



AHRQ Transforming Primary Care Grants

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

Principal Investigator: W. Carl Cooley, MD, and Jeanne W. McAllister, BSN, MS, MHA
Institution: Center for Medical Home Improvement, Crotched Mountain Foundation, Inc.
AHRQ Grant Number: R18 HS019157

Overview of Transformation Efforts

Patient-centered medical home (PCMH) transformation was studied in 12 pediatric practices identified as top performers among 45 practices participating in a year-long medical home learning collaborative. The breakthrough-style learning collaborative was sponsored by the Maternal and Child Health Bureau of the Health Resources and Services Administration. The collaborative aimed for practicewide implementation of the PCMH model and focused on improving the care of children with special health care needs.

Each of the 12 practices identified a team to participate in the learning collaborative and guide transformation efforts. Each team was composed of a pediatric physician champion, two parent partners, and a member of the practice’s clinical or administrative staff. The practices used quality improvement (QI) techniques and other strategies to enhance care coordination and facilitate family-centered, team-based care. All but the smallest practice introduced care coordinators who communicated with families between visits and supported them in navigating the health care system. The practices also partnered with patients and families to identify goals and care strategies, which were incorporated into individualized care plans. In addition, the practices strengthened their linkages with community resources and partners and implemented strategies to enhance access to care (e.g., responding to patient concerns by phone or seeing patients in a “quiet room” or other space that could accommodate parents and young siblings).

Results of Transformation Efforts

Sustained gains in key PCMH domains were evidenced by a 21 percent improvement in the average Medical Health Index (MHI) score across all 12 practices at the end of the learning collaborative, and an additional 13 percent improvement 6 to 7 years later. The MHI assesses 25 indicators of medical “homeness” in six domains. The greatest gains were seen in the domains of “Care Coordination” and “Chronic Condition Management,” followed by “Organization Capacity” and “Quality Improvement.” Gains in “Community Outreach” and “Data Management” were less pronounced. Practices with higher

Number and Type of Practices

There were 12 pediatric primary care practices in this project, including independent and hospital-owned practices, an academic clinic, and a Federally-Qualified Health Center.

The practices varied in size, serving between 528 and 27,597 patients each.

Location

Across the United States, including Connecticut, Pennsylvania, Ohio, Michigan, Minnesota, North Carolina, Utah, Texas, and Illinois.

Transformational Elements

- Accessible Services
- Comprehensive Care
- Coordinated Care
- Patient-Centered Care
- Quality & Safety



MHI scores also scored higher in “Adaptive Reserve,” suggesting they were more resilient and had a greater ability to make and sustain change.

One practice attained Level 3 PCMH recognition from the National Committee for Quality Assurance and one practice attained PCMH recognition from a State program; the remaining 10 practices opted not to pursue PCMH recognition.

Key Impacts of Transformation

Patient Satisfaction:

- In six of the 12 practices, parents completed the Consumer Assessment of Healthcare Providers and Systems Health Plan Survey. All six practices scored above the mean on national benchmarks. Family satisfaction appeared to stem from better access, care, and safety and having a strong relationship with their health care team.
- Parents reported that the care plans were very helpful in easing family stress, enhancing their sense of safety, and decreasing emergency room use and hospitalization.

Provider Satisfaction:

- Lead clinicians and care coordinators described an enhanced sense of personal and professional satisfaction due to implementation of the family-centered medical home. They also reported a greater awareness of daily demands on parents and developing a new conceptualization of pediatric care quality as planned, proactive, and integrated care across the health care system and community, in partnership with families.

Challenges to Transformation

Physician leaders noted that leading PCMH transformation required a significant amount of time that is not reimbursed by encounter-based payment systems. Such payment systems, which focus on quantity rather than quality of health services provided and fail to factor in care complexity, may also compromise a practice’s ability to sustain a PCMH.

Practices identified the electronic health record (EHR) as both a driver and restrainer of transformation. Two practices reported success in using EHR for care plans and that reporting was within reach. However, the promise EHR holds for pediatrics in terms of data and report retrieval, immunization management, medication dosing, and report tracking remained unrealized.

Lessons Learned and Implications for Others

- Providers, family members, and staff participating in this initiative agreed that team-based care, care coordination, partnering with families/family-centered care, and QI were key features of the medical home and essential for PCMH transformation.
- Formal QI structures helped drive PCMH transformation. Such structures included shared QI learning opportunities; a family-centered QI team with shared goals and accountability; and the ability to generate and analyze performance improvement data. Physicians indicated the learning collaborative



“Medical home is a process. I don’t think it’s an endpoint. It’s constantly evolving; if you get one thing going, there’s always something else you can improve upon.”

“Medical home is a process. I don’t think it’s an endpoint. It’s constantly evolving; if you get one thing going, there’s always something else you can improve upon.”

-Physician champion



was especially important, noting it was “what got them started” in using QI to support PCMH transformation.

- Providers, families, and staff described care coordination as a key medical home function and identified care coordinators as integral to a practice’s ability to be proactive, support families, and reach out to communities. Many physicians said they would “not go back” to their previous care model without care coordinators.
- Family participation was a lead driver of PCMH transformation. In addition to sharing their stories and describing their goals and needs for their children, families identified practice areas for improvement and community resources that were useful to them and their children.

For additional information about this grant, please visit:

<http://www.ahrq.gov/professionals/systems/primary-care/tpc/tpcbib.html#pedcare> or the Center for Medical Home Improvement, Crotched Mountain Foundation, at: <http://www.medicalhomeimprovement.org/>.

