AHRQ Transforming Primary Care Grants

Transforming Primary Care Practice in North Carolina

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Overview of Transformation Efforts

The North Carolina Area Health Education Centers (AHECs) Practice Support Program (previously known as the Improving Performance in Practice Program) is a statewide quality improvement (QI) initiative that provided primary care practices with onsite improvement coaches, tools, and resources to assist with transformation to improve clinical care, beginning in 2005.

Onsite QI Consultants were provided through the North Carolina AHECs to serve as practice coaches and assist with practice change. QI Consultants helped set goals for practice improvement, trained staff on QI methodology, and assisted in creating patient data registries to track progress toward improved clinical outcomes for asthma or diabetes. They also provided practices with monthly practice change and leadership ratings to track implementation and use of disease registries, planned care templates, care protocols, and patient self-management support tools.

Number and Type of Practices

This project included 76 primary care practices across North Carolina: 42% family medicine, 13% internal medicine, and 26% pediatric medicine, mostly independent practices. 32 practices had more than 7 clinicians on staff, 26 had between 4 and 6, and 18 had 3 or fewer.

Location

North Carolina (49% rural)

Transformational Elements

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

In addition, practices participated in collaborative learning sessions, conference calls, and group email discussions to share practice transformation experiences with others in the program. Regional collaborative learning sessions were held quarterly and adapted from the Institute for Healthcare Improvement Model for Improvement. Interdisciplinary teams from each practice attended the meetings to learn about QI principles and key drivers of improvement in diabetes and asthma care and share successes and lessons learned in practice transformation activities.

All participating practices reported monthly clinical quality measures.

Results of Transformation Efforts

Practice coaches used the Key Driver Implementation Scale (KDIS) to document and measure the extent of implementation in four key areas of practice change: disease registries, planned care templates, care protocols, and self-management support. Ordinal KDIS scores indicate the level of implementation and range from 0 (no activity) to 5 (practicewide adoption).

After 1 year of working with a practice coach, 28 (37%) of the 76 practices had a high level of improvement in their practice change scores (two or more KDIS scores of ≥4). Of these, 18 practices also had a high level of improvement in clinical measures, and 10 had low improvement.

Key Impacts of Transformation

Quality of Care:

- Within the first year of implementation, between 50 and 78 percent of practices showed improvement on each of the individual diabetes and asthma clinical measures.
- Among the 51 practices focused on improving diabetes care, higher leadership scores were associated with more screening for diabetic nephropathy. Greater use of patient registries and protocols was associated with more patients achieving the cholesterol control goal (low-density lipoprotein level <100 mg/dL).

Challenges to Transformation

The average opportunity cost for practices undertaking transformation efforts was approximately $21,550, or 50 percent of a full-time equivalent registered nurse or licensed practical nurse. Smaller practices were disproportionately affected by the costs of implementation because larger practices had the advantage of economies of scale.

Only 50 percent of practices had an electronic health record (EHR) at the outset of this project. A number of practices added an EHR, or replaced/upgraded their existing EHR, during this project. When this occurred, the work of the practice coaches, use of registries, and data collection were generally disrupted for between 3 and 6 months.

Staff turnover was another challenge for practice transformation efforts, particularly for the smaller practices, where the loss of one team member could mean the loss of the person leading QI efforts.

Lessons Learned and Implications for Others

- *Staff engagement:* It was essential to engage staff at all levels to achieve practice transformation. Successful practices were team oriented and held each member of the team accountable for his or her responsibilities.
- *Cross-training:* Among practices with higher practice change scores, cross-training of staff was critical to success. Familiarity with each other's work allowed team members to fill in when other staff were busy or unavailable.
- *Leadership:* Practices with higher levels of leadership, as measured by the practice coaches, were more likely to make practice changes.
- *Partnerships*: Partnering with local organizations, such as AHECs, to provide practice change support can help offset some of the costs of practice transformation.

Having a committed midlevel manager, in addition to a visionary leader, is essential for successful practice change. Midlevel managers serve as the operational link between the strategic leaders and the practice staff responsible for day-to-day implementation activities.

For additional information about this grant, please visit:
http://www.ahrq.gov/professionals/systems/primary-care/tpc/tpcbib.html#nc or
www.ncfahp.org/quality-improvement.

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