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

Marie Smith, PharmD  
University of Connecticut  School of Pharmacy

Marghie Giuliano, RPh , CAE  
CT Pharmacists Association

National Medicaid Congress  Washington, DC  June 13, 2011
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 ≥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 one person or profession……primary care offers opportunities for interdisciplinary collaboration and teamwork for safe, evidence-based, cost-effective medication use**

**SOURCES:**
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.**
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 current prescribed and self-care medications for actual 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 promise 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
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)

<table>
<thead>
<tr>
<th>Per Patient</th>
<th>Initial Visit Score</th>
<th>Final Visit Score</th>
<th>p-value a</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean (+/- SD)</td>
<td>2.25 (+/- 2.04)</td>
<td>1.78 (+/- 1.77)</td>
<td>0.042</td>
</tr>
</tbody>
</table>

a paired t-test of mean difference

Face-to-face visits contribute to establishing a trusted patient-provider relationship
# MRP Resolution Actions

## 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)*

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmacist-directed resolution actions</td>
<td>1,285 (78%)</td>
</tr>
</tbody>
</table>

## Prescriber-involved resolution actions
*(requires new medication; change in medication, dose, frequency, or referral to the PCP to evaluate/treat an adverse drug event)*

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Prescriber-involved resolution actions</td>
<td>353 (22%)</td>
</tr>
</tbody>
</table>

~ 80% MRPs resolved in 4 patient visits

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

<table>
<thead>
<tr>
<th>STATUS</th>
<th>First visit</th>
<th>Last visit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stable, Improved, or Resolved</td>
<td>63%</td>
<td>91%</td>
</tr>
</tbody>
</table>

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
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

Patient-centered Primary Care Collaborative (Jul 2010)
*Integrating Comprehensive Medication Management to Optimize Patient Outcomes: A Resource Guide*

Pharmacists Role in Medical Home

Email: marie.smith@uconn.edu
mgiuliano@ctpharmacists.org