

Project Title:	Massachusetts Quality E-Measure Validation Study
Principal Investigator:	Schneider, Eric, M.D.
Organization:	Harvard University School of Public Health
Mechanism:	RFA: HS07-002: Ambulatory and Safety Quality Program: Enabling Quality Measurement through Health IT (EQM)
Grant Number:	R18 HS 017048
Project Period:	09/07 – 08/09
AHRQ Funding Amount:	\$995,575
Summary Status as of:	December 2008

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

Summary: This project was initiated in September 2007 and has completed the first half of the grant period. This project is evaluating the readiness of structured electronic health record (EHR) data to support ambulatory clinical quality measurement by using the AQA Alliance (AQA) ambulatory care measurement set to compare quality measurement based on a structured EHR data measurement method to two standard measurement methods: 1) a “hybrid method,” combining claims data with medical record review; and 2) a “claims-only method” based upon claims data aggregated across commercial health plans and the Medicare program. The project includes primary analyses with formal hypothesis testing and secondary analyses that will help to identify and prioritize the high-impact, short- and long-term modifications to community-wide, office-based EHR systems that could support and accelerate the dissemination of ambulatory clinical quality measurement. The data used for this grant are being collected and aggregated as part of the Massachusetts eHealth Collaborative’s (MAeHC) community-wide interoperable EHR implementation pilot in three Massachusetts communities. Massachusetts Health Quality Partners (MHQP) is developing EHR-based quality measure specifications and data extraction logic for the AQA ambulatory quality measure set. In addition to the implementation of interoperable EHRs, the Quality and Usage Data Coordinating Center (QUDCC) was developed and implemented for selective retrieval, linkage, and storage of patient-level clinical data elements that can be used to calculate clinical quality measure results.

Specific Aims

- Recruit a cohort of adult ambulatory patients from three communities that are piloting community-wide implementation of structured EHRs to compare a quality measurement method based on a structured EHR data to a hybrid method involving a combination of aggregated claims data and medical record review. **(Ongoing)**
- Compare a measurement method based on structured EHR data to a claims-only method based on a novel database that aggregates claims data from commercial health plans and Medicare. **(Ongoing)**

2008 Activities: Dr. Schneider and his team accomplished the majority of the planning necessary for the project. Patient recruitment materials were developed and received Institutional Review Board (IRB) approval. The materials include a physician notification letter, a patient invitation letter for inclusion in the project, a patient opt-out form, a formal invitation letter for patients who agree to participate, and a study consent form. The project initially identified and recruited three health plans that have large percentages of enrollees in the three MAeHC communities for the purpose of patient identification and

recruitment. One of the plans opted not to participate, and the project has begun to identify a third plan to ensure adequate sample size. The IRB-approved study materials were submitted to the health plans for their review, with approval expected in early 2009. The sample patient frame for use in the first aim listed above was specified and includes a cohort of adult ambulatory patients from the three MAeHC communities that are 18–80 years of age and eligible for the selected AQA measures. To further inform the effort, the project is using a subcontractor, the Center for Survey Research, to develop a patient survey. The initial draft of the survey was completed, and cognitive testing began with the expectation that the survey would be refined and fielded in early 2009. To conduct the evaluation, development of a medical record review tool commenced and includes a schema for each quality measure component that specifies the data elements and potential data values represented in the EHR, claims data files, the medical record abstraction tool, and the patient survey. In parallel, a measure-specific medical record abstraction module is under development. Once complete, the quality measure specifications and measure-specific modules will be combined to form the medical record review tool.

Preliminary Impact and Findings: Publicly available findings will be made available closer to the end of the project.

Selected Outputs

None Available.

Grantee’s Most Recent Self-Reported Quarterly Status: The project is on track across 65 to 80 percent of its milestones. There were initial delays in identifying patients, but that issue has been resolved and is now on track. Patient surveys were expected to occur in January 2009, and the medical record review process was scheduled for June 2009. The shift in timeline allows additional patient data to be accrued by the health information exchange (HIE) and for MHQP to complete the quality measure specification process which is the overall basis for the evaluation. The project continued to conserve funds to ensure sufficient monies were available to move forward once the patient identification and HIE implementation components were in place. Full use of the budget is planned, and completion of the project is expected.

Milestones: Progress is on track in some respects but not others.

Budget: Significantly under spent, more than 20 percent.