

## Measuring and Improving Ambulatory Patient Safety with an Electronic Dashboard

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<b>Organization:</b>	University of California, San Francisco
<b>Mechanism:</b>	PAR: HS08-269: Exploratory and Developmental Grant to Improve Health Care Quality through Health Information Technology (IT) (R21)
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<b>Project Period:</b>	September 2012 – September 2014
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**Summary:** Inadequate patient safety is a major public health challenge. Patient safety problems, such as adverse drug events, monitoring failures, and lack of followup on abnormal tests occur commonly in outpatient settings. In safety-net health systems where patients experience unique barriers to health care and where health information technology (IT) infrastructure may be less robust, there is a particular need for innovative ways to detect and mitigate safety risks. Because of fragmentation of care in ambulatory health systems, approaches to patient safety are more likely to be effective if problems are detected across the population of a patient-centered medical home (PCMH) instead of focusing on individuals attending outpatient visits. The growth of the PCMH movement provides an opportunity to move beyond visit-based care to integrate ambulatory patient safety surveillance as part of panel management. New health IT has the potential to address these needs.

The overall goal of this project is to identify and mitigate patient safety risks in outpatient settings using health IT across safety-net health care systems. The research team is developing and pilot testing an ambulatory-focused patient safety dashboard that synthesizes data from an electronic health record and administrative databases. The dashboard allows panel managers and clinicians to detect safety problems more efficiently. This tool will also inform potential health system process changes by detecting risk patterns across patient populations.

### Specific Aims:

- Develop an ambulatory safety electronic dashboard (visual summary of safety measures) for use in primary care settings. **(Ongoing)**
- Conduct a pilot study to assess the feasibility of incorporating use of the dashboard in a primary care setting. **(Upcoming)**

**2012 Activities:** Dr. Sarkar has established a clinician advisory board that will review the design and protocols embedded in the dashboard. The project team has engaged additional stakeholders including front-line staff (medical assistants, nurses, and physicians) and other ambulatory care leaders. Dr. Sarkar and her team have made significant progress in establishing key safety metrics across high-priority safety problems including anti-coagulation monitoring, abnormal colorectal cancer screening, and heart failure admission followup. For anti-coagulation monitoring, the project team has documented the current processes used in the study clinic and determined that a new patient registry is a necessary first step. For abnormal colorectal cancer screening, the team has completed the registry and clinic workflow mapping.

In addition, the project team plans to use stakeholder input to develop a second metric for surveillance following colon cancer treatment. The team is working with cardiology and primary care leaders to determine an appropriate metric for heart failure admission followup.

As last self-reported in the AHRQ Research Reporting System, progress is mostly on track and project budget funds are significantly underspent due to an administrative delay in the project start. Dr. Sarkar anticipates that spending will be on target in the next quarter, once the administrative issues have been resolved.

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

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**Target Population:** Cancer, Congestive Heart Failure, Low Literacy, Medicaid, Medicare, Safety Net, Uninsured, Racial or Ethnic Minorities\*

**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

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