



AHRQ Estimating the Costs of Supporting Primary Care Practice Transformation Grants

Tool to Assess Ongoing Costs of Patient-Centered Medical Homes

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Overview of Estimating Costs Grant

This study examines the cost structure associated with maintaining patient-centered medical home (PCMH) services in 20 small- and medium-sized primary care practices in Utah and Colorado that have redesigned systems and implemented changes consistent with mature PCMH practices. The practices include eight clinics belonging to a university-owned network in Utah that implemented a model called Care by Design™, which emphasized timely access, team-based care, and care planning and yielded improvements in clinical quality as well as patient and provider satisfaction. Also included in the study are five Federally-Qualified Health Centers in Colorado serving diverse underserved patient populations that implemented changes to enhance access, continuity of care, and teamwork, as well as seven independent practices in Colorado that participated in a PCMH pilot and achieved significant improvements in cardiovascular and diabetes care, smoking cessation, depression screening, and preventive care.

The five Federally-Qualified Health Centers and seven independent practices in Colorado obtained Level 3 PCMH recognition by the National Committee for Quality Assurance (NCQA). The eight clinics in Utah opted not to pursue NCQA PCMH recognition.

The overall aim of this study is to understand the cost structure associated with ongoing maintenance of PCMH services in small- and medium-sized primary care practices. In support of this aim, the study team conducted a cost analysis in primary care practices that varied in terms of NCQA PCMH recognition status. The analysis focused on estimating the direct costs (primarily staff salaries and benefits) of maintaining PCMH services.

The study team also correlated practice characteristics (such as patient volume and mix, number of providers, and NCQA certification status) with the cost of ongoing maintenance of PCMH services, and estimated per patient per month costs for practices while accounting for the variation in practice-level characteristics.

Data and Methods

The study used the PCMH Cost Dimensions Tool to estimate the costs of maintaining PCMH services. Originally developed for the PCMH pilot in Colorado, this tool delineates costs associated with the PCMH domains identified by NCQA, and assesses resources and systems unique to mature PCMH Level 3

Health Care Setting

This study includes 20 primary care practices, including independent practices, Federally-Qualified Health Centers, and clinics belonging to a university-owned network.

Location

Utah and Colorado

Costs Estimated

Cost of maintaining PCMH services:

- Per full-time equivalent clinician
- Per patient per month
- Per element of NCQA PCMH recognition



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practices. The tool includes a line item list of work required for delivery of PCMH services and accompanying “level of effort” categories representing the range of services, functions, staff roles, and competencies that required investment in order to become a medical home.

“By rigorously defining costs for maintaining PCMH practices, we have an important opportunity to contribute to effective primary care payment reform and to the sustainability of primary care transformation.”

- Michael Magill, MD,
Principal Investigator

Data to complete the PCMH Cost Dimensions Tool were collected by the study team through structured interviews with practice staff (including the medical director and nursing and administrative leaders) using an interview guide developed by the study team. The staff examined financial and administrative data sources to identify the actual costs of personnel for the fiscal year preceding the start of the study. With these data as an input, the Cost Dimensions Tool was used to calculate practice-level direct costs of maintaining

PCMH services associated with the NCQA domains. Line item costs were examined in relation to the specific PCMH-related processes/systems/structures in place in each practice. Only service dimensions that satisfy NCQA PCMH 2011 requirements were assessed and compared to ensure that “zero costs” were not attributed to a dimension that had not been implemented. Additional activities that practices engage in to achieve PCMH criteria, and their related costs, were also identified.

In addition, the study team collected data on practice characteristics, including the number of providers, number of patient visits per year, payer mix, patient health and socioeconomic status, and NCQA recognition status. These data are being used in aggregate cost analyses to examine the cost of maintaining a PCMH and to identify the cost to maintain individual PCMH elements. Practice characteristics (as described previously) and market-specific characteristics (e.g., salary and contract differences by location) are controlled for using multivariate regression analysis of cost elements individually and by PCMH dimension.

Anticipated Benefits

The findings from this study will be useful to practices in predicting the costs they may experience in maintaining a PCMH practice, to payers in establishing financial systems and incentives for practices to implement and operate PCMH practices, and to policymakers in establishing programs that encourage and support the development of PCMH practices.

The project will also contribute to the refinement of the PCMH Cost Dimensions Tool. When using the tool, the study team assessed its face validity and determined whether any activities related to NCQA PCMH recognition criteria need to be added.

Challenges to Estimating Costs

The practices in this study reflect a range of practice settings and characteristics. However, because the practices are located in either Utah or Colorado, some findings may not be generalizable to practices in other locations. Additionally, because the practices have not fully implemented each and every element of a PCMH, the costs of full implementation may be underestimated.

Results

The study team has developed estimates of the direct costs of maintaining PCMH services and estimated per patient per month costs while accounting for variation in practice-level characteristics.

Detailed results will be included in forthcoming publications.



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Publications

Publications from this study are forthcoming.

