



**Medication Management
in a Patient Centered
Medical Home**

*NACDS Pharmacy & Technology
Conference
August 9, 2009*

Discussion Topics

- Defining a patient centered medical home
- Role of health information technology and e-prescribing in a patient centered medical home
- Medication management in the patient centered medical home
- Role of the pharmacist in the patient centered medical home
- Examples of pilots and cost and quality impact
- Key take aways

Surescripts Overview

- Surescripts network is the backbone that facilitates e-prescribing
 - Deliver prescription benefit information
 - Deliver prescription history information
 - Enable prescription routing
- Surescripts operates a neutral network
 - Certify all participants based on industry standards (NCPDP)
 - Preserve prescriber's choice of medication and patient's choice of pharmacy
 - Avoid competing with partners by offering end user solution
- Owned by CVS Caremark, Express Scripts, Medco, National Association of Chain Drug Stores, and National Community Pharmacists Association
- Paid by PBMs to deliver prescription benefit and prescription history and by pharmacies to route prescriptions electronically
- The company's leadership collaborates with and provides guidance to national, regional and state health IT initiatives

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What is a Patient Centered Medical Home?

- Concept initially introduced by AAP in 1967 and referred to a central location for a child's medical records; it was particularly important for children with special needs (1)
- Evolved over time to a method of providing comprehensive primary care for children at the community level
- In March 2007, AAP, AAFP, ACP and AOA issued "Joint Principles of the Patient-Centered Medical Home" in response to a request from several large national employers seeking to create a more effective and efficient model of healthcare delivery
- Joint Principles have been endorsed by 18 specialty healthcare organizations

(1) The Patient-Centered Medical Home, A Purchasers Guide, www.pcpcc.net.

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Joint Principles of a Patient Centered Medical Home

- Ongoing relationship with a personal physician
- Physician-directed medical practice
- A whole person orientation
- Coordination and integration of care
- Quality and safety
 - Evidence based medicine and clinical decision support tools guide decision making
 - Information technology is utilized appropriately to support optimal patient care
- Enhanced access to care
- Payment that recognizes added value to patients who have a patient centered medical home (2)
 - It should support adoption and use of health information technology for quality improvement

Basic Premise: Continuous, uninterrupted care that is managed and coordinated by a personal provider with the right tools that will lead to better outcomes...

(2) Joint Principles of the Patient Centered Medical Home, http://www.acponline.org/running_practice/pcmh/demonstrations/jointprinc_05_17.pdf.

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The Patient Centered Primary Care Collaborative – Broad Stakeholder Support & Participation

The PCPCC is a coalition of major employers, consumer groups, patient quality organizations, health plans, labor unions, hospitals, clinicians and many others who have joined together to develop and advance the patient centered medical home...

Providers
333,000 primary care

- ACP ■ AAP
- AAFP ■ ADA
- ABIM ■ ACC
- ACOI ■ AHI

Purchasers -
Most of the Fortune 500

- IBM ■ Ohio
- FedEx ■ Iowa
- Dow ■ General Electric
- Business Coalitions
- Merck & Co. ■ Microsoft

80 Million Lives

Payers

- BCBSA ■ Aetna
- United ■ Humana
- CIGNA ■ Kaiser Permanente
- WellPoint ■ Geisinger

Patients

- AARP ■ AFL-CIO
- National Consumers League
- SEIU
- Foundation for Informed Decision Making

The Patient-Centered Medical Home

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HIT Can Be an Empowering Facilitator to the Establishment of a Medical Home



HIT capabilities to Support the "Connected Medical Home" (3)

- Ability to collect, store, manage and exchange relevant personal health information (e.g., e-prescribing)
 - Incorporate data from outside systems such as pharmacies, payers/PBMs
- Ability of providers, patients and other members of a person's health team to communicate among themselves and in the process of care delivery (e.g., EMRs/e-prescribing)
 - Maintain medication lists and document patient's medication experience
 - Provide drug-allergy warnings, drug-drug interaction warnings, other safety alerts, decision support for medication management, ability to reconcile prescribed medications with pharmacy records
 - Identify patients on particular medications who need monitoring and send reminders

(3) Meaningful Connections, A resource guide for using health IT to support the patient centered Medical home, www.pccpc.net.

HIT Can Be an Empowering Facilitator to the Establishment of a Medical Home (continued)



HIT capabilities to Support the "Connected Medical Home" (continued)

- Ability to collect, store, measure and report on the processes and outcomes of individual and population performance and quality of care (e.g., EMRs/e-prescribing)
 - Provide ability to measure medication errors and other safety issues
 - Connect and document indication for medication to drug, dose, duration, outcomes
 - Provide post marketing surveillance on appropriateness, effectiveness, safety and adherence
 - Record drug therapy problems specific to drug, medical condition and patient parameters
- Ability of providers and their practices to engage in decision support for evidence-based treatments and tests (e.g., EMRs)
 - Incorporate decision support for medication selection and dose
- Ability of consumers and patients to be informed and literate about their health and medical conditions and appropriately self-manage with monitoring and coaching from providers (e.g., PHRs)
 - Offer support and personalized engagement for patient self-management
 - Facilitate assessment of barriers when patients do not move towards their treatment goals such as medication adherence
 - Encourage use of PHR and maintenance of medication list

Medication Management in the Patient Centered Medical Home



- A critical step in the success of the Patient Centered Medical Home includes maximizing the benefits that medications offer in improving outcomes related to chronic conditions
- The health reform and delivery system changes now under discussion must include the management of medications to identify, resolve, and prevent medication related problems
- Medications involve 80% of all treatments and impact every aspect of the patient's life
- 70% of patients seen in ambulatory care have a drug therapy problem preventing them from achieving the desired goals of therapy
- 80% of the drug therapy problems are the result of inappropriate, ineffective or unsafe drug therapy for that particular patient, most common problems are:
 - Patient requires additional drug therapy
 - Existing dosages need to be increased to achieve clinical goals of therapy (4)
- According to the World Health Organization, adherence to long term therapy for chronic diseases in developed countries averages 50%, and the consequences are poor health outcomes and increased health care costs
- Drug related morbidity and mortality costs the U.S. almost \$200 billion annually (5)

(4) Iselts, Brown, Schondelmeyer, Lenarz. Quality assessment of a collaborative approach for decreasing drug-related morbidity and achieving therapeutic goals. Arch Int med 2003; 163: 1813-1820.
(5) World Health Organization. Adherence to Long-Term Therapies: Evidence for Action (World Health Organization Web site), 2003. Available at <http://whqlibdoc.who.int/publications/2003/9241545992.pdf>.

Medication Management in the Patient Centered Medical Home



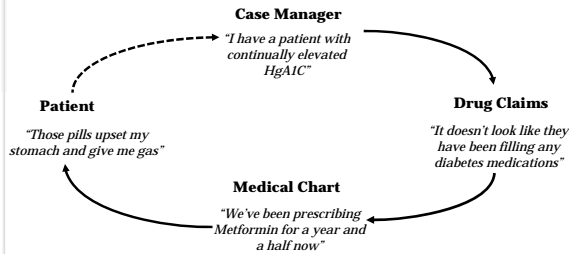
- Medication management is defined as the standard of care that ensures each patient's medications is individually assessed to determine that each medication is appropriate for the patient, effective for the medical condition, is safe given the co-morbidities and other medications being taken, and are able to be taken by the patient as intended
- Successful medication management results in achievement of the clinical goals of therapy in a safe manner with the patient's understanding and agreement with the treatment regimen
- Premise: Create a Pharmacy Home, virtual or otherwise, where drug use information from multiple sources (medical chart, prescription fill history, claims, patient, home visit, pharmacist, case manager) is gathered to better inform prescribing and intervention strategies, to identify/resolve duplications, interactions, possible adverse drug events, poor adherence, or other sub-optimal drug taking behavior

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The Pharmacy Home Project



Drug Use gathering Example-Ambulatory



Example of an unmet treatment goal resulting from an adherence-related drug therapy problem

Medication Management in the Patient Centered Medical Home



Medication Management in the Medical Home Includes:

- An assessment of the patients medication related needs
 - Comprehensive, reveal patient's medication experience, medication history, current medications, current medical conditions
- Identification of the patient's medication related problems
 - Appropriateness, effectiveness, safety, adherence
- Development of a care plan with individualized goals of therapy and personalized interventions
 - Support provider intervention, establish goals for each medical condition, design personalized education, establish measurable outcome parameters, determine follow up timeframes
- Follow up evaluation to determine actual patient outcomes
 - Determine if actual outcomes were what was intended, re-assess if needed, coordinate with the medical team

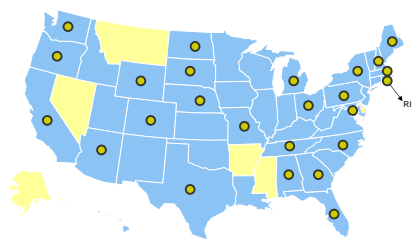
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What is the Role of the Pharmacist in the Patient Centered Medical Home?



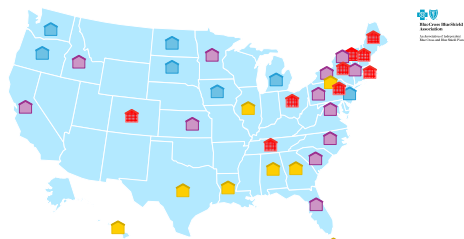
- Role of pharmacist not fully defined
- Focus is on the primary care physician as the team leader
- Pharmacist has a critical role on the care team
 - "Specialist" for medication management
 - Sees the patient more frequently
 - Coordinate back with the physician on medication management issues
 - Opportunity to be more engaged in patient care
 - Work in consultation with primary care physician
- E-prescribing is a valuable tool to support the physician-pharmacist communication and information sharing around medication management on behalf of their patients including informing interventions to improve medication adherence

Patient-Centered Medical Home 2009 Overview of Pilot Activity and Planning Discussions



- Multi-Payer pilot discussions/activity
- Identified pilot activity
- No identified pilot activity – 6 States

Blue Cross Blue Shield Plan Pilots (as of January 2009)




- Pilots in progress
- Pilot activity in early stages of development
- Pilots in planning phase for 2009 implementation
- Multi-Stakeholder demonstration

Some New 2009 Single-Payer Health Plan Demonstration Pilots

**Key PCMH Pilot Programs
Either in Place or in
Development**

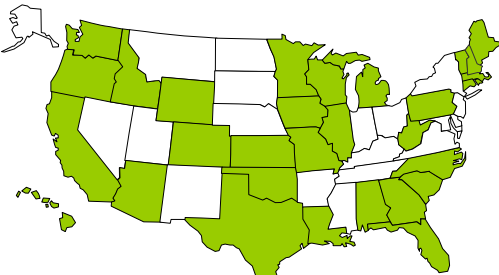
- Cigna PCMH Pilot in New Hampshire
- Aetna has PCMH Pilots in
 - Colorado
 - Maine
 - Mid-Hudson Valley
 - Pennsylvania
 - Central New Jersey
- Priority Health PCMH Pilot Program in Michigan
- Wellpoint, Inc. PCMH Pilot in New York City
- UnitedHealth Medical Home Pilot in Arizona (Tucson & Phoenix)
- Blue Cross Blue Shield PCMH Pilot in Nebraska in early stages of development



■ = New Demonstration Pilots Taking Place or in the Process of Being Enacted

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State Initiatives to Advance Medical Homes in Medicaid/SCHIP




■ = Identified to have a medical home initiative

Source: National Academy for State Health Policy State Scan, November 2008


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What actions can purchasers take to advance the patient centered medical home?



- Participate in regional pilot(s)
 - Use of technology for patient tracking and analysis, identifying gaps in evidence based care, patient communications and e-prescribing/EHR to inform prescribing and medication management (formulary, medication history)
- Incorporate PCMH into insurer procurement and performance assessment activity
 - Pharmaceutical care management adoption (e.g., primary care sites have implemented pharmaceutical care functionality through the use of a professional trained in pharmaceutical care and education of patients in drug therapy use and identification of drug therapy problems)
 - The use of technology for patient tracking, communication and prescribing
- Align payment strategy with PCMH adoption objectives
- Build coalitions in support of PCMH
- Engage consumers
- Integrate PCMH into other corporate health strategies
 - Coordinate employer contracted health benefit carve out services with the medical home (e.g., pharmacy benefit manager, disease management, behavioral health)


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Medication Management in a Patient-Centered Medical Home

EXAMPLES OF PILOTS

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Multi-specialty physician group practice

- Location: Greensboro, NC
- Pharmacist relationship: physically present, contracted staff, collaborative MTM protocols and clinical pharmacist licensing
- Services:
 - ID/document medication-related problems
 - Anticoagulation management and testing
 - Insulin/oral hypoglycemic therapy
 - Hyperlipidemia therapy
 - Multi-disease medication regimen optimization
 - Patient education
 - Longitudinal outcomes monitoring
- Access: physician referral, patient request/appointment, benefit design/contract
- Payment: E&M coding; MTM CPT for Medicare; self pay
- Metrics: clinical treatment goal; patient adherence; ADEs identified/prevented


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Community pharmacy practice

- Location: Rural MN
- Pharmacist relationship: employed by retail chain; separate from dispensing operation
- Services:
 - Identify/document medication-related problems
 - CVD/hypertension therapy
 - Anticoagulation management
 - Chronic care/geriatrics/palliative care
 - Mental health/neurology
 - Care transition/medication reconciliation
 - Patient education (in-person/telephonic)
- Access: physician referral, patient request/appointment, inter-service referrals, pharmacist follow up appointments
- Payment: MTM CPT for Medicaid and self insured employers; self pay/co-pay
- Metrics:
 - Clinical treatment goals achievement
 - NCOA/HEDIS measures (various)
 - Annualized cost avoidance/ROI
 - Patient satisfaction


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Group model HMO

- Location: Denver, CO
- Pharmacist relationship: present and virtually present models, employee staff, collaborative MTM protocols, integrated with primary care clinics and services
- Services:
 - Comprehensive assessment of medication and medical conditions
 - Identification/documentation of drug therapy problems
 - Physician-pharmacist care plan development
 - Follow up/evaluation visits
 - Written documentation of encounters to physician and patient
- Access: physician referral, patient request/appointment, employer referral
- Payment: MTM CPT for Medicaid and self insured employers; self pay/co-pay
- Metrics:
 - Volume and complexity of patients
 - Clinical goals achievement
 - Hospitalizations avoided/clinic visits prevented
 - Medication cost savings
 - Days at work saved
 - Patient adherence to regimen


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Physician-directed inter-professional community health center

- Location: Tucson, AZ
- Pharmacist relationship: physically present, employee staff, collaborative MTM protocols
- Services:
 - ID/document medication-related problems
 - Insulin/oral hypoglycemic therapy
 - Hyperlipidemia therapy
 - CVD/hypertension therapy
 - Patient education
- Access: physician referral, patient request/appointment, pharmacist follow up
- Payment: HRSA/community funded; MTM CPT; self pay/co-pay
- Metrics:
 - Clinical treatment goals achievement
 - Patient adherence
 - Adverse effects identified/prevented


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Staff model HMO in a medical home framework: acute and chronic care to enrolled members

- Location: Seattle, WA
- Pharmacist relationship: physically present, employee staff, collaborative MTM protocols; integrated as core team within PCP clinics
- Services:
 - Identify/document medication-related problems
 - CVD/hypertension therapy
 - Anticoagulation management
 - Group care registries for chronic disease panels
 - Patient education (in-person/telephonic)
- Access: physician referral, patient request/appointment, pharmacist follow up
- Payment: PMPM capitation; self pay/co-pay
- Metrics:
 - Clinical treatment goals achievement
 - HEDIS/NCOA measures
 - Annualized cost avoidance/ROI
 - Patient satisfaction
 - Medication/treatment adherence

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Evidence of Cost Savings and Quality Improvement

Barbara Starfield of Johns Hopkins University
 Within the United States, adults with a primary care physician rather than a specialist had 33 percent lower costs of care and were 19 percent less likely to die.
 In both England and the United States, each additional primary care physician per 10,000 persons is associated with a decrease in mortality rate of 3 to 10 percent.
 In the United States, an increase of just one primary care physician is associated with 1.44 fewer deaths per 10,000 persons.


Commonwealth Fund has reported:
 A medical home can reduce or even eliminate racial and ethnic disparities in access and quality for insured persons.

Denmark has organized its entire health care system around patient-centered medical homes, achieving the highest patient satisfaction ratings in the world. Denmark has among the lowest per capita health expenditures and highest primary care rankings.

Center for Evaluative Clinical Sciences at Dartmouth, states in the US relying more on primary care have:

- lower Medicare spending
- lower resource inputs
- lower utilization
- better quality of care

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Evidence of Cost Savings and Quality Improvement


BCBS of ND Reported - Chronic Care for Diabetes

- 6% decrease in hospital admissions
- 24 % decrease emergency room
- \$500, Per member per years savings

North Carolina reported savings of \$244 million for FY04 for their 720,000 Medicaid recipient program.

Horizon BCBS of NJ reported that the cost per patient, complying with diabetes testing in engaged medical homes, was substantially less than those in not engaged in medical homes.

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Simple Cost Avoidance

NC Savings (FY04)

Category of Service	Estimated Savings from Benchmark
Inpatient	\$142,085,680
Outpatient	\$51,865,028
Emergency Room	\$25,944,553
Primary Care, Specialist	\$45,498,709
Pharmacy	\$(15,526,996)
Other	\$(5,065,238)
Totals	\$244,801,735

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Statement on the PCMH from President Obama

"I support the concept of a patient-centered medical home, and as part of my health care plan, I will encourage and provide appropriate payment for providers who implement the medical home model, including physician-directed, interdisciplinary teams, care management and care coordination programs, quality assurance mechanisms, and health IT systems which collectively will help to improve care."

Barack Obama

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- Key Take Aways
- Patient centered medical home is in best interest of patient
 - System is strained, we need to extend all aspects of it, integrate, leverage physicians and pharmacists
 - Direction can strengthen and elevate role of pharmacist in taking care of patients
 - Pharmacies should embrace concept of patient centered medical home
 - Retail clinics can become primary care site and support coordination of care
 - Pharmacy needs to be a player in medical home – get actively engaged
 - Opportunity is for pharmacists to be primary care provider for medication management
 - Engage patient
 - Understand context of whole patient
 - Improve healthcare and outcomes
 - Follow in longitudinal manner
 - Document and communicate with primary care physician
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Questions?

Thank You...

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