Presented by NDPCP and HIMSS for the Pharmacy Informatics Community

The ABCs of the SCRIPT Standard

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Agenda

- NCPDP overview
- Regulatory impacts
- ePrescribing overview
- What's new in SCRIPT 10.6
  - Structured and Codified Sig
  - Long Term and Post Acute Care
- Questions

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What is NCPDP?

- The National Council for Prescription Drug Programs (NCPDP) is an ANSI-accredited standards development organization (SDO).
- A forum and marketplace for a diverse membership focused on health care and pharmacy business solutions.
- A member driven organization that has been named in various government legislation and rulings, such as HIPAA and the Medicare Modernization Act.
- One of several SDOs involved in healthcare information technology and standardization.
- Focused on pharmacy services and has the highest member representation from the pharmacy services sector of healthcare.

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NCPDP Work Group 11 – ePrescribing and Related Transactions

- **Work Group Scope:** develops standardized messages for prescribers, pharmacists, payers and/or other interested parties to exchange information.
- **Work Group Goals:**
  - Educate the healthcare industry about benefits of using the NCPDP SCRIPT Standard and the NCPDP Formulary and Benefit Standard.
  - Continue collaboration with other organizations and participate in Standards Development Organization (SDO) activities as they affect Work Group 11 ePrescribing and Related Transactions.
  - Monitor Drug Enforcement Administration (DEA) activities for electronic initiatives of controlled substance prescriptions and electronic signature.

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NCPDP Work Group 11 – ePrescribing and Related Transactions

- Collaborate with Work Group 10 Professional Pharmacy Services Industry Sig Task Group, Health Level Seven (HL7), ASTM International and other industry organizations on incorporating and implementing Sig into SCRIPT, HL7, CCR, and other related standards.
- Collaborate with Work Group 14 Long Term and Post Acute Care in addressing the needs of Long Term Care and Post Acute (LTPAC) in ePrescribing.
- Continue working with National Committee on Vital and Health Statistics (NCVHS) and Center for Medicare and Medicaid Services (CMS) and other government entities regarding the Medicare Prescription Drug Improvement and Modernization Act of 2003 and other regulations pertaining to ePrescribing.

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SCRIPT and the Federal Government

- SCRIPT is named in the MMA (Medicare Modernization Act of 2003).
- The industry has recommended sunsetting SCRIPT v8.1. The industry has been able to voluntarily use SCRIPT 10.6 as of 07/01/2010.
- CMS has published an NPRM to sunset SCRIPT 8.1 by **10/31/2013.**
  - Finalization of NCPDP SCRIPT 10.6 as a Backward Compatible Version of NCPDP SCRIPT 8.1.
  - Retirement of NCPDP SCRIPT 8.1 effective October 31, 2013.
  - Adoption of NCPDP SCRIPT 10.6 as the Official Part D E-Prescribing Standard effective November 1, 2013.
  - Lifting the Long Term Care exemption, effective November 1, 2013

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SCRIPT and the Federal Government

- CMS has published an NPRM to include the current HIPAA versions for eligibility for use in ePrescribing.
  - NCPDP Telecommunication Standard version D.0 and X12 270/271 version 5010.
- CMS is soliciting comments on lifting the Long Term Care exemption, effective November 1, 2013, in conjunction with the effective date of NCPDP SCRIPT 10.6
  - NCVHS submitted letter in support after hearing testimony from members of the industry

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Formulary and Benefit Proposed Rule

- Propose to recognize the use of either Version 1.0 or 3.0 as compliant effective 60 days after the publication of a final rule.
- Requesting Comments:
  - When to retire Version 1.0 as the official Part D e-prescribing standard.
  - Proposal to adopt Formulary and Benefit Version 3.0 as the official Part D e-prescribing standard.
    - Proposing that entities that voluntarily adopt later versions of standards must still accommodate the earlier official Part D e-prescribing standard without modification.

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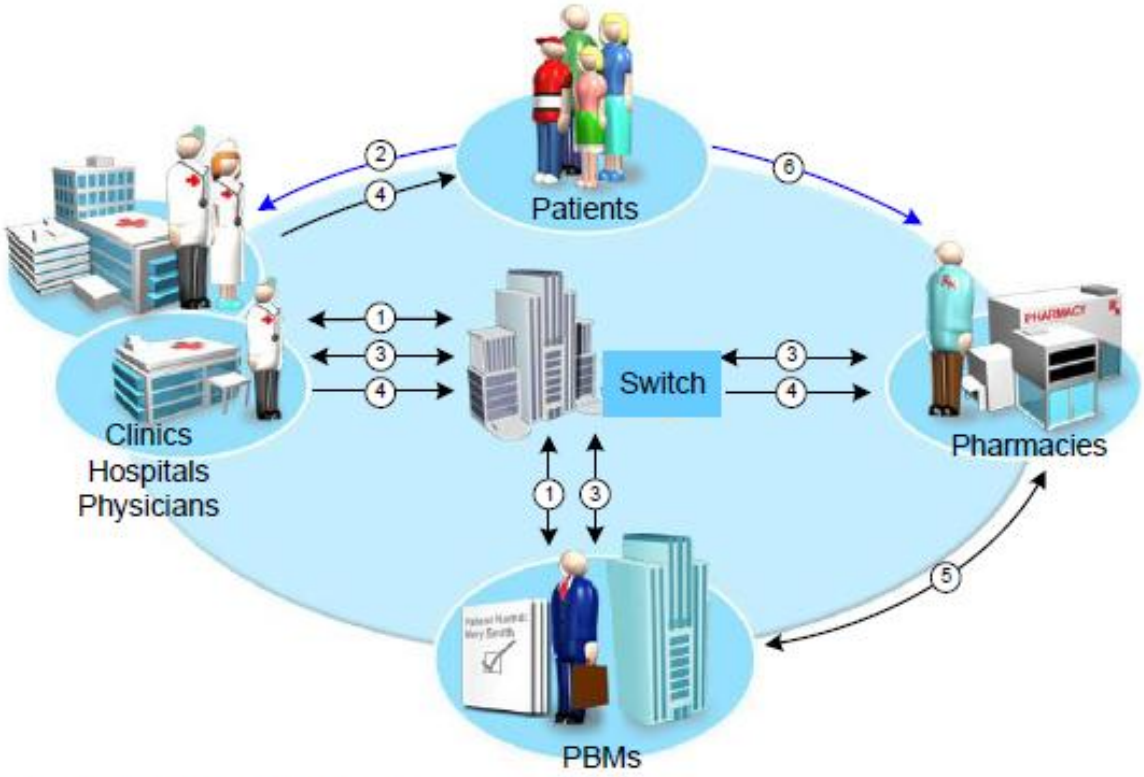
The Electronic Prescribing Process



Standard flow of a new ePrescription

1. Prior to (or during) patient visit an eligibility is sent. Eligibility response provides information for using the formulary and requesting medication history
2. Patient visits Clinic / Hospital
3. Prescriber requests the patient's Medication History using the information from the Eligibility Response
   PBM provides Medication History / Pharmacy provides Medication History
   Prescriber uses the formulary information along with the medication history to write an informed prescription. Prescriber informs patient that he will write a prescription and asks the Patient's Preferred Pharmacy
4. Prescriber creates a New Rx and sends it to the Pharmacy. Pharmacy receives and fills the New eRx
5. Prescription is billed to patient's prescription insurance
6. Patient arrives at pharmacy and picks up prescription

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Current State of ePrescribing (7/2012)

Per the Surescripts National Progress Report Released in 2012:

- **Prescription Routing:** Nearly 36% of prescriptions dispensed were e-prescribed in 2011. More than 570 million prescriptions were routed electronically in 2011, up 75% from 2010.
- **Prescribers:** By the end of 2011, 390,000 prescribers routed prescriptions electronically, up from 234,000 in 2010. This represents 58% of all office-based prescribers.
- **Community and Mail Order Pharmacists:** 91% of community pharmacies and six of the largest mail order pharmacies in the United States were connected for prescription routing in 2011.
- **Payers:** At the end of 2011, more than 66% of patients in the United States were provided access to prescription benefit and medication history information (on behalf of payers and pharmacies).
- **Prescription Benefit:** Electronic responses for prescription benefit information grew 87% in 2011.
- **Medication History:** Electronic medication history deliveries increased 72% in 2011. Medication History was available for one in three office visits.

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Current State of ePrescribing (7/2012)

Current ePrescribing participants are using several standards to perform the transactions needed for ePrescribing.

Standard	Adoption
NCPDP SCRIPT v8.1	Currently used in ambulatory provider settings to communicate with retail and mail order pharmacies. Some participants have also adopted EPCS on a modified version.
NCPDP SCRIPT v10.2 and v10.3	Currently used to support electronic prescribing in long term/post-acute care settings.
NCPDP SCRIPT v10.6	Adoption is beginning to occur. Several major pharmacy chains and a few major prescribing vendor solutions have adopted v10.6. Some participants have adopted EPCS on v10.6. Adoption of v10.6 is expected to be required by November 1, 2013.
ASC X12N 270/271 v5010	Used to support eligibility transactions to support ePrescribing.
NCPDP Formulary and Benefit Version 1.0	Provides a standard means for pharmacy benefit payers (including health plans and Pharmacy Benefit Managers) to communicate formulary and benefit information to prescribers via technology vendor systems.

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NCPDP Standards Used in ePrescribing

SCRIPT Standard

- Exchange between prescribers, pharmacies, intermediaries, payers
  - New prescription request
  - Refill/renewals request/response or resupply in long term care
  - Cancel of a prescription
  - Change of a prescription
  - Fill Status notification
  - Medication History Exchange

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Adoption of v10.6

- As participants adopt the v10.6 standard they will have to consider support of:
  - New features contained in the existing messages
  - Handling new codification systems
  - Whether or not to adopt new messages
  - When to include electronic prescribing of controlled substances (EPCS)

New Features across all transactions

#	Feature	Possible Benefits
1	Enhanced drug codification using RxNorm	When provided, this feature will allow the system to provide a more accurate and exact drug selection list, enabling the pharmacist to select the correct drug to dispense. RxNorm was developed by the National Library of Medicine, to facilitate translation of clinical concepts across multiple Drug Compendia. So a prescriber using Compendia A can transmit an RxNorm code and it will relate to the same exact drug in Compendia B for the pharmacy.
2	Enhanced Sig codification	Meant to promote greater consistency in specifying directions and build a way to do clinical review / analysis. Will require updates from National Library of Medicine for SNOMED-CT code sets.
3	Enhanced support for Prior Authorizations	PA Approvals, Denials, Deferred status. It will also indicate to the pharmacy if a prior authorization was attempted and denied, requiring the patient to consider self payment.
4	Support for Scheduled Medications	Provides the fields necessary to enable Electronic Prescribing of controlled substances. Also includes an effective date – to be used in CII Rx's as a do not fill before date
5	Support for Patient Observations	Will allow prescribers to supply Patient Height, Weight, Diastolic and Systolic Blood Pressure. Patient Weight will be useful for validating proper pediatric dosing.
6	Identify resident location	Enables the facility associated with the patient to be passed in the message (used in LTPAC)
7	Additional dates	Sold Date – Identifies when patient took possession of medication [Med History] Delivered on This Date - Date prescription received at facility Date Validated - Date reviewed at facility
8	Medication History Source	To show where the medication history was obtained and who is the source of the information Supports the ability to consolidate history from different sources into a single Medication History

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CancelRx

- Adoption of CancelRx with v10.6 is highly recommended as it will directly aid in patient safety.
- Enables the prescriber to cancel a prescription regardless of the origin of the prescription.
- The CancelRx transaction is sent by the prescriber to the pharmacy for one of two reasons
  - Cancel an Rx that has not yet been dispensed or
  - Discontinue therapy and do not fill any remaining refills
- The pharmacy is required to respond back to the prescriber as to whether the prescription was able to be cancelled or not. (Approval or Denial).
- Used in Long Term Care to discontinue an order.

RxChange

- Adoption of RxChange with v10.6 is highly recommended as it will directly reduce the volume of faxes and phone calls between pharmacies and prescribers.

- The RxChange transaction is sent by the pharmacy to the prescriber for the following reasons:

    1. Generic Substitution request when the prescriber has specified DAW 1.
    2. Therapeutic Interchange request when the pharmacy wishes to change some clinical information about the prescription.
    3. Prior Authorization request to a prescriber.

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RxChange Use Cases

#	RxChange Type	Possible Uses	Possible Benefits
1	Generic Substitution	On original New Rx Mid-stream Substitution Brand Not Covered	Request that a Generic be substituted for the Brand, for situations where the prescribed indicated DAW 1
2	Days Supply Change	30ds to 90ds	One use for RxChange might be to support the shift from 30 to 90 days supply prescriptions.
3	Dosage Change	Therapy Chg 10MG BID to 20MG QD	When a new Rx is received, after the RPH selects the drug, If the pharmacist wishes to change the therapy of the same drug – say 10MG 2xday to 20MG 1xday This could be done mostly because of: inventory issues or where the prescriber is not up to date with the available strengths.
4	Therapeutic Interchange	Preferred Product Switching	If a TP payer indicates preferred alternatives or the patient receives the letter from TP payer indicating a preferred alternative.

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RxChange Use Cases

#	RxChange Type	Possible Uses	Possible Benefits
5	Dosage Change	Refill Too Soon (dosing increase)	There may be situations where the Prescriber verbally changes the dosing on a prescription with a Patient, and does not issue a new prescription to the pharmacy. e.g. Increase dosage, "Instead of taking 2 tablets a day, go ahead and take 4 a day." The patient follows the new verbal directions and as a result the next refill receives a Reject for 'Refill Too Soon'. RPh contacts patient, patient advises this is because of the new verbal directions. System can provide the option to the user to create the RxChange request.
6	Drug Utilization Review	DUR Allergies, Dose Alerts, Drug to Drug Interactions, Drug Diseases	There may be situations where the Prescriber has not checked the patient's allergies, Drug-Drug interactions etc. When the RPh fills the prescription and finds that patient has some allergies for the medicine or there is some Drug-Drug interaction because of the medicine that has been prescribed by the doctor then the system could provide the option to the user to create the RxChange request
7	Prior Authorizatio n	Prior Auth Requests	Currently when a third party exception occurs for a fill that requires a prior authorization, most pharmacies create a faxable request for a Prior Authorization. If the prescriber participates in this transaction, the system could electronically request the prior authorization. Then if the prescriber responds electronically, the system could automatically reprocess the claim with the prior authorization returned

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Structured Sig Overview

- A prescription contains a number of different elements. Among them is the directions for use, or Sig.
- “Sig” is an abbreviation for “signatura,” Latin for “Mark thou”. The Sig contains the instructions explaining how the patient is to take the medication.
- It must be legible, unambiguous, and complete to ensure the prescriber’s instructions for use of the product are understood.
  - *The intent of the Structured and Codified Sig Format is not to facilitate the reconstruction of the Sig to human readable form (English), but rather to communicate through electronic means the Sig components in a controlled, well-defined structure.*

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Structured Sig Goals

- Singularity
  - Single terminology is preferred; if that is not feasible, then a single point of access is required.
- Comprehensive
  - The terminology(ies) must include all elements in the Sig format.
- Suitability
  - The Structured and Codified Sig Format was designed to support the prescription process
- Maintenance of the code set
- Ease of use and access
- Timeline for use in standards
- Able to be used in the U.S.
- All care settings
  - retail, mail, inpatient, long term care, home care, etc.
- Code set of free or reasonable cost

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Structured and Codified Sig Pilots

- Initially tested in 2006 MMA e-prescribing pilots.
- New pilot project was awarded in September 2008
  - This pilot was funded by OESS and AHRQ and completed on 2/29/10. RAND submitted the final report to CMS on 3/19/10. The report has now been published (http://jamia.bmj.com/content/early/2011/05/25/amiajnl-2010-000034.full)
  - The Sig was tested in lab settings only, with rigorous analysis performed by the pilot participants, the principal investigator and other industry experts.
  - Ninety-five percent of the Sig strings were completely accommodated by the current format.
- Some discussion has begun regarding beta testing of Sig as part of SCRIPT 10.6 implementation efforts.

FIELD NAME	FIELD DEFINITION
Repeating Sig	The Repeating Sig is used to indicate if there is more than one Sig, such as for a range, tapered dose or sliding scale.
Code System	The Code System of the Sig identifies which code system and version are used.
Sig Text	Used to reflect the text string expression of the Sig. It should always be used, and in addition is the only element to place a free text Sig from a system that cannot generate a structured Sig.
Dose	The Dose can define a fixed dose or can repeat to define a variable dose, dose range, or dose options.
Dose Calculation	Used to calculate a dose where a body metric such as metric weight or surface area is used to calculate a dose for a patient.
Vehicle	Defines a vehicle specified for the delivery of the product.
Route Of Administration	Defines the route of administration.
Site Of Administration	Defines the site of administration.

FIELD NAME	FIELD DEFINITION
Timing	This element is used to provide instruction about the timing of the Sig - when/how often/ at what rate/for how long - the medication is to be taken.
Administration Timing	Defines a specific administration day, date time, or event.
Frequency	Defines a frequency of administration. Frequency is events per unit of time.
Interval	Defines an interval of administration. Interval is the time between events.
Duration	Defines the duration of use/therapy.
Stop	Used to express a hard stop, such as the last Sig sequence in a tapering dose, where the last sequence is 'then D/C' or where the therapy/drug is used to treat a condition and that treatment is for a fixed duration with a hard stop, such as antibiotic treatment, or if the stop is related to a change in the patient's condition (i.e. new or worsening symptoms), etc.
Maximum Dose Restriction	The dose restriction element of the Sig which defines a maximum or dose limit.
Indication	Defines the indication for use of the medication as meant to be conveyed to the patient.

Structured and Codified Sig Changes – future version

- NCPDP's Sig Task Group reviewed the pilot findings and made modifications to the Implementation Guide.
- The following changes have been made for future versions of the Structured and Codified Sig Format:
  - Requiring the use of the Sig Timing Segment.
  - Revising the Sig Timing Segment to support more specific Sigs.
  - Allowing the use of a text field to support a specific Duration.
  - Allowing the use of a text field for Dose Quantity.
  - Modifying the Stop Segment to support more specific Sigs.
  - Clarifying the use of free text.
  - Ensuring that the Structured and Codified Sig Format uses the XML format to the fullest extent possible.

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Structured and Codified Sig Implementation

- XML structure allows for easier implementation than EDIFACT
  - XSLT tools are available to assist.
- In lab testing, more than 95% of Sig strings were accommodated using the Structured and Codified Format.
- Complexity will not apply to all care settings; i.e. rate of administration.
- Changes made for future versions build upon existing structure.

Long Term and Post Acute Care Changes

- Added Long Term and Post Acute Care (LTPAC) specific content, such as patient location.
- Enabled changes to open-ended orders, using New Prescription and Cancel Prescription transactions.
- Added CENSUS transaction to notify a pharmacy of patient admissions, discharges, changes.
  - Includes Allergy and Diagnosis segments
- Added RESUPPLY transaction to request additional dispensing for open-ended medication orders.
- Ability to state the urgency for delivery of the medication.
- Support for open-ended medication orders and notification of orders dispensed at the facility.

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Long Term and Post Acute Care Changes

- Allergy Segment added to CENSUS transaction. Includes:
  - Date/Type of adverse event
  - Drug/Product/Item
  - Reaction to the drug/product/item
  - Severity of reaction

- Diagnosis Segment added to CENSUS transaction. Includes:
  - Problem date
  - Type of problem
  - Problem name

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CENSUS Transaction

- Makes the long term or post acute care pharmacy aware of patient changes:
  - Patients admitted to the facility.
  - Patient changes, including room, insurance, clinical info (diagnosis, allergy).
  - Patient leaving the facility.

Resupply Request Transaction

- Enables the nurse at the facility to request an additional quantity of a patient's medication.
- Particularly useful for medications taken as-needed, or those without a set dosage (e.g., insulin).
- Does not represent a new prescription, but rather an additional amount of a previously prescribed medication.

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Resources

A wide variety of resources are available at:
http://www.ncpdp.org/eprescribing.aspx

CMS NPRM – SCRIPT and Formulary and Benefit
Department of Health and Human Services, Centers for Medicare & Medicaid Services 42 CFR Parts 410, 414, 415 et al.
http://www.gpo.gov/fdsys/pkg/FR-2012-07-30/pdf/2012-16814.pdf

Comments due no later than 5 p.m. EST on September 4, 2012.

CMS Final Rule – eligibility for ePrescribing
42 CFR Chapter IV Medicare and Medicaid Program; Regulatory Provisions to Promote Program Efficiency, Transparency, and Burden Reduction; Final Rule

http://www.gpo.gov/fdsys/pkg/FR-2012-05-16/pdf/2012-11543.pdf

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Future NCPDP Events

Quarterly Joint Technical Work Group Meetings
November 7-9, 2012 at the Hyatt Regency St Louis at the Arch
St Louis, MO

2013 Educational Summit & Work Group Meetings:
"NCPDP: Moving Standards Forward to Improve Patient Care"
February 5-8, 2013 at The Cosmopolitan
Las Vegas, NV

Quarterly Joint Technical Work Group Meetings and
36th Annual Technology & Business Conference
May 5-9, 2013 at the Arizona Biltmore Resort & Spa
Phoenix, AZ

Quarterly Joint Technical Work Group Meetings
August 7-9, 2013 at the Omni Fort Worth
Fort Worth, TX

For more information, please visit www.ncpdp.org

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Questions?

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Save the Dates!

Pharmacy Informatics Town Hall Series:

Thursday, September 20 12:00pm CT /1:00pm ET:
The Impact of Standards & Pharmacy Informatics

Thursday, October 18 12:00pm CT/1:00pm ET:
ePrescribing Fundamentals

Thursday, November 15 12:00pm CT /1:00pm ET:
Improving Medication Reconciliation with Standards

http://www.himss.org/ASP/topics_pharmacyInformatics.asp

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