The Collaborative Role of Medication Management in a Patient-Centered Medical Home
The Collaborative Role of Medication Management in a Patient-Centered Medical Home (PCMH)

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The Patient-Centered Primary Care Collaborative
(www.pcpcc.net)
• The faculty reported the following financial relationships or relationships to products or devices they or their spouse/life partner have with commercial interests related to the content of this CME activity:
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    • Salary: GlaxoSmithKline (former Medical Director, Health Policy and Advocacy)
    • Ownership Interests: Consultant Medication Management Systems, MN
Key Points

- Explain the expanding role of the PCMH and the opportunity for comprehensive medication management on the national front
- Explain the steps in comprehensive medication management linked to clinical goals within the Medical Home and resources available to implement this model
- Assess the implications and potential impact of the collaborative roles among care providers in a PCMH
• 75% of our costs are related to chronic disease and growing

• Having insurance does not mean you have the infrastructure to deliver the care needed to improve health or reduce costs – ask Massachusetts

• Evidence is clear that coordinated care throughout the system (centered around primary care) reduces costs and improves quality, but payment is not aligned
We Have a “Sickcare” System, Not a “Healthcare” System

- The US health system is geared and aligned financially to reward acute episodic care
  - Higher payment for more volume of care and procedures
    - Little or no payment for better outcomes or reward for avoided care
    - No payment or system for coordination of care
      » between various doctors/practices
      » between systems (inpatient and outpatient settings, nursing homes, behavioral health, community care)
      » for education/engagement of the patient about lifestyle choices, management of chronic conditions, medications, or social needs
  - Out-of-pocket costs are not aligned to encourage use of primary and preventative care services, coordinated services, or behavioral health (HDHPs)
Changing From “Sickcare” to “Healthcare”

• **What if** the US health system were geared and aligned financially to coordinate care?
  
  – Focus on the person (patient-centric) and all of their needs, instead of just one problem at a time
  – A robust primary care **team** serving as central point of coordination
  – Payment and systems aligning for team coordination of care
    • between various doctors/nurses/practices
    • between systems (inpatient and outpatient settings, nursing homes, behavioral health, community care)
    • for education/engagement of patients about prevention and lifestyle choices, their conditions, and any medications currently used and linked to clinical goals of therapy
    • in a culturally and medically literate fashion to meet the patients’ health, medical, and social needs
  – Out-of-pocket costs are aligned to encourage use of primary and preventative care services, coordinated services, or behavioral health
My patients are those who make appointments to see me

Care is determined by today’s problem and time available today

Care varies by scheduled time and memory or skill of the doctor

I know I deliver high quality care because I’m well trained

Patients are responsible for coordinating their own care

It’s up to the patient to tell us what happened to them

Clinic operations center on meeting the doctor’s needs

Our patients are those who are registered in our medical home

Care is determined by a proactive plan to meet patient needs with or without visits

Care is standardized according to evidence-based guidelines

We measure our quality and make rapid changes to improve it

A prepared team of professionals coordinates all patients’ care

We track tests & consultations, and follow-up after ED & hospital

A multidisciplinary team works at the top of our licenses to serve patients

Slide from Daniel Duffy MD School of Community Medicine Tulsa Oklahoma
The Patient-Centered Primary Care Collaborative

- The Patient-Centered Primary Care Collaborative is a **coalition** of over 700 major employers, consumer groups, health plans, unions, organizations representing primary care physicians, government, and other stakeholders who have joined **to advance the patient-centered medical home**

- The Collaborative believes that, if implemented, the **Patient-Centered Medical Home** will **improve the health of patients and the health care delivery system while reducing costs**
Statement on the PCMH: 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.”
  – President Barack Obama

• Bipartisan and Presidential Support!
## The Facts

<table>
<thead>
<tr>
<th>Summary of Key Data on Cost Outcomes from Patient-Centered Medical Home Interventions</th>
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<tbody>
<tr>
<td><strong>Group Health Cooperative of Puget Sound</strong></td>
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<tr>
<td>• 29% Reduction in ER visits and 11% reduction in ambulatory sensitive care admissions.</td>
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<td>• Additional investment in primary care of $16 per patient per year was associated with offsetting cost reductions, with the net result being no overall increase in total costs for pilot clinic patients.</td>
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<tr>
<td><strong>Community Care of North Carolina</strong></td>
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<tr>
<td>• 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 for TANF-linked populations and $400 million for the aged, blind, and disabled population.</td>
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<tr>
<td><strong>Genesee Health Plan HealthWorks PCMH Model</strong></td>
</tr>
<tr>
<td>• 50% decrease in ER visits and 15% fewer inpatient hospitalizations, with total hospital days per 1,000 enrollees now cited as 26.6 % lower than competitors.</td>
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<tr>
<td><strong>Colorado Medicaid and SCHIP</strong></td>
</tr>
<tr>
<td>• Median annual costs $785 for PCMH children compared with $1,000 for controls, due to reductions in ER visits and hospitalizations. In an evaluation specifically examining children in Denver with chronic conditions, PCMH children had lower median costs ($2,275) than those not enrolled in a PCMH practice ($3,404).</td>
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<tr>
<td><strong>Johns Hopkins Guided Care PCMH Model</strong></td>
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<tr>
<td>• 24% reduction in total hospital inpatient days, 15% fewer ER visits, 37% decrease in skilled nursing facility days.</td>
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<tr>
<td>• Annual net Medicare savings of $1,364 per patient and $75,000 per Guided Care nurse deployed in a practice.</td>
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</table>

The Facts

- 75% of all healthcare costs are related to chronic disease
- After lifestyle interventions, medications are the primary weapons used in modern medicine to prevent disease and effectively control chronic disease
- Proper use of medications can lead to improved health, enhanced quality of life, and increased productivity when directly linked to clinical outcome goals

So Why A Quality Gap?
The Facts

- Four out of Five patients leave with at least one prescription\(^1\)
- One-third of all American adults take 5 or more medications
- Medicare beneficiaries with multiple illnesses:
  - See an average of 13 different physicians
  - Have 50 different prescriptions filled each year
  - Account for 76% of all hospital admissions
  - Account for 88% of all prescriptions filled
  - Account for 72% of physician visits
  - Are 100 times more likely to have a preventable hospitalization than someone without a chronic condition\(^2\)

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2. Testimony of Gerard F. Anderson, Ph.D., Johns Hopkins Bloomberg School of Public Health, Health Policy and Management, before the Senate Special Committee on Aging, 
“Pharmaceuticals are the most common medical intervention, and their potential for both help and harm is enormous. Ensuring that the American people get the most benefit from advances in pharmacology is a critical component of improving the national health care system.”

The Institute of Medicine (IOM)¹

“Drugs don’t work in people that don’t take them”

C. Everett Koop, MD
Former Surgeon General

Why Is Medication Management Needed in the PCMH?

• Comprehensive medication management has been shown to facilitate the efficiency and effectiveness of the PCMH team in improving patient clinical outcomes, reducing morbidity and mortality, while lowering total healthcare costs.

• Medication Management is even more essential when multiple providers/prescribers are involved with complex patients.
Steps to Achieve Comprehensive MTM

1. Identify patients that have not achieved clinical goals of therapy
2. Understand the patient’s personal medication experience/history and preferences/beliefs
3. Identify actual use patterns of all medications including OTCs, bioactive supplements, and prescribed medications
4. Assess each medication for appropriateness, effectiveness, safety (including drug interactions) and adherence (in that order) focused on achievement of the clinical goals for each therapy
Steps to Achieve Comprehensive MTM

5. Identify all drug therapy problems (the gap between current therapy and that needed to achieve optimal clinical outcomes)

6. Develop a care plan addressing recommended steps including therapeutic changes needed to achieve optimal outcomes

7. Patient agrees with and understands care plan which is communicated to the prescriber/provider for his/her consent/support
8. Document all steps and current clinical status vs goals of therapy

9. Follow-up evaluations with the patient are critical to determine effects of changes, reassess actual outcomes, and recommend further therapeutic changes to achieve desired clinical goals/outcomes

10. A reiterative process – care is coordinated with other team members and personalized (patient unique) goals of therapy understood
“Underutilization of controller medications in asthmatics and lack of adherence to medications in patients with congestive heart failure were major contributors to ER visits and hospitalizations.”

Allen Dobson, MD
Former NC Assistant Sec. of Health
and State Medicaid Director
• PCPCC Medication Management Task Force:
  – Since March of 2009 developed:
    • The Opportunity for Comprehensive Medication Management (CMM) in the PCMH white paper and practice profiles
    • A general purpose slide deck to be used to inform and outline the need and process for CMM integration in the PCMH
    • www.pcpcc.net > coordinated care > medication management >
Sec. 3503. Medication Management Services in Treatment of Chronic Disease

• Allows for a demonstration project that provides comprehensive medication management to patients, linking all of the medications actually used by the patient including OTCs and herbals to clinical goals of therapy.

• Determines drug therapy problems and makes recommended therapeutic changes to achieve the clinical goals of therapy – patient agrees to the treatment plan and providers are in agreement with the recommended changes.

• Will document reductions in ER, hospital, and other costs and can be expanded into other projects if proven to improve quality and reduce costs.
Patients Targeted

- 1 of 12 chronic conditions in adults 18–64 and
- 2 or more health care claims (related to those conditions) in the last 12 months

285 MTM patients and 252 patients in the comparison group (all BCBS Minnesota health plan members)

- Fairview Health System clinics and MTM pharmacists
- 6.4 medical conditions and 7.9 drug therapies per MTM patient

The Minnesota Experience: 637 Drug Therapy Problems Identified

<table>
<thead>
<tr>
<th>Category</th>
<th>Problem</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Indication</td>
<td>Needs Additional Drug Therapy</td>
<td>34%</td>
</tr>
<tr>
<td></td>
<td>Unnecessary Drug Therapy</td>
<td>6%</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>Ineffective Drug</td>
<td>12%</td>
</tr>
<tr>
<td></td>
<td>Dosage Too Low</td>
<td>20%</td>
</tr>
<tr>
<td>Safety</td>
<td>Adverse Drug Reaction</td>
<td>14%</td>
</tr>
<tr>
<td></td>
<td>Dosage Too High</td>
<td>4%</td>
</tr>
<tr>
<td>Compliance</td>
<td>Noncompliance</td>
<td>10%</td>
</tr>
</tbody>
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Clinical Outcomes of Minnesota MTM Services

• Clinical Results Improved!
  – Goals of therapy improved from 76% at baseline to 90% after MTM
  – 2.2 drug therapy problems per patient identified and resolved
    • 78% resolved without MD
  – HEDIS® Hypertension criteria achieved in 71% of MTM patients versus 59% in the comparison group
  – HEDIS® Cholesterol criteria achieved in 52% of MTM patients versus 30% in the comparison group

“Most patient care interactions involve medications and the limitations both in knowledge and time on my part make the addition of a clinical pharmacist on the medical home team MANDATORY! I would have a difficult time maintaining our current standards without this person on board.”

James Bergman, MD
Staff Physician, Group Health Permanente
Associate Professor, Family Medicine,
University of Washington, Seattle
Economic Outcomes of Minnesota MTM

- Target the disease, then optimize the drug therapy

MTM services provided a 12:1 ROI

Total health care cost: -31.5%
- Facility costs -57.9%
- Professional costs -11.1%
- Drug costs +19.7%

“I have been taking this medication for almost seven years. I have never been clear on why I am taking it or what it is supposed to do for me, and I have never had anyone who had the time to explain it to me. Now I can ask questions and discuss my concerns about my medications.”

J.P.
Patient receiving medication management services at a medicine clinic in Minneapolis, MN

A thorough understanding of a patient’s illnesses and how medications impact outcomes is critical for truly Patient-Centered Care.
Return on Investment

• On average, $16.70 saved for every $1 invested in clinical pharmacy services (review of 104 studies)

• Benefit: cost ratio ranged from 1.7:1–17.0:1 (literature review)
• Data will inform which drugs and at what doses are best in co-morbid, complex patients to improve clinical outcome and reduce total costs

• Formulary and benefit-design decisions will be based on clinical outcomes directly linked to medication impact on clinical status and total healthcare costs, instead of drug cost

• Pharmacist as providers can make a significant impact on healthcare improvement and cost