

Project Title:	Implementation and Evaluation of Standing Orders Using Health Information Technology
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Organization:	Medical University of South Carolina
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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: Implementation and Use

Summary: A standing order (SO) in primary care practice authorizes nurses and other staff to carry out a medical order (test, vaccination, etc.) according to a practice-approved protocol without a provider's exam. Previous research shows SOs are effective for immunizations within practices not using electronic medical records (EMRs). The potential advantage of reminder systems within EMRs provides an opportunity to improve additional preventive and chronic care measures. The goals of this project are: 1) to incorporate a variety of SOs into daily workflow of eight PPRNet (Practice Partner Research Network) primary care practices using their EMRs (Practice Partner, McKesson, Inc. Seattle, WA); 2) to identify methods and strategies used by practices and barriers/facilitators to the uptake and sustained use of SOs; and 3) to measure change in 15 quality indicators resulting from use of SOs. The study design is a mixed methods quality improvement intervention. Quantitative data measures are calculated from EMR extracts quarterly; qualitative data are obtained through observation in practice site visits, interviews during these visits and network meetings, e-mail, and phone correspondence. The sample includes eight PPRNet primary care practices with 2-15 providers not previously involved in PPRNet interventions or using SOs.

This study uses the PPRNet-TRIP (Translating Research Into Practice) Quality Improvement (QI) models, an intervention model, an improvement model, and practice development model to evaluate the use of standing orders over 18 months. Practices experiment using these models to adopt changes into practice.

The outcome measures for this study include:

- Four screening measures (cholesterol, HDL-cholesterol, mammograms, osteoporosis).
- Six adult immunization measures (influenza, pneumonia, tetanus, zoster).
- Five diabetes measures (HgA1C, urinary microalbumin, HDL, LDL-cholesterol, triglycerides).

The project will develop a compendium of strategies for implementation of electronic SOs as one of its' main deliverables. Barriers to the process of implementing these SOs and success factors that lead to successful facilitation of this effort will be synthesized. This study began during the last half of 2008.

Specific Aims

- Facilitate the initiation of an electronic SO system and its incorporation into daily workflow in eight primary care practices, identifying best methods and strategies. **(Ongoing)**
- Determine barriers and facilitators to the uptake and sustained use of electronic SOs in these practices. **(Ongoing)**

- Document changes in quality-of-care indicators and practice time management resulting from the use of electronic SOs. **(Ongoing)**
- Disseminate findings to the rest of the research network and to publish results in a peer-reviewed medical journal. **(Upcoming)**

2008 Activities: We recruited and enrolled eight primary care practices within PPRNet that had not previously participated in any PPRNet interventions. A network introductory meeting was held in October 2008, in Nashville, TN. PPRNet research team members and consultants met with physician and staff liaisons of each of the participating practices to provide an overview of the study. The first site visits to each practice to introduce the study, observe clinical practice settings and workflow, and assist the practices with planning for project implementation and monitoring. Qualitative and quantitative data were collected to assess the project at baseline and subsequent stages.

Preliminary Impact and Findings: None available.

Selected Outputs

None available.