ePrescribing: What's Left and What's Next?

MODERATOR: Tony Schueth, M.S.
CEO and managing partner
Point-of-Care Partners, LLC

Panel Discussion
November 11
Objectives

Upon successful completion of this presentation, the attendees will be able to:

1. Describe the frequency and types of ePrescription problems requiring pharmacy-prescriber interactions and overall how ePrescribing affects medication error rates;

2. Develop a strategy to increase prescriber use of EPCS;

3. Understand how the SCRIPT standard works to support ePA and its adoption status;
Objectives continued

4. Summarize why the availability and usefulness of formulary data is limited and how these limitations affect ePrescribing and medication adherence;

5. Define requirements for accepting prescriptions from long-term care facilities; and

6. Understand the value and process for ePrescribing of specialty medications.
Agenda

• Meet the panelists
• A look at the road so far
• A closer look at the path
• Unintended consequences of ePrescribing
• Long-term care: lessons learned, best practices and gaps
• Pillars of specialty ePrescribing
• Collaboration case study: driving EPCS success
• Other opportunities & post-test
Meet the panelists

- **Andrew Mac**, R.Ph., vice president, pharmacy operations, Sav-On Drugs and Sav-On LTC Pharmacy Services
- **Louis Hyman**, executive vice president, chief technology officer, eHealth Solutions
- **Zoë Barry**, founder and CEO, ZappRx
- **Melissa Kotrys**, MPH, CEO, Arizona Health-eConnection, CEO, Health Information Network of Arizona
Accreditation Statement

The Institute for Wellness and Education is accredited by the Accreditation Council for Pharmacy Education as a provider of continuing pharmacy education. Attendees who participate in the interactive portion and submit the completed evaluation form at the conclusion of the program will have credit for 1.75 hours of continuing pharmacy education (0.17 CEU(s)) uploaded to CPE Monitor within 60 days after the program date.

ACPE program numbers are:
0459-0000-14-094-L04-P & 0459-0000-14-094-L04-T
The Road to ePrescribing
Adoption, Gaps & Hazards

Tony Schueth
CEO & Managing Partner
Point-of-Care Partners
tonys@pocp.com
ePrescribing Today

73% of ambulatory prescribers prescribing electronically

58% of ambulatory prescriptions transmitted electronically*

*Excludes EPCS prescriptions  Source: Surescripts 2013 National Progress Report and SafeRx Rankings
A look at the road so far

1977: Personal computers introduced
Late 1980’s: First ePrescribing solution for VA
1997: NCPDP SCRIPT standard published
2001: Surescripts formed
2003: MMA
2007: NEPSI Launched
2008: MIPPA
2008: Surescripts and RxHub merged
2009: ARRA
2010: EPCS IFR
2015: I-STOP Deadline
A closer look at the path and possible hazards

Unintended consequences of ePrescribing are causing challenges in pharmacies and bumps in the road.

Long-term care continues to be a lane under construction with gaps that should be addressed, but there are lessons learned and best practices.

Specialty medications continues to evolve through three pillars (doctors, pharmacy and patients). Watch ahead!

EPCS is in the slow lane currently. Will explore the lessons learned in this area.
As ePrescribing increases over the next decade, the focus will shift from adoption to utilization to information quality & quantity.

*Excludes EPCS prescriptions  
Source: Surescripts 2013 National Progress Report and SafeRx Rankings
Unintended Consequences of ePrescribing: Prescribing Error Log Pilot Study: Results

Andrew Mac, R.Ph.
Vice President, Pharmacy Operations, Sav-On Drugs and Sav-On LTC Pharmacy Services
andrew@savondrugs.com
Background

• Electronic prescribing is the predominant form of prescription received in community pharmacies
• Early claims-based studies indicated a decrease in Rx errors with e-prescribing; later studies showed an increase. E-prescribing reduced some types of prescribing errors but caused other types
• Little is known about errors encountered at the pharmacy or the potential impact of such errors on patient outcomes
Objectives and Rationale

Objective

– Document prescription problems that require pharmacy staff to call medical office staff

Rationale

– Prescription problems that require calls from pharmacies to prescribers represent additional work on the part of both the pharmacy and the prescriber’s office (or payer)

– It is important to determine how frequently such problems occur and to assess the potential for patient harm so as to develop policies and procedures to minimize their occurrence
## Prescription Problem Log

<table>
<thead>
<tr>
<th>Date:</th>
<th>/ /2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time problem detected:</td>
<td></td>
</tr>
<tr>
<td>Handled by: (check all that apply)</td>
<td></td>
</tr>
</tbody>
</table>
- Pharmacist  
- Pharmacy technician  
- Pharmacy Intern |
| Prescription type: |  
- e-Rx  
- non e-Rx  
- New  
- Refill  
- Voided |
| Drug name and strength: | |
| Description of problem (choose all that apply): |  
- Wrong drug NAME  
- Wrong/inadequate DOSE/Strength  
- Wrong FORMULATION  
- Formulation/dosage too COSTLY  
- DUPLICATE conflicting SIG  
- SIG and write-in INSTRUCTIONS differ  
- SIG requires clarification (other)  
- REFILL related problem  
- Wrong QUANTITY  
- CONTROLLED substance e-prescribed |
| Rx NOT AVAILABLE at pharmacy: |  
- Medical office has not yet sent Rx  
- Rx appears to be “lost” in the system |
| ILLEGIBLE handwriting | |
| Rx information INCOMPLETE (e.g. date, DEA#) | |
| FORMULARY/coverage Issue | |
| Potential drug INTERACTION | |
| Other problem (please describe): | |
| Time problem resolved: |  
Date: _____/_____/2012  
Time: ______:______  
- Not resolved |
| Potential level of patient harm if problem not resolved: |  
- None  
- Minimal  
- Moderate  
- Severe |
<p>| Additional comments concerning this Rx problem: | |</p>
<table>
<thead>
<tr>
<th></th>
<th>Total New Prescriptions</th>
<th>Logs Completed</th>
<th>Rate per 100 Rxs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>E-Rx</td>
<td>Paper-Rx</td>
<td>E-Rx</td>
</tr>
<tr>
<td>All Locations</td>
<td>741</td>
<td>900</td>
<td>32</td>
</tr>
<tr>
<td>Pharmacy 1</td>
<td>348</td>
<td>273</td>
<td>9</td>
</tr>
<tr>
<td>Pharmacy 2</td>
<td>65</td>
<td>121</td>
<td>3</td>
</tr>
<tr>
<td>Pharmacy 3</td>
<td>55</td>
<td>148</td>
<td>8</td>
</tr>
<tr>
<td>Pharmacy 4</td>
<td>139</td>
<td>148</td>
<td>9</td>
</tr>
<tr>
<td>Pharmacy 5</td>
<td>134</td>
<td>210</td>
<td>3</td>
</tr>
</tbody>
</table>
## Descriptive Results

<table>
<thead>
<tr>
<th>Description</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem solved by pharmacist, not technician</td>
<td>59</td>
<td>94.7%</td>
</tr>
<tr>
<td>Problem resolved during study period</td>
<td>54</td>
<td>88.5%</td>
</tr>
<tr>
<td>Problems resolved same day</td>
<td>51</td>
<td>79.7%</td>
</tr>
<tr>
<td>Median time to resolve (minutes)</td>
<td>50</td>
<td>12.5</td>
</tr>
</tbody>
</table>
Summary of Problems Reported
(75 problems reported on 64 logs)

<table>
<thead>
<tr>
<th>Problem Reported</th>
<th>e-RX</th>
<th>non-E-Rx</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wrong quantity</td>
<td>9</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>SIG requires clarification</td>
<td>3</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>Potential drug interaction</td>
<td>7</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>Illegible handwriting</td>
<td>0</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Wrong dose/strength</td>
<td>2</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Formulary/coverage issue</td>
<td>2</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Too costly</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Med office yet to send</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Rx info incomplete</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Wrong drug name</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Other problems mentioned once</td>
<td>6</td>
<td>7</td>
<td>13</td>
</tr>
</tbody>
</table>
## Potential Harm from Rx Problem

<table>
<thead>
<tr>
<th></th>
<th>Percent of Cases (n=64)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>E-Rx</td>
</tr>
<tr>
<td>None</td>
<td>50.0%</td>
</tr>
<tr>
<td>Minimal</td>
<td>23.3%</td>
</tr>
<tr>
<td>Moderate</td>
<td>10.0%</td>
</tr>
<tr>
<td>Severe</td>
<td>16.7%</td>
</tr>
<tr>
<td>Missing</td>
<td></td>
</tr>
</tbody>
</table>
Types of Problems with E-Rx

• Multiple unique problems; no predominant error
• Four categories of problems
  – Pick-list errors
  – Transmission confusion
  – Formulary/reimbursement concerns
  – Potential drug interactions
E-Rx vs. Paper-Rx Problems

• Illegible prescriptions vs. pick-list problems
  – Patient name
  – Medication name
  – Strength
  – Instructions
  – Quantity
Possible Solutions

- Perform final prescription check at medical office before sending
- Give Rx information to patient
- Place checklist for error prevention at input site
- Encourage use of formulary and drug interaction alerts
- Share best practices for preventing problems between medical offices and pharmacies
- Create mechanism for efficient correction of obvious mistakes by pharmacist
Long Term Post Acute Care and Electronic Prescribing:
Why am I so misunderstood?

Louis E. Hyman
Chief Technology Officer
SigmaCare
lhyman@sigmacare.com
LTPAC Agenda

- LTPAC – The land that time forgot
- There should be more hubbub about lack of a widely used LTPAC hub
- If all you have is an ambulatory or acute care hammer, the world is not a nail – The LTPAC differences and complexities
- Now what?
**Electronic Prescribing Timeline and LTPAC**

### June 23, 2006
- **NCPDP SCRIPT v5.0 Standard**
  - By this date, all electronic transmission of orders or prescription details by hospitals and medical practices must utilize the NCPDP SCRIPT v5.0 standard.

### June 1, 2010
- **DEA Interim Final Rule for Electronic Prescribing of Controlled Substances (EPCS)**
  - Practitioners have the option of writing prescriptions for controlled substances electronically if the state approves it.
  - Pharmacies, hospitals, and practitioners have the ability to use modern technology for controlled substance prescriptions while maintaining the closed system of controls on controlled substances.

### November 1, 2014
- **NCPDP SCRIPT v10.6 Standard**
  - By this date, LTC exemption ended and all electronic transmission of orders or prescription details must utilize the NCPDP SCRIPT v10.6 standard (42 CFR §423.160).

### March 27, 2015
- **NYS eRX Mandate**
  - By this date, all orders for controlled and non-controlled substances are to be transmitted electronically as per NY Public Health Law 281.
eRx in Ambulatory & Acute Care Settings

Highly Scalable Technology Model

67,000 Retail & Hospital Based Pharmacies

More than 700 EHR, CPOE, EOE eRx Systems Tested & Verified by Single eRx hub
**eRx in LTPAC Settings**

**Less Scalable Technology Model**

More than 2,000 LTC Pharmacies

More than 50 EHR/EMR/eMAR/other software products in use by thousands of LTPAC settings

Potential for thousands of independent integrations. No single hub dominates in LTPAC market which is highly dependent upon direct connections between EHR/facility based software & pharmacy IT systems.
## What Makes LTPAC Different?

<table>
<thead>
<tr>
<th>Area</th>
<th>Ambulatory</th>
<th>LTCPAC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmacy Relationship</td>
<td><strong>Open System</strong> – Typically the patient’s preferred pharmacy.</td>
<td><strong>Closed System</strong> – Facility has a relationship with a LTC vendor pharmacy which, for all intents and purposes, makes them an extension of the facility.</td>
</tr>
<tr>
<td>Medications</td>
<td><strong>Incomplete</strong> – Various physicians, healthcare systems and means of acquiring medications (in plan / out of plan) leads to incomplete medication data for patient. Any one physician seldom takes responsibility for a comprehensive medication review. (Episodic Care)</td>
<td><strong>Complete</strong> – Exhaustive assessment of care and orders is done upon admission and maintained throughout the patient’s stay. The vast majority of all care is delivered within the facility with frequent medication reviews. (Comprehensive Care)</td>
</tr>
</tbody>
</table>
## What Makes LTPAC Different? (cont.)

<table>
<thead>
<tr>
<th>Area</th>
<th>Ambulatory</th>
<th>LTCPAC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eligibility and Benefits</td>
<td><strong>Easily Accessible with EDI</strong> – Via SureScripts provided that the transaction is done close to or on day of encounter.</td>
<td><strong>Burdensome</strong> to Acquire and Maintain – Manual process for majority of patients and not yet understood by transaction vendors.</td>
</tr>
<tr>
<td>“Formulary” (Preferred Medications / Alternatives)</td>
<td><strong>Episodic, Commercial and Part B Focused</strong> – Due to episodic nature of transaction, there are seldom clinical guidelines and protocols other than a plan formulary (preferred alternatives) to yield quality and cost-effective healthcare delivery.</td>
<td><strong>Comprehensive, Institutional and Clinical Best Practice Focused</strong>: Pharmacies and facility medical directors collaborate on clinical guidelines which are combined with plan formulary and pharmacy inventory to form a facility/pharmacy “formulary”.</td>
</tr>
</tbody>
</table>
What Makes LTPAC Different? (cont.)

Other differences:

– IVs and compounds in hospitals are typically filled by the in-house pharmacy (closed environment) whereas these medications are filled by the outside vendor pharmacies for LTCPAC

– In LTPAC complex directions from the prescriber such as an adjustable dose or “sliding scale” for insulin easily exceeds the 140-character limit in NCPDP SCRIPT 10.6
LTPAC Workflow – Non-Controlled Substances: Current Long-Term Care Workflow with CPOE/EHR

Nurse Calls Prescriber For Medication Order

Nurse Enters Telephone Order Into CPOE/EHR

Telephone Order Sent Electronically To Pharmacy

Pharmacy Dispenses Medication

Dispensed Info Sent Electronically To Facility’s eMAR

Medication Delivered To Facility

Nurse Administers Medication To Resident

Attending Physician Signs Off 48 to 72 Hours Later (depends upon state)

Attending Physician Signs Off 48 to 72 Hours Later (depends upon state)
LTPAC Workflow – Controlled Substances: Current Long-Term Care Workflow with CPOE/EHR

1. Nurse Calls Prescriber For Medication Order
2. Nurse Enters Medication Order Into CPOE/EHR
3. Prescriber Handwrites Prescription Which Is Handed To Pharmacy
4. Pharmacy Dispenses Medication
5. Dispensed Info Sent Electronically To Facility’s eMAR
6. Medication Delivered To Facility
7. Nurse Administers Medication To Resident
8. Nurse Administers Medication To Resident
LTPAC Workflow – NY eRX Mandate for Non-Controlled and Controlled Substances

Workflow Impact
• No Telephone Orders
• No Attending Physician Sign-Off

BUT
• Prescriber Must Approve Every Order Before Pharmacy Can Dispense

For controlled substances, prescriber must complete two factors of authentication: password & token
What is Next for LTPAC?

• Continue to follow regulations in a manner which does not place patient safety at risk
• Continue working with the appropriate NCPDP workgroups to merge more LTPAC requirements into the SCRIPT standard
• Raise awareness to ensure that federal and state regulations are reasonable in their timelines and expectations
• Promote partnerships and tap leaders in other care settings to help accelerate electronic prescribing in LTPAC in a mutually beneficial approach
Specialty drugs continue to grow

- US spending on specialty drugs is projected to grow **67% by the end of 2015**

- Specialty medications are the fastest-growing sector in the American healthcare system, expected to jump by two-thirds by 2015, and **account for half of all drug costs by 2018**

- Specialty medications can run at $2,000 per month per patient; **those at the high-end cost upwards of $100,000 to $750,000 per year**
But ...

- 0% of doctors know the medication is specialty
- 30% of eRxs contain diagnosis code
- 0% of doctors know where the specialty Rx should be dispensed
- 95% of specialty Rxs prescriber-pharmacy are faxed

- 50%-95% specialty Rxs require Prior Authorization
- 95% Opportunity for financial assistance for patients
- 5%-40% Have REMS, MedGuides or REMS-Like Requirements
Pillars of Specialty ePrescribing
Driving Adoption

Zoë Barry
Founder and CEO
ZappRx
zoe.barry@zapprx.com
The current workflow for prescribing specialty medications is extremely fragmented.
Challenges in Specialty Prescribing

Manual processes cause excess time delays*

- Paper Forms: **19.2 minute** manual input
- Benefits Verification: **1 week** backlog; 60% accuracy
- PA Forms: **1 week** submission to results delay
- REMS: 1/3 orders delayed **7+ days** by patient sign-off
- Payment/Shipping: **2 day** delay for patient confirmation
- Refills: **10 day** average turnaround

Delays result in fewer patients served

**Bottlenecks accumulate** – It currently takes an average of **3-6 weeks** for a patient to receive their specialty medication after it is prescribed
Solutions for Specialty Prescribing

Comprehensive ePrescribing tool that accommodates and navigates the customized needs of specialty medication orders.

- Patient Updates
- Prescription Selection
- Medication Delivery
- Care Coordination
- Payment/Shipping Verification
- Benefit Verification
- Order Submission
- Order Initiation
- Ancillary Supplies
- Supporting Documentation/Prior Authorization
As of July 31, 2014, 570,000 EPCS prescriptions were transmitted via Surescripts*.

- Translates to about 500 M of the 3.85 B retail prescriptions electronically nationwide.
- Less than 1% of prescriptions transmitted electronically nationwide.
- 14 of approx. 681 prescriber vendors certified for EPCS.
- 31,000 of 67,000 pharmacy locations enabled for EPCS.

* Surescripts EPCS Progress Update at the NCPDP Work Group Meeting, August 2014 and POCP Analysis.
Collaboration Case Study:
Driving EPCS Success in Arizona

Melissa Kotrys, MPH
Chief Executive Officer
Arizona Health-e Connection
melissa.kotrys@azhec.org
Arizona EPCS Initiative

AzHeC established an advisory committee, conducted a needs assessment and implemented four key programs between May and December 2013

**Key EPCS Program Strategies:**

- Provider and pharmacist focused education and outreach
- Encouraged pharmacy chains to get EPCS-enabled
- Worked collaboratively with EHR vendors to support EPCS
- EPCS incentive program to reimburse providers for their identity proofing costs
193 More Arizona Pharmacies Became EPCS Enabled Through the Campaign

Arizona (45%) is above the national average of 40% EPCS enablement
209 Arizona providers were EPCS enabled through the campaign

- **March 2014 data**
- **Growth**: 1306%

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**EPCS Enabled Providers**

- **May 2013**: 16
- **March 2014**: 225

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**March 2014 data**
AZ EPCS Program Grew Provider enablement and transaction volume

- New Rx EPCS Volume
- # of Enabled EPCS Prescribers
- # of Active EPCS Prescribers
AZ EPCS Prescriber (EHR) vendor progress

March 2014 data

AZ Enabled and Active EPCS Prescribers

- Allscripts: 3 Enabled, 3 Active
- Cerner: 70 Enabled, 0 Active
- DrFirst: 42 Enabled, 19 Active
- NewCrop: 5 Enabled, 2 Active
- NextGen: 48 Enabled, 12 Active
- RxNT: 57 Enabled, 49 Active
- Total: 225 Enabled, 85 Active

March 2014 data
# Considerations & Next Steps for AZ

<table>
<thead>
<tr>
<th>What we learned:</th>
<th>What we can do:</th>
</tr>
</thead>
</table>
| Many prescribers and pharmacists still **believe EPCS is not legal!** | Continue educational efforts  
• Keep the subject alive in newsletters, AzHeC speaking opportunities, forums, etc. |
| EPCS remains a **low priority for many provider vendors** | Maintain software vendor relationships to help them understand how EPCS benefits them  
• Encourage certification for Tier 1 endorsement |
| Prescriber and pharmacy communities have **strong interest in doing EPCS** | Keep EPCS in front of providers and pharmacies  
• Attend meetings, invite them to contact us with questions or concerns, etc. |
## Considerations & Next Steps for AZ (cont.)

<table>
<thead>
<tr>
<th>What we learned:</th>
<th>What we can do:</th>
</tr>
</thead>
</table>
| **Additional training needed** for pharmacy staff after pharmacy is certified for EPCS | Maintain relationships with corporate pharmacy contacts.  
   - Encourage ongoing training with staff and solicit their help in addressing store by store problems. |
| Prescribers need a place to go for **issue resolution** or they may drop the use of the technology | Continue to work with DTAPS to keep them involved and helping with EPCS related issues.  
   - Use the AzHeC website, meetings, etc., to continue offering help. |
| EPCS is part of the bigger need for prescribers to adopt ePrescribing technology | In efforts to increase Arizona’s status for SafeRx, incorporate the benefits of EPCS as part of the rationale for using ePrescribing systems. |
Other Opportunities & Post-Test

Tony Schueth
CEO & Managing Partner
Point-of-Care Partners
tonys@pocp.com
Post Test Question #1

1. What are common reasons that require pharmacies to call prescribers upon receipt of electronic prescriptions?
   a. Formulary/reimbursement issues
   b. Wrong quantity
   c. Potential drug interactions
   d. All of the above
Post Test Question #1

1. What are common reasons that require pharmacies to call prescribers upon receipt of electronic prescriptions?
   a. Formulary/reimbursement issues
   b. Wrong quantity
   c. Potential drug interactions
   d. All of the above
Post Test Question #2

2. What does ePA allow the provider to do?
   a. Electronically request or be presented with a PA question set.
   b. Return the answers to the payer and receive a real-time response.
   c. Utilize a network or direction connection to enable bi-directional communications and real-time responses.
   d. All of the above.
Post Test Question #2

2. What does ePA allow the provider to do?
   a. Electronically request or be presented with a PA question set.
   b. Return the answers to the payer and receive a real-time response.
   c. Utilize a network or direction connection to enable bi-directional communications and real-time responses.
   d. All of the above.
Post Test Question #3

3. What percentage of specialty medications require prior authorization?
   a. 25%
   b. 40%
   c. 60%
   d. 95%
Post Test Question #3

3. What percentage of specialty medications require prior authorization?
   a. 25%
   b. 40%
   c. 60%
   d. 95%
Post Test Question #4

4. Which of the following are NOT allowed under the Part D ePrescribing Program for LTC effective Nov. 1, 2014?
   a. Computer-Generated Facsimile
   b. HL7 Messaging
   c. NCPDP SCRIPT 10.6
4. Which of the following are NOT allowed under the Part D ePrescribing Program for LTC effective Nov. 1, 2014?

a. Computer-Generated Facsimile
b. HL7 Messaging
c. NCPDP SCRIPT 10.6
Post Test Question #5

5. Which of the states below allow EPCS but only for CIII-CV?
   a. Kansas, Vermont
   b. Ohio and Michigan
   c. Florida and New York
   d. None of the above
Post Test Question #5

5. Which of the states below allow EPCS but only for CIII-CV?

a. Kansas, Vermont
b. Ohio and Michigan
c. Florida and New York
d. None of the above