Patient Centered Medical Homes: Four Key Elements

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Session Objectives

- Identify key elements for implementing a PCMH model focused on delivering high-quality care while reducing inefficiencies
- Develop understanding of design elements that allow for successful replication and national coordination
- Apply methods of evaluating outcomes and measuring results
Agenda

- Overview of Blue Cross Blue Shield of Michigan Patient Centered Medical Home Program
- National Coordination: How the Blue Cross Blue Shield Association isAligning Programs
- Implementing the PCMH: A Provider’s Perspective
- Program Evaluation: Measurement, Design, Implications

BCBSM PCMH Overview

- Approximately 16,000 providers across the state working to implement Patient Centered Medical Home capabilities
  - Includes both PCPs and specialists
- 2015 Patient Centered Medical Home Designation
  - 4,349 primary care physicians in 1,551 practice units
  - Designated providers consistently show excellence on quality and utilization metrics
  - Nearly 75% of PGIP-participating PCPs are Patient Centered Medical Home designated
  - PCMH designated providers are in 78 of Michigan’s 83 counties
2008 Patient-Centered Medical Home Initiatives

- **Patient-Provider Partnership:** Physician, care team, and patient discussions about PCMH model and patient and provider roles and responsibilities
- **Patient Registry:** Comprehensive patient registries that enable population level management and point of care readiness
- **Performance Reporting:** Performance reporting that enables POs and providers to compare and track management of their patient population
- **Individual Care Management:** Care processes that enable patients with chronic conditions to receive organized, planned care and be empowered to take greater responsibility for their health.
- **Extended Access:** Care processes that ensure all patients have timely access to health care services that are patient-centered, culturally sensitive, and delivered in the least intensive and most appropriate setting
- **Test Tracking:** Standardized, reliable system to ensure that patients receive appropriate tests, and that test results are communicated in a timely manner.

2009 Patient-Centered Medical Home Initiatives

- **Preventive Services:** Patient screening and education on both primary and secondary preventive care
- **Linkage to Community Services:** Community services directories and care processes to ensure patients receive needed community services
- **Self-Management Support:** Formalized care processes to enable patients to effectively manage their chronic conditions.
- **Patient Web Portal:** Web portals giving patients ability to schedule appointments, obtain test results, enter health information, and have e-visits
- **Coordination of Care:** Care processes that avoid duplication of services and effectively manage patient care transitions across settings
- **Specialist Referral Process:** Standardized referral processes to ensure patients receive needed care and all providers have timely access to the information they need to provide optimal care to the patient.
Engaging in PCMH, Part I

- **Phase I:** Implementing up to 148 PCMH capabilities in 12 initiatives
  - Physician organizations receive incentive dollars for capability implementation within their practices
    - Practices can be either PCPs or specialists
    - Must be part of PGIP
  - Rewards paid twice/year using reward pool of $100 million+
  - Estimated time to fully implement: 8-10 years. Nobody has accomplished this...yet
  - Incentive at PO level = differentiator. Two reasons:
    - No issues with small n, better from measurement standpoint
    - More efficient dissemination of tools and resources

Engaging in PCMH, Part II

- **Phase II:** Becoming PCMH Designated
  - Designation takes place at practice unit level
  - Nominated by physician organization
  - Cycle renews each July; includes “honor roll” for practices that have been designated for more than 1 yr.
  - PCPs only
  - Providers receive value-based reimbursement of 105% to 130% of the regular provider fee schedule for office visit and preventive services codes
How Does Designation Work?

1. Practice units nominated by physician organizations
2. Educational site visits by PGIP Field Team to verify capability implementation
   a) Interpretive Guidelines – a “how-to guide”
3. Conduct analytics related to quality/use and capability implementation
4. New “list” released each July
5. Designated practices receive 10% value-based reimbursement on office and preventive visit codes
6. Cost benchmark POs: Affiliated practices receive an additional 10% in value-based reimbursement for being part of POs that meet cost benchmark criteria

PCMH Designation Metrics

- Analytics Process: Two elements, equal weight
  - Capability implementation (“self-assessment database”; 50%)
  - Quality/use/efficiency metrics (claims data; 50%)

- QUE measures include:
  - Evidence-based care (HEDIS)
  - Resource management
    - Generic dispensing rate (discontinued in 2016!)
    - High tech imaging
    - Low tech imaging
    - ER use
PCMH Designation Growth

Number of BCBSM’s PCMH designated PCPs has steadily increased in each year of program:

- 2009: 1,259 physicians
- 2010: 1,852 (47% increase in designated PCPs over prior year)
- 2011: 2,552 (Up 38%)
- 2012: 3,029 (Up 19%)
- 2013: 3,623 (Up 20%)
- 2014: 4,022 (Up 11%)
- 2015: 4,349 (Up 7.5%)

Number of BCBSM’s PCMH designated practice units in each program year:

- 2009: 302 practice units
- 2010: 513 practice units (70% increase over prior year)
- 2011: 776 practice units (Up 51%)
- 2012: 995 practice units (Up 25%)
- 2013: 1,243 practice units (Up 28%)
- 2014: 1,422 practice units (Up 14%)
- 2015: 1,551 practice units (Up 8.3%)

Real World Impact

- Over 99% of PCMH designated practice units have:
  - 24-hour access to a clinical decision-maker
  - All test tracking steps documented in the patient’s medical record
  - Patients routinely informed about abnormal test results
  - Medication review and management for patients with chronic conditions
  - Up-to-date directories of specialists and community resources
  - Staff training about patient centered medical home/practice transformation concepts
  - Systematic approach to providing smoking cessation advice
PCMH at the National Level

Blue Distinction

the foundation from which employers can guide employees to higher quality and more affordable care

Blue Distinction Total Care
Recognizes physicians, group practices and hospitals participating in locally tailored programs designed to lower cost trend through better coordinated care and performance-based payment

Blue Distinction Specialty Care
Recognizes healthcare facilities for their expertise and efficiency in delivering specialty care
BDTC Filters Based on Consistent Criteria

570 BCBS Programs
- ACO (450)
- PCMH (69)
- P4P (37)
- EBP (14)

389 of 570 Programs Meet BDTC Criteria
- BDTC ACO (357)
- BDTC PCMH (32)


National Program Access
- 389 Programs
- 117,000+ Physicians
- 440+ Hospitals
- 9,500,000+ Members
National Leader

In 2015, BDTC programs available in 36 states and 41 of the top 50 MSAs


PCMH: Provider Perspective
Department of Family Medicine  
University of Michigan Health System

- 90 faculty
- Six PCMH outpatient clinics
  - 128,000 annual visits
- Education
  - 33 residents
  - 9 fellows
  - 3rd year medical student clerkship

UMHS Family Medicine:  
Phased Approach To PCMH Implementation

- **Phase 1**: Team development, role definition
- **Phase 2**: Point-of-care population management
- **Phase 3**: Population management outreach, care management, access improvement
BCBSM: PCMH Financial Support

- PCMH capability development
  - Choose capabilities to develop, none “mandatory”
  - Allows PO/practice to shape vision and implementation pace
- PCMH designation
  - 10% uplift on all E/M claims
- Care management
  - 2010-2012
    - Provider Delivered Care Management pilot
  - 2012-present
    - G/CPT codes billable for care management
    - 5% uplift on all E/M claims

BCBSM: PCMH Development Support

- Quarterly state-wide leadership meetings
- Participation in BCBSM-sponsored initiatives
  - Improving transitions of care
  - Reducing ED visits
  - Integrating behavioral health
  - LEAN learning collaboratives
- On-site PCMH validation visits
- Care Management Resource Center
  - www.micmrc.org
**PCMH: Multi-Payer Model Foundation**

- BCBSM PCMH-designated practices formed the foundation for the CMS Multi-Payer Advanced Primary Care Practice (MAPCP) demo
  - Multiple payers fund a common clinical model
  - Allows global primary care transformation efforts
  - Support development of multi-payer evidence-based care management
  - All participating payers involved in model development, steering committee

- Michigan Primary Care Transformation Project (MiPCT)
  - One of 8 original MAPCP states participating January 2012-December 2014
  - Michigan one of 5 states extended an additional two years, through 2016
  - Forms a strong foundation for successful Michigan ACO and SIM models

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**MiPCT Participants**

As of November 2015:

- 350 PCMH practices
- 1,920 providers
- 581 care managers
- 1,158,650 patients
- 5 participating payers

<table>
<thead>
<tr>
<th># Patients</th>
<th>% Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicare</td>
<td>186,997</td>
</tr>
<tr>
<td>Medicaid</td>
<td>214,745</td>
</tr>
<tr>
<td>BCBSM</td>
<td>361,802</td>
</tr>
<tr>
<td>BCN</td>
<td>275,316</td>
</tr>
<tr>
<td>Priority</td>
<td>119,990</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,158,850</td>
</tr>
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</table>
MiPCT Progress To Date

- Developed evidence-based care management training program in partnership with Geisinger Health System
  - Almost 600 care managers trained to date
  - Initial didactic course, with ongoing webinars and in-person training to develop additional expertise
- Multi-payer database
  - Includes claims and clinical data
  - Dashboards and patient-specific data
  - Used to determine MiPCT incentive payments
- Results
  - CMS: Results for year 1 - positive ROI, subsequent years pending
  - State multi-payer evaluation underway

PCMH Evaluation
Acknowledgments

- University of Michigan
  - Jeff Alexander, PhD, Michael Fetters, MD
- University of Alberta
  - Lee Green, MD
- Blue Cross Blue Shield of Michigan
  - Amanda Markovitz, MPH, Darline El Reda, DrPH
- Consultant
  - Chris Wise, PhD
- Funded by: Agency for Healthcare Research and Quality

How do we translate the conceptual model of PCMH into a measure we can analyze?
Medical Home Measurement

- Began with 115 capabilities – consistently defined each year
- Each capability within a domain contributes equally to a domain score (PCMH initiatives + E-prescribing)
- Each domain score contributes equally to an overall PCMH score
- PCMH as a continuous variable
  - A value of 1 = full implementation
  - A value of 0 = no implementation

Longitudinal study design

- Interested in:
  1. PCMH implementation at the beginning of study year
  2. Change in PCMH implementation during study year
  3. Outcomes (cost, quality, etc.) occurring during the study year
Confounding variables

**Practice Characteristics**
- Practice size
- Practice specialty
- Professional services per PCP
- Number of years in PGIP
- Turnover of physicians
- Whether practice changed POs

**Practice Environment**
- BCBSM marketshare
- Percent non-white residents
- Percent rural
- Percent unemployed
- Number of PCPs per 1,000 pop

**Patient Characteristics**
- Mean prospective risk score
- Percent female

**PO Characteristics**
- PO size

Longitudinal Modeling approach

- Cross-classified hierarchical models
  - Account for the longitudinal design
  - Address clustering of practices within POs
  - Allow for movement of practices between POs

- Effect estimate interpreted as the difference in outcome between a practice that has fully implemented all PCMH capabilities and a practice that has implemented no PCMH capabilities
Adult Cost & Quality Associations

<table>
<thead>
<tr>
<th>Outcome Variable</th>
<th>Beta Estimate</th>
<th>95% CI (Lower)</th>
<th>95% CI (Upper)</th>
<th>p-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMPM</td>
<td>-16.73</td>
<td>-30.66</td>
<td>-2.80</td>
<td>0.02</td>
</tr>
<tr>
<td>Quality</td>
<td>4.6%</td>
<td>3.3%</td>
<td>5.9%</td>
<td>.001</td>
</tr>
<tr>
<td>Preventive</td>
<td>4.0%</td>
<td>2.8%</td>
<td>5.2%</td>
<td>.001</td>
</tr>
</tbody>
</table>

*Interpreting effect estimates:* Full PCMH implementation at the beginning of the study year compared with no previous PCMH implementation was associated with a $16.73 lower adult PMPM cost.

Effect estimates of PCMH on cancer screening by SES context

<table>
<thead>
<tr>
<th>SES Category</th>
<th>Effect of PCMH</th>
<th>P</th>
<th>Effect of PCMH</th>
<th>P</th>
<th>Effect of PCMH</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Highest)</td>
<td>2.6 (-0.1 to 5.3)</td>
<td>Ref</td>
<td>-0.5 (-2.7 to 1.7)</td>
<td>Ref</td>
<td>4.5 (1.8 to 7.3)</td>
<td>Ref</td>
</tr>
<tr>
<td>2</td>
<td>6.3 (4.5 to 8.1)</td>
<td>.005</td>
<td>2.3 (0.9 to 3.6)</td>
<td>.01</td>
<td>5.7 (4.0 to 7.5)</td>
<td>.38</td>
</tr>
<tr>
<td>3</td>
<td>6.5 (4.2 to 8.7)</td>
<td>.01</td>
<td>3.8 (2.1 to 5.5)</td>
<td>&lt;.001</td>
<td>7.7 (5.6 to 9.9)</td>
<td>.04</td>
</tr>
<tr>
<td>4 (Lowest)</td>
<td>5.4 (1.5 to 9.3)</td>
<td>.21</td>
<td>4.2 (1.4 to 6.9)</td>
<td>.004</td>
<td>7.0 (3.6 to 10.5)</td>
<td>.23</td>
</tr>
</tbody>
</table>

*Note:* p-value reflects whether effect estimate differs between SES category and reference group.
Estimation of breast cancer screening disparity by level of PCMH implementation

Estimated effects of the PCMH on Emergency Department & Inpatient Use, July 2009 to June 2012

<table>
<thead>
<tr>
<th>Condition type</th>
<th>Emergency Department Visits per 1,000</th>
<th>Inpatient Discharges per 1,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambulatory care-sensitive</td>
<td>-11.2%*</td>
<td>-13.9%*</td>
</tr>
<tr>
<td>All other conditions</td>
<td>-3.7%*</td>
<td>-3.8%*</td>
</tr>
</tbody>
</table>

Ambulatory care sensitive conditions defined using Agency for Healthcare Research & Quality criteria

Comparisons reflect the percent change in facility visits associated with an increase in PCMH score from 0.34 to 0.68

* P < 0.05
Pediatric Cost & Quality Associations

<table>
<thead>
<tr>
<th>Outcome Variable</th>
<th>Change PCMH Score During Study Year</th>
<th>Beta</th>
<th>95% CI (Lower)</th>
<th>95% CI (Upper)</th>
<th>p-Value</th>
<th>Beta</th>
<th>95% CI (Lower)</th>
<th>95% CI (Upper)</th>
<th>p-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMPM</td>
<td>$5.99</td>
<td>-2.09</td>
<td>$14.07</td>
<td>0.9194</td>
<td></td>
<td>$9.17</td>
<td>$0.45</td>
<td>$17.90</td>
<td>0.0393</td>
</tr>
<tr>
<td>Preventive</td>
<td>6.5%</td>
<td>4.4%</td>
<td>8.6%</td>
<td>&lt;.0001</td>
<td></td>
<td>4.1%</td>
<td>2.2%</td>
<td>5.9%</td>
<td>&lt;.0001</td>
</tr>
</tbody>
</table>

- **Interpreting effect estimates**: Full PCMH implementation at the beginning of the study year compared with no previous implementation was associated with a $5.99 higher pediatric PMPM cost.

- Effect estimates were similar in year-by-year analyses.

Implications

- Impact of PCMH is dependent upon the level of implementation achieved and its duration of use.

- PCMH can improve quality of care, but...
  - Mixed effects on costs
  - Results dependent on practice context

- Incremental improvements associated with PCMH could potentially support shared savings programs that facilitate the continued growth of PCMH.
Questions?

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