Medication Management of Chronic Diseases in a Medical Home Model:
CMS Medicaid Transformation Project

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Topic Overview

- Primary Care Medication Use/Safety Issues

- Medication Therapy Management (MTM)

- Findings of CMS Medication Transformation Grant Research Team:

    UConn School of Pharmacy: Smith, Dang, Kuti, Mello-Moniz

    CPA: Giuliano, Buckley, Cintron, Network Pharmacists

- Considerations for Integrating Pharmacists in Primary Care Health Home Models

Primary Care Med Use and Safety Issues

- **Prescribing:** 71% of physician office visits recorded $\geq$1 prescription meds; 48% of US adults having 4+ prescriptions for chronic conditions

- **Medication discrepancies**: 24% prescription meds and 76% OTCs/herbals (reported as actual meds used at home) were not in EHRs; ~ 50% medication discrepancies due to discontinued meds

- **ADEs:** 175,000 visits/yr to US emergency depts for adverse drug events (ADEs) in the elderly; 32% adverse events leading to hospital admission attributed to medications

- **Care Transitions:** 49% patients had unexplained med discrepancies between home to hospital discharge; 29% patients had unexplained med discrepancies between hospital discharge and 30-days post discharge

> **Medication management is too critical and important to leave to any <u>one</u> person or profession…….primary care offers opportunities for <u>interdisciplinary collaboration</u> and <u>teamwork</u> for safe, evidence-based, cost-effective medication use**

SOURCES: National Ambulatory Medical Care Survey: 2006 Summary. Natl Health Stat Report. 2008 Aug 6;(3):1-39.
 Health Affairs 28, no. 1 (2009): w1–w16; Intl J Med Informatics 2008:153–60; Ann Intern Med. 2007;147(11):755-765.;
Arch Intern Med. 2006;166:565-571;JAMA. 2006;296:1858-1866.

Medication Therapy Management (MTM)

Medication Therapy Management (MTM) is a "*systematic process of collecting patient-specific information, assessing medication therapies to **identify medication-related problems**, developing a **prioritized list of medication-related problems**, and creating/implementing a **plan to resolve** them.*"

*Pharmacists have the training and clinical expertise to **detect, resolve, monitor, and prevent** medication discrepancies and medication-related problems across the continuum of care and at times of care transitions*

MTM is a component of:
- ✓ patient safety or risk management initiatives
- ✓ care quality improvement programs
- ✓ performance target or incentive programs
- ✓ cost optimization programs

True MTM is NOT:

- ✓ comparing 2 med lists for medication reconciliation purposes
- ✓ copying meds into a list to give to the patient
- ✓ outbound calls to see if patients have new meds or med problems
- ✓ adherence education, patient counseling, refill alerts and reminders

CT DSS Medicaid Transformation Grant

Demonstration Project - Aims

GOAL: Pharmacists in a **shared resource network** assist the patient, family/caregivers, and PCPs with **appropriate, effective, and safe medication use.**

1. Build a **comprehensive, active medication profile** (**CAMP** – prescriptions, OTCs, herbal products, nutriceuticals) for Medicaid patients that can be **accessed by health care providers via the Health Information Exchange**.

2. **Assess primary care drug therapy problems** using the CAMP **and communicate findings to primary care providers.**

3. **Collaborate with primary care providers to optimize medication therapy outcomes with medication therapy management (MTM) services** for Medicaid patients.

4. Improve medication adherence for Medicaid patients utilizing Rx fill data to **alert prescribers on patient adherence trends.**

Pharmacist Shared Resource Network

pharmnetex
PHARMACISTS NETWORK FOR EXCELLENCE

Contract with Health Plans/Payers, Employers, Providers, Health Systems **for Pharmacist Services**

Recruit Qualified Pharmacists to provide contracted services

Pharmacists Collaborate with Health Care Professionals & **Provide** Patient-Centric Care

Improved Patient Care and Outcomes

THE COMMONWEALTH FUND

DRIVING VALUE IN MEDICAID PRIMARY CARE: THE ROLE OF SHARED SUPPORT NETWORKS FOR PHYSICIAN PRACTICES
March 2011

……**PharmNetEx** contracts on a fee-for-service basis with provider groups, payers, health plans, and employers to provide pharmacy services in primary care offices. Pharmacists work directly with patients to perform comprehensive medication reviews, develop patient medication and action plans, assess medication-related problems, develop personal medication records, and communicate with the provider.

Pharmacist MTM Services

1 - Comprehensive review of a patient's <u>current</u> prescribed and self-care medications for <u>actual</u> usage and adherence patterns

TODAY, most primary care office med lists are INCOMPLETE or INACCURATE
- **Inadequate time/skills in collecting comprehensive medication histories**
- **Poor documentation of medication info**
- **Poor patient recall or avoidance of truth on med use/non-adherence**
- **Cultural or health literacy challenges**
- **Discontinued medications not included**
- **Fragmented sources of medication info**

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 which diminishes the <u>promise</u> of improved medication safety and care quality
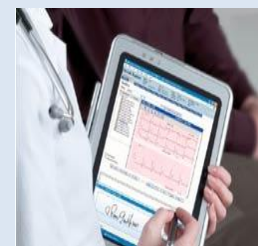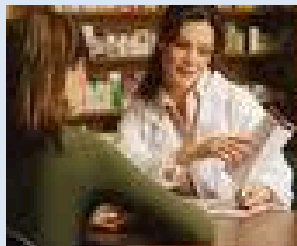
Pharmacist MTM Services

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 care plan with 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

Medicaid MTM Project Overview

- Demonstration project in 5 primary care sites, 20 providers

- Beneficiaries: 3700 eligible, 88 enrollees, 401 encounters
  - limited sample yet demonstrates benefit of MTM services, team care

- CT Pharmacist Network: shared resource model
  - met with Medicaid patients in PCP office with EHR access
  - integrated multiple med'n data: pharmacy claims, EHR, patient report of actual med use at home

- Initial and 5 monthly face-to-face patient-pharmacist visits between primary care provider appointments; (avg=4.6 visits)
  - Patient incentives – grocery gift cards

- Intervention: Pharmacist-provided MTM services
  - patient received updated Medication Action Plan at each visit (comprehensive active med list + w/ self-management goals)
  - PCP received MTM report/SOAP note with pharmacist recommendations; specialist report in EHR

CT DSS Medicaid Transformation Grant FINDINGS

Key Findings

CT Medicaid beneficiaries have complex medication regimens
- ✓ Mean Age – 51 yrs, Female – 71%
- ✓ Medical conditions ~9-10/ptnt , chronic medications ~ 15-16/ptnt
- ✓ Pain, GI, Dyslipidemia, HBP, Asthma/COPD, Diabetes, Depression

Medication discrepancies (n= 3248, 80% of all meds)

… inconsistency in the drug, dose, frequency, route, quantity dispensed, or current medication use by the patient between the Medicaid claims, EHR medication list, or patient's report of actual medication use at home.

50% related to discontinued meds (by prescriber or patient)
39% related to drug or dose

Medication-related problems (MRPs) = 917, mean = 10.4/ptnt
- ✓ **Medication appropriateness (30%)**

  Needs additional medications (23%) – using evidence-based guidelines
- ✓ **Effectiveness (23%) -** Dose too low (16%)
- ✓ **Safety (21%) -** Adverse drug event (16%)
- ✓ **Patient non-adherence (26%)**

  Patient doesn't understand med'n use instructions (11%) – esp. inhalers

74% MRPs relate to clinical decision-making / team-based care
26% MRPs relate to patient health beliefs, adherence behaviors

Adherence Trends

- Patients disclosed "authentic" adherence issues to the pharmacist after 3-4 visits; initially told pharmacists what they wanted to hear until they established a trusted patient-provider relationship

- Modified Morisky Questionnaire (8-items)

  SCORES: <2 = High adherence behaviors and >2 = Low adherence behaviors

- Morisky Results (60 patients with initial and final visit scores)

Per Patient	Initial Visit Score	Final Visit Score	p-value [a]
Mean (+/- SD)	2.25 (+/- 2.04)	1.78 (+/- 1.77)	0.042

[a] paired t-test of mean difference

Face-to-face visits contribute to establishing a trusted patient-provider relationship

MRP Resolution Actions

~ 80% MRPs resolved in 4 patient visits

Pharmacist-directed resolution actions (**developed medication action plan with patient;** recommend OTC use; meds not to split or crush; change med administration timing to minimize side effects or drug interactions; proper home monitoring for glucose or blood pressure)	1,285 (78%)
Prescriber-involved resolution actions (requires new medication; change in medication, dose, frequency, or referral to the PCP to evaluate/treat an adverse drug event)	353 (22%)

78% DTPs were resolved without a PCP visit; collaborative practice opportunities for CT pharmacists can increase %

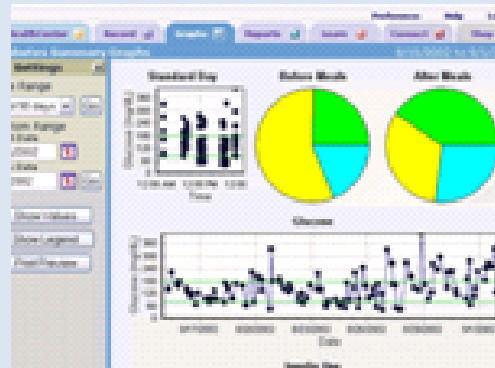**Pharmacists can enhance primary care practice efficiency**

Patient Achievement of Therapy Goals

STATUS	First visit	Last visit
Stable, Improved, or Resolved	63%	91%

STABLE = goals achieved, continue same therapy
IMPROVED = progress being made, continue same therapy
RESOLVED = goals achieved, therapy completed

There was 28% improvement in achievement of patient medication therapy goals between the first and last patient-pharmacist visits

Patient Survey Written Testimonials

IMPROVED   COMMUNICATION

- "The most important part of meeting with **my pharmacist** was she **communicated with my doctor** & then **we were all on the same page."**

- "These programs also offer the patient the opportunity to **ask questions** that are **embarrassing to ask the doctor"**

PATIENT EXPERIENCE

- "I get **answers** to questions that I **could not get from a busy pharmacist inside a store"**

- "Getting **another opinion from another professional** is a reason I came."

- "I loved this program….**wish I could send my family and friends**."

Patients felt empowered and more comfortable asking PCP medication questions

Patients valued the collaboration between the Network Pharmacist and their PCP to manage medications and resolve any drug therapy problems

Patients appreciated the opportunity to meet with a pharmacist in the PCP office to discuss medication issues that can't be addressed in a busy pharmacy

Primary Care Provider Survey Results

- 11/20 respondents (55% response rate)

- PCPs found pharmacist MTM services favorable

  ➢ 73% found pharmacist-MTM helped patients better understand meds

  ➢ 91% found it helpful to have pharmacists identify DTPs

  ➢ **82% made a med adjustment based on pharmacist recommendations**

  ➢ 100% found PCP-Pharmacist collaboration important to assure safe, appropriate, cost-effective medication use

  ➢ 90% wanted pharmacist MTM service for eligible patients

PCPs valued collaboration with Network Pharmacist to identify and resolve patient-specific drug therapy problems

PCPs made a medication regimen change based on the Network Pharmacists recommendations

PCPs are supportive of pharmacist-led MTM services

Implications for Medicaid Health Homes

- Pharmacist "**shared resource" network** is a feasible solutions for small/medium primary care practices.

- Within a health home, **pharmacists** are crucial for care coordination and quality improvement initiatives to **optimize chronic disease medication outcomes**, **promote medication safety, and assure cost-effective regimens.**

- Care quality and medication safety was improved as **78% of MRPs were resolved with pharmacist-patient visits** between PCP visits; **82% PCPs made at least one change** in patients' therapies **based on the pharmacists' recommendations**.

- Pharmacists created a **medication action plan** that was shared with the patient/caregiver and PCP; **summary MTM report** was sent to the PCP and **entered in the patient's EHR**

Resources

Medication Management in Primary Care

Smith MA**,** Giuliano MR, Starkowski MP.   In Connecticut: Improving Patient Medication Management in Primary Care. *Health Affairs* 30, no. 4 (201): 646-654.

Patient-centered Primary Care Collaborative (Jul 2010)

Integrating Comprehensive Medication Management to Optimize Patient Outcomes: A Resource Guide

https://www.elbowspace.com/servlets/cfd?xr4=&formts=2010-06-30%2006:58:52.550887

Pharmacists Role in Medical Home

Smith MA**,** Bates DW, Bodenheimer T, Cleary PD. Why Pharmacists Belong in the Medical Home. *Health Affairs* 29, no. 5 (2010): 906-913.

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