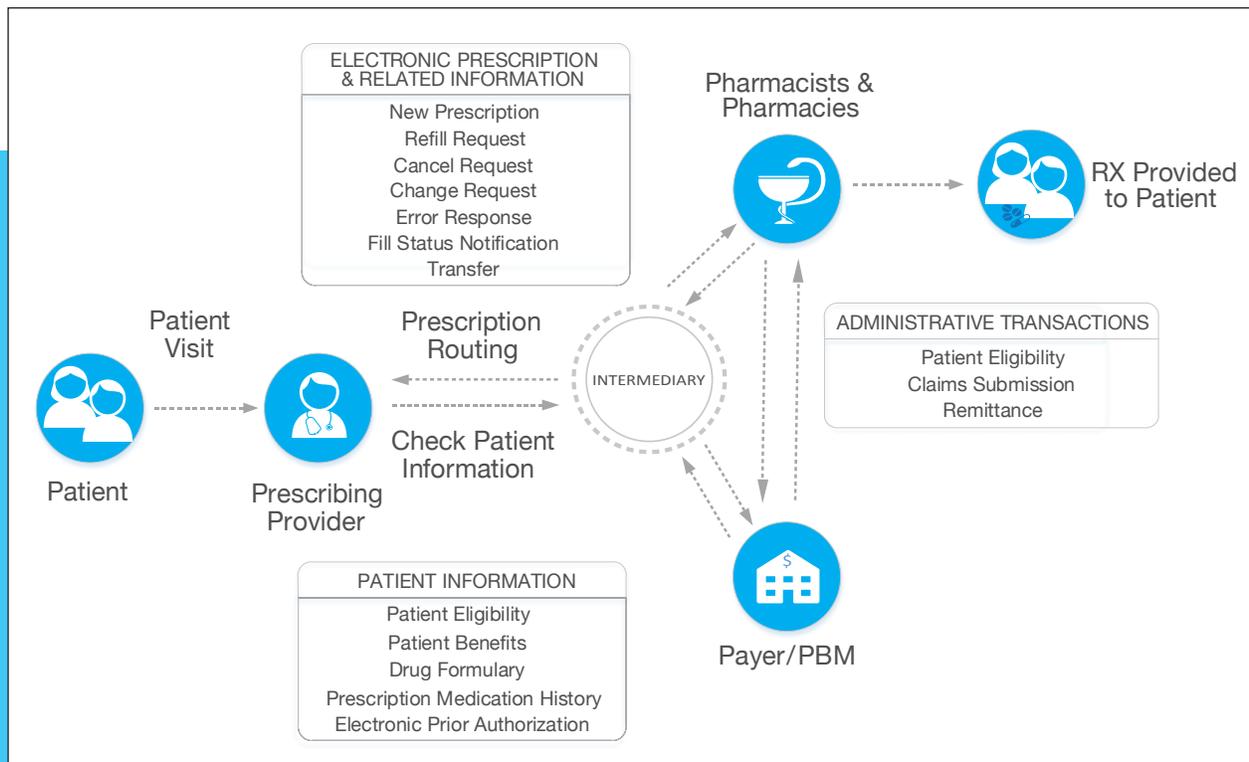
- Prescriber(s): including licensed providers and agents of providers
- Pharmacy(ies): including facilities and pharmacists
- Payers/PBMs: including payers, group purchasers, and pharmacy benefit managers (PBMs)

## What is e-prescribing?

E-prescribing means secure bidirectional electronic information exchange between prescribing providers, pharmacies, payers/PBMs, directly or through an intermediary network. E-prescribing encompasses routing prescriptions, checking the prescribed drug against the patient's health plan formulary of covered drugs, obtaining prior authorization, checking for any known patient drug allergies or sensitivities, identifying any drug-drug interactions, accessing patients' medication histories from external sources such as claims databases, and sending or receiving acknowledgement of prescriptions filled. E-prescribing also supports other important processes in care delivery, such as medication reconciliation, medication management and prior authorization.

E-prescribing replaces paper with two key tools: e-prescribing software used by prescribers, pharmacies, payers or PBMs, leveraging standard content; and a transmission network that links prescribing providers with pharmacists and pharmacies, often through a health information exchange intermediary. An example of the common process flow is shown in Figure 1. Note that the technology is primarily a tool and does not replace or negate the need for clinical judgment and review of all prescription information by the sender and receiver.

Figure 1: Common e-prescribing Process Flow



Adapted with permission from CenterX

## Why is electronic prescribing important?

Approximately 3.9 billion new and renewal prescriptions are written annually in the United States<sup>4</sup>. This previously paper-based process has been evolving to electronic transmission with promises for improved efficiencies and reduced errors due to lack of standardization and illegible scripts.

The Institute of Medicine (IOM) estimated that approximately 7,000 deaths<sup>5</sup> occur each year in the United States due to medication errors. In addition, in its report, *Preventing Medication Errors*, the IOM estimates more than 1.5 million adverse drug events (ADEs) each year are preventable, and the report's authors consider this a very low estimate<sup>6</sup>. These errors are predominately due to illegibility, unclear abbreviations and dosage instructions, and unclear and ambiguous orders. Missed drug-drug or drug-allergy reactions also contribute to the number of adverse drug events.

E-prescribing can be an important element in improving 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. In addition to prescription routing, use of the prescription benefit and formulary and prescription medication history features can contribute to improved patient safety<sup>7</sup>.

Effectively implementing e-prescribing statewide, including on-going training, the accurate use of standards, clinical decision support, and the best practices outlined in this document, can:

- Reduce medication errors and increase patient safety by routing prescriptions electronically.
- Directly inform pharmacies of discontinued (canceled) prescriptions.
- Reduce or eliminate errors and issues associated with unreadable handwriting.
- Improve quality and reduce adverse drug events through warning and alerts provided with e-prescribing clinical decision support systems.
- Enhance medication management by enabling prescribers to more thoroughly examine medication history while prescribing and notifying them when prescriptions are filled.

<sup>4</sup> Gabriel MH, Swain M. 2014. "E-Prescribing Trends in the United States." *ONC Data Brief*, no.18. Washington, DC: Office of the National Coordinator for Health Information Technology, at <http://www.healthit.gov/sites/default/files/oncdatabriefe-prescribingincreases2014.pdf>

<sup>5</sup> Institute of Medicine. 2000. "To Err is Human," at <http://www.nap.edu/catalog/9728/to-err-is-human-building-a-safer-health-system>

<sup>6</sup> Institute of Medicine. 2006. "Preventing Medication Errors," pgs. 124-125, at <http://www.nap.edu/catalog/11623/preventing-medication-errors-quality-chasm-series>

<sup>7</sup> Health Resources and Services Administration, "What are some of the benefits of e-prescribing?" web page, <http://www.hrsa.gov/healthit/toolbox/HealthITAdoptiontoolbox/ElectronicPrescribing/benefitsepres.html>, accessed December 8, 2014.

- Reduce costs by encouraging prescribers to review and use a patients' eligibility, formulary and benefit information before prescribing non-covered medications. Greater adherence to a formulary means greater use of lower-cost generics and fewer call-backs to verify prescriptions, a timesaver that leads to greater efficiencies.
- Reduce costs for pharmacies by reducing the time spent mediating between PBMs and prescribers, and allow for more time to be spent on clinical practices such as medication management and other direct patient care services.
- Expedite requests for prior authorization when needed for a specific medication.

### Minnesota's electronic prescribing requirements

Minnesota law requires that, "Effective January 1, 2011, all providers, group purchasers, prescribers, and dispensers must establish, maintain, and use an electronic prescription drug program. This program must comply with the applicable standards in this section for transmitting, directly or through an intermediary, prescriptions and prescription-related information using electronic media" (Minnesota statutes, section 62J.497; see Appendix B for the complete statutory language).

Minnesota's law applies to all prescriptions and all professionals authorized to prescribe in Minnesota unless otherwise prohibited by federal law. This means that any person or organization involved in prescribing, filling prescriptions or paying for prescriptions, including communicating or transmitting formulary or benefit information, must do so electronically using specified standards.

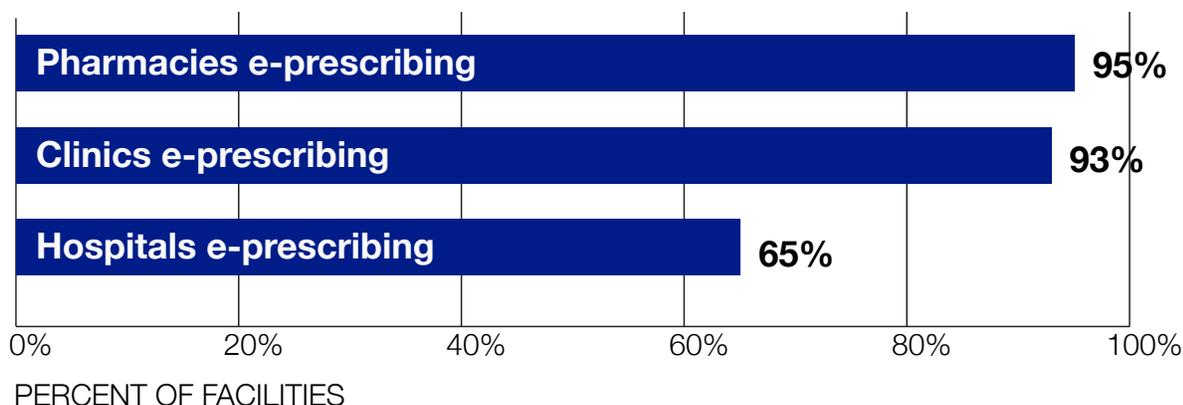
The Minnesota law applies to:

- **Prescribers:** Persons permitted by Minnesota law to issue prescriptions for drugs for human use at all sites of care. Persons including, but not limited to, physicians, osteopaths (duly licensed to practice medicine), dentists, podiatrists, optometrists, advanced practice registered nurses and physician assistants. Sites of care include, but are not limited to, clinics, community clinics, hospitals, nursing facilities, and dental offices.
- **Pharmacies:** Persons permitted by Minnesota law to provide drug products for human use by prescription in the course of professional practice. This includes, but is not limited to, pharmacists, pharmacies and dispensing physicians.
- **Payers and Group Purchasers:** Persons or organizations that purchase health care services on behalf of an identified group of persons, regardless of whether the cost of coverage or services is paid for by the purchaser or by the persons receiving coverage or services. This includes, but is not limited to, community integrated service networks, health insurance companies, health maintenance organizations, nonprofit health service plan corporations, and other health plan companies; employee health plans offered by self-insured employers; and workers' compensation.

## Current status of e-prescribing in Minnesota

Minnesota is one of the leading e-prescribing states in the nation and was the first state to mandate electronic prescribing. In 2013, nearly 23 million prescriptions in Minnesota were routed electronically, representing 89% of prescription benefit requests, ranking second in the nation<sup>8</sup>. In 2014, 95% of Minnesota pharmacies, 87% of clinics, and 68% of hospitals were electronically prescribing<sup>9</sup>. Figure 2 shows e-prescribing rates among Minnesota's pharmacies, hospitals and clinics.

Figure 2: Use of E-Prescribing Among Minnesota Hospitals and Clinics, 2014



Source: Office of the National Coordinator, Surescripts; Minnesota Department of Health, Office of Health Information Technology, 2014, <http://www.health.statemn.us/e-health/assessment.html>

## Controlled substances and e-prescribing

Since the first edition of this guide was released in 2009, the Federal Drug Enforcement Administration (DEA) rules have been modified to allow electronic prescribing of controlled (Schedule II, III, IV, V) substances (EPCS)<sup>10</sup>. This change is significant, as it removes the need for multiple prescribing workflows. With controlled substances accounting for 5%-15% of prescriptions, the potential safety and productivity improvements are significant. There are additional requirements needed to support EPCS, namely two-factor authentication (of the prescriber) that are not needed for other prescriptions. Statewide, adoption

<sup>8</sup> Surescripts. 2013. "Minnesota State Progress Report on Electronic Prescribing, December 31, 2013"; at <http://www.scribd.com/doc/225301727/2013-State-Report-on-E-Prescribing-Minnesota>

<sup>9</sup> Minnesota Department of Health, Office of Health Information Technology, 2014; at <http://www.health.state.mn.us/e-health/assessment.html>.

<sup>10</sup> Minnesota Statutes, section 152.11, available at <https://www.revisor.mn.gov/statutes/?id=152.11>; and U.S. Department of Justice, Drug Enforcement Administration, Title 21 Code of Federal Regulations, Park 1300-End, available at <http://www.deadiversion.usdoj.gov/21cfr/cfr/index.html>

of EPCS is not widespread but it is increasing. As of November 2014, 333 pharmacies have received an EPCS message from 220 prescribers. Just three months earlier, 220 pharmacies had received messages from 141 prescribers<sup>11</sup>. Progress is being made as prescribers and pharmacies are completing the steps necessary to allow them to send and receive electronic prescriptions for controlled substances.

Entities will need to consider the best approach to implementing two-factor authentication for EPCS and how it relates to other potential uses (such as remote access to the EHR). The California HealthCare Foundation has identified some key considerations as part of EPCS implementation:

- Ensuring full compliance with DEA requirements for identity proofing, issuance of two-factor authentication credentials, and setting logical access controls.
- Reviewing third-party audit or certification reports for all EPCS-related software components (including two-factor authentication technology, data standards, etc.) every two years or when changes are made, such as upgrades.

More information is available at: <http://www.chcf.org/projects/2013/epcs-pilot>.

### **Standards required for e-prescribing in Minnesota**

Standards are uniform terminologies and documentation specifications used in transmitting information. All parties involved in e-prescribing (prescribers, pharmacies, payers/PBMs) need to standardize their transaction exchange activities to achieve interoperability, or secure, accurate and verifiable electronic exchange of information. The specific set of transactions covered by Minnesota statutes, section 62J.497—and the standards required to implement them—are summarized below and listed in Appendix C.

The law does not require a prescriber, pharmacy or payer/PBM to perform all of these transactions but it does require that if any of these transactions are performed, they must be done electronically using the specified standards.

<sup>11</sup> Email communication from Surescripts, November 5, 2014.

The National Council for Prescription Drug Programs (NCPDP) is the standards development organization that maintains the standards used for e-prescribing that are named in Minnesota and federal legislation. The NCPDP SCRIPT Standard shall be used to conduct the following transactions:

- New Prescription Message (NEWRX)
- Prescription Fill Status Notification (RXFILL)
- Refill (Renewal) Prescription Request (REFREQ)
  - Resupply Prescription Request (RESUPP)  
used in long term care
- Refill (Renewal) Prescription Response (REFRES)
- Prescription Change Request (RXCHG)
- Prescription Change Response (CHGRES)
- Cancel Prescription Request (CANRX)
- Cancel Prescription Response (CANRES)
- Medication History Request (RXHREQ)
- Medication History Response (RXHRES)



NCPDP has also established standard transactions for electronic prior authorization (ePA) between prescribers and payers/PBMs. These transactions are designed to improve workflow problems associated with manual prior authorization. Implementation of these transactions has begun although full adoption by the industry does not have a specific timeline.

Electronic administrative transactions can support prescribing workflow:

- Patient eligibility transactions use the ASC X12N 270/271 standard.
- Formulary and benefit information are not transactions per se, but files sent from the payer/PBM to be loaded by the provider. The NCPDP Formulary and Benefits Standard are used for communicating and transmitting formulary and benefit information. Version 3.0 is required as of March 1, 2015<sup>12</sup>.

Because technology standards evolve over time it is recommended that readers stay up to date by monitoring NCPDP and the Minnesota e-Health Initiative.

<sup>12</sup> 42 CFR Parts 405, 410, 411, et al. Medicare Program; Revisions to Payment Policies Under the Physician Fee Schedule, Clinical Laboratory Fee Schedule & Other Revisions to Part B for CY 2014; Final Rule

## Interoperability within the context of e-prescribing

Interoperability of electronic health records (EHR) in Minnesota means the ability of two or more electronic systems or components of systems, such as e-prescribing tools, to exchange information electronically, securely, accurately and verifiably, when and where needed. Four types of interconnected standards are required for consistent, accurate, secure and timely exchange of information among health providers:

- Technical standard is the transmitting of data accurately and securely using hardware, software and networks.
- Syntactic standard is the structuring of the data in the message using nationally recognized templates.
- Semantic standard is communicating the meaning of the data using data, content and terminology standards.
- Process standard is using and integrating the data into the process, workflow and rules of the organization.

In the context of e-prescribing, interoperability encompasses:

- The use of the appropriate NCPDP SCRIPT Standard transactions, allowing for system-to-system communication with no human intervention, to enable technical interoperability.
  - Use of the NCPDP Formulary and Benefit Standard
  - Use of the ASC X12 270/271 Health Care Eligibility Benefit Inquiry and Response
- The adoption of a common vocabulary, such as RxNorm, to achieve semantic interoperability.
- The integration of common processes where all prescribers are prescribing electronically, completing formulary, benefit and medication history checks with automated drug utilization review (DUR), and all prescriptions (new/renewal/cancel) are routed electronically to dispensers and are received and filled without manual re-entry will help achieve process interoperability.
  - NOTE: to ensure success of these integrated common processes, detailed operational procedures should be developed, implemented and monitored.
- The exchange and use of medication history data to support medication reconciliation, comprehensive medication review and medication management.
- The integration with related systems, such as Minnesota's Prescription Monitoring Program.

The Minnesota e-Health Initiative supports a Standards and Interoperability Workgroup to monitor and support implementation of standards across the health care continuum. Resources and participation information are at: <http://www.health.state.mn.us/e-health/standards/index.html>.



## Electronic Prescription Transactions and Workflows

Using e-prescribing software, prescribers can access patient prescription benefit and formulary information, medication history, and route prescriptions to a patient's pharmacy of choice. All of these functions involve workflows between the prescriber, pharmacy, payer/PBM, payer, and patient.

Key functions enabled by e-prescribing include:

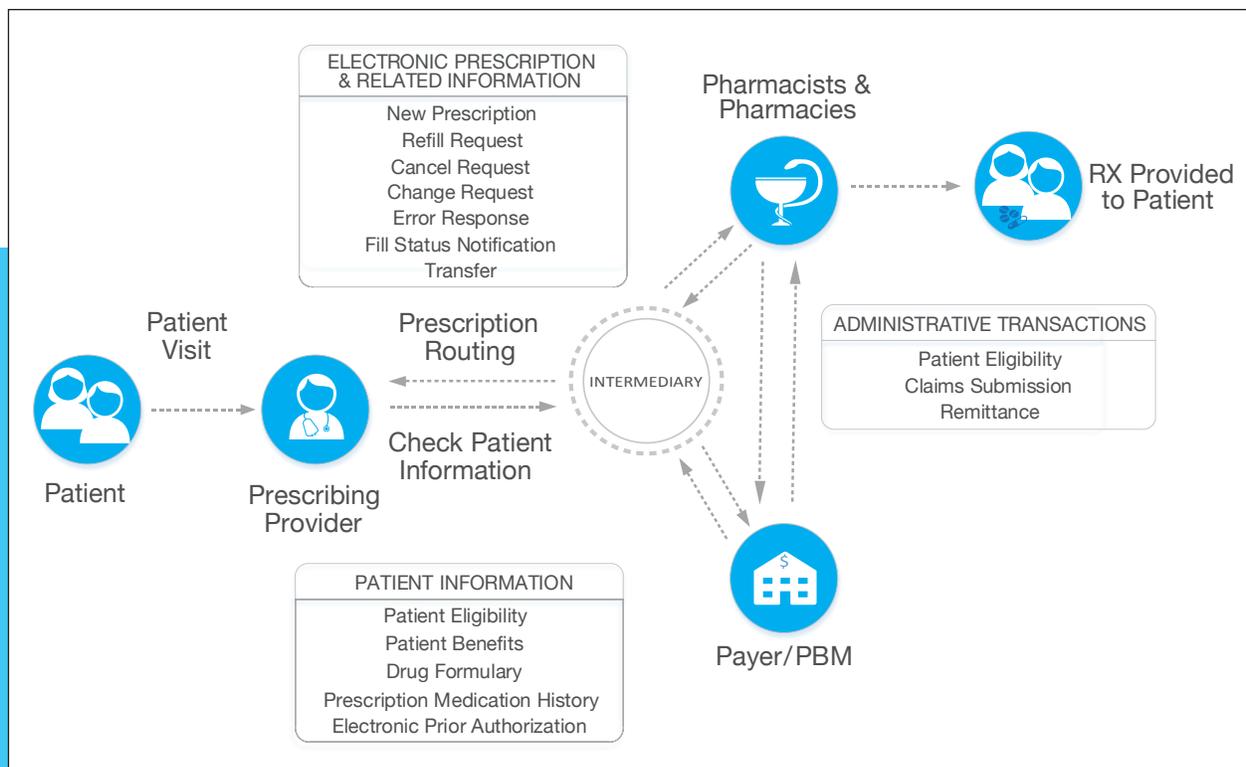
- **Electronically access a patient’s prescription benefit:** Prescribers can choose medications that are on formulary and are covered by the patient’s pharmacy benefit. Prescribers can also choose lower-cost alternatives such as generic drugs or preferred therapies per the patient’s plan. Pharmacies are less likely to receive prescriptions that require changes based on the patient’s drug benefit, which reduces unnecessary phone calls from pharmacies to prescribers.
- **Electronically access a patient’s medication history:** With a patient’s consent, prescribers receive critically important information on their patients’ current and past prescriptions and are better informed about potential medication issues with their patients, such as non-adherence and potentially contraindicated therapies. Prescribers can use this information to improve safety, quality and overall efficacy of care. While patients are encouraged to authorize release of all medications to be shared, there may be gaps, including over the counter (OTC) products and dietary supplements. Every effort should be made to validate the completeness of a patient’s medication list.
- **Electronically route the prescription to the patient’s choice of pharmacy:** Reviewing medication history, and formulary and benefit information will lead to “cleaner” prescriptions sent to pharmacies, requiring less rework by pharmacies and prescribers. Exchanging prescription information electronically between prescribers and pharmacies improves the accuracy of the prescribing process and workflow efficiency. Time savings primarily result from reduced pharmacy phone calls and faxes related to prescription renewal authorizations, as well as from a reduced need for pharmacy staff to manually enter prescription data into the pharmacy management system. Patients appreciate the convenience of knowing the prescription has been sent directly to their pharmacy.

When pharmacies receive a prescription electronically, they can communicate with the prescriber electronically to request changes to the prescription. These changes may be requested as a result of adjudication of the claim by a third-party payer (i.e., Drug A to Drug B), or different strength or quantity. Other changes may be based on a discrepancy in the patient’s history, the receipt of a new medication (e.g., Metformin ER vs. Metformin), or a pharmacy record of drug intolerance that is not known by the prescriber (e.g., a script sent by a new or substitute prescriber).

## Prescription routing transactions

The transactions listed in this section allow prescribers to transmit orders for new prescriptions and renewals directly to pharmacies as well as cancellations of previously prescribed medications. Refer to the common process flow for e-prescribing in Figure 1 as these transactions are described. Pharmacies can transmit prescription renewal requests directly to prescribers for refill/renewal requests received by a pharmacy. New prescription and request for renewal transactions are the most utilized e-prescribing transactions. A cancellation message sent by a prescriber to a pharmacy notifies the pharmacy that a previously prescribed medication should no longer be dispensed. This notification is of significant importance if the patient has enrolled in their pharmacy's auto-fill program, as it ensures the pharmacy no longer dispenses a medication and/or dosage that the prescriber has discontinued.

Figure 1: Common e-Prescribing Process Flow



Adapted with permission from CenterX

The NCPDP standard transaction name is included in parentheses.

### **1. New Prescription Message (NEWRX)**

Send a new prescription from a prescriber to a pharmacy electronically

- 1) Patient visits/contacts prescriber.
- 2) Prescriber requests the patient's medication history:\*)
  - a) Payer/PBM provides medication history to prescriber.
  - b) Pharmacy provides medication history to prescriber.
  - c) Prescriber reviews and validates the medication history.
- 3) Prescriber requests the patient's formulary and benefit (F&B) information:\*)
  - a) Payer/PBM provides the F&B information to prescriber.
  - b) Prescriber reviews the F&B information.
- 4) Prescriber informs patient that s/he will write a prescription and asks the patient's desired pharmacy:
  - a) Prescriber creates an e-prescription and sends it to the patient's desired pharmacy.
  - b) Pharmacy receives and fills the new prescription.
- 5) Prescription is billed to patient's prescription insurance, if applicable.
- 6) Pharmacy performs quality assurance check that prescription as filled is correct.
- 7) Medication is dispensed to patient.

### **2. Refill (Renewal) Prescription Request (REFREQ) and Response (REFRES)**

Request from a pharmacy to a prescriber to change the allowed refills on a prescription or renew an expired prescription. Response from a prescriber to a pharmacy, which has requested to refill a prescription additional times or renew an expired prescription.

- 1) Patient contacts pharmacy for a refill of their medication.
- 2) Pharmacy determines that a renewal of the prescription or additional refill authorization is needed.
- 3) Pharmacy sends a refill/renewal request to the prescriber.
- 4) Prescriber reviews the request and sends a response to the pharmacy.

\* The order of these transactions may vary. Additionally, some functionality will occur within the electronic systems and may not require separate action by the prescriber. For example, in advance of a scheduled patient visit, some EHR systems will request eligibility, formulary and benefit information and medication history, so that the most current information is presented to the prescriber.

- 5) Pharmacy fills the prescription if approved by the prescriber.
- 6) Prescription is billed to patient's prescription insurance, if applicable.
- 7) Pharmacy performs quality assurance check that prescription as filled is correct.
- 8) Medication is dispensed to patient.

## **2a. Resupply Prescription Request (RESUPP)**

The resupply transaction is the long-term care facility message from the facility to the pharmacy. The workflow is similar to that of the refill request. The facility will request the resupply on behalf of the patient and the pharmacy will provide the medication to the facility, who will dispense/administer it to the patient.

## **3. Prescription Change Request (RXCHG) and Response (CHGRES)**

Request from a pharmacy to a prescriber asking for a change in a new prescription or a "fillable" prescription. It may also be utilized to request a prescriber to review the drug requested, and obtain a prior authorization from the payer/PBM for the prescription. The response is from a prescriber to a pharmacy for a prescription change. It may also be used to send a response to a request for a prior authorization back to the pharmacy.

- 1) Pharmacy sends a change request to the prescriber.
- 2) Prescriber reviews the request and sends a response to the pharmacy.
- 3) Pharmacy fills the changed prescription if approved by the prescriber. If the prescriber does not approve the change request, the pharmacy should fill the original prescription.
- 4) Prescription is billed to patient's prescription insurance, if applicable.
- 5) Pharmacy performs quality assurance check that prescription as filled is correct.
- 6) Medication is dispensed to patient.

## **4. Cancel Prescription Request (CANRX) and Response (CANRES)**

Request from a prescriber to a pharmacy that a previously sent prescription not be filled; also to indicate that a previously filled/dispensed prescription should be stopped (discontinued). Response from a pharmacy to a prescriber on the status of a prescription cancellation.

- 1) Prescriber determines that a prescription was sent in error, or that a medication should no longer be taken by a patient and notifies the patient.
- 2) Prescriber discontinues the medication in the patient's record and a cancel request is sent to the pharmacy.
- 3) Pharmacy acknowledges the cancel request by sending a cancel response.
- 4) Pharmacy marks the medication as canceled/discontinued on the patient's profile.
- 5) Pharmacy cancels enrollment of that prescription/medication in any auto-refill programs.

## 5. Transfer

The ability to electronically transfer individual prescriptions from one pharmacy to another was added to the NCPDP SCRIPT Standard v20140702. The ability to batch prescriptions for transfer (e.g., when a pharmacy is being sold) is currently available via the NCPDP Prescription Transfer Standard.

### Best Practice Recommendations

#### PRESCRIBERS:

- Confirm with your vendor that all required transactions are supported and implemented.
- Train all impacted staff on how to appropriately use the transactions.
- Ensure you have policies and procedures in place if any prescription functions are delegated within your organization, and that any delegated functions comply with Minnesota Statute 151.37.
- Prescribers should review all prescriptions (new and renewal approvals, approved change requests) before they are sent to ensure accuracy and completeness.
- Do not cancel an expired prescription. Confirm with your vendor how expired prescriptions are treated.
- When a renewal request is received and if it is to be approved, respond to the request rather than sending a new prescription.
- Establish and follow timelines for responding to electronic requests received from pharmacies; e.g., within XX hours.
- Set expectations with your patients as to how you will communicate with them on refill requests and cancellations, especially if related to a change in therapy.
- If a prescription is sent to the wrong pharmacy, send a cancellation to that pharmacy before sending the prescription to the correct pharmacy.

#### PHARMACIES:

- Confirm with your vendor that all required transactions are supported and implemented.
- Train all affected staff on how to appropriately use the transactions.
- Ensure that related processes (IVR messaging, auto-refill programs) are using the most current prescription information, reflecting changes and cancellations.
- Establish and follow timelines for sending and responding to requests. E.g., if no response to a renewal (refill) request is received within XX hours, another request may be sent.
- Special attention needs to be taken on the impact of a cancel request while the prescription is in workflow; for example, check for cancel notifications before dispensing a medication.



### **Prescription fill status notification**

These transactions allow prescribers to receive an electronic notice from a pharmacy that a patient's prescription was picked up, not picked up, or partially filled. Fill status notifications can help providers monitor medication compliance in patients, especially those with chronic conditions.

### **Prescription Fill Status Notification (RXFILL)**

Notification from a pharmacy to a prescriber when the prescription has been dispensed to the patient, partially dispensed, or not dispensed and medication returned to stock.

### **Best Practice Recommendations**

#### **PRESCRIBERS:**

- Confirm with your vendor that all required transactions are supported and implemented.
- Understand how you will use this functionality in your practice.
- Consider when to request a medication history or receive fill status notifications.

#### **PHARMACIES:**

- Understand how this functionality is supported by your vendor and how it will be used in your practice.

The Network for Excellence in Health Innovation (NEHI) published an issue brief that outlines issues related to medication adherence, specifically identifying the use of fill status notifications as a tool to address non-adherence.

“Ready for Pick-Up: Reducing Primary Medication Non-Adherence. A New Prescription for Health Care Improvement” is available at:

<http://www.nehi.net/publications/60-ready-for-pick-up-reducing-primary-medication-non-adherence/view>.

## Prior Authorization (PA)

Effective January 1, 2016, prior authorization information is required (under MN Statute 62J.497) to be exchanged electronically (ePA). The goal of ePA includes modifying the current activity flows, so that the prescriber is requesting and obtaining PA before the prescription is sent to the pharmacy. Transitioning to a prospective model allows for the prescriber to communicate with their patient about the PA process, reduces the volume of claims rejected because PA hasn't been obtained, reduces calls from pharmacies to prescribers and will improve patient satisfaction with the process. Electronic PA should decrease the time to therapy initiation.

The NCPDP prior authorization transactions:

- Provide a fully electronic means for determining whether prior authorization is required for a particular medication and particular patient.
- Present prior authorization information needs to the prescriber in a consistent format while enabling each payer to request the particular information it requires.

The prior authorization transactions include:

- PA Initiation Request and PA Initiation Response
- PA Request and PA Response
- PA Appeal Request and PA Appeal Response
- PA Cancel Request and PA Cancel Response

### PA Initiation Request and Response

- 1) The prescriber initiates the PA process by notifying the payer/PBM of the patient and the medication for which the PA is being requested, along with the prescriber's information and other related details.
- 2) In response, the payer/PBM indicates the information needed from the prescriber to determine approval or denial of the authorization. This information is presented to the prescriber within their EMR/EHR.

### PA Request and Response

- 1) The information needed by the payer/PBM (received in the PA Initiation Response) is sent by the prescriber to the payer/PBM.
- 2) In response, the payer determines whether authorization can be granted and sends the determination to the prescriber.

### **PA Appeal Request and Response**

- 1) Allows a prescriber to send a request for information that is required to submit an appeal, and also enables the prescriber to submit the appeal information for a prior authorization determination.
- 2) In response, the payer/PBM sends provides information to the prescriber on what is needed for an appeal, and also is used by the payer to indicate the outcome of an appeal.

### **PA Cancel Request and Response**

- 1) The prescriber notifies the payer that the PA request is no longer needed.
- 2) In response, the payer acknowledges the PA request was or was not canceled.

### **Best Practice Recommendations**

#### **PRESCRIBERS:**

- Confirm with your vendor that the ePA transactions are supported and implemented. Encourage the ability for the system to use coded references to populate the PA Response.
- Train all applicable staff on the use of the ePA transactions.
- Establish workflow processes if this functionality is to be handled by someone other than the prescriber. Processes should encompass requests that may be handled in real-time and those that may require additional review, and therefore additional time, before a decision is communicated.
- Ensure patients understand the process for requesting a PA, and discuss when the prescription will be sent to the pharmacy.

#### **PAYERS/PBMS:**

- Build your questions/question sets to leverage coded references and system adjudication.
- Establish and communicate to prescribers your timeframes for reviewing and responding to requests and appeals.
- Consider how you will integrate PA information with member-facing/member service tools.

#### **PHARMACIES:**

Understand how your system supports the RxChange transaction which can be used to notify the prescriber that an e PA request should be submitted for your patient.



## Medication history transactions

These transactions allow providers to access information from external sources, such as claims databases and pharmacy records, about medications (prescription and over-the-counter) previously used by a patient. The ability to check a patient's prescription medication history is an extremely valuable clinical tool to help avoid duplication, interactions and reduce adverse drug events. While patients are encouraged to authorize the release of all medications to be shared, there may be gaps, including OTC and dietary supplements. Every effort should be made to validate the completeness of a patient's medication list.

Note that patients may opt out of sharing their personal health information, and therefore medication history may not be available to all providers. For information on patient consent refer to the Minnesota Department of Health's information about Minnesota's privacy and consent requirements, available at <http://www.health.state.mn.us/e-health/privacy/index.html>.

## Medication History Request

Request from one entity to another for a list of medications that have been prescribed for, dispensed to, claimed or indicated by a patient.

## Medication History Response

Response from the entity that received the medication history request that describes the patient's medication history. The medication history result includes the medications that were dispensed or obtained.

## Best Practice Recommendations

### PRESCRIBERS:

- Send complete and accurate data in response to a medication history request.
- Work with your vendor to pre-populate medication history prior to a patient encounter to assist in medication reconciliation processes.
- Validate the completeness and accuracy of the medication history with the patient.
- Ensure that patients are notified that their medication history may be shared.
- Recognize that, for patients who opt out of consent to share their personal health information, medication history may not be available to you.

## PHARMACIES:

- Send complete and accurate data in response to a medication history request.
- Work with your vendor to pre-populate medication history prior to a patient filling a controlled substance prescription.
- Work with your vendor to pre-populate medication history prior to a comprehensive medication review (CMR or MTM).
- Validate the completeness and accuracy of the medication history with the patient.
- Ensure that patients are notified that their medication history may be shared.

## PAYERS:

- Send complete and accurate data in response to a medication history request.
- Ensure that members are notified that their medication (claim) history may be shared.

### **Administrative transactions**

These transactions allow pharmacies to verify eligibility, submit claims to payers/PBMs and receive remittance information using electronic administrative transactions. Although these are not electronic prescribing transactions, they do support related workflows in the pharmacy.

Minnesota Statute 62J.536 Uniform Electronic Transactions and Implementation Guide Standards defines the standards that are to be used for health care administrative transactions such as eligibility and claims. As described in the statute, the Minnesota Administrative Uniformity Committee has developed companion guides to support implementation of the named standards. These guides can be found at <http://www.health.state.mn.us/auc/guides.htm>.

### **Patient Information**

Transactions allow prescribing providers to access information about a patient's eligibility and prescription benefit including formulary and prior authorization information. These transactions may also include information on lower cost alternatives like generic drugs. Use of these transactions present prescribers with important information about a patient's benefits before a prescription is sent, and can avoid delays due to rejected coverage.

### **Patient Eligibility Standard**

According to Minnesota Statutes 62J.536 and 62J.61, the ASC X12/005010X279A1 Health Care Eligibility Benefit Inquiry and Response (270/271) transactions are to be used to determine a patient's eligibility. More information is available at: <http://www.health.state.mn.us/asa/rules.html>.

## **Formulary and Benefit Standard**

A standard means for payers to communicate formulary and benefit information to prescribers via technology vendor systems, including:

- Drugs that the patient’s benefit plan considers to be “on formulary” (formulary status), and alternative medications for those which are not preferred (alternatives).
- Limitations that may impact whether the patient’s benefit will cover a drug being considered (coverage).
- The copay for one drug option versus another.

## **Best Practice Recommendations**

Effective March 1, 2015, version 3.0 of the Formulary and Benefit Standard is required under 42 CFR Parts 405, 410, 411, et al. Medicare Program; Revisions to Payment Policies Under the Physician Fee Schedule, Clinical Laboratory Fee Schedule & Other Revisions to Part B for CY 2014; Final Rule.

For additional information, refer to NCPDP’s white paper: “Challenges and Opportunities for Stakeholders Regarding ePrescribing Technologies and Formulary Compliance”, at <http://ncdp.org/Education/Whitepaper>.

### **PRESCRIBERS:**

- Work with your vendor to understand how eligibility and formulary and benefit information are supported, displayed and implemented.
- Confirm with payers what level of information they are providing. Some offer plan level, others offer detail at the group level.
- Use the formulary and benefit information to improve your workflow and patient satisfaction.

### **PAYERS:**

- Notify prescribers the level of information you are providing (plan, group). Instruct them how to obtain more detailed information if they need it.
- In addition to formulary status, provide payer-specified alternatives, coverage information, and copay information. Ensure that files are updated on a schedule that is communicated to providers and reflects changes in a timely manner.



## Resources

This section provides general resources on e-health and e-prescribing, including local and national resources.

## Minnesota resources

- **Minnesota e-Health home page:** <http://www.health.state.mn.us/e-health/>
  - Minnesota e-Health initiative:  
<http://www.health.state.mn.us/e-health/abouthome.html>
  - E-health laws and mandates:  
<http://www.health.state.mn.us/e-health/lawsmn.html>
  - Electronic prescribing guidance:  
<http://www.health.state.mn.us/e-health/eprescribing/index.html>
  - State-certified HIE Service Providers:  
<http://www.health.state.mn.us/divs/hpsc/ohit/certified.html>
  - Privacy and security resources:  
<http://www.health.state.mn.us/e-health/privacy/index.html>
  - Standards and interoperability:  
<http://www.health.state.mn.us/e-health/standards/index.html>
  
- **Institute for Clinical Systems Improvement:**  
<http://www.icsi.org>
  
- **Stratis Health HIT implementation toolkits:**  
<http://www.stratishealth.org/expertise/healthit/>
  
- **Boards**
  - Pharmacy: <http://mn.gov/health-licensing-boards/pharmacy/>
  - Nursing: <http://mn.gov/health-licensing-boards/nursing/>
  - Medical Practice: <http://mn.gov/health-licensing-boards/medical-practice/>
  
- **Associations**
  - Minnesota Medical Association: <http://www.mmaonline.net>
  - Minnesota Academy of Family Physicians: <http://www.mafp.org>
  - Minnesota Hospital Association: <http://www.mnhospitals.org>
  - Minnesota Nurses Association: <http://www.mnnurses.org>
  - Minnesota Dental Association: <http://www.mndental.org>
  - Minnesota Pharmacists Association: <http://www.mpha.org>
  - Minnesota Council of Health Plans: <http://www.mnhealthplans.org>

## National resources

- **NCPDP e-prescribing industry information, including SCRIPT Implementation Recommendations:**  
<http://www.ncdp.org/Resources/ePrescribing>.  
Other information is also available on the NCPDP website, including white papers. The NCPDP standards are available to NCPDP members.
- **Office of the National Coordinator for Health IT:** <http://www.healthit.gov/>  
“A Prescription for e-Prescribers: Getting the Most Out of Electronic Prescribing”, <http://www.healthit.gov/providers-professionals/prescription-e-prescribers-getting-most-out-electronic-prescribing>
- **Agency for Healthcare Research and Quality, A Toolset for E-Prescribing Implementation in Physician Offices:**  
<http://healthit.ahrq.gov/sites/default/files/docs/page/ToolsetEPrescribingImplementationFINAL.pdf>
- **Medicare e-prescribing information:**  
<http://www.cms.gov/Medicare/E-Health/Eprescribing/index.html?redirect=/eprescribing>
- **Pharmacy & Prescriber E-prescribing Experience Reporting Portal:**  
<https://www.pqc.net/eprescribe/disclaimer.aspx>
- **The California HealthCare Foundation conducted pilots on electronic prescribing of controlled substances (EPCS) and the findings are available at:** <http://www.chcf.org/projects/2013/epcs-pilot>



## Action Steps

The process of implementing e-prescribing is not just a matter of automating old processes but acting on the opportunity to transform how you practice and conduct business. As with all technology, the functionalities and processes evolve over time. Stakeholders will be best prepared to optimize the functions and manage changes by considering the action steps described below. Refer to the resources included in this guide to implement these actions.

## Planning for implementation, updates, and vendor negotiations

- Research the federal and state mandates and regulations that apply to you. Discuss these with your vendor to ensure they understand Minnesota requirements (see Resources section of this guide). Consider adding language to your vendor agreements that addresses compliance with all applicable laws and regulations.
- Seek out information from your peers and your professional and/or trade associations to learn lessons from other organizations similar to yours.
- Understand and document the volume and types of transactions your organization conducts to prepare for negotiating vendor agreements.
- During vendor negotiations, inquire with your vendor and intermediary to understand:
  - Ensure that prescribers have the most timely benefit and formulary information by including frequency of updates to this information as a key item in your intermediary contract.
  - Ensure that your vendor’s product is certified to connect with at least one Minnesota state-certified intermediary, and that both the product and intermediary support all of the e-prescribing transactions required by law (see Resources section of this guide for information).
  - Determine if your vendor provides the same security/authentication for remote access as for EPCS.
  - Understand what will occur if there is a disruption during transmission of any of the e-prescribing transactions.
  - Understand your intermediary’s approach to disaster planning and business continuity.
  - Be sure your agreement addresses how items such as new transactions, updated versions, testing, and certification will be handled.
  - Discuss the billing structure with your intermediary in order to understand costs for implementation, transactions, maintenance, and training. Make sure you understand how the various e-prescribing fees work, including those for the intermediary. These are all important costs—some of them ongoing—to factor into your business plan and ROI calculations.

## Optimizing the e-prescribing system

- Understand who is authorized to complete e-prescriptions for all situations, including protocol delegation to a nurse and controlled substances. Consult with the appropriate Boards for their guidance, and consult with your legal counsel or compliance officer.
- Ensure that you plan to use all the e-prescribing system functions to achieve the maximum e-prescribing benefit. The cost, quality, and efficiency benefits of e-prescribing are dependent on how well the technology is implemented and used. Routinely gather feedback from users on ways that the technology could be improved to assist in workflow.

- Establish and maintain a training program for all users to address implementation, updates, new workflows, etc.
- Establish patient consent.
- Regularly evaluate your progress and optimize your system to effectively leverage your investment. Work with your vendor to address usability concerns.
- Monitor and document errors and workflow issues. Work with your partner prescribers/pharmacies and vendor to address issues.
- Establish procedures for managing consent, regular security risk analysis, and updates as part of your risk management processes (see Resources page of this guide). Medicare Part D regulations have specific consent requirements, and the Minnesota Health Records Act (§§144.291 through 144.298) covers consent and authorization requirements for individuals enrolled in commercial plans. Payers/PBMs should review these consent and authorization requirements with legal counsel when crafting agreements with intermediaries.
- Consider forming a local user group with others using the same application. The application vendor may have a regional or national user group that your organization could participate with to optimize use of the system.

### **Action steps for payers /PBMs**

- Collaborate with other payers to advance the shared goal of improving medication management. There may be an opportunity to create or leverage an existing forum for payers to discuss and share best practices and lessons learned regarding solutions to improved medication management.
- Work with intermediaries to implement uniform processes for maintaining and updating formularies, patient eligibility and prescription benefit information.
- Ensure that you are providing the most complete, timely and accurate data in response to requests.
- Review transaction data to identify areas of concern and then work with stakeholders to address and resolve those areas.
- Payers and intermediaries could consider developing incentives or reimbursement programs to offset pharmacy costs related to e-prescribing.



## Practice-Related FAQs

### **How do we make sure the financial and other benefits of e-prescribing offset the costs associated with purchasing, implementing and maintaining a system?**

Understand the e-prescribing capabilities your system offers and train your staff in their full use so that you can reduce the volume of calls and faxes handled. Work with your vendor to ensure you are complying with all state and federal requirements.

**With an increased number of prescriptions to manage and the work required to fill them, will the extra volume cover our increased operating costs?**

Leveraging the capability of e-prescribing including reducing manual entry should allow your staff to maintain, or increase, productivity.

**Is this system actually going to reduce the number of callbacks to physicians? We still need to contact the provider to clarify information.**

It is anticipated that e-prescribing will reduce illegible prescriptions and that clinical decision support used by prescribers will reduce contradictory prescriptions. Use of the change transactions allow prescribers and pharmacies to securely and electronically communicate without being tied to the phone.

**Is e-prescribing going to reduce the amount of time that I will be able to spend providing patient counseling and providing medication therapy management services?**

E-prescribing should decrease the amount of time you spend entering prescriptions, thus freeing up time to spend with patients.

**Electronically generated prescriptions in the computer-to-fax system have generated new types of errors being transmitted to the pharmacy. How can we communicate our experiences with e-prescribing to begin working with prescribers to continuously improve e-prescribing processes?**

Consider participating in professional associations, user groups and other clinical practice groups such as ICSI. Report your experiences with e-prescribing to the Minnesota Board of Pharmacy and/or the Minnesota e-Health Initiative (see Resources section of this guide).

**Can we be confident that the prescriptions we receive have been verified by the prescriber prior to transmission?**

As mentioned throughout, it is ultimately the prescriber's responsibility to verify the prescriptions sent under their license. Some prescriptions may be sent under protocol but the sender should still verify the completeness and accuracy of the prescription before it is sent.

### **How do we support best practices for prescriber and pharmacies without dictating their internal processes?**

This can best be done in an open, collaborative format, sharing lessons learned from other prescriber and pharmacy settings. Consider participating in professional associations, user groups and other clinical practice groups such as ICSI.

### **It is a challenge to relay to payers the value in paying transaction fees associated with e-prescribing, and the potential return on investment from transmitting master patient index (MPI) files to an intermediary to make available to prescribers at the point of care. What are the implications of having incomplete information at the point of e-prescribing?**

There are many implications to not having complete information at the point of e-prescribing, such as workflow disruption and manual management of prescriptions written for non-covered medications, delays that cause dissatisfaction and potential outcomes issues for patients. Collaborate with payers and prescribers to discuss these implications and their impact on patient care.

### **Are there other resources in addition to payment incentives that payers can employ to encourage the implementation and effective use of e-prescribing?**

Structure payment incentives and pay-for-performance programs to include e-prescribing to encourage and assist providers and pharmacies in making this transition.

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# Appendix B: Minnesota Statute Relating to e-Prescribing

## 62J.497 ELECTRONIC PRESCRIPTION DRUG PROGRAM.

### *Subdivision 1. Definitions.*

For the purposes of this section, the following terms have the meanings given.

- (a) “Backward compatible” means that the newer version of a data transmission standard would retain, at a minimum, the full functionality of the versions previously adopted, and would permit the successful completion of the applicable transactions with entities that continue to use the older versions.
- (b) “Dispense” or “dispensing” has the meaning given in section 151.01, subdivision 30. Dispensing does not include the direct administering of a controlled substance to a patient by a licensed health care professional.
- (c) “Dispenser” means a person authorized by law to dispense a controlled substance, pursuant to a valid prescription.
- (d) “Electronic media” has the meaning given under Code of Federal Regulations, title 45, part 160.103.
- (e) “E-prescribing” means the transmission using electronic media of prescription or prescription-related information between a prescriber, dispenser, pharmacy benefit manager, or group purchaser, either directly or through an intermediary, including an e-prescribing network. E-prescribing includes, but is not limited to, two-way transmissions between the point of care and the dispenser and two-way transmissions related to eligibility, formulary, and medication history information.
- (f) “Electronic prescription drug program” means a program that provides for e-prescribing.
- (g) “Group purchaser” has the meaning given in section 62J.03, subdivision 6.
- (h) “HL7 messages” means a standard approved by the standards development organization known as Health Level Seven.
- (i) “National Provider Identifier” or “NPI” means the identifier described under Code of Federal Regulations, title 45, part 162.406.
- (j) “NCPDP” means the National Council for Prescription Drug Programs, Inc.
- (k) “NCPDP Formulary and Benefits Standard” means the National Council for Prescription Drug Programs Formulary and Benefits Standard, Implementation Guide, Version 1, Release 0, October 2005.
- (l) “NCPDP SCRIPT Standard” means the National Council for Prescription Drug Programs Prescriber/Pharmacist Interface SCRIPT Standard, Implementation Guide Version 8, Release 1 (Version 8.1), October 2005, or the most recent standard adopted by the Centers for Medicare and Medicaid Services for e-prescribing under Medicare Part D as required by section 1860D-4(e)(4)(D) of the Social Security Act, and regulations adopted under it. The standards shall be implemented according to the Centers for Medicare and Medicaid Services schedule for compliance. Subsequently released versions of the NCPDP SCRIPT Standard may be used, provided that the new version of the standard is backward compatible to the current version adopted by the Centers for Medicare and Medicaid Services.

- (m) “Pharmacy” has the meaning given in section 151.01, subdivision 2.
- (n) “Prescriber” means a licensed health care practitioner, other than a veterinarian, as defined in section 151.01, subdivision 23.
- (o) “Prescription-related information” means information regarding eligibility for drug benefits, medication history, or related health or drug information.
- (p) “Provider” or “health care provider” has the meaning given in section 62J.03, subdivision 8.

***Subd. 2. Requirements for electronic prescribing.***

- (a) Effective January 1, 2011, all providers, group purchasers, prescribers, and dispensers must establish, maintain, and use an electronic prescription drug program. This program must comply with the applicable standards in this section for transmitting, directly or through an intermediary, prescriptions and prescription-related information using electronic media.
- (b) If transactions described in this section are conducted, they must be done electronically using the standards described in this section. Nothing in this section requires providers, group purchasers, prescribers, or dispensers to electronically conduct transactions that are expressly prohibited by other sections or federal law.
- (c) Providers, group purchasers, prescribers, and dispensers must use either HL7 messages or the NCPDP SCRIPT Standard to transmit prescriptions or prescription-related information internally when the sender and the recipient are part of the same legal entity. If an entity sends prescriptions outside the entity, it must use the NCPDP SCRIPT Standard or other applicable standards required by this section.

Any pharmacy within an entity must be able to receive electronic prescription transmittals from outside the entity using the adopted NCPDP SCRIPT Standard. This exemption does not supersede any Health Insurance Portability and Accountability Act (HIPAA) requirement that may require the use of a HIPAA transaction standard within an organization.

- (d) Notwithstanding paragraph (a), any clinic with two or fewer practicing physicians is exempt from this subdivision if the clinic is making a good-faith effort to meet the electronic health records system requirement under section 62J.495 that includes an electronic prescribing component. This paragraph expires January 1, 2015.

***Subd. 3. Standards for electronic prescribing.***

- (a) Prescribers and dispensers must use the NCPDP SCRIPT Standard for the communication of a prescription or prescription-related information. The NCPDP SCRIPT Standard shall be used to conduct the following transactions:
  - (1) get message transaction;
  - (2) status response transaction;
  - (3) error response transaction;
  - (4) new prescription transaction;
  - (5) prescription change request transaction;
  - (6) prescription change response transaction;
  - (7) refill prescription request transaction;
  - (8) refill prescription response transaction;
  - (9) verification transaction;
  - (10) password change transaction;
  - (11) cancel prescription request transaction;
  - and
  - (12) cancel prescription response transaction.

- (b) Providers, group purchasers, prescribers, and dispensers must use the NCPDP SCRIPT Standard for communicating and transmitting medication history information.
- (c) Providers, group purchasers, prescribers, and dispensers must use the NCPDP Formulary and Benefits Standard for communicating and transmitting formulary and benefit information.
- (d) Providers, group purchasers, prescribers, and dispensers must use the national provider identifier to identify a health care provider in e-prescribing or prescription-related transactions when a health care provider's identifier is required.
- (e) Providers, group purchasers, prescribers, and dispensers must communicate eligibility information and conduct health care eligibility benefit inquiry and response transactions according to the requirements of section 62J.536.

***Subd. 4. Development and use of uniform formulary exception form.***

- (a) The commissioner of health, in consultation with the Minnesota Administrative Uniformity Committee, shall develop by July 1, 2009, a uniform formulary exception form that allows health care providers to request exceptions from group purchaser formularies using a uniform form. Upon development of the form, all health care providers must submit requests for formulary exceptions using the uniform form, and all group purchasers must accept this form from health care providers.
- (b) No later than January 1, 2011, the uniform formulary exception form must be accessible and submitted by health care providers, and accepted and processed by group purchasers, through secure electronic transmissions.

***Subd. 5. Electronic drug prior authorization standardization and transmission.***

- (a) The commissioner of health, in consultation with the Minnesota e-Health Advisory Committee and the Minnesota Administrative Uniformity Committee, shall, by February 15, 2010, identify an outline on how best to standardize drug prior authorization request transactions between providers and group purchasers with the goal of maximizing administrative simplification and efficiency in preparation for electronic transmissions.
- (b) By January 1, 2014, the Minnesota Administrative Uniformity Committee shall develop the standard companion guide by which providers and group purchasers will exchange standard drug authorization requests using electronic data interchange standards, if available, with the goal of alignment with standards that are or will potentially be used nationally.
- (c) No later than January 1, 2016, drug prior authorization requests must be accessible and submitted by health care providers, and accepted by group purchasers, electronically through secure electronic transmissions. Facsimile shall not be considered electronic transmission.

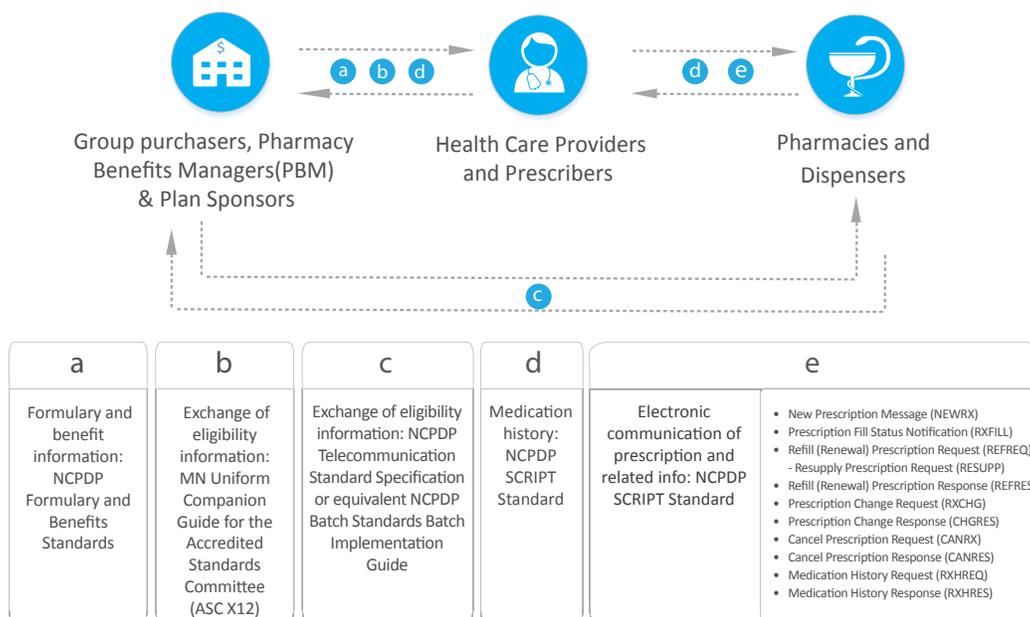
# Appendix C: Standards for e-Prescribing in Minnesota

Minnesota Statutes, section 62J.497, requires that when electronically prescribing, the e-prescribing system must use the following transactions standards:

- For communicating and transmitting formulary and benefit information, providers, group purchasers, prescribers, and dispensers must use the NCPDP Formulary and Benefits Standard.
- For exchange of eligibility information, providers, group purchasers and prescribers must use the MN Uniform Companion Guide for the ASC X12N 270/271—Health Care Eligibility Benefit Inquiry and Response. Identical to administrative simplification transactions required under Minnesota Statutes, section 62J.536.
- For exchange of eligibility information between pharmacies and PBMs/plan sponsors: the NCPDP Telecommunication Standard Specification, or equivalent NCPDP Batch Standards Batch Implementation Guide, must be used.
- For communicating and transmitting medication history information, the NCPDP SCRIPT standard is required.
- For electronic prescribing transactions between providers and pharmacies, the NCPDP SCRIPT standard must be used. This refers to any of the following transactions: get message, status response, error response, new prescription, prescription change request, prescription change response, refill prescription request, refill prescription response, verification, password change, cancel prescription request, cancel prescription response.
- For electronic prior authorization, health care providers and group purchasers will exchange standard drug authorization requests using NCPDP SCRIPT Standard). Information on standards required for electronic prior authorization in Minnesota is available at <http://www.health.state.mn.us/asa/drugauth.html>.

Note: When transmitting prescription information within an organization/legal entity (e.g., hospital emergency department to the hospital pharmacy), the HL7 standard may be used instead of NCPDP SCRIPT.

Figure 3: Summary of Minnesota e-Prescribing Transaction Standards



## Appendix D: Glossary of Electronic Prescribing Terms

**ADE (Adverse Drug Event):** An Adverse Drug Event is an injury resulting from medical intervention related to a drug. Does not necessarily imply medical error; ADE s can include non-preventable incidents such as adverse reactions to properly prescribed drugs (see ADR), as well as preventable incidents due to improper prescribing or other errors.

**ADR (Adverse Drug Reaction):** An Adverse Drug Reaction is a complication caused by use of a drug in the usual (i.e. correct) manner and dosage.

**Advanced Practice Registered Nurse (APRN):** Advanced Practice Registered Nurses include certified nurse midwives, certified nurse practitioners, certified registered nurse anesthetists and certified clinical nurse specialists.

**Community Pharmacy:** Community pharmacy or community retail pharmacy is an independent pharmacy, chain pharmacy, supermarket pharmacy or mass merchandiser pharmacy.

**Drug Enforcement Administration (DEA)** registration number system was implemented as a way to successfully track controlled substances from the time they are manufactured until the time they are dispensed to the patient. At the present time, however, the DEA number also is being used as a physician identifier by pharmacies for non-controlled substances, suppliers of durable medical equipment, and insurance companies for reimbursement purposes. Using the DEA number for purposes such as these could lead to the DEA

number falling into the hands of people who sell and use drugs illicitly and could lead to use of the DEA number for fraudulent prescriptions.

**Drug Utilization Review (DUR):** Study of drug prescriptions to evaluate a medication's usage and cost-effectiveness; may also be used to analyze treatment choices by individual practitioners, to suggest alternative medications, or to update an organization's drug formulary.

**EDI (Electronic Data Interchange):** EDI is a direct exchange of data between two computers via the Internet or other network, using shared data formats and standards.

**Electronic Prescribing or e-Prescribing:** Electronic prescribing, or "e-prescribing," means secure bidirectional electronic information exchange between prescribing providers, pharmacists and pharmacies, payers or pharmacy benefit managers (PBMs), directly or through an intermediary network. Fill Status Notifications: Informs when Rx filled, not filled, or partially filled. It includes provider, patient, and drug segments of SCRIPT message.

**Intermediary:** An entity that provides the infrastructure to connect computer systems or other electronic devices used by health care providers, laboratories, pharmacies, health plans, third-party administrators, or pharmacy benefit managers to facilitate the secure transmission of health information.

**Interoperability:** The ability of two or more systems or components to exchange information and to use the information that has been exchanged accurately, securely, and verifiably, when and where needed.

**NCPDP (National Council for Prescription Drug Programs):** NCPDP is an ANSI -accredited standards development organization. NCPDP works to create and promote data interchange and processing standards for the pharmacy services sector of the health care industry. NCPDP Standards are named in HIPAA and MMA for claims and electronic prescribing. Reference: <http://www.ncdp.org>

**Pharmacy Benefit Manager (PBM):** An organization that administers pharmacy benefits and manages the purchasing, dispensing and reimbursing of prescription drugs on behalf of payers and group purchasers. PBMs provide their services to health insurers or to large health care purchasers such as public employee systems, other government agencies and labor union trust funds. PBM services to their clients may include negotiating rebates or discounts from pharmaceutical manufacturers, processing claims for prescription drugs and negotiating price discounts from retail pharmacies. PBMs also develop formularies and manage utilization of drugs through prior authorization or utilization reviews. Many PBMs also operate mail order pharmacies or have arrangements to include prescription availability through mail order pharmacies. PBMs play a key role in managing pharmacy benefit plans in the Medicare drug program.

**Prescription:** The term “prescription” means a signed written order, or an oral order reduced to writing, given by a practitioner licensed to prescribe drugs for patients in the course of a practitioner’s practice, issued for an individual patient and containing the following: the date of issue, name and address of the patient, name and quantity of the drug prescribed, directions for use, and the name and address of the prescriber.

**Preauthorized Refill:** Initial prescription includes number of refills permitted.

**Prior Authorization:** A requirement that the provider and prescriber receive advance approval for providing a service or dispensing a product or providing a service to ensure that the medication or service qualifies for coverage under the terms of the patient’s pharmacy benefit plan. The purpose of the prior authorization function is for the group purchaser to determine member eligibility, benefit coverage, medical necessity, location and appropriateness of services.

**Renewals:** Renewal prescriptions are either 1) prescriptions with all refills used or 2) expired prescriptions.

## Appendix E: Minnesota's Approach to e-Health

In 2004, the Minnesota e-Health Initiative was established as a public-private collaboration to pursue strong policies and practices to accelerate e-health with a focus on achieving interoperability (the ability to share information seamlessly) across the continuum of care. The Initiative's consensus-driven approach seeks to identify and encourage policies and practices that:

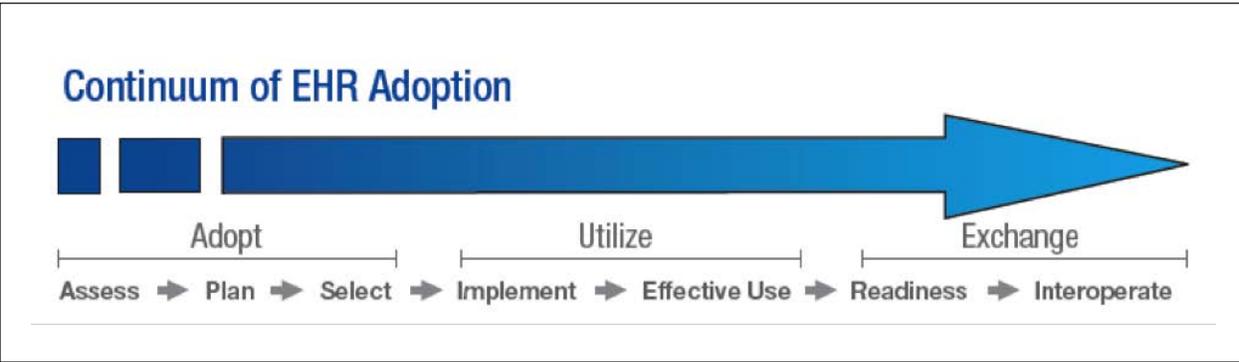
- Empower consumers with information and tools to help make informed health and medical decisions.
- Inform and connect health care providers by promoting the adoption of EHRs, effectively using clinical decision support, and achieving interoperable EHRs.
- Protect communities and improve public health by advancing efforts to achieve interoperable public health systems and population health goals.
- Modernize the infrastructure and increase workforce informatics competencies through adoption of standards for health information exchange; policies for strong privacy and security protection; supporting informatics education, funding and other resources; and assessing and monitoring progress on adoption, use and interoperability.

The Initiative includes representatives from all aspects of Minnesota's health system that are focused on achieving the Minnesota e-health vision: to accelerate the adoption and effective use of electronic health record (EHR) systems and other health information technology (HIT) in order to improve health care quality, increase patient safety, reduce health care costs and improve public health. Achieving the vision requires a collaborative effort among the intersecting domains of clinical care, policy/research, public health, and consumer engagement, and guides the work of the Minnesota e-Health Initiative.

To help providers across the continuum of care transition to an electronic environment, the Initiative developed the Minnesota Model for Adopting Interoperable EHRs (below) in 2008. The Model outlines seven practical steps leading up to and including EHR interoperability and groups each of the steps into three major categories that apply:

- Adopt, which includes the sequential steps of Assess, Plan and Select.
- Utilize, which involves implementing an EHR product and learning how to use it effectively.
- Exchange, including readiness to exchange electronically with other partners, and implementing regular, ongoing exchange between interoperable EHR systems.

Figure 4: Minnesota Model for Adopting Interoperable Electronic Health Records



This model was first published in the statewide plan aimed at helping providers understand and implement Minnesota’s EHR mandate. Entitled “A Prescription for Meeting Minnesota’s 2015 Interoperable Electronic Health Record Mandate—

A Statewide Implementation Plan,” the plan provides practical guidance for proceeding through the steps of Adoption, Utilization and Exchange. It is available for download at <http://www.health.state.mn.us/ehealth/ehrplan.html>.

FOR MORE INFORMATION:



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