

Synthesizing Lessons Learned Using Health Information Technology

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Organization:	Medical University of South Carolina
Mechanism:	PAR: HS08-268: Small Research Grant to Improve Health Care Quality through Health Information Technology (IT) (R03)
Grant Number:	R03 HS 018830
Project Period:	May 2010– April 2012
AHRQ Funding Amount:	\$99,861
Summary Status as of:	December 2010

Target Population: Not Applicable

Summary: Over the past decade, the Practice Partner Research Network (PPRNet) has established a theoretically-informed framework for translating research into practice (TRIP) in small- to medium- sized primary care practices that use the Practice Partner® electronic medical record (EMR). The PPRNet-TRIP Quality Improvement (QI) Model has three components: an intervention model, an improvement model, and a practice development model that assists practices with implementation of QI measures.

This project is conducting an evaluation of the mixed-methods data and lessons learned from a decade of PPRNet-TRIP research. The experience of PPRNet research participants and researchers will enhance understanding of the PPRNet-TRIP components and how they can improve primary care quality. The cross-case analyses conducted through this research will generate important themes, provide new insights, and generate new hypotheses about factors that improve the quality of care through the use of EMRs.

Each project is being reviewed individually for new interpretations and discovery of concepts not previously identified. All source data for each project will be embedded into NVivo 8.0 (qualitative data analysis software) for analyses. The full set of data for each project will be read by Dr. Nemeth using each whole document or component, then re-read, and coded by Dr. Nemeth.

Using the new insights developed through the secondary analysis across all of the studies, a semi-structured interview guide will be developed in collaboration with the PPRNet research team and the expert advisory panel to examine the perspectives of practice participants who have been engaged in previous PPRNet research. This interview guide will be cognitively pre-tested with a small sample of practice participants to ensure that the meanings of the questions are understood consistently, and that participants can articulate what the questions mean. Participants for the interviews on sustainability, maintenance, and team development will be recruited from PPRNet practices that have participated in past studies.

Finally, by identifying the patterns transcending the individual projects, the project team will refine and validate the PPRNet-TRIP QI model and its three components: intervention, improvement, and practice development. Using the combined observation data from practice site visits, group and individual interviews with practice participants, interactions of practice liaisons at best-practice network meetings, and ongoing correspondence in conjunction with quantitative practice performance data on the specific

measures related to each particular study, this project will identify strategies implemented and the barriers and facilitators of QI efforts by practices using EMRs. The secondary analyses of the primary findings in a context separate from the individual study, using “immersion and crystallization,” will allow new interpretations and learning about how the research team and the primary care practices within the research network have evolved to improve quality while implementing health information technology.

Specific Aims:

- Complete a mixed-methods secondary analysis to synthesize findings related to improving quality using health information technology in primary care across seven nationally-funded PPRNet initiatives. **(Ongoing)**
- Examine current perspectives of PPRNet-TRIP study practice participants related to developing and sustaining QI efforts and team development for an increasingly active health care delivery role through robust EMR implementation. **(Ongoing)**
- Integrate findings from PPRNet’s previous studies with the current perspectives of practice representatives to refine the overarching theory-based “PPRNet-TRIP QI Model.” **(Ongoing)**

2010 Activities: The primary focus of this year was the first aim, which will inform the second and third aims, listed above. Mixed-methods data from three of the projects were reviewed during this period, including Colorectal Cancer Screening in Primary Care; Implementation and Evaluation of Electronic Standing Orders; and Medication Safety-Translating Research into Practice. In the review of these data, concepts were clarified and will be compared to the other studies. Data were extracted from a variety of sources including e-mail, meeting notes, site visit evaluations, focus groups, and interviews for analyses within the NVivo database.

As these three studies were recently completed during the reporting period, the primary qualitative analyses had fresh insight towards “newer concepts” that were not part of the original PPRNet models. Manuscripts pertaining to these most recent studies were revised, refined, clarified, and submitted for publication. Ongoing use of the NVivo database will be used to complete the secondary analyses of the seven studies. Preliminary revision of conceptual framework was initiated and will be tested for validity.

Grantee’s Most Recent Self-Reported Quarterly Status (as of December 2010): This project is in the start-up phase and is meeting its aims. Spending is roughly on target.

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

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: Synthesis and Dissemination