E-Prescribing and Health Information Exchanges: Lessons from Connecticut's CMS Medicaid Transformation Grant

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Topic Overview

• CT Medicaid Transformation Grant
  – Demonstration Project for E-Rx/HIE Med Info Exchange

• E-Prescribing Info Gaps and HIE Challenges

• Lessons Learned
  – PCP Sites and Providers
  – Pharmacists
  – Patients
  – Medication Reconciliation

• E-Rx and HIE: Care Coordination in Primary Care
CT Medicaid Transformation Grant: E-Rx and HIE Med Info Exchange

• Partners:

• Objectives

1. Network Pharmacists **build a comprehensive, active medication profile (CAMP)** for Medicaid patients that can be accessed by health care providers via the Health Information Exchange.

2. Network Pharmacists **assess medication-related problems (MRPs) and share findings with patients and primary care providers.**

3. Advance the **medical home concept** through Network Pharmacists’ **medication therapy management (MTM)** services in **collaboration with primary care providers** to optimize medication therapy outcomes/ reduce MRPs.

4. Network Pharmacists **improve medication adherence** utilizing Rx fill data to **inform prescribers on patient adherence trends.**
CT MTG Pilot Project Elements

• Medicaid patients
  – 90 adults; chronic diseases w/ > 3 chronic prescription medications

• Practice Sites
  – FQHC/Private practice (fee-for-service)
  – EHR/E-Rx for ≥ 12 months

• Metrics
  – Medication Discrepancies, Medication-related Problems
  – Adherence Trends, Cost Trends

• Pharmacist Interventions
  – Appointments with patient in PCP office
  – Initial visit: 60-90 minutes (face-to-face); 5 monthly follow-up visits
  – Medication List and Action Plan developed and printed for patients
  – Medication Therapy Management/Adherence report sent to PCP and EHR
HIE is a shared platform for centralized patient medication history, usage patterns, and outcomes that can be accessed by all health care professionals and patients.
Definition of E-Prescribing

- Electronic prescribing, as defined by the National Council for Prescription Drug Programs (NCPDP), a standards development organization, has two parts:

  - **Part 1:** Two way [electronic] communication between prescribers 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.

  - **Part 2:** Potential for information sharing with other health care partners including eligibility/formulary information and patient medication history
Variability of E-Rx Software Functionality

1 - BASIC ELECTRONIC REFERENCE
Drug info, calculators, formulary lists – not integrated with prescribing

2 - STAND-ALONE E-Rx
Search drug name/dose – not patient-specific

3 - PATIENT DATA INCLUDED
Demographics, formulary, allergies

4 - MED HISTORY
Rx meds listed for renewals/ drug interactions

5 - CONNECTIVITY
Providers/pharmacy/payors; real-time

6 - EHR INTEGRATION

Full E-Rx

Limited E-Rx

Not E-Rx

E-Rx functionality level used by MD is unknown to Pharmacist; CCHIT certification standards for stand-alone ERx applications (2009)

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Adapted from Electronic Prescribing: Towards Maximum Value and Rapid Adoption, eHealth Initiative, 2004
Pharmacist Clinical Care - Core Services

Medication therapy management (MTM) – pharmacists have the training and clinical expertise to **detect, resolve, monitor, and prevent** medication-related problems across the continuum of care:

1 - **Comprehensive review** of a patient’s current prescribed and self-care medications for actual usage and adherence patterns

**TODAY, most PC med lists include only Rxs prescribed by one PCP……INCOMPLETE**

Missing Info…..OTCs, herbals, nutriceuticals, MD samples, indigent care meds, complex dose schedules, meds from other MDs/specialists, discontinued meds, adherence trends

**Even with use of EHR and E-prescribing, most PC med lists are incomplete or inaccurate ………diminishes the promise of improved medication safety and care quality**
Pharmacist Clinical Care - Core Services

2 - **Systematic assessment** of each medication for appropriateness, efficacy, safety, and adherence (in this sequence) to achieve optimal therapy goals

70-80% of medication-related problems in primary care

3 - Development of a personal medication action plan active med list, patient self-management goals, and medication management recommendations

4 - **Documentation and communication** of the care plan to the patient and all health-care providers for care coordination and follow-up between office visits
Lessons Learned......

E-Rx, EHRs, and HIE

• Not all E-Rx, EHR systems are created equal...what features and fxns? use formulary....alternative meds?? CDS – dose checks, allergy checks, drug intxn checks?
• Myth – ERx includes meds from all prescribers, includes all active meds.... allergies, drug intxn
• ERx still requires pharmacist-prescriber interaction to clarify incomplete, missing, or inaccurate info (ex. ptnt instructions, E-Rx errors)
• Challenge in transferring CAMP to HIE
Lessons Learned (2)…….

**PCP sites/Providers**

- **Site selection process**
  - Support of admin and clinical leadership
  - EHR and E-Rx software system

- **Communication**
  - Review of Protocol
  - Monitoring workflow process (ex. confirmation of pharmacist notes received by PCP, entered into EHR)
  - Reveal project findings for clarifications
Pharmacists

• Recruitment
  – Network of independent pharmacist consultants
  – Agnostic to employer site
  – Application fees, selection criteria (broad vs specific??)
  – Ideally have prior experience with direct-patient care

• Training
  – Documentation software training, patient cases
  – Writing recommendations to PCP for incorporation into EHR
  – QA process to review pharmacist recommendations/notes

• Communication
  – Weekly emails throughout the project
  – Planned workshops, tutorials, focus groups during project
  – Foster support among network pharmacists
  – Reveal project findings for clarifications in project evaluation
Lessons Learned (4) .......

Patients

- Incorporated patient incentives
- Approximately 50% no-show rate for initial visit
- Retention rate for visits 2-6 >90%
- Most visits were face-to-face based on patient complexity
- Took 3-6 visits with same pharmacist to establish rapport/trust for medication behavior change
- Felt empowered as a result of pharmacist visits to ask PCP/Specialists about medication questions
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