



Electronic Prescribing (eRx): The Pros and Cons

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Boston HealthNet

- Established in 1995
- Partnership between Boston Medical Center, Boston University School of Medicine and 15 Community Health Centers (CHCs)
- The network's CHCs account for
 - 1.2 million patient visits annually
 - Over 206,000 patients
 - 173.18 FTE Physicians
- 14 of the 15 CHCs have EMRs, beginning in 2002



e-Prescribing Defined

The two-way [electronic] communication between physicians and pharmacies involving new prescriptions, refill authorizations, change requests, cancel prescriptions and prescription fill messages to track patient compliance.

Electronic Prescribing is not Faxing or printing paper prescriptions.

*-National Council for Prescription Drug Program, Inc.
(NCPDP)*



With or Without eRx

With eRx

- Reduces Cost
 - Increasing speed and ease of issuing new prescriptions
 - Reducing paper prescriptions
 - Reduces back-and-forth communication with the pharmacy
- Improves in safety and quality of care
 - Reduce errors due to illegible paper-based prescriptions.
 - Clinical decision support
 - Becomes part of the electronic patient record
- Improves patient satisfaction
 - Reduces wait time
 - Improves compliance
- Incentives from payors, feds

Without eRx

- Difficulty reading handwritten prescriptions
- Phone call needed for 30% of all prescriptions
- Inefficient prescribing process
- Prescriptions lost by patient
- Little potential for Clinical Decision Support
- Medication errors harm over 1.5 million people each year (IOM 2006)
- Treating drug-related injuries in hospitals cost about \$3.5 billion annually (IOM 2006)

Prescriptions Today

- Physicians write close to 4 billion prescriptions a year

- Physicians write a prescription from mental drug list

- Call to confirm prescription (over 150 million calls per year)
- clarify handwriting
- Dosage?
- Drug?

Physician



- Wait

Patients



- Request changes if required based on benefits

PBMs

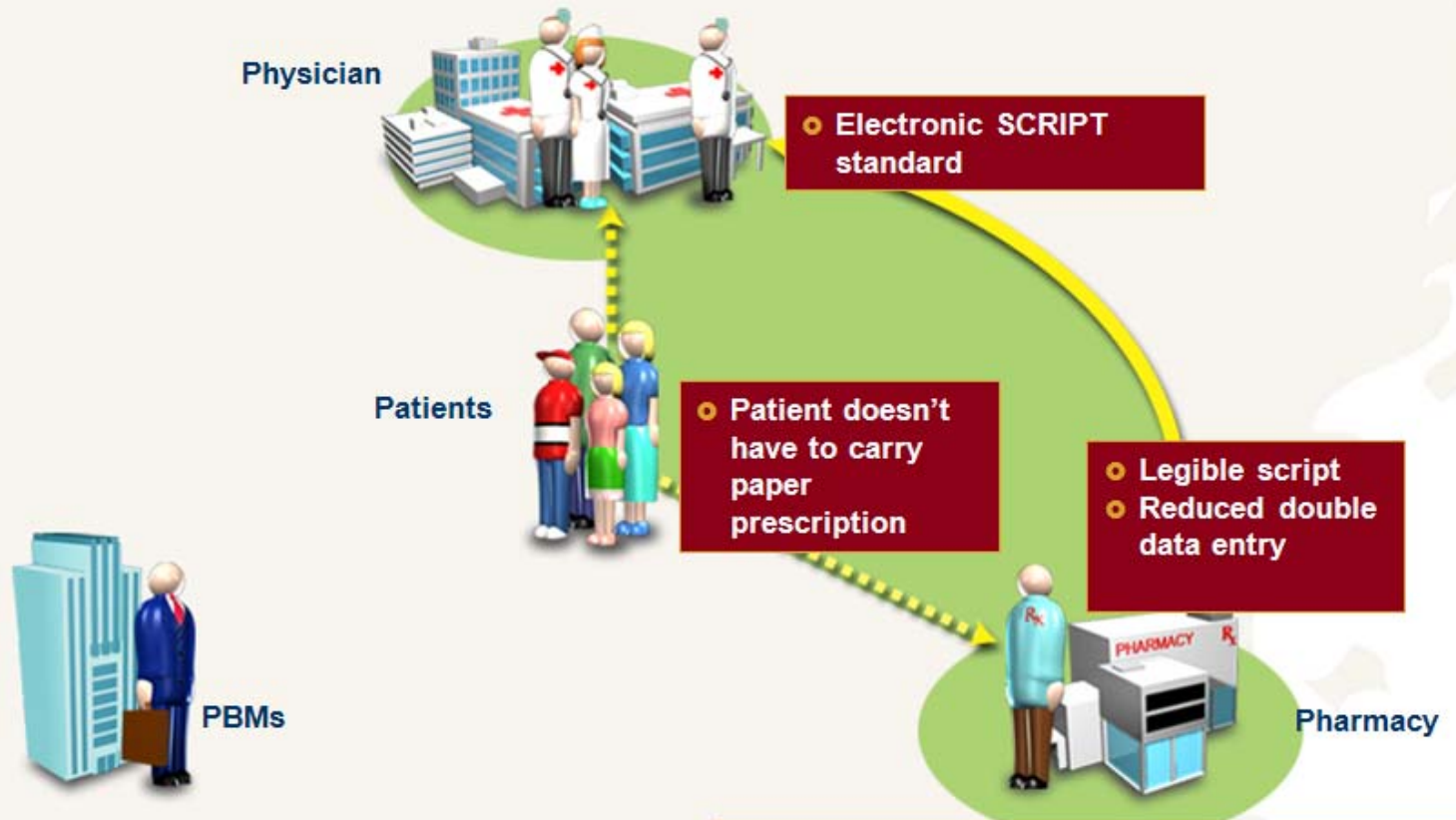
- Check eligibility
- Determine benefit

- Read script
- Data enter script

Pharmacy



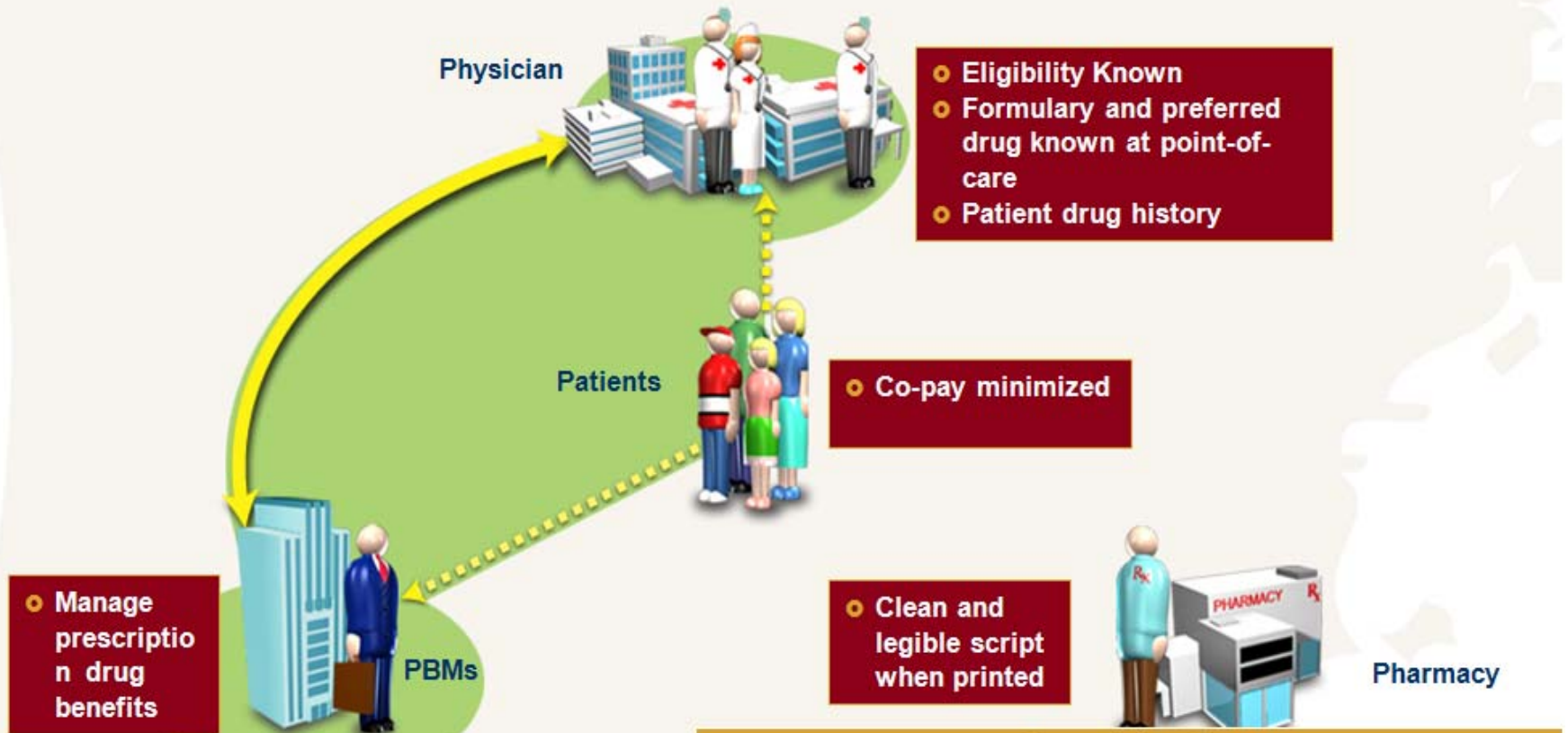
Electronic transmission MD to Pharmacy (e.g. fax)



Remaining Issues

- Formulary Compliance
- Eligibility
- Co-pay
- Wait time

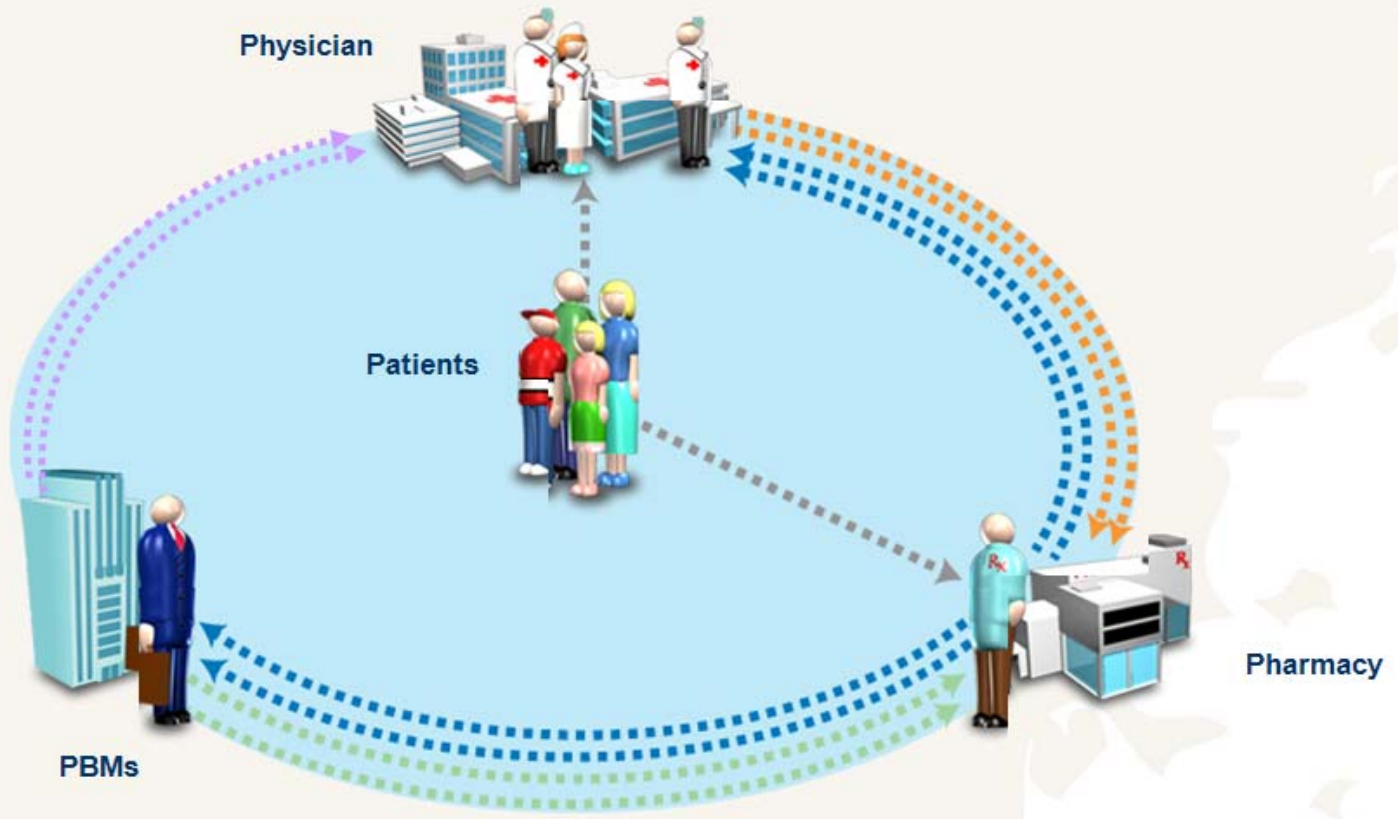
Electronic Eligibility Check



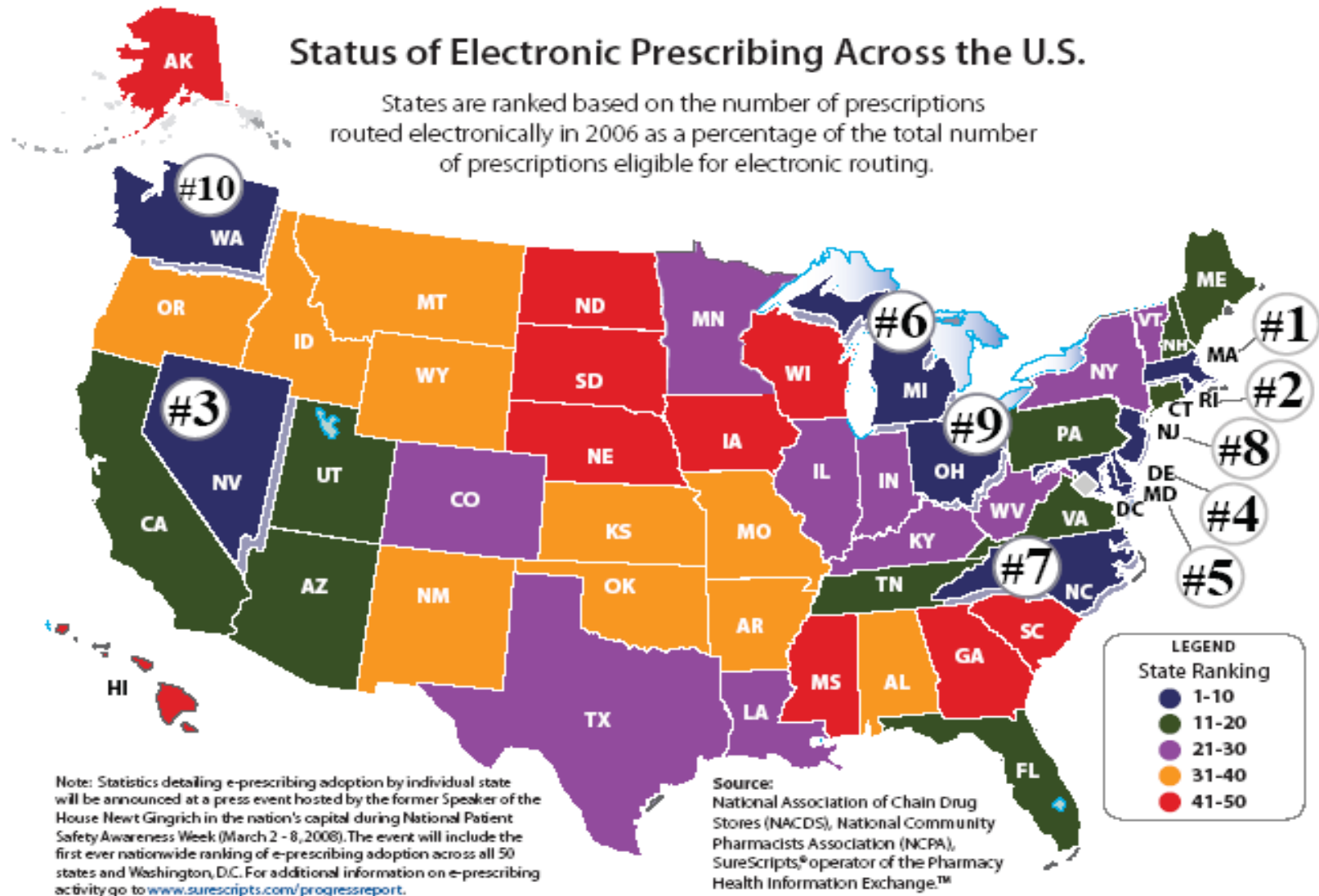
Remaining Issues

- Medications not submitted for payment by patient are not known by PBM
- Patient wait time remains high
- Pharmacy data entry still required
- Pharmacy competitive position on physicians' desktop

eRx: Complete Prescription Cycle



E-Prescribing Growth by State



Kryptiq's eSM Solution: Minor Workflow Change

New Medication

Name: B TEST
Birth: 05/02/2007
Age: 8 Month Old Female
Height:
Weight:
BSA: Unable to calculate

Insurance:

Current Medications
COMBIVIR TABS 150-300 MG (LAMIVU
BL ECHINACEA 167 MG TABS (ECHINA
AEROCHAMBER MASK LARGE MISC (I
ADVAIR DISKUS 250-50 MCG/DOSE M

Current Allergies
ADENOSINE (ADENOSINE)

Find Medication
Custom List: BCMG Reference List...
Formulary: BMC Outpatient Formulary
Search Formulary...
Select Formulary...
Choose Alternative
Status...

Define Medication
Medication:
Instructions:
Start Date: 01/03/2008 Stop Date:
Duration: Days Weeks Months

Prescription
Quantity: 30 Refills: 1 Brand medically necessary Print Pt. Handout
Pharmacy: Englewood Pharmacy*
21 Justice St
Englewood, CO 80110
Ph: 3034830922
Fax: 3034830990
Authorized By: Winston MD, Harry S.
Prescribing Method: Electronic
State: Oregon

Add to custom list: Drug Instructions/Duration Qty/Refills

Save & Continue OK Cancel

Prescription
Quantity: 30 Refills: 1 Brand medically necessary Print Pt. Handout
Pharmacy: Englewood Pharmacy*
21 Justice St
Englewood, CO 80110
Ph: 3034830922
Fax: 3034830990
Authorized By: Winston MD, Harry S.
Prescribing Method: Electronic
State: Oregon

- Proposed workflow is almost identical to current workflow
- eRx enabled pharmacies appear with an (*) asterisk next to the name
- Users will select 'Electronic' as the Prescribing Method

Kryptiq's eRx Workflow



- Sending a new prescription with eSM fits seamlessly into current prescription workflow
- New prescriptions get sent securely from Centricity on the prescriber's desktop through eSM Central and SureScripts to the pharmacy
- Minimal Training

Challenges

Issue	Solution
Some CHCs pharmacy's not on SureScripts network	Contacted pharmacy and had them added
Multiple locations of care at BMC	Used a consolidated location of care (home location). This does pose a prescription origin and contact info issue.
Prescriber Phone number	Phone number of general service was used.
NPI number wasn't associated	eSM upgrade – manual process to register residents currently
eRx latency	eSM backend query issue, Obs Table issue; resolved with new query.
Collaborating provider not on script	Kryptiq will add a field on the back end to send this information in the electronic transmission. Upcoming release will correct this.
BMC pharmacy – workflow issues	Inpatient discharge issue; prioritization issue; volume change.
Refill Requests from Pharmacy	We decided to start with New Rx only. Process for refill requests need to be fixed with Pharmacies first.
Oct 1, 2008 – TRP mandate	Microprint on script
April 1, 2009 e-Prescribing Standards	Currently we are on Logician 5.6 and there is no solution



BHN User Feedback

- MD's have not felt too much of a difference (that's a good thing)
- NP's perceive their productivity has increased
 - No need to wait for physician to manually sign
 - Can submit Rx immediately and move on
- Believe the call-backs from pharmacies have decreased 80%
- Do not need to re-fax Rxs
- Would like DEA to allow eRx of controlled substances



BHN Feedback (cont'd)

- April 1, 2009 eRx standards not possible with Logician 5.6. These include:
 - Formulary & Eligibility
 - Fill status
 - Medication History



So, what's the bottom line?

- E-Prescribing
 - has not changed provider work flow very much
 - has tremendous benefits to support staff, CHC and patients.



Thank You!

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