The AHRQ Centers for Primary Care Practice-Based Research and Learning nurture partnerships, conduct research, and disseminate knowledge with the ultimate aim of improving patient care. By connecting several Practice-Based Research Networks (PBRNs) and other research partners under a single Center it is possible to engage in sophisticated projects in a collaborative environment.

This summary is an invitation to learn about the Center’s research areas of interest, experts, and strategies for enhancing primary care. We hope the information fosters pursuits of shared interest and new quality improvement partnerships, perhaps with you.

PPRNet works with its member practices to improve health care and conduct research important to the entire primary health care system. All PPRNet practices use electronic health records (EHRs), and many long-time members are pioneers in EHR use. PPRNet has three primary aims: 1) to turn EHR data into actionable information for clinicians and practice staff, 2) to test sound primary care quality improvement interventions, and 3) to disseminate interventions that improve primary care.
Partnerships & Collaborations

Reporting to Improve
PPRNet provides its members practice-, provider-, and patient-level performance reports on over 60 evidence-based clinical quality measures (CQM). The reports include network and national benchmarks, which are useful for assessing improvement opportunities. Reports are made available monthly or quarterly and can be customized to meet a practice’s needs (such as the inclusion of Accountable Care Organization or Physician Quality Reporting System measures). PPRNet continually revises the reports to keep them up to date.

- **Practice Performance Reports**
  Practice Level Performance Reports are longitudinal, available monthly, and present graphical trends for each CQM over a two-year period. They employ methodology that can readily assess change and help a practice plan quality improvement projects. [An example report.]

- **Provider and Patient Level Reports (PLR)**
  PLRs are designed to assist with population management and patient outreach. The reports include patient registries, which allow “one-click” identification of patients not meeting the recommendation assessed by the CQM. The registries also identify interventions for improving overall practice performance and highlight intra-practice comparisons between providers, supporting sharing of “best practices” within a practice. [An example report.]

Sentiments from PPRNet Members

“PPRNet provides data that is meaningful and useful in improving care and increasing practice revenues.”

“The monthly reports have brought our practice together, helped our sense of teamwork, and enhanced our sense of accomplishment.”

Training & Education

Using Funded Research as a Training Ground
PPRNet is committed to conducting collaborative research projects with its member practices that present learning opportunities and enable the application of best practices in the community. Participation in studies that examine quality improvement, clinical practice guidelines, and evidence-based medicine is highly encouraged, as these projects serve as a training ground for researchers and result in findings that are disseminated and implemented throughout the PPRNet network.

Reaching Members through Continuing Medical Education
Actively involving members in research and learning is a goal PPRNet leaders strive to meet, but can be challenging given other demands on the providers’ time including patient care, logistics of running a practice, and keeping up with continuing education requirements. To increase engagement, PPRNet reaches out to members through continuing medical education (CME) programs enabling providers to receive credit for
reviewing research and adopting what was learned into practice. These “kernels of knowledge” are made available in easy-to-review, educational, actionable reports.

Continuing education is also made available at the PPRNet annual meetings. Each year, members come together to network, learn, disseminate information, and provide opportunities to participate in research and quality improvement studies. Continuing education credits are offered for activities that take place throughout the conference.

Interactive Learning Opportunities through Webinars

In addition to encouraging participation in research and offering CME opportunities, PPRNet makes available a library of Webinars providing information on topics such as PPRNet reports and how to use them, involving the practice team in learning and quality improvement initiatives, and understanding Patient-Centered Medical Home and Physician Quality Reporting System standards. The PPRNet listserv includes notifications of upcoming Webinars.

“PPRNet investigators host an annual continuing education meeting and monthly Webinars to translate research findings into practice for its member practices.”

Steve Ornstein, MD
PI-PPRNet

Join PPRNet on Facebook, Twitter, and LinkedIn for more updates and information!
Health Information Technology Research to Improve Primary Care:
A common thread of all PPRNet member practices is the use of an EHR. Many long-time PPRNet members pioneered their use in primary care and, because most use a common EHR, it is possible to conduct in-depth and informative EHR-related research studies.

Highlights of PPRNet Research Examining, Utilizing, and Informing EHRs

Learning from Primary Care Meaningful Use Exemplars – Evaluated the Health Information Technology for Economic and Clinical Health (HITECH) Act EHR Meaningful Use incentive program to assure it improves the quality of health care provided to the American public. This is one of the twelve projects funded by AHRQ to inform stage 3 Meaningful Use requirements.

Enhancing Comparative Effectiveness Research Capabilities in PPRNet – Examined the likelihood that patients with one or more chronic illnesses receive the appropriate recommended clinical preventive services at a primary care visit. This cross-sectional study was conducted among 226 practices in 43 States that maintain a clinical database derived from a common EHR.

Reducing Inappropriate Prescribing of Antibiotics by Primary Care Clinicians (ABX-TRIP) – Assessed the impact of an EHR clinical decision support tool to improve antibiotic prescribing for acute respiratory infections.

Implementation and Evaluation of Standing Orders Using Health Information Technology (SOTRIP) – Implemented electronic standing orders into the daily workflow of primary care practices, identified methods and strategies, determined barriers and facilitators, and measured changes in quality indicators resulting from the implementation.

The Impact of Electronic Medical Records on Primary Care Practice – Examined the organizational and economic impact of electronic medical records on community-based, primary care practice. Six PPRNet practices that had converted from paper records to electronic medical records participated.

Information on other research projects done by PPRNet is available on their Web site
Getting to Know PPRNet’s Key Personnel

Steven M. Ornstein, MD
Principal Investigator, PPRNet
“The P30 Federal funding mechanism set up eight Centers for Primary Care Practice-Based Research and Learning. It provides unique opportunities for the PPRNet research team to collaborate on timely proposals and reach out to new partners within the academic, practice, and PBRN community. Highlights of these partnerships include investigating “meaningful use” of electronic health records within PPRNet practices, developing a survey based on the PPRNet model and other implementation science constructs, and evaluating associations related to these constructs and clinical quality measures derived from EHR data.”

Andrea Wessell, PharmD
Co-Investigator, PPRNet
“Working with the members and partners of PPRNet P30 Center for Primary Care Practice-Based Research and Learning provides access to expertise necessary to fulfilling our mission. We are developing new medication safety indicators to be vetted through a modified Delphi process with practice member clinicians, and will be working together at enrolled practices with practice staff, clinicians, and patients to understand their perspectives on reducing adverse drug events.”

Chanita Hughes-Halbert, PhD
Co-Investigator, PPRNet
“Working with the PPRNet Center for Primary Care Practice-Based Research and Learning opportunity enticed new partners to join the PPRNet family. We extended our work with practices, including patients in focus groups for our behavioral and lifestyle study in underserved populations to develop an evidence-based, patient-centered obesity intervention.”
What is next for PPRNet?

Welcoming new members!
PPRNet welcomes new members from across the country! Any independent practice or network of practices with a Stage 2 Meaningful Use certified electronic health record is welcome to [join the network]. More members will mean an expanded base for dissemination and implementation of research findings and more opportunities for collaboration. Member practices report improved practice morale, staff retention, and gratification from working and learning with their colleagues across North America.

Partnering with the Centers for Medicare & Medicaid Services
PPRNet recently received preliminary approval to serve as a [CMS Qualified Clinical Data Registry (QCDR)] for 2015. A QCDR is a new reporting mechanism available for the Physician Quality Reporting System (PQRS). A QCDR will complete the collection and submission of PQRS quality measures data on behalf of Eligible Professionals and serve in additional roles that foster quality improvement in addition to the collection and submission of quality measures data.

Ongoing project identification and proposal submission
PPRNet will work with its members and partners to identify projects matching the team’s expertise and plans to submit several grant applications to AHRQ and other research funders in the coming year.
### Get to Know PPRNet: Project Snapshots

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<tr>
<th>Topic</th>
<th>Lead Personnel</th>
<th>Key Project</th>
<th>Key Publication</th>
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<tbody>
<tr>
<td>Meaningful Use</td>
<td>Steve Ornstein</td>
<td>Learning from Primary Care Meaningful Use Exemplars (09/01/2013 - 05/31/2014)</td>
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## PPRNet: Primary (Care) Practice Research Network

**NURTURING PARTNERSHIPS IN RESEARCH, TRAINING, DISSEMINATION, AND IMPLEMENTATION**

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<td>Medication Safety</td>
<td>Andrea Wessell</td>
<td><strong>Dissemination of the PPRNet Model for Improving Medication Safety in Primary Care</strong>&lt;br&gt;(PPRNet-MS-2 10/01/2010 - 09/30/2013)&lt;br&gt;Reducing medication errors is a fundamental patient safety goal; however, few improvement interventions have been evaluated in primary care settings. This project was designed to test the impact of a multi-method quality improvement intervention on 5 categories of preventable prescribing and monitoring errors in 20 PPRNet practices.</td>
<td>Wessell AM, Ornstein SM, et al. <a href="#">Medication safety in primary care practice: results from a PPRNet quality improvement intervention</a>. Am J Med Qual 2013;28(1):16-24.</td>
</tr>
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<td><em>(09/30/2002 - 09/30/2006)</em></td>
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<td>Primary care practices use different approaches in their quest for high-quality care. Previous work in PPRNet found that improved outcomes are associated with strategies to prioritize performance, involve staff, redesign elements of the delivery system, make patients active partners in guideline adherence, and use tools embedded in the EMR. The aim of this study was to examine variations in the adoption of improvements among sites achieving the best outcomes.</td>
<td></td>
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<tr>
<td>Practice</td>
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<td>This quality improvement model incorporates evidence-based strategies of teamwork, organizational change, patient activation, individualized and population-based medicine, and EMR tools to improve the provision of primary care.</td>
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# PPRNet: Primary (Care) Practice Research Network

## NURTURING PARTNERSHIPS IN RESEARCH, TRAINING, DISSEMINATION, AND IMPLEMENTATION

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| Data Coordination         | Ruth Jenkins  | **Quality of Care for Asthma, Coronary Disease, Diabetes Mellitus and Hypertension in the Practice Partner Research Network**  
The purpose is to describe adherence to a number of quality indicators and clinical outcomes for asthma, diabetes mellitus, hypertension, coronary heart disease, atrial fibrillation, and cerebrovascular disease in the primary care practices of PPRNet. Participating practices send anonymous clinical data on patients to the PPRNet data center monthly. Standard database management and statistical software are used to compile practice reports, including measures of adherence to process and outcome measures for chronic illnesses. | Ornstein SM, Jenkins RG. *Quality of care for chronic illness in primary care: opportunity for improvement in process and outcome measures*. Am J Manag Care 1999;5(5):621-7. |
| Quality Measure Reporting | Steve Ornstein| **Primary and Secondary Prevention of CHD and Stroke (TRIP II Project)**  
(10/01/2000 - 09/30/2003)  
For more information about PPRNet, contact:
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pprnet@musc.edu

For more information about the AHRQ PBRN Resource Center, please visit www.pbrn.ahrq.gov
or email PBRN@ahrq.hhs.gov