AHRQ Transforming Primary Care Grants

Transforming Primary Care: Evaluating the Spread of Group Health's Medical Home

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Overview of Transformation Efforts

Group Health Cooperative designed and implemented transformation to a patient-centered medical home (PCMH) in one prototype clinic and then later spread implementation across 25 clinics using the Lean (also known as the Toyota Production System) method for implementing and standardizing care processes.

An implementation team (including health system leaders, providers, and managers) identified a set of core structural and staffing changes for transformation, which included reducing the physician panel size to 1,800 patients; increasing flexibility for longer patient visits; reducing the number of face-to-face visits per day; and increasing care team staffing. To facilitate spread across the practices, the redesign was segmented into four practice change and four management change modules. The practice change modules were: virtual medicine (including after-hours nurse consultations and increased virtual visits via secure messaging), chronic disease management, pre-visit preparation, and outreach. The four management change modules were: strategy for telephone call management, use of team huddles, strategy for hiring new staff and redistributing patients across practices, and standardized management practices to be used by clinic leaders (including root cause analysis, Plan-Do-Study-Act quality improvement cycles, and workplace rounding).

Number and Type of Practices

This project included 26 practices in an integrated (nonprofit, consumer-governed) health system with a range in size from approximately 5000 to 20,000 patients.

Location

Washington (Puget Sound and Spokane regions) and northern Idaho

Transformational Elements

- Accessible Services
- Comprehensive Care
- Coordinated Care
- Health IT
- Quality & Safety

To develop each practice change module, Lean-based rapid process improvement workshops were held to directly observe and analyze the ways in which the prototype clinic integrated process changes into its daily work and to refine the work processes for application across practices. One of the outcomes of these workshops was a set of standard processes, including team role and responsibility definitions, patient flow diagrams, training schedules, and process metrics.

When transformation was spread across the health care system, practice teams engaged in 10-week successive implementations of each practice change module, beginning with trainings and transitioning into the new work. Process metrics for each module were posted and reviewed daily to facilitate performance improvement and problem solving. Aggregated, clinic-level metrics were reviewed weekly by clinic leadership. Lean improvement tools were used if clinics consistently did not meet benchmarks established for each measure based on performance of the prototype site.

Results of Transformation Efforts

National Committee for Quality Assurance Level 3 PCMH recognition was achieved at all 26 practices. Lean implementation was largely successful. All 26 clinics had implemented the eight modules 14 months after implementation began. Implementation targets were met for three of the four practice change modules by all of the clinics 12 to 18 weeks after the start of implementation. Only one process change module did not meet the implementation target—chronic disease management, the only clinically focused module—which involved the creation of collaborative care plans for patients with selected chronic diseases. A second workshop was established to redesign the processes for this module.

Key Impacts of Transformation

Health Outcomes

- Practices that underwent transformation saw a statistically significant decrease in the number of patients with diabetes who had poor glucose control (25.0% to 20.3%) or poor cholesterol (low-density lipoprotein) control (46.2% to 36.9%), and a statistically significant increase in the proportion of patients with hypertension who had good blood pressure control (67.9% to 77.8%).

Access

- PCMH implementation resulted in substantial and sustained increases in electronic messaging and telephone encounters by primary care teams. The number of secure message threads per 1,000 patients increased by 123 percent and telephone encounters increased by 20 percent. Primary care office visits decreased by 4.5 percent.

Utilization

- Compared with what would be expected with no PCMH implementation, practices undergoing transformation had an 18.3 percent reduction in emergency room visits but a 10 percent increase in specialty care visits. There was no significant change in inpatient admission rates.

Provider and Staff Satisfaction

- Providers and staff found the PCMH to be the “right work,” and work satisfaction and burnout rates improved. The percentage of staff reporting that they were “extremely satisfied” with their workplace increased from 38.5 percent at baseline to 42.2 percent at followup, and rates of reported burnout decreased from 32.7 to 25.8 percent.
- In general, patients had favorable responses to the PCMH changes, which were supported by small but statistically significant increases in patient experience scores.

Challenges to Transformation

Transformation activities were based on modules developed from the experiences at a prototype clinic. During the spread of transformation to all 26 clinics, however, the individual clinic leaders were responsible for developing local training systems and communicating these to their staff. This resulted in inconsistent training content and format.

A large upgrade of practice management software at Group Health during implementation disrupted the collection and distribution of quality of care data. This caused staff frustration and hampered quality improvement activities.

Lessons Learned and Implications for Others

Providers and staff found PCMH transformation to be the "right work," and work satisfaction and burnout rates improved.

- Clinics with leadership who provided excellent communication and supported staff throughout implementation with hands-on, side-by-side training had the highest functioning teams.
- The Group Health application of the Lean method was generally successful in meeting process targets, but teams felt that it tended to disrupt teamwork rather than enhance it. Leadership focused transformation efforts on process improvement, and improved team functioning (including building shared goals, mutual respect, and within-team communication) was expected to occur naturally from these efforts, as it had in the prototype clinic. Therefore, team building was not systematically included in the Lean transformation approach.
- Nurses (registered and licensed practical nurses) were confused and dissatisfied by changes in their roles related to the transformation activities, and they questioned whether the standardized workflows best used their time and skills.

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

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