Medical Home Transformation in Pediatric Primary Care – What Drives Change?

Pediatric Grand Rounds
Oregon Health Sciences University
Portland, OR
June 28, 2012

W. Carl Cooley, MD
Medical Director, Center for Medical Home Improvement
(www.medicalhomeimprovement.org)
Chief Medical Officer, Crotched Mountain Foundation
Adjunct Professor of Pediatrics, Geisel School of Medicine at Dartmouth
On my last trip to Oregon....
I have no financial interests to disclose in relation to the material that I am presenting today.
Agenda

- The Family Centered Medical Home – a pediatric care innovation
- The FCMH and the Triple Aim – outcomes clear
- A culture of improvement and the experience of 12 high functioning pediatric medical homes
- The road ahead – will we need a new brand name for high quality primary care
Sandy – parent partner
Burlington, VT:
“Our Medical Home until 1:30 p.m. 2/15/01”
“And then...along came the amazing Miss Kate”

- Congenital Hydrocephalus
- Multiple revisions, infections, complications
- Cerebral Palsy, Epilepsy
- Downright remarkable
“Our Medical Home After 1:35 pm 2/15/01”
Ronald Belloir Jr., sitting on Mom's lap, plays doctor with Dr. Carl Cooley.
Medical Home transformation

- Timeline
- Outcomes
- Measures and recognition
- A culture of quality improvement
Medical Home timeline

- Late 1960s – AAP uses term “medical home” in reference to centralized pediatric medical records
- Dr. Sia’s work in the 80s and early 90s leads to adoption of medical home as a model of primary care by the AAP and the US MCHB
- 1995 – US MCHB begins to fund medical home model demonstration projects
Medical Home timeline

- 2002 – Medical Home Index validated as a quantifiable measure of “medical homeness”
- 2007 – Joint Principles of the Patient-Centered Medical Home published (AAP, AAFP, ACP, and AOA)
- 2008 – First NCQA medical home recognition standards are published (revised in 2011)
- 2008 – Regional Medical Home pilot projects
- 2009 – Evidence for value of medical home model grows
- 2010 – Affordable Care Act, CHIPRA, meaningful use
- 2012 – ?The Year of the Medical Home
Triple Aim – the path to affordable, high quality health care
Improved experience of care

- Medical Home family surveys
  - Family feedback – 80 families surveyed before and after a three year medical home implementation project
    - ↑ Care plans/summary
    - ↑ Health status
    - ↓ Parental Worry
    - ↓ School absences
    - ↓ ER, hospitalizations, & specialty visits

McAllister, Sherrieb, Cooley
J Amb Care Mgmt, 2009
Improved population health

- VA Integrated Service Network (OH)
  - COPD mortality of 10.1/100 patient years vs. 13.8/100 in the usual care group
  - BP control improved from 82% to 86% of patients in the PCMH program compared to 80% of same facility patients not in the program and 76% of VA patients statewide

- Intermountain Healthcare (UT)
  - Absolute reduction of 3.4% in 2-year mortality (13.1% died in PCMH group and 16.6% in control group)
Reduced health care costs

- Higher overall MHI scores and higher domain scores for:
  - Care coordination
  - Chronic condition management
  - Office capacity
- Lower hospitalization rates

- Higher Chronic Condition Management domain scores
- Fewer ER visits
  - Cooley, McAllister, Sherrieb, Kuhlthau Pediatrics, July 2009
Reduced health care costs

- Geisinger Health System PCMH model (PA)
  - 18% reduction in hospital admissions relative to controls
  - 7% reduction in PMPM costs relative to controls

- HealthPartners Medical Group PCMH model (MN)
  - 39% decrease in emergency department visits
  - 24% decrease in hospital admissions per enrollee

- Intermountain Healthcare Medical Group (UT)
  - Net reduction in total costs of $640/patient
  - $1650 reduction per highest risk patient

- Genesee Health Plan (MI)
  - 50% decrease in emergency department visits
  - 15% fewer inpatient hospitalizations

- Community Care of North Carolina (NC)
  - Cumulative savings of $974.5 million
  - 40% decrease in hospitalizations for asthma
  - 16% fewer emergency room visits
Measures and recognition

- Medical Home Index
  - Validated, 25 item scored self-assessment
  - Pediatric and adult care versions
  - Short version
  - Widely used
    - Pre and post measure in national and state learning collaboratives
    - Used for medical home recognition in some medical home pilot projects
    - Special version adopted as national measure for all CHIPRA demonstration project

- Health Care Transition Index now available
NCQA – Medical Home Recognition

- First available in 2008
- Involves a series of medical home characteristics
  - Includes “must pass” items
  - Requires a portfolio of documentary evidence
  - Results in score after NCQA review
  - Three levels of recognition
  - Requires payment of a fee to NCQA
- New edition in 2011
- Used to justify prospective payments in some Medical Home pilot projects
Other medical home recognition programs

- Oregon, Minnesota, Colorado, others
- Other organizations
  - Utilization Review Accreditation Commission - URAC
  - Joint Commission
  - Accreditation Association for Ambulatory Health Care
A new culture of quality improvement

- Methodology for change
- Learning collaboratives
  - The National Medical Home Learning Collaboratives
- Maintenance of certification
QI – methodology for change

- Changing a busy pediatric primary care practice is like changing the tire on a bicycle while you’re riding it.

- “Every system is perfectly designed to get the results that it gets.” Deming

- Change
  - Mindful, intentional, planned, tested, sustained
  - Includes input of those whom it affects
  - Requires a commitment of time and resources
QI – learning collaboratives

- Organized approach to quality improvement across multiple settings
- Collaborative learning
  - Shared ideas and innovations
  - Shared data
  - Shared successes
- Various models
  - Breakthrough Series Learning Collaborative - IHI
The current system cannot do the job. Trying harder will not work. Changing systems of care will.

- Crossing the Quality Chasm
“We just haven’t been flapping them hard enough.”
Breakthrough series learning collaborative model

Select Topic

Expert Meeting

Develop Framework & Changes

Planning Group

Pre-work

Participant teams

LS 1 → LS 2 → LS 3

AP1 → AP2 → AP3

Supports

- Email (listserv)
- Phone Conferences
- Monthly Team Reports

LS – Learning Session

AP – Action Period

Do not cite or reproduce content without appropriate citation.
National MHLC unique aspects

- Two collaboratives in one
  - 11 state Title V programs
  - 34 individual primary care practices
- Non-categorical or single disease focus
- Significant family/consumer involvement
- Further spread within states a major goal
- Improvement of meta-services in primary care
  - Care coordination and care planning
  - Vertical and horizontal communication
  - Practices as public health entities
Vision for MHLC – Dual Track

- 3 primary care teams per state
  - Team formation
    - Lead clinician
    - Parent partner
    - Care coordinator
    - Other logical members

- Title V state team

- 11 Title V programs; 13 states; 33 teams

- 2nd MHLC – 8 states, 12 practice teams
Largest shifts toward medical homeness

1) Quality standards
2) Identification of the population
3) Office environment
4) Resource information and referral
5) Care coordination/role
Lessons of the national MHLC

- If you do nothing else...
  - Identify your population of CSHCN
  - Gain family participation/feedback
  - Develop the capacity for practice-based care coordination and the use of care plans
During the 1st MHLC

- Title V and primary care partnerships
- Parent partners 90% of teams
- Identification of CSHCN in 80% of practices
  - 60% enter registry
- Care coordination
  - 20/24 sites with care coordinator; 75% budgeted
  - Time dedicated – 20-40 hours
- Emergency room visits reduced
Medical Home Transformation in Pediatric Practice – What Drives Change?

- 2-year AHRQ supported study (2010 – 12)
- 12 highest-performing pediatric practices from the national medical home learning collaborative in 2004 and 2005
Medical Home Transformation in Pediatric Practice – What Drives Change?

■ Quantitative measures
  □ Medical Home Index (TAPPP™ analysis)
  □ Adaptive Reserve Survey
  □ Chart audits
  □ CAHPS survey of families

■ Qualitative measures
  □ Semi-structured, on-site interviews with clinical leaders, care coordinators, families
  □ nVivo analysis by two researchers per interview
Qualitative results

- 36 1-hour interviews coded – 3 per practice
  - Physician leader (all unchanged since MHLC)
  - Care coordinator (role in place in every practice)
  - Parent partner

- 7302 items coded in 5 themes
  - Helpfulness of learning collaborative
  - Drivers and barriers for transformation
  - Key medical home features or functions
  - Key outcomes of medical home transformation
  - Differences between pediatric and adult MH models
Helpfulness of learning collaborative

- 223 quotes coded (3% of whole)
- Themes
  - Provided information, tools, and measures
  - Family participation was built in
  - Provided structure and standards for transformation
- Uniform beliefs that MHLC was crucial
  - “Joining the MHLC was key.”
  - “The MHLC got us started on a better path.”
Drivers and barriers to transformation

- 2850 quotes coded (39% of whole)
- Top seven (of 15) sub-themes
  - Reimbursement
  - Leadership – teams, practice, larger organization
  - Practice environment – part of a network with resources
  - Staff capacity
  - Electronic health record
  - Time for innovation and reflection
Key medical home features/functions

- 3429 quotes coded (47% of whole)
- Top seven (of 16) sub-themes
  - Care coordination
  - Family-centered care/family participation
  - Teamwork
  - Care plans
  - Community engagement and resources
  - Focus on CSHCNs as a population
  - Access and communication about access
Key outcomes of transformation

- 800 quotes coded (11% of whole)
- Top three (of 5) sub-themes
  - Patient satisfaction
  - Quality of care
  - Provider/staff satisfaction
“The moment of transformation”

“I think ‘medical home’ is a process. I don’t think it’s an endpoint. It is constantly evolving; if you get one thing going, there is always something else you can tweak or improve upon. It should be a way of {practice} life.”

- Pediatrician
Integrated systems of care

- Accountable care organizations
  - Holy grail or hardly happening
ACOs

- The least mentioned part of the Affordable Care Act to provoke the most discussion
- The least common existing payment arrangement about which there are the most opinions
- In the context of a multi-payer health care system suffering from fragmentation, procedure based payment, and over dependence on specialist care – not to mention enormous costs
  - ACOs may be the best hope
**DIFFERENT FORMS OF ACCOUNTABLE CARE ORGANIZATIONS**

<table>
<thead>
<tr>
<th>Level</th>
<th>ACO</th>
<th>Health Care Providers Included</th>
<th>Examples of Cost Reduction Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 4</td>
<td>ACO</td>
<td>Public Health</td>
<td>Coordinated Health and Social Services Support</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Safety-Net Clinics</td>
<td></td>
</tr>
<tr>
<td>Level 3</td>
<td>ACO</td>
<td>Hospitals</td>
<td>Improved Management of Complex Patients</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other Specialists</td>
<td></td>
</tr>
<tr>
<td>Level 2</td>
<td>ACO</td>
<td>Major Specialists (Cardiology, Orthopedics, Etc.)</td>
<td>Improved Outcomes and Efficiency for Major Specialties</td>
</tr>
<tr>
<td>Level 1</td>
<td>ACO</td>
<td>Primary Care Practice</td>
<td>Reduction in Preventable ER Visits &amp; Admissions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Primary Care Practice</td>
<td>Appropriate Use of Testing/Referral</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Primary Care Practice</td>
<td>Prevention &amp; Early Diagnosis</td>
</tr>
</tbody>
</table>
ACO members need...

- Organized approach to quality
- Evidence of providing highly efficient care (low cost)
- Ability to coordinate care along the continuum
  - With hospitals
  - With specialists
  - With community services
  - With primary care practices
- Ability to manage data to measure outcomes for the population served
QI - MOC Part IV

- MOC Part IV is the new Category I CME
- Growing number of approved QI projects
- Can drive a new culture of QI and medical home implementation
- CMHI – Six Core Elements of Health Care Transition
  - ABP approved for MOC Part IV
  - ABFM and ABIM approval pending
Future of medical home recognition

- In non-integrated systems of care, the primary care must “qualify” for enhanced payments for medical home functionalities.

- In integrated systems with global payments (e.g. ACO models), primary care will need medical home functionalities in order to participate.

- Naming this “medical home” or requiring recognition will become moot.
A culture of quality improvement will be needed for survival...

“When you stop getting better, you stop being good”

Wyatt Taylor, North Carolina summer camp director
Home is the place where
When you have to go there
They have to take you in
How to cite this presentation: