A Pharmacist Network for Integrated Medication Management in the Medical Home

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Case Study for New Primary Care Model

• 90 yo WM, cardiac disease, post-CABG
• 7 chronic meds/day; adherent
• PCP + 5 specialists
  – Pharmacist-led anticoag clinic
• Multiple prescribers
• Motivated in self-management
• Care support system
  – spouse – “adherence coach”
  – 3 daughters – “care coordinator/navigators”
• Great access, insurance coverage

Has had multiple **preventable** medication misadventures/errors with care transitions, change in PCPs, specialist care – POOR CARE COORDINATION, HIGH COSTS
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

Disparate, Fragmented Med Info Sources in Primary Care

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??)

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Pharmacist Services in Primary Care

Collaborate with patients/families and providers to:

- Perform **comprehensive review of medication therapies**
- **Identify, resolve, monitor, and prevent** medication use and safety problems
- Optimize **polymedicine** regimens
- Recommend **cost-effective** therapies
- Design tailored **adherence and health literacy** programs
- Address **health disparities** - culturally and linguistically appropriate care
- Develop **medication action plans** for patients and caregivers
- Provide **medication recommendations** to all patient’s providers
- Perform targeted medication assessments at **care transitions**

Enhance Access to Care

- Pharmacists can provide patient services in **multiple locations**
  - retail pharmacies, physician offices, outpatient clinics, home visits, worksite health centers, senior centers
  - pharmacist consults by tele-health connection
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 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
Pharmacist Patient Care - 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
- Lack of 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 Patient Care - MTM Services

2 - **Systematic assessment** of each medication for appropriateness/indication, 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*
Incorporating Pharmacists in the PCMH

Workflow patterns that incorporate pharmacists in a direct patient-care role

• **Pre-visit planning**: meet with patient or reviews the patient medical chart and makes care plan recommendations that are shared with the primary care provider *prior to* the patient’s primary care appointment

• **Coincident referral**: sometimes called a “warm handoff” as the pharmacist meets with the patient and makes care plan recommendations to the referring provider *during or at the conclusion of* a primary care appointment

• **Follow-up referral**: the provider refers the patient to the pharmacist for a separate, follow-up visit subsequent to the patient’s primary care appointment; care plan recommendations are sent to the referring primary care provider *between* primary care appointments

• **Targeted consults**: the pharmacist initiates (or the provider requests) medication management services for selected patients
  - care transitions
  - lack of therapeutic goal achievement
  - high-risk medications for adverse events
  - complexity of medication regimens
  - multiple prescribers
  - poor patient adherence
  - presence of liver or renal dysfunction
Considerations for Pharmacist Integration in PCMH

**Patient Selection (Who?)**

Elderly patients, polymedicines, high-risk meds, high-cost therapies, complex regimens, lack of therapeutic goal achievement, health literacy and cultural issues, care transitions, frequency of med-related hospitalizations/ED visits, non-adherence

**Locations (Where?)**

Primary care offices, ambulatory clinics, worksites, home visits, senior centers, community pharmacies, tele-health, e-consults

**Integration Models (How?)**

Employed model – pharmacist on PCMH staff
Embedded model – partnership between PCMH and pharmacy school clinical faculty
Referral/regional model – pharmacist serves PCMHs in geographic area
Contracted model – PCMHs/payers contract w/ network of credentialed pharmacists

**Sustainable Payment Sources**

Fee-for-service (CPT codes for pharmacist MTM)
Global Payment/Care Coordination Payments
Performance Targets/Bonuses
Additional physician visits (w/complex medication patients seen by pharmacist)
CT DSS Medicaid Transformation Grant
**CT DSS Medicaid Transformation Grant**

**Building a Medicaid HIE and ERx Med Info Exchange**

**UConn School of Pharmacy**  
*Build/Evaluate ERx Med Info Exchange*

**CT Pharmacist Network**  
*Pharmacists provide direct patient care for MTM and Adherence Plans*

**PHARMACIST – PATIENT ENCOUNTER in PCP Office**

**MEDICAID HEALTH INFO EXCHANGE**

**EHealthCT**  
*Build Health Info Exchange*

**EDS**  
*Medicaid Data Transfer*

- **Inpatient and ED Discharge Info**  
  - Hospitals
- **Updated Med Info**  
  - Pharmacies
- **Patient Medical Info**
- **Physician Offices**

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Contract with Health Plans/Payers, Employers, Providers, Health Systems for Pharmacists to provide contracted services

Recruit Qualified Pharmacists to provide contracted services

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

Improve Patient Care and Outcomes

NETWORK SERVICES
Negotiate Contracts
- Administrative and billing service
  - Direct payments to Pharmacists
- Coordinate network of pharmacists
  - Competency/skill-based qualifications
  - Not dependent on pharmacists’ workplace
- Validate credentials of pharmacists involved
- Provide standardized pharmacist documentation tool
  - HIPAA compliant
  - Web-based, secure access
  - Standardized reports
- Systematic approach to all services offered

PHARMACIST MED’N THERAPY MANAGEMENT
- Pharmacist at Point-of-Care (Primary Care Office/Telemedicine)
- Perform Comprehensive Medication Review
  - Develop a Personal Medication Record
  - Assess Medication-Related Problems (MRPs)
  - Duplicate therapy/Drug interactions
  - Adverse events and side effects
  - Adherence
- Develop Patient Medication Action Plan
- Document/Follow-up Plan
- Communicate with Primary Care Provider

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CMS Medicaid Transformation MTM Project

- Demonstration project in 4 FQHCs, 20 providers
- Beneficiaries with 4+ chronic meds, >1 chronic disease, not disease specific
  - 3700 eligible beneficiaries, 88 enrollees, 401 encounters
- Initial and 5 monthly face-to-face patient-pharmacist visits between primary care provider appointments; avg=4.6 visits
- CT Pharmacist Network: specially-trained Pharmacists
  - met with Medicaid patients in PCP office
  - had full access to EHR
  - multiple medication data sources: pharmacy claims, EHR, patient visit to obtain actual med use at home
- Provide patient with comprehensive active med list + Medication Action Plan w/ self-management goals
- Communicate MTM recommendations to PCP via EHR
Key Findings: CT Medicaid Pharmacist MTM Project

1. EHR and ERx adoption does not solve medication use/safety problems
2. Medication discrepancies ~ 50% related to discontinued medications
3. Clinicians need actual patient medication use info not just admin claims or ERx data for clinical decision-making
4. CT Medicaid beneficiaries have complex medication regimens
   - Medical conditions ~9-10, chronic medications ~ 15-16
   - Medication-related problems (MRPs)/ptnt: 10
     - 74% MRPs - medication appropriateness, effectiveness, safety (clinical decisions)
     - 26% MRPs - patient adherence
       - Needs additional medications (23%) – using evidence-based guidelines
       - Dose too low (16%)
       - Adverse drug event (16%)
       - Patient does not understand medication use instructions (11%) – esp. inhalers
5. Took 4 pharmacist-patient visits to resolve 83% of identified MRPs
6. Medicaid Project – Success Drivers
   - Medical home model – pharmacist seen as part of the health care team
   - Pharmacist access to EHR - complete medical info and lab data
   - Holistic patient MTM evaluation (all comorbidities, not disease specific)
   - Intensity and frequency of patient-pharmacist visits (initial, 5 monthly visits)
   - Pharmacist developed Medication Action Plans – promoted patient engagement
   - Pharmacist sent MTM Reports with recommendations to the patient’s provider
Med Management in Primary Care

RESOLVING medication – related problems

- ~80% MRPs resolved in 4 monthly visits
- Pharmacists made ~60 recommendations to PCP for preventive treatment according to evidence-based guidelines
- ~75% MRPs were resolved in the patient-pharmacist encounters (did not require a PCP visit) with use of Medication Action Plans
- 28% improvement in achieving patient medication therapy goals between the first and last patient-pharmacist visits
- 83% PCPs made medication adjustment based on MTM reports

PATIENT ENGAGEMENT and TRUST

“The most important part of meeting with my pharmacist was she communicated with my doctor and then when we met we were all on the same page.”

“These programs offer the patient the opportunity to ask questions that are embarrassing to ask the doctor.”

“I get answers to questions that I could not get from a busy pharmacist inside a store.”

In a PCMH who should manage medication processes? Required training/competencies?? MD productivity impact?
Medical Neighborhood Info Exchange Model

- **Prescribing**
  - HIE Shared Care Plan
- **Rx Processing**
  - Patient Med Use at Home – Between PCP Visits
- **CCD/Labs**
  - Comprehensive Active Med Profile/Med Rec/Adherence Trends
- **SPECIALIST PATIENT VISIT**
  - MTM PHARMACIST Level 3 MTM Consults
    - Complex meds/regimens Not at therapeutic goal
- **PRIMARY CARE PATIENT VISIT**
  - MTM PHARMACIST Level 2 Targeted MTM
    - Drug Interxn/ADEs
    - Polypharmacy/Costly Meds
    - Care Transitions
- **COMMUNITY PHARMACIST**
  - Level 1 Med Assessment
    - Polypharmacy/Costly Meds

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Resources

APhA/NACDS MTM Core Elements

http://www.pharmacist.com/AM/Template.cfm?Section=Home2&CONTENTID=15496&TEMPLATE=/CM/ContentDisplay.cfm

Patient-centered Primary Care Collaborative (Jul 2010)

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

Payment Reform to Support High-Performing Practice

Pharmacists Role in Medical Home


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