



What is electronic prescribing? It is the computer-to-computer transfer of prescription data between pharmacies, prescribers, and payers. It is not the use of an email or a facsimile transaction. Electronic prescribing functions include messages regarding new prescriptions, prescription changes, refill requests, prescription fill status notification, prescription cancellation, and medication history.

Who is involved in electronic prescribing? Prescribers – individual practitioners, clinics, hospitals, provider associations; pharmacies; software vendors; trade and professional associations; state and federal governments, standards development organizations, terminology and code set organizations.

The Institute of Medicine recommends that all prescribers and pharmacies use electronic prescribing by 2010.¹

	If I'm a prescriber?	If I'm an EMR vendor?	If I'm a trade or professional association?	If I'm a pharmacy?
Why is electronic prescribing important	Compliance with regulatory requirements Supports efforts to improve the standard of care Will increase administrative efficiency Is welcomed by patients Is safe and secure Is allowed in all 50 states	Regulatory requirements of customers Industry movement	Support for members	Compliance with regulatory requirements Supports efforts to improve the standard of care Will increase administrative efficiency Is welcomed by patients Is safe and secure Is allowed in all 50 states
What do I need to begin electronic prescribing	Select an electronic prescribing or EMR vendor (if you don't have one) Contact your vendor and request electronic prescribing Consider development of electronic prescribing awareness information	Contact NCPDP for messaging standards Certify with appropriate network business partners Contact Certification Commission for Healthcare Information Technology (CCHIT) (www.cchit.org) for certification requirements.	Consider development of electronic prescribing awareness information	Contact NCPDP for messaging standards Certify with appropriate network business partners Consider development of electronic prescribing awareness information
Where can I get more information on electronic	http://www.cms.hhs.gov/EPrescribing/ http://www.cms.hhs.gov/EHealthRecords/			

¹ The Institute of Medicine Reports in 1999 and 2001, "To Err is Human" <http://www.iom.edu/?id=12735> and "Crossing the Quality Chasm" <http://www.iom.edu/CMS/8089.aspx>.

prescribing	http://www.ehealthinitiative.org/ http://www.rxhub.net/ http://www.nationalerx.com/ http://www.thecimm.org/faq.htm http://www.himss.org/ASP/topics_eprescribing.asp www.healthtransformation.net
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Electronic prescribing standards

NCPDP SCRIPT Standard:

The NCPDP SCRIPT Standard was first published in 1997 and has been updated annually based on the business needs identified by the industry. SCRIPT is a standard created to facilitate the transfer of prescription data between pharmacies, prescribers, intermediaries, and payers. The current standard supports messages regarding new prescriptions, prescription changes, refill requests, prescription fill status notification, prescription cancellation, and medication history. Enhancements have been added for Drug Use/Utilization Review (DUR) alerts and formulary information. A transaction for a facility to notify a pharmacy of resident information has been added. In the future, enhancements may be included such as lab values, patient drug profiles, prescription transfers, and formulary inquiries.

In conjunction with the Agency for Healthcare Research and Quality (AHRQ) and the Centers for Medicare and Medicaid Services (CMS), NCPDP is working with the industry to enhance the functionality available for exchanging structured and codified Sig, electronic prior authorization functionality, and the use of RxNorm for standardized medication nomenclature. The ability to include the Sig (prescription instructions) in a structured and codified way is available in SCRIPT version 10.4 and above. The industry will continue testing and enhancing this complex information sharing of instructions. As electronic prior authorization and RxNorm efforts continue, NCPDP will work with the industry to enhance the appropriate standards to support these business functions.

Within SCRIPT, basic business operations such as the communication of prescription information between prescriber and pharmacy and medication history information between entities can all be handled electronically (computer to computer).

PHARMACY The pharmacy typically will:	PRESCRIBER The prescriber typically will:	Entities (pharmacy, prescriber, intermediary, payer/health plan) typically will:
<ul style="list-style-type: none"> • initiate a request for a refill • initiate a request for a change to a new prescription • initiate a request for a password change • initiate a notification of a dispensed, not dispensed, or partially dispensed prescription • initiate a response to a cancel prescription request • initiate a request for a medication history to a prescriber • initiate a request for a medication history to a payer 	<ul style="list-style-type: none"> • initiate a request for a new prescription • initiate a response to a refill request from a pharmacy • initiate a response to a prescription change request • initiate a request for a password change • initiate a request to cancel a prescription that has already been transmitted • initiate a request for a medication history to a pharmacy • initiate a request for a medication history to a payer • notify the pharmacy about census events (acting as a facility in a long term care environment) • modify the prescription order and notify the pharmacy (in long term care environments) • send a refill request from a facility to a pharmacy 	<ul style="list-style-type: none"> • request medication history request from another entity • provide medication history
<p>Intermediaries/Switches/Clearinghouses/Aggregators are entities that accept an electronic transaction from another organization and electronically routes the transaction to a receiving entity.</p>		

NCPDP Formulary and Benefit Standard:

The NCPDP Formulary and Benefit Standard provide patient benefits information to physicians at the point of care. The goal is to enable the physician to consider the following kinds of information during the prescribing process, so that he/she could make the most appropriate drug choice for the patient. Formulary and benefits data can consist of the following types: Formulary Status, Payer-specified Alternatives, Coverage Information, Copay Information, and Drug Classifications. Lastly, a Cross-Reference may be used to tie the different types of information to a particular benefit plan or group.

- Information about which drugs are considered to be “on formulary,” and alternative medications for those drugs not on formulary.
- Limitations that may impact whether the patient’s benefit will cover a drug being considered (such as age limits, gender limits, step therapy rules, benefit-specific coverage exclusions, etc.)
- The cost to the patient for one drug option versus another.

ASC X12N 270/271:

ASC X12N 270 Health Care Eligibility/Benefit Inquiry and ASC X12N 271 Health Care Eligibility/Benefit Response used for a prescriber system to request eligibility information about a patient, in this case, specifically for pharmacy benefit eligibility information. This standard is maintained by the Accredited Standards Organization (ASC) X12. www.x12.org.

Continuity of Care Record (CCR):

The HL7 Continuity of Care Document (CCD) Component describes the document content that summarizes a consumer's registration/medication information. See HL7 Implementation Guide: CDA Release 2 - Continuity of Care Document (CCD), April 01, 2007. www.hl7.org

National Provider ID (NPI):

On April 7, 2008, CMS released 42 CFR Part 423 “*Medicare Program; Standards for EPrescribing Under Medicare Part D and Identification of Backward Compatible Version of Adopted Standard for EPrescribing and the Medicare Prescriptions Drug Program (Version 8.1); Final Rule*”². In this rule, the NPI is adopted for electronic prescribing to identify an individual health care provider to Medicare Part D sponsors, prescribers and dispensers, in electronically transmitted prescriptions or prescription-related materials for Medicare Part D covered drugs for Medicare Part D eligible individuals. **It is important to note that the NPI is used to identify the individual prescriber and dispenser in the electronic prescription process. The NPI was not created to be used for routing of transactions.**

The electronic prescribing standards are not **HIPAA covered transactions** and as such are not required to use the NPI. Entities covered by the Medicare Modernization Act are required to comply with the MMA, including the NPI usage.

Progress to Date (as of 12/2008)

December 2007 - In industry meetings with the National Committee on Vital and Health Statistics (NCVHS), the industry requested moving from SCRIPT version 8.1 to version 10.5 for implementation in January 2010. The long term care industry also requested removing the exemption for electronic prescribing in long term care. Information is available at www.ncvhs.hhs.gov

November 2008 – Industry representatives requested of NCVHS that since there have been delays in the regulatory process for moving to SCRIPT 10.5, that SCRIPT 10.6 be recommended.

Medicare Improvements for Patients and Providers Act of 2008 (MIPPA) – Eprescribing Incentive Program

This program authorizes a new and separate incentive program for eligible professionals who are successful electronic prescribers (e-Prescribers) as defined by MIPPA. This new incentive is separate

² The rule was published in the Federal Register on April 7, 2008

from and is in addition to the quality reporting incentive program authorized by Division B of the Tax Relief and Health Care Act of 2006 - Medicare Improvements and Extension Act of 2006 (MIEA-TRHCA) and known as the Physician Quality Reporting Initiative (PQRI). Information is available at http://www.cms.hhs.gov/PQRI/03_EPrescribingIncentiveProgram.asp#TopOfPage

The MIPPA legislation is at http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=110_cong_bills&docid=f:h6331eh.txt.pdf

CMS published information on the electronic prescribing fax exemption on 10/30/2008. The fax exemption is in and available until 2012, and considered valid for a prescription, but will not count for incentives.

Infrastructure

It is anticipated that in 2008 alone, 100 million e-prescription transactions will have been securely and successfully processed. Today, seventy percent (70%) of all community pharmacies receive e-prescriptions compared to six percent (6%) of physicians who transmit them.

In 2008, from information stated by SureScriptsRxHub, the combined organization expects to transmit 100 million electronic prescription transactions and respond to more than 70 million requests by physicians confirming information about their patients' drug coverages and medication histories. With appropriate patient consent, the combined organization will extend this information to clinicians caring for more than 200 million patients across the United States.³

History of NCPDP

NCPDP, located in Scottsdale, AZ, is a not-for-profit ANSI-accredited Standards Development Organization consisting of over 1,500 members who represent chain and independent pharmacies, consulting companies and pharmacists, database management organizations, federal and state agencies, health insurers, health maintenance organizations, mail service pharmacy companies, pharmaceutical manufacturers, pharmaceutical services administration organizations, prescription service organizations, pharmacy benefit management companies, professional and trade associations, telecommunication and systems vendors, wholesale drug distributors, and other parties interested in electronic standardization within the pharmacy services sector of the health care industry.

NCPDP Standards have been instrumental in enhancing the technical connectivity of the health care industry; from pharmacy claims submission to electronic prescribing. These Standards have been named in various state and federal laws and regulations including HIPAA and MMA. Developed by NCPDP members to address business needs, the existing standards are continually evolving and new standards are created as needed to support new business requirements.

Case Studies of Interest/Articles of Interest

California Healthcare Foundation

<http://www.chcf.org/documents/hospitals/EPrescribing.pdf>

CDN Eprescribing Pilot Project

<http://www.eclinician.org/ePrescribing/>

Eprescribing: Becoming Mainstream Practice

http://www.ehealthinitiative.org/assets/Documents/eHI_CIMM_ePrescribing_Report_6-10-08_FINAL.pdf

FL eprescribe

<http://www.fhin.net/eprescribe/ePandHIEinFL/ePandHIEindex.shtml>

Get Connected Program

³ Press Release, July 1, 2008 of SureScripts, RxHub merger

<http://www.aafp.org/online/en/home/publications/news/news-now/practice-management/20080306getconnected.html>

Government Health IT

<http://www.govhealthit.com/topics/eprescribing/>

MA Health Data Consortium – MA-Share

<http://www.mahealthdata.org/ma-share/projects/e-prescribinged.html>

and

<http://www.jamia.org/cgi/content/short/13/3/239>

National Eprescribing Patient Safety Initiative

<http://www.nationalerx.com/>

Rhode Island Quality Institute

http://www.riqi.org/matriarch/MultiPiecePage.asp_Q_PageID_E_24_A_PageName_E_StrategicInitiativeTTCEPrescribing

SureScripts National Progress Report on Eprescribing

<http://www.surescripts.com/pdf/National-Progress-Report-on-EPrescribing.pdf>