Overview of Transformation Efforts

In 2007, Pennsylvania launched a Chronic Care Initiative (CCI) that focused on improving the care of patients with chronic diseases by helping primary care practices implement the National Committee for Quality Assurance patient-centered medical home (PCMH) model, using a rapid-cycle testing approach. Twenty-five practices participated in the first regional rollout of the initiative. The practices focused on improving the care of patients with diabetes, with the goal of applying lessons learned and practice changes to other patient populations. CCI supported the practices with a quarterly learning collaborative and by providing practice coaches, monthly performance reports on diabetes quality measures, and access to a Web-based patient registry for population management. Additionally, health plans participating in CCI provided financial support through enhanced payments to the practices.

Approaches to PCMH transformation varied across the 25 practices. For example, some practices regularly discussed quality improvement in meetings and shared performance data with staff, while others focused less on quality improvement and performance reporting. All of the practices enhanced care management capabilities for high-risk patients but differed in how they defined the role of care managers and how they incorporated them into the care team. Many practices expanded the medical assistants’ role by training them as health coaches and/or outreach workers or engaging them in population management activities.

Number and Type of Practices

This project included 25 adult primary care practices, including private practices, Federally Qualified Health Centers, and practices belonging to health systems.

The practices varied in size from 2 to 25 providers; one quarter of the Federally Qualified Health Centers were led by nurse practitioners.

Location

Southeast Pennsylvania, including inner-city, suburban, almost-rural, and underserved communities.

Transformational Elements

- Comprehensive Care
- Coordinated Care
- Health Information Technology
- Patient-Centered Care
- Quality & Safety

Results of Transformation Efforts

Differences in transformation efforts were assessed by ranking the practices based on their improvement from baseline to 18 months on three diabetes measures (glycated hemoglobin concentration <7%, blood pressure <130/80 mm Hg, and low-density lipoprotein [LDL] cholesterol <100 mg/dL).

Approaches to care management varied across practices, with substantial differences between the most- and least-improved practices. In the top one third of practices (i.e., those that improved the most), care managers focused exclusively on care management; were better integrated into the care
team through regular meetings and ongoing communication with providers and staff; used a more patient-centered approach by engaging with patients in person and by phone rather than by phone only; provided self-management support personally to patients rather than referring patients to outside health educators; and made greater use of the electronic health record (EHR) and electronic forms for messaging and patient tracking.

All of the practices achieved National Committee for Quality Assurance PCMH recognition in the first year of the initiative. In general, the five most-improved practices attained higher recognition levels than the five least-improved practices. Among the five most-improved practices, three achieved Level 3 recognition, one achieved Level 2 recognition, and one achieved Level 1 recognition.

Key Impacts of Transformation

Health Outcomes

- Across all 25 practices, the percentage of patients who achieved the target values increased slightly following PCMH transformation; however, the level of improvement achieved by individual practices varied widely. In the five most-improved practices, the percentage of patients who met target values for glycated hemoglobin, LDL cholesterol, and blood pressure increased by 8.8, 14.9, and 19.4 percent, respectively. In the five least-improved practices, the percentage of patients who met target values decreased for all three measures.

Quality of Care

- Providers and staff reported that they were able to use many of the diabetes management processes and protocols to manage other chronic disease populations and to support preventive care for their entire population. Providers also reported feeling more confident in their skills and in the support systems established to manage diabetes care, and some reported referring fewer patients to endocrinologists.

Patient Satisfaction

- Most providers and staff believed that their patients were not aware of the PCMH implementation, but thought some patients may have recognized that staff were more involved in their care and appreciated the support they received for self-management and care management.

Challenges to Transformation

Many providers reached out to local hospitals to improve communications related to hospital admissions, discharges, and emergency room visits. Outreach was more difficult in urban practices, where there were more hospitals to coordinate with than in suburban settings. Outreach in urban settings was further complicated when providers were not affiliated with a hospital system.
Lessons Learned and Implications for Others

- Supplemental financial support was critical to PCMH transformation, as it allowed practices to acquire needed resources such as additional staff (e.g., medical assistants and nurse care managers), EHR systems, time for education and quality improvement efforts, and space modifications.

- The five practices with the most-improved clinical outcomes had greater structural capabilities (e.g., EHRs and stable financial systems) at baseline. Other features distinguishing these practices included strong leadership and a shared PCMH vision; team orientation with shared decisionmaking and collective problemsolving; focus on clinical quality improvement; and processes for monitoring progress and obtaining feedback.

- Care managers and expanded roles for medical assistants were critical elements of PCMH transformation. For optimal impact, care managers should focus on high-risk patients and be embedded in the practice, collaborating and communicating regularly with providers.

- For many providers, PCMH transformation required adjusting their “mental model” of primary care. This involved shifting practitioners’ perspective toward proactive, population-oriented care; accepting new roles and a redistribution of responsibilities related to team-based care; and working in partnership with patients to develop and implement care plans.

For additional information about this grant, please visit: [http://www.ahrq.gov/professionals/systems/primary-care/tpc/tpcbib.html#penn](http://www.ahrq.gov/professionals/systems/primary-care/tpc/tpcbib.html#penn).