

Electronic Prescribing Update

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What is E-Prescribing (E-Rx)?

Electronic exchange of prescription and prescription-related data using adopted standards that provide conformity and consistency

- Does not require manual transcription at either end
- Traditional faxing is NOT electronic prescribing
- E-mail is NOT electronic prescribing



eRx “Big Picture”

□ **Benefits**

- Could avoid more than 2 million adverse drug events annually
- E-prescribing also has enormous potential to create savings in health care costs, through reduction of adverse drug events and in improved workflows.
 - One recent study estimated the potential savings at \$27 billion per year in the United States [\[i\]](#).
 - Promotes affordability by allowing physicians to know which medications are covered by their patients’ Part D plans

[\[i\]](#) E-Health Initiative. *Electronic Prescribing: Toward Maximum Value and Rapid Adoption*. 2004the problem of hard-to-read handwritten prescriptions



MMA Regulatory Requirements

- MMA 2003 Creates Voluntary Ambulatory E-Rx for Part D Plans
 - E- prescribing foundation standards implemented January 1 2006
 - Pilot testing of initial standards in CY 2006
 - Pilot Report to Congress April 2007
 - Promulgate final uniform standards by April 1, 2008
 - Final standards effective no later than one year after promulgation of final uniform standards.



Foundation Standards

- **Adopted by Secretary based on NCVHS recommendations and industry experience, went into effect January 1, 2006**

NCPDP SCRIPT Standard, Version 5.0*

For transactions between prescribers and dispensers for new prescriptions, refills, changes, cancellations and messaging

ASC X12N 270/271, Version 4010 and Addenda

For eligibility and benefits inquiries and responses between prescribers and Part D sponsors

NCPDP Telecommunications Standard, Version 5.1

For eligibility and benefits inquiries and responses between dispensers and Part D sponsors

*Voluntary adoption of Version 8.1 is permitted, is backward compatible, and contains medication history standard.



Initial Standards

- **Tested in pilots during 2006 to see if they worked and if they were interoperable with foundation standards**
 - Formulary & Benefit Information –NCPDP Formulary and Benefits Standard Version 1.0
 - Exchange of Medication History – NCPDP SCRIPT 8.1
 - Fill Status Notification –NCPDP SCRIPT 8.1
 - Structured and Codified SIG – NCPDP SCRIPT 8.1
 - Clinical Drug Terminology - RxNorm
 - Prior Authorization Messaging – ACS X12N 278/275 with HL7



Report to Congress

- Summarizes/synthesizes evaluation contractor findings
- Delivered to Congress April 2007
- Complete report posted to AHRQ and CMS websites
 - <http://healthit.ahrq.gov/erxpilots>.



Pilot Findings

- **Formulary & Benefits** – displays drug formulary status (on formulary, off-formulary), alternative drugs, co-pays and other status information.
 - The pilots demonstrated that the standard has been successfully implemented among a variety of e-prescribing partners
 - *The standard can support the transaction, and it is ready for implementation under Part D.*



Pilot Findings (continued)

- **Medication History** – includes the status, provider, patient, coordination of benefits, request and response segments for prescription medications prescribed for a patient.
 - This standard is relatively mature, widely adopted by the prescribing industry, and is useful in preventing medication errors, and for understanding medication management compliance.
 - *The pilots found that the proposed standard is structured well, supports the exchange of information, and is ready to be used for Medicare Part D prescribing.*



Pilot Findings (continued)

- **Fill Status Notification** – a way for a pharmacy to notify a prescriber when the prescription has been dispensed, partially dispensed, or not dispensed and medication returned to stock. This can help with medication management and adherence to therapy regimens.
 - The pilots' observations indicate there is no pressing marketplace demand for RxFill. Prescribers expressed interest if a patient had or had not picked up a prescription.
 - *The standard is clearly sufficient to support the pharmacy sending prescription status messages to the prescriber.*



Pilot Findings (continued)

- **Prior Authorization** – the ability of a prescriber to electronically obtain real-time pre-approval from a health plan to prescribe certain drugs
- Health plans typically require prior authorization only for a small subset of drugs, so the pilot sites had limited live experience with this standard.
- *The standard is not currently robust enough to support the complex nature of the prior authorization process.*



Pilot Findings (continued)

- **Structured and Codified SIG** - Patient instructions for taking medications (e.g., take one pill three times a day). Currently, there is no standardized format for vocabulary for SIGs.
- *The Structured and Codified SIG standard needs additional work with reference to field definitions and examples, field naming conventions, and clarifications of field use where new codes are recommended*



Pilot Findings (continued)

- **RxNorm** - a standardized nomenclature for clinical drugs developed by the National Library of Medicine (NLM), provides standard names for clinical drugs (active ingredient + strength + dose form) and for dose forms as administered to a patient
- Currently, there are multiple systems using different databases to uniquely identify drugs.
 - RxNorm tries to create one standard format for drug names, with links from clinical drugs to their active ingredients, drug components, and most related brand names.
- *Analysis shows that it is not mature enough for use in Medicare Part D e-prescribing in its current state.*



Pilot Conclusions

- Formulary and Benefits, Medication History and RxFill are ready for Part D use
- RxNorm, Prior Authorization and Codified SIG still need work
- LTC will be ready for e-prescribing with workarounds
- More time, more pilot testing may be needed



Next Steps

- CMS issued an NPRM in November 2007 asking for comments on standards adoption, e-prescribing in long-term care, use of NPI in e-prescribing
- Final rule must be out by April 2008
- Final implementation April 2009
- Still working with DEA to resolve e-prescribing of controlled substances
- Industry pushing for mandatory e-prescribing for Medicare Part D