



Innovative Models of Medication Management for Pharmacists

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Topic Overview

- Primary Care Medication Use/Safety Issues
- Medication Info Sources and Gaps
- Pharmacists' Core Services in Primary Care
- Models of Integrating Pharmacists in Primary Care
 - ☐ National
 - ☐ Connecticut
- Considerations for Integrating Pharmacists in Primary Care Medication Management

Pharmacy Vision 2015

Pharmacists will be the health care professionals responsible for providing patient care that ensures optimal medication therapy outcomes. (Joint Commission Pharmacy Practitioners, 2008)

Pharmacy Vision 2015 Critical Areas:

1. **Practice Model** – articulate model to providers, patients, payors
2. **Payment Policy** – align payment with practice model
3. **Communications** - build stakeholder support and commitment

These critical areas can serve as a framework for strategic approaches and change management efforts for pharmacist involvement in research and policy

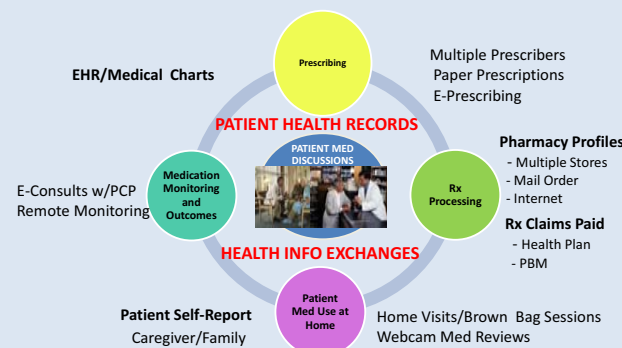
Primary Care Med Use and Safety Issues

- **Prescribing:** 71% of physician office visits recorded 1 or more prescription meds with 15% of visits having 4 or more prescriptions
- **Medication discrepancies:** 24% prescription meds and 76% OTCs/herbals (reported as actual meds used at home) were not in EHRs
- **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: National Ambulatory Medical Care Survey: 2006 Summary. Natl Health Stat Report. 2008 Aug 6;(3):1-39.
 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.

Disparate, Fragmented Sources of Med Info 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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Pharmacists are Trained and Skilled in Medication Management

Education and Training

- ◆ Entry-level 6-yr degree (PharmD)
 - 2 yr pre-pharmacy + 4 yr pharmacy curriculum
 - 4 yrs Pharmacotherapeutics
 - 1.5 yr Drug Info/Lit Eval'n
 - 3 yrs integrated pharmacy problem-solving seminars
 - 4 yrs patient-care exp + clinical rotations
- ◆ Postgraduate Residencies and Fellowships
- ◆ Board-certified Specialties
 - Ambulatory Care, Geriatrics, Pharmacotherapy, Nutrition Support, Psychopharmacy, Oncology, Nuclear Pharmacy

Expertise Areas

- ◆ Drug Information
- ◆ Pharmacotherapeutics
- ◆ Pharmacokinetics
- ◆ Pharmacogenomics
- ◆ Drug Toxicities
- ◆ Patient Medication Safety
- ◆ Pharmacoadherence Assessment
 - Compliance and Persistence
- ◆ Pharmacoeconomics and Outcomes Research
- ◆ Medication Therapy Management (MTM)
 - Rx, OTCs, Herbals, Dietary

Incorporating Pharmacists in the PCMH

Pharmacists practicing at the “top of their license”

- Collaborate with providers to:
 - Perform **comprehensive medication therapy reviews**
 - Identify, resolve and monitor** medication use and safety
 - Optimize **polypharmacy** regimens
 - Recommend **cost-effective** therapies
 - Design tailored **adherence and health literacy** programs
 - Perform medication reconciliation and communicate med info to patient, providers, and all other entities in **care transitions**
- Enhance Access to Care
 - Pharmacists can provide patient services in multiple locations
- Address Health Disparities
 - Culturally and linguistically appropriate care
 - Health literacy issues

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, nutraceuticals, 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 inaccuratediminishes 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 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



Primary Care Pharmacist Models

1980 - Univ of Tenn Primary Care Clinic

APRN/PharmD Collaborative Triage model with Internal Medicine Dept

- APRNs saw patients with acute symptoms/urgent care problems;
- PharmDs saw patients for MTM/adherence evaluations; scheduled follow-up visits as needed to monitor chronic disease drug therapy outcomes between PCP office visits
- Review patient care plans each day with Internal Med Dept Head
- Cost avoidance: 50% cost of ptnts seen for primary care in Emerg Dept

1997 - Asheville Project (data measured 5+ years)

Employers engage community-based pharmacists in a chronic care manager/health coach model

- Pharmacist met with patients every 1-2 months for 20-30 minutes/visit
- Medication assessments done and results reported to physicians
- Patients in the program had no co-pays for meds/supplies
- DIABETES OUTCOMES
 - average A1c from 8.0 to 6.8 for individuals enrolled for 5 years
 - 50% patients w/BG levels at goal @1 yr; 75% patients w/BG levels at goal @3 yrs
 - ROI 4:1 using total health care costs

Primary Care Pharmacist Models (2)

Asheville Project (Cont'd)

CARDIOVASCULAR OUTCOMES

- controlled BP increased from 40% at baseline to 67% at 6 yrs
- LDL control improved from 50 % to 75%
- CV med'n use increased 3x, yet total CV-related medical costs decreased by 47%

2000 - Fairview Health/Minnesota

MTM services provided by pharmacists to BlueCross BlueShield ptnts in collaboration with primary care providers

- 2-3 drug therapy problems were resolved /patient
- Patients' goals of therapy achieved increased from 76% to 90%
- HEDIS measures improved in the intervention group compared with comparison group for hypertension (71% versus 59%) and cholesterol management (52% versus 30%)
- Total health costs declined from \$11,965 to \$8,197 per person

Primary Care Pharmacist Models (3)

2009 - Community Care of North Carolina

PCMH model in 14 nonprofit community care networks w/Medicaid

- 23 pharmacists participate
 - ~10 regional pharmacy specialists (centralized, population management)
 - clinic employees on PCMH team
 - contracted MTM pharmacists by referrals from PCPs or case managers (including transitions in care)
- Limited information specific to pharmacist-care services impact
- 40% decrease in hospitalizations for asthma and 16% lower ER visit rate
- Total savings to the Medicaid and SCHIP programs are calculated to be \$135 Million and \$400 Million for the aged, blind and disabled population

CT Primary Care Pharmacist Models

Pharmacist Direct Patient Care Services

- UConn School of Pharmacy PharmD Faculty – Chronic Dx MTM
- VA CT – Amb Care Clinics
- Backus Hospital – Anticoagulation Clinic

2009 - CMS Medicaid Transformation Project : ERx/HIE

- Demonstration MTM Project with CT Medicaid
- Specially-trained Pharmacists: MTM w/Medicaid patients in PCP office
- Communicate patient visit recommendations to PCP via EHR
- Study Measurements:
 - ✓ Medication Discrepancies
 - ✓ Drug Therapy Problems
 - ✓ Adherence Trends

2010 - Culturally-appropriate Medication Optimization Project

- Same MTM process as in CMS Medicaid project
- Elderly Cambodian patients with Khmer Health Advocates using community health workers (CT/ CA via telemedicine)

2010 – Care Transition: Hospital-to-Home MTM

- Network Pharmacists - MTM home visits w/in 72 hrs discharge
- Work with Hospital Pharmacists and Case Managers

Taking action: building partnerships

Pharmacists will be the health care professionals responsible for providing patient care that ensures optimal medication therapy outcomes.



NETWORK SERVICES

- Negotiate Contracts
- Administrative and billing service
- 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

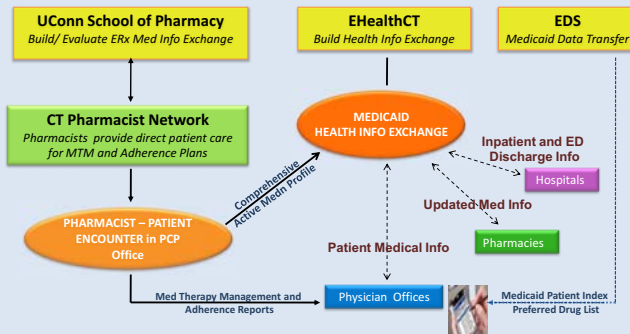
PHARMACIST MED'N THERAPY MANAGEMENT

- 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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CT DSS Medicaid Transformation Grant

Building a Medicaid HIE and ERx Med Info Exchange



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CT Medicaid Study Patient Overview

Patient Eligibility Criteria

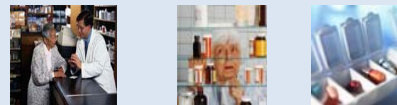
- Adults with ≥ 1 chronic medical condition
- ≥ 3 chronic prescription meds

Sites: > 12 months use of EMR/E-Rx

Initial Pharmacist Visit + 5 monthly visits

Patient Demographics (early findings)

- ~ 52 yo
- ~ 9 medical conditions/ptnt
- ~ 15 meds/ptnt (Rx, OTCs, herbals)



Medicaid Study Outcomes Parameters

- **Medication discrepancies**
 - Sources: EMR, Medicaid claim, actual patient use at home
- **Drug therapy problems – identified, resolved, and monitored**
 - Unnecessary drug therapy
 - Needed additional drug therapy
 - Ineffective drug
 - Dosage Too low/high
 - Adverse drug reaction
 - Noncompliance
- **Impact on health care costs**

Considerations for Pharmacist Integration in PCMH

Patient Selection

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

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

Integration Models

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

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



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

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

https://www.elbowspace.com/servlets/cfd?xr4=&formats=2010-06-30%2006:58:52_550887

Payment Reform to Support High-Performing Practice

https://www.elbowspace.com/servlets/cfd?xr4=&formats=2010-06-30%2006:47:34_445008

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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