AHRQ Transforming Primary Care Grants

Primary Care Transformation in a National Committee for Quality Assurance Certified Patient-Centered Medical Home

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Overview of Transformation Efforts

Palo Alto Medical Foundation began implementing components of the patient-centered medical home (PCMH) in 1999. Its primary care transformation efforts included: 1) enhancements to patient access and outreach (including same-day appointments, e-visits, a diabetes registry, and automated secure online reminders for preventive health appointments and chronic disease management); 2) shared medical appointments; 3) team-based care and cross-trained staff; 4) bringing best evidence to the point of care through use of self-management protocols, electronic health record alerts, and linked orders; 5) encouraging shared decisionmaking and family involvement in care; 6) coordination of care throughout the system and with community resources; 7) new methods of measuring and improving quality and safety (including a full electronic health record system, e-prescribing, care review committee, and patient safety council); 8) innovations in practice management (including the Lean method of supply management and demand flow technology); 9) advanced information systems and technology (including an online patient portal, secure electronic messaging, and e-prescribing); and 10) changes to physician reimbursements (including compensation for e-visits and chart abstraction, and "pay for performance," where physicians' bonuses are determined by patient performance on quality measures).

Number and Type of Practices

This project included 13 primary care clinics in a large, nonprofit, multispecialty medical group that serves about 850,000 patients.

Practices ranged in size from three to 300 physicians.

Location

Northern California

Transformational Elements

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

Results of Transformation Efforts

In 2007, four primary care practices were recognized by the National Committee for Quality Assurance (NCQA) as Level 3 PCMHs, five were recognized as Level 2, and four did not seek recognition. Implementing the PCMH principles was seen by organizational leadership and staff as consistent with the organization's patient-centered culture and mission, and as a way to compete in the local health care market. However, seeking recognition as a PCMH was prompted incidentally by a one-time incentive from a local group of large employers. In 2009, the Palo Alto Medical Foundation allowed PCMH recognition to lapse.

Key Impacts of Transformation

Patient Satisfaction

- Patient satisfaction was higher in practices that improved the way care team members communicated and related to one another.
- Patients reported a high degree of satisfaction with shared medical appointments, and felt that it improved their relationship with their physician because of the changed power dynamic and more relaxed environment.

Health Outcomes

- Cholesterol control improved in patients with diabetes who sent and received more secure e-mail messages with their physician.
- Having frequent in-person clinic visits was associated with improved blood pressure and cholesterol control among patients with diabetes, and improved blood pressure control among patients with hypertension.

Quality of Care

- Providing advanced access to a patient's own primary care provider and improved continuity were associated with improved process-oriented clinical quality metrics (including measures of chronic disease management and preventive screening), although not necessarily with improved health outcomes.

Utilization

- Patients at clinics with the highest level of NCQA PCMH recognition used fewer services from all departments (2.38 less total Relative Value Units) than patients at clinics with lower levels of NCQA recognition.
- Secure e-mail messaging, both between the patient and provider and among the care team, was related to increased services across many departments. There was no difference in the annual number of primary care phone calls between patients who did and did not use free secure e-mail messaging, but there was a small increase in office visits for each new e-mail thread (0.05 visits per patient-year). For specialty care, there was an increase in annual phone calls (0.16 calls per patient-year) and office visits (0.21 visits per patient-year) for each new message thread.

Challenges to Transformation

There were numerous other initiatives at the Palo Alto Medical Foundation at the same time as PCMH transformation, which created competition demand for the attention and time of staff. Front-line staff often expressed feeling overwhelmed by changes and experienced change fatigue.

Lessons Learned and Implications for Others

- Five key factors were identified as important for the successful implementation of PCMH transformation: an organizational culture characterized by innovation and patient-centeredness; strong leadership support for improvement initiatives; real-time performance data

Implementing group visits is not as difficult as some physicians and administrators assume. However, management support and a committed physician champion are necessary for successful implementation.

provided to front-line physicians and staff; adequate organizational infrastructure; and multidisciplinary teamwork.

- There is a potential disconnect between PCMH transformation and NCQA recognition, which is costly to maintain and may not be meaningful in itself.
- Shared medical appointments were able to develop and thrive in practices where there was management support, physician champions, and dedicated support staff.
- Data on primary care physicians working part-time demonstrated better patient experience but decreased continuity and access. Compared with full-time primary care physicians, part-time physicians' patients experienced an 8.8 percent decrease in continuity of care and a 1.7-day increase in the number of days until the third next available appointment (a measure of access that aims to measure true appointment availability), but a 3.8 percent increase in patient satisfaction scores after accounting for continuity and access to care and controlling for other factors.

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