

Bringing High-Performing Systems to Small Practices

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Organization:	New York City Health/Mental Hygiene
Mechanism:	PAR: HS08-270: Utilizing Health Information Technology to Improve Health Care Quality Grant (R18)
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Target Population: Adults, Inner City*, Medicaid, Medically Underserved, Safety Net

Summary: To date, there is limited evidence on the ability of small community health care providers to improve quality of care through the use of electronic health records (EHRs), and limited data on the impact of financial incentives for quality improvement on small providers. Investments in health information technology (IT) are being made to improve quality of care and, while there is evidence of improved quality in integrated delivery systems, such as the Kaiser Permanente system, there is less evidence of the effectiveness of health IT on patient outcomes in nonintegrated health systems.

This study will provide information on the effects that supportive EHR implementation, clinical decision support (CDS) systems, and pay-for-quality improvements have on small community providers' cardiovascular health outcomes. The New York City Primary Care Information Project (PCIP) is comparing the implementation of EHRs at 60 small ambulatory primary care practices that are not part of an integrated delivery system throughout New York City to 60 similar practices in the area that do not have an EHR. The project targets EHR implementation throughout New York City, with a focus on some of the poorest neighborhoods. The majority of practices are using Certification Commission Health Information Technology-certified eClinical Works.

The study will evaluate the impact of an EHR implemented with the support of technical assistance, and added tools, including integrated registry systems and CDS, on improvements in quality of care as compared to practices that do not have an EHR or the aforementioned support programs. The primary goal is to determine whether practices that have supportive EHR implementation provide higher-quality care and experience a more rapid rate of improvement of their quality measures than practices that do not have an EHR. A secondary goal is to determine the characteristics, if any, that indicate supported EHR practices are atypical, or have any consistently different characteristics, as compared to other small independent practices. At a more nuanced level, the research will assess the attributable impact of various interventions on changes in four cardiovascular health outcomes at small practices that provide adult primary care. This will provide specific information on the value of various types of support on the rate of improvement on cardiovascular quality measures.

Specific Aims:

- Determine whether practices that participated in the PCIP program experienced a more rapid rate of improvement on their quality measures than practices that did not participate. **(Ongoing)**

- Determine if PCIP-participating practices are atypical in comparison to other small independent practices in New York City. **(Ongoing)**
- Assess the attributable impact of each intervention: adoption of EHR, CDS, and pilot pay-for-quality program. **(Upcoming)**

2010 Activities: The project finalized the group of PCIP providers that is the comparison group for the active intervention practices that are receiving supportive EHR implementation. EHR adoption among small clinics in New York has moved rapidly since the writing of the grant, and there are fewer practices that have not begun EHR implementation. As a result, the project is shifting the definition of the “control” practices from non-EHR adopters to a subset of practices that are late adopters of the EHR. For the later adopters, 58 practices were recruited, representing a total of 134 providers. Similar to the early adopters, the majority of practices that were recruited as the late adoption group are solo or two-person practices. The project has decided to define early adopters as those that adopted an EHR prior to January 2009. Late adopters are those that adopted between January 2009 and March 2010.

The team developed and successfully implemented a baseline provider survey tool on their experiences with quality measurement, reporting, and incentives. A separate survey was distributed by PCIP as part of the overall regional extension center activities to assess the practice’s orientation and experience in completing tasks such as documentation and ordering. Practice characteristics, such as number of providers, ancillary staff, and patient demographics, are collected either through the practice’s application or through the chart review process.

To assess the impact of the interventions on quality, a number of quality measures will be collected through chart review. The team developed a form, database, and instruction set to collect the clinical data elements from paper charts that can be used to calculate the same quality measures as those calculated through the EHR. Chart review will continue through 2011. The study design was updated to include two time points prior to EHR adoption for the early EHR adopters for contemporaneous comparison with the later EHR adopters. This is needed to assess trends in quality measurement prior to EHR adoption. The two trends (pre-EHR vs. post-EHR) will enable the research team to determine which factors may be associated with changes in the trends in practice performance on quality measures. The team is also seeking additional data sources external to the PCIP program (e.g., health plan claims), to compare performance on quality metrics in these practices.

Grantee’s Most Recent Self-Reported Quarterly Status (as of December 2010): Progress is completely on track. The team is on time on all tasks and the budget spending is on track.

Preliminary Impact and Findings: Data describing the characteristics of the early and late adopters is under internal review and will be submitted to the American Journal of Public Health. Preliminary analyses in 2010 for a few selected items focused on providers who received incentive payments and their perceptions of the payments. These analyses were used to gauge the motivation of providers in earning incentives tied to quality performance.

Strategic Goal: Develop and disseminate health IT evidence and evidence-based tools to improve health care decisionmaking through the use of integrated data and knowledge management.

Business Goal: Knowledge Creation

* *AHRQ Priority Population*