

Stepping up to the Future

NH CITIZENS HEALTH INITIATIVE



ePrescribing in New Hampshire

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and

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“Together, we are setting a goal of making New Hampshire the first state in the nation where all of our health care providers are able to prescribe medication electronically—an innovation that will improve health care quality and help save lives, while at the same time reducing health care costs and improving the efficiency of our health care system.”

**~NH Governor
John Lynch**

Purpose

This document was created by the NH Citizens Health Initiative’s Quality of Care Policy Team as a resource for New Hampshire’s prescribing clinicians and to assist prescribers with making the decision to adopt ePrescribing technology. It provides an overview of the benefits of electronic prescribing (ePrescribing), its functionality, and what ePrescribing options are available to prescribers, as well as background on the vendors supporting this technology.

About the NH Citizens Health Initiative

The NH Citizens Health Initiative is a health care collaborative effort that seeks to create a system of care that promotes health, where quality is assured, and care is accessible, affordable, effective, and safe. The Initiative brings together a broad cross section of citizen representatives, joined by businesses, medical providers, and community agencies in an ongoing, goal-oriented effort to implement a comprehensive health care plan for our state.

ePrescribing Functionality

According to the Institute of Medicine, over three billion prescriptions are written in the United States annually, with medication errors resulting in \$77 billion in costs and 7,000 deaths per year. There is a clear opportunity for quality improvement in the way prescriptions are generated and transmitted to the pharmacy.

ePrescribing is a process by which a prescription is electronically generated by a licensed practitioner and then electronically transmitted to and received by a pharmacy. ePrescribing is typically a functional capability of most electronic medical record (EMR) systems. In addition to accessing ePrescribing via EMR systems, prescribers can use wireless handheld devices or stand-alone web-based applications. The non-EMR solutions are a practical, low cost way for hospitals or physicians to purchase ePrescribing technology.

ePrescribing has three core quality improvement and efficiency components:

- 1. Medication history.** This information may come from a variety of sources, including electronic medical records, pharmacy claims data, or from prescriber-to-pharmacy transactions.
- 2. Drug-to-drug interaction and allergy alerts.** These provide decision support rules at the point of prescribing and combine this information with health insurance formularies and pharmacy benefit plans to assist the prescriber in their drug selection.
- 3. Bi-directional pharmacy communication.** This allows the prescribing practitioner to electronically write the prescription and transmit it to the pharmacy. Additionally, the pharmacy may request refills electronically without needing to fax or call the prescriber.

“The plan calls for all providers to have the ability to prescribe prescriptions electronically by October 2008.”

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As a result of these three components, ePrescribing results in

- improved patient safety by prevention of medical errors,
- improved efficiencies for physicians and pharmacists,
- increased formulary compliance,
- reduced medical costs, and
- improved patient satisfaction.

From a security perspective, ePrescribing employs multiple safeguards to protect patient confidentiality. These include authentication of the prescribing clinician, secure transmissions between the prescriber and the pharmacy, compliance with the federal Health Insurance Portability and Accountability Act (HIPAA) regulations, and audit trails.

ePrescribing Transaction Intermediaries

In order to facilitate the electronic transactions between the prescribing practitioners and the pharmacy, as well as to provide medication history and formulary information, two national companies, SureScripts and RxHub have been created. These organizations work with the electronic medical records (EMR), wireless handheld, and web-based ePrescribing software companies to ensure compatibility and full functionality.

RxHub (www.rxhub.net) was founded in 2001 by pharmacy benefit managers (PBMs)—AdvancePCS (acquired by CVS Caremark), Express Scripts, and Medco Health Solutions—in order to create the RxHub National Patient Health Information Network™. Today, RxHub links prescribers, pharmacies, payers, PBMs, and benefit plans to share patient eligibility, benefit, formulary, and medication history information at the point of prescribing. The list of PBMs currently supported by RxHub is extensive and may be found at: http://rxhub.net/pdf/RxHub_PBM-Payer_Providers.pdf.

SureScripts (www.surescripts.com) was founded in 2001 by the National Association of Chain Drug Stores (NACDS) and the National Community Pharmacists Association (NCPA) to create and operate the Pharmacy Health Information Exchange™. The Exchange is the largest network linking electronic communications between pharmacies and prescribing practitioners, allowing the electronic exchange of prescription information. The list of ePrescribing vendors (web based, electronic medical records, and personal digital assistant platforms) certified by SureScripts is extensive and may be found at: <http://www.surescripts.com/get-connected.aspx?ptype=physician>.

“This is an aggressive goal, but one I believe we can meet because the people who can make it happen - the New Hampshire Hospital Association, the New Hampshire Medical Society, New Hampshire’s Pharmacists and New Hampshire’s major insurers - have all joined together through the Citizens Health Initiative to develop and endorse this plan.”

**~NH Governor
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The following table contains a summary of functionality offered by each company:

Feature	RxHub	SureScripts
Eligibility	✓	✓
Formulary information	✓	✓
Prescription transmission	✓	✓
Prescription refill	✓	✓
Medication history – provided by the pharmacy, including OTC medications		✓
Claims reconciliation – provided by the Pharmacy Benefit Manager	✓	

New Hampshire’s ePrescribing Landscape

The New Hampshire ePrescribing initiative began in the fall of 2006, with the goal of having all New Hampshire primary care physicians with access to the technology by the fall of 2007, and all New Hampshire specialty physicians with access by the fall of 2008. As of January 2007, there were a total of 1,477 licensed, practicing primary care physicians and 2,034 specialty care physicians in New Hampshire. It is estimated that close to half of the primary care physicians already have access to basic ePrescribing capabilities through electronic medical record (EMR) systems provided by New Hampshire’s hospitals, clinics, and larger physician groups. For those not using EMR systems; web-based and wireless handheld ePrescribing tools are readily available.

Nearly half of New Hampshire’s hospitals have purchased EMR systems with ePrescribing capabilities and are in various stages of implementation. In addition to some of the hospitals, the Federally Qualified Health Centers have adopted an EMR system and are using ePrescribing technology to submit the prescriptions to the pharmacy via facsimile. Ultimately, fax interactions will be replaced by fully electronic transmissions, thereby allowing the pharmacy to remit information back to the prescriber such as whether the patient picked up the prescription.

The majority of the EMR systems installed in New Hampshire use the GE Centricity product. Although the GE Centricity clients currently transmit prescriptions to the pharmacy via facsimile, they have a beta rollout of full ePrescribing functionality scheduled for August 2007. Other common EMR vendor systems in New Hampshire include Epic, NextGen, Allscripts, McKesson, and eClinicalWorks. These vendors all have current or planned capacity to provide ePrescribing capabilities to their customers.

“Modernizing our prescription drug system will save lives and improve the health of our citizens. It will also help control costs.”

**~NH Governor
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To date, there have been fewer than 100 New Hampshire prescribers who have fully implemented non-EMR ePrescribing solutions, but it is expected that this market segment will grow in 2007 and 2008, as a number of national initiatives—including Centers for Medicare and Medicaid Services (CMS) and Anthem Blue Cross Blue Shield New Hampshire—press for full adoption of ePrescribing.

Getting Started

Getting started with ePrescribing is relatively simple and there are two typical paths of implementation:

1. For prescribers currently using an electronic medical record (EMR) system, such as GE/Centricity, NextGen, Allscripts, Epic, McKesson, or another package, it is best to contact the prescriber’s EMR vendor directly to find out what is needed to begin. Typically, there is a monthly per prescriber fee charged by the EMR vendor to cover the connection fees to the pharmacies and the pharmacy benefit managers. Additionally, depending on what version of the EMR system is currently installed, an upgrade may be required. Finally, the prescriber will need to work with their vendor to notify the local pharmacies the prescriber wishes to connect with to ensure that the pharmacy is able to begin electronic communication. Many prescribers today are sending faxes to the pharmacy and the work flow in the pharmacy is slightly different with ePrescribing. The pharmacy will also be able to send the prescriber electronic refill requests and the system will notify the prescriber when the prescription has been filled and picked up by the patient.
2. For prescribers who do not use electronic medical records, there are both web-based and wireless handheld options available for prescribers to choose from. A number of the vendor solutions combine both the web-based and wireless handheld devices into one offering. A complete list of vendors certified by SureScripts can be found at <http://www.surescripts.com/get-connected.aspx?ptype=physician>.

Points to consider when making an ePrescribing purchasing decision include:

- Will I be moving to an electronic medical record soon? If so, how will a standalone product integrate later on?
- Do I need a wireless handheld device or will running the software on a computer with a web browser suffice?
- Will I want to be able to synchronize the eligibility information in my practice management or billing system with the ePrescribing software? How frequently?
- What type of implementation support am I going to need? Do I need on-site training and support or is my office staff computer savvy enough for telephonic or web-based training and support?

About the Authors

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Patrick Miller, MPH, serves as a Research Associate Professor at the New Hampshire Institute for Health Policy and Practice as well as Senior Staff for the NH Citizens Health Initiative. Patrick has worked in the fields of health care finance, operations, technology, and policy. Patrick started his own consulting company in 1999, and previously held positions as Chief Information Officer and co-founder for Choicelinx Corporation, as well as senior management positions with Healthsource/CIGNA.

Further Reading

The following documents contain further information on the subject of ePrescribing:

- October 2007, **Press Release, Governor Lynch, Citizens Health Initiative**, Announce Major Push to Ensure 100 Percent E-Prescribing Capability in New Hampshire by October 2008; Switch to E-Prescribing Will Improve Quality, Save Lives, Reduce Health Care Costs, <http://www.nh.gov/governor/news/2006/101906.htm>.
- June 2006, **Fact Sheet: Benefits of ePrescribing, MA eRx Steering Committee**, Massachusetts Health Data Consortium, http://www.mahealthdata.org/ma-share/projects/e-prescribing/20060627_eRxBenefitsFactSheet.pdf.
- January 2006, **The Prescription Infrastructure: Are We Ready for ePrescribing?**, Health Reports, California HealthCare Foundation, <http://www.chcf.org/documents/ihealth/ThePrescriptionInfrastructureReadyForERx.pdf>.

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