Health Information Technology in Ambulatory Care Settings: Effects on Quality and Disparities

**Principal Investigator:** Miller, Amalia, Ph.D.

**Organization:** RAND Corporation

**Mechanism:** PAR: HS08-269: Exploratory and Developmental Grant to Improve Health Care Quality Through Health Information Technology (IT) (R21)

**Grant Number:** R21 HS 021301

**Project Period:** September 2012 – August 2014

**AHRQ Funding Amount:** $290,456

**Summary:** Considerable resources are being devoted to promoting the diffusion of information technology (IT) in health care. However, there is limited empirical evidence about the effects of health IT on health care quality and potential differences in impact across racial and ethnic groups. Ambulatory settings, where the majority of health care is provided, are a current target of Federal policies incentivizing health IT adoption. Yet evidence of health IT’s impact on ambulatory settings is scarce.

This project will develop and implement a large-scale, multi-state, multi-year approach to measuring the impact of health IT on the quality and variability of care in ambulatory settings. The project team is developing a set of time-varying measures of local area health IT adoption that includes ambulatory care providers, hospitals, and health systems. The project explores associations between the developed health IT measures and ambulatory care quality. These comparisons will include an analysis of racial and ethnic disparities. The primary data source will be the Healthcare Information and Management Systems Society (HIMSS) Analytics™ Database.

**Specific Aims:**

- Develop longitudinal measures of local area health IT that have the potential to affect ambulatory care quality. *(Ongoing)*
- Estimate the effects of health IT on the quality of ambulatory care. *(Upcoming)*
- Estimate the effects of health IT on racial and ethnic disparities in ambulatory care quality. *(Upcoming)*

**2012 Activities:** Dr. Miller has assembled a project team and hired a research assistant to conduct the programming tasks. The project experienced some administrative delays in the first quarter, but Dr. Miller anticipates that the project will regain the original timeline in early 2013. As last self-reported in the AHRQ Research Reporting System, project progress and activities are mostly on track, though project budget funds are significantly underspent due to the delay.

**Preliminary Impact and Findings:** This project has no findings to date.

**Target Population:** Racial or Ethnic Minorities*: African American, Hispanic

**Strategic Goal:** Develop and disseminate health IT evidence and evidence-based tools to support patient-centered care, the coordination of care across transitions in care settings, and the use of electronic
exchange of health information to improve quality of care.

**Business Goal:** Knowledge Creation

*This target population is one of AHRQ’s priority populations.*