

<b>Project Title:</b>	Medication Safety in Primary Care Practice—Translating Research into Practice
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<b>Organization:</b>	Medical University of South Carolina
<b>Mechanism:</b>	RFA: HS07-006: Ambulatory Safety and Quality Program: Improving Quality through Clinician Use of Health IT (IQHIT)
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<b>Project Period:</b>	09/07 – 09/10
<b>AHRQ Funding Amount:</b>	\$1,183,549
<b>Summary Status as of:</b>	December 2008

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**Strategic Goal:** Develop and disseminate health IT evidence and evidence-based tools to improve the quality and safety of medication management via the integration and utilization of medication management systems and technologies.

**Business Goal:** Implementation and Use

**Summary:** This project was initiated in September 2007 and has completed the first third of the grant period. The Practice Partner Research Network (PPRNet), a practice-based research network among primary health care providers practicing in 38 States who use a common electronic medical record (EMR), has developed a quality improvement model for successfully translating research into primary care practice termed the Practice Partner Research Network—Translating Research into Practice (PPRNet-TRIP). The purpose of this project is to conduct a demonstration project among 20 PPRNet practices. The project will develop a set of medication safety measures relevant for primary care, incorporate these measures in practice performance reports sent quarterly to participating practices, and assess the impact of PPRNet-TRIP on the incidence of these errors. The project is 3 years in duration. During the first 9 months, a preliminary set of medication safety indicators developed by the research team were refined, using a consensus development process among the participating practices. Programs were developed to add these medication safety measures to the quarterly PPRNet practice reports.

A 2-year intervention is underway, including the development and dissemination of performance reports, network meetings, and practice site visits, to help practices systematize their use of the medication safety clinical decision support features in their electronic medical record (EMR) system, McKesson Practice Partner (Version 9, Seattle, WA). These features include warnings for drug allergies, drug-drug and drug-disease interactions, incorrect dosages, and drug ineffectiveness; and prompts for therapeutic monitoring to prevent adverse drug events. After 2 years, the impact of the intervention on the incidence of medication errors will be assessed. A mixed-method process evaluation will also be conducted to assess the project. The findings will then be disseminated to other PPRNet practices and more broadly through presentations and publications. The final performance report will be prepared in the tenth month of year three of the project, and these data will serve as the final point for assessment of the project's effectiveness. Analyses and manuscript preparation will be done during the final 3 months of the project, and a wrap-up network meeting will be held to disseminate study results.

### Specific Aims

- Develop a set of PPRNet medication safety indicators based on literature, refined to reflect cumulative expertise of members. **(Achieved)**

- Incorporate PPRNet medication safety indicators in quarterly practice reports distributed to 20 participating practices. **(Ongoing)**
- Assess the impact of the PPRNet-TRIP quality improvement (QI) model on medication safety indicators in participating practices. **(Ongoing)**

**2008 Activities:** The project continues to assess the impact of the PPRNet-TRIP QI model on medication safety indicators and conducted the first practice site visit in September 2008; all site visits will be completed by March 2009. The development of the set of PPRNet medication safety indicators is complete, and indicators have been incorporated in quarterly practice reports but will continue to make minor modifications as the project progresses.

**Preliminary Impact and Findings:** The initial key finding was the relatively high baseline performance on the variety of medication safety indicators included in the reports. The second key finding was the enthusiasm for the project demonstrated by participants at the September 5, 2008, network meeting and the broad set of improvement approaches they developed. Site visits were completed at 13 practices. Project staff noticed that practices were generally enthusiastic about the study. All made improvement plans, largely centered around developing better systems for assuring the completeness of medication lists, using reports to identify patients needing specific follow-up and using EMR medication safety tools more systematically.

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### **Selected Outputs**

The project presented on the measure set and baseline performance at the North American Primary Care Research Group Meeting in San Juan, Puerto Rico, in November 2008.

Measure Outcomes and Medication Safety Reports.

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**Grantee's Most Recent Self-Reported Quarterly Status:** The project is meeting 100 percent of its milestones; and is on time on all tasks.

**Milestones:** Progress is completely on track.

**Budget:** Spending is roughly on target.