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.

The National Center for Pediatric Practice-Based Research and Learning (C-PRL) is a resource for primary care child health research, dissemination, and implementation. The partnership between the Pediatric Research in Office Settings (PROS), the Practice Improvement and Quality Improvement Networks (PIN/QuIIN) of the American Academy of Pediatrics (AAP), and the Pediatric Research Consortium (PeRC) of the Children’s Hospital of Philadelphia (CHOP) creates a unique infrastructure that puts child-based research first and facilitates robust research projects in the areas of Health Information Technology and Meaningful Use. These include work on patient engagement and using data to guide research. C-PRL distinguishes itself in its pursuit to develop and disseminate knowledge directed at improving care among all pediatric patients, infants through teenagers.
Partnerships & Collaborations:

C-PRL strives to enhance established, and create new, working relationships among its members. Each member plays a unique role and engages in autonomous activities. Yet, the consistent, collegial collaborations that C-PRL cultivates provide luster to their research and its impact. PROS serves as the administrative core, PeRC functions as the data analysis core, and PIN/QuIIN provides quality improvement expertise. The PROS Rapid Response Listserv was created to simplify communication between leaders from all three networks, as well as more than 25 PROS practitioners, and to gather feedback on potential participation in research studies.

Some quality improvement jewels of C-PRL-supported partnerships:

- Through the AHRQ grant "Pediatric Patient Engagement as a Criteria for Meaningful Use Stage 3," PeRC member practices assessed the impact on pediatric asthma care of implementing a patient portal designed to educate, collect patient-reported outcomes, and enable parents to report treatment preferences and goals. The study provides real-world guidance for achieving the Centers for Medicare & Medicaid Services Meaningful Use objectives. Policy recommendations based on project findings have been shared with the Office of the National Coordinator for Health Information Technology.

- PROS and PIN/QuIIN work together to disseminate products of the recently completed PROS Teen Driving Study, during which pediatricians promote the development of parent-teen driving contracts at office and clinic visits. QuIIN has collaborated with PROS to submit two grant applications to fund this effort; both QuIIN and PROS staff are highlighted in the application.

- The Comparative Effectiveness Research through Collaborative Electronic Reporting (CER2) study, funded by the Health Resources and Services Administration Maternal and Child Health Bureau and the National Institute of Child Health and Human Development creates a system to employ clinical data in electronic health records (EHRs). By linking pediatric EHR-based research networks in Philadelphia, Boston, Cleveland, and a national family medicine EHR, data of over 1.3 million children will be analyzed to determine long-term side effects of medications such as atypical antipsychotics. PROS and PeRC are developing common metrics and approaches to be applied to ongoing research questions and are developing a governance document that will provide an organizational framework for access to and maintenance of a database of EHRs for children across the U.S. For more information, see Comparative Effectiveness Research Using the Electronic Medical Record: an Emerging Area of Investigation in Pediatric Primary Care, a joint PROS/PeRC article.
Training & Education:

All member networks of C-PRL are dedicated to providing continuing education opportunities for their member networks. Ensuring all C-PRL members have access to information and guidance makes the Center stronger and better able to care for its patients.

- PROS makes a compilation of training materials available to its member practitioners, as well as the general public, on its Web site. The list is continually updated with materials from organizations including the National Institutes of Health, the University of California, and the Clinical and Translational Science Award program and includes topics such as methods for behavioral interventions and disparities.
- PROS provides in-person training sessions on topics such as practice-based research and research methodology.
- CHOP maintains a network of data to create Maintenance of Certification programs that directly contribute to the education of PeRC members. For more information, access Maintenance of Certification Part 4 Credit and recruitment for practice-based research, an article published in Pediatrics by Dr. Wasserman and others.
- PROS developed a program to help pediatricians be more effective leaders of research in their practices and is committed to helping PeRC implement a similar strategy.

Using Health Information Technology Data to Guide Research
- Electronic Pediatric Research in Office Systems (ePROS)

C-PRL is committed to developing and disseminating evidence-based tools in the pediatric office setting through the use of integrated data and knowledge management. ePROS (electronic Pediatric Research in Office Systems) is a subnetwork of PROS that extracts data from multiple vendor EHRs. The data is then de-identified, standardized, and aggregated into a database that links the health information of multiple clinical sites. An ePROS partner, the DARTNet Institute, developed the technology to bring together the data from multiple sources, giving researchers access to a diverse set of patient information. The dataset is diversified further when ePROS data records are combined with those from PeRC, which has a large minority patient population drawn from in and around Philadelphia. Using patient data from multiple pediatric practices, ePROS can conduct observational and interventional comparative effectiveness studies. ePROS researchers work together to generate research questions, design study materials, obtain funding, collect and analyze data, and publish results on studies such as:

- Prevalence of Obesity and Associated Diagnosis
- Prevalence of Psychotropic Medication Prescription and Associated Diagnosis
- Improving the Medication Management of Patients with Attention-deficit Hyperactivity Disorder
- Comparative Effectiveness Research through Collaborative Electronic Reporting (CER²) – Linking ePROS and PeRC to pediatric EHR-based data on over 1.3 million children.
You’re Invited

**Pediatric Practices with EHRs are invited to join ePROS**

EHR-based practices throughout the nation are invited to join ePROS. Joining is easy, and burden on your practice is minimal. Benefits include the opportunity to participate in cutting-edge research that will assist in improving child health, receiving point-of-care prompts and reports, having access to individualized patient education materials, and much more!

“With additional members, ePROS will be in a unique position to represent the care delivered to a substantial proportion of children seen in U.S. pediatric practices and clinics.”

*Dr. Richard “Mort” Wasserman, PROS Director*

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**Getting to Know C-PRL: Key Personnel**

**Richard “Mort” Wasserman, MD**  
C-PRL, PROS Director

“PROS and ePROS are a part of the American Academy of Pediatrics, a non-academic member organization. Being a part of a member organization gives the C-PRL Center a national caché and the ability to reach out to a trusted partner, but limits its access to researchers, faculty, and fellows whose job it is to generate new research questions and implement studies. The collaboration between AAP and the C-PRL member networks expands the wealth of expertise for all involved and affords the opportunity to apply for research projects we would not be able to alone. The partnership has been very successful and makes me think about who else we could reach out to.”

**Alex Fiks MD, MSCE**  
Associate Medical Director, PeRC; Associate Director, PROS

“PeRC has wonderful access to local resources through CHOP, but creating nationally generalizable information is a limitation. The partnership with PROS and the AAP allows us to explore research questions we have identified as important, but haven’t been able to answer due to small sample sizes. The partnership on projects such as Comparative Effectiveness Research through Collaborative Electronic Reporting (CER2) and ePROS has been very successful.”

**Jim Massey RN, BSN, MBA**  
Network Director, PeRC

“As the director of a member network, it has been very rewarding to work with C-PRL. The opportunities to collaborate on and plan for future research endeavors with the other network leaders is exciting and challenging. We will continue to leverage the resources of all the partners and build on what we have learned so far to plan for future projects.”
What is next for C-PRL?

The National Center for Pediatric Practice Based Research and Learning (C-PRL) plans to continue and expand many of its current projects, as well as collaborate on new opportunities. PROS and PeRC are working together to finalize a governance document for the Comparative Effectiveness Research through Collaborative Electronic Reporting (CER2) project, allowing it to expand effectively as more organizations join. They will also publicize the CER2 resource to the pediatric community in hopes that more networks will join in order to share and analyze data.

PROS is exploring relationships with vendors who are developing EHRs specifically for pediatric practices—an effort that will be a boost to both the ePROS (electronic Pediatric Research in Office Systems) and CER2 projects.

Lastly, the C-PRL members have applied jointly for several large R01 grants related to antibiotic use, HPV vaccination, and the use of text messaging to improve vaccine delivery. Upcoming projects on improving vaccine delivery will build upon earlier work that identified innovative decision support methods to increase the initiation and completion of the series of shots needed to protect against HPV. Drs. Alex Fiks, Mort Wasserman, and Mr. Jim Massey and their team received first place in the AHRQ PBRN Vaccine Manuscript Contest for their work in this area in 2013. Here, Mr. Massey accepts the award on behalf of his team at the North America Primary Care Research Group – PBRN Conference.

A Webinar on the HPV Vaccine project is featured on the PBRN Resource Center Web site.
## Get to Know the Members of C-PRL

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<th>Who, Where, When</th>
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<td><strong>AAP Quality Improvement Innovation Networks (QuIN)/Practice Improvement Network (PIN)</strong>&lt;br&gt;www.QuIN.aap.org</td>
<td>QuIN aims to improve the quality and value of care and outcomes for children and families by providing the infrastructure for pediatric improvement networks Value in Inpatient Pediatrics (VIP) and the Practice Improvement Network (PIN (outpatient)).</td>
<td>Kairys S, Wasserman R, Pace W. <em>Practice-based quality improvement/research networks: Full speed forward.</em> Academic pediatrics 2013;13(6):S12-3.</td>
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<td><strong>Pediatric Research Consortium of the Children’s Hospital of Philadelphia (PeRC)</strong>&lt;br&gt;www.research.chop.edu/programs/perc</td>
<td>PeRC works to improve the safety, quality, and health outcomes of pediatric care through clinical research. PeRC has been able to take advantage of Children’s Hospital’s expanded organizational and technological infrastructure in the ambulatory network of pediatric and adolescent practices.</td>
<td>Visit the PeRC Web site for a full list of publications, including:&lt;br&gt;Power TJ, Blum NJ, Guevara JP, Jones HA, Leslie LK. <em>Coordinating mental health care across primary care and schools: ADHD as a case example.</em> Advances in school mental health promotion 2013;6(1):68-80.</td>
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**Director: Steven Kairys**<br>391 Clinicians in 335 clinics<br>Location: National, Home State Illinois<br>Founded in 2005

**Director: James Massey**<br>Medical Director: Louis Bell<br>Co-Medical Director: Alex Fiks<br>201 Clinicians in 31 Clinics<br>Location: New Jersey, Pennsylvania<br>Founded in 2002
### NURTURING PARTNERSHIPS IN RESEARCH, TRAINING, DISSEMINATION, AND IMPLEMENTATION

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<th>Who, Where, When</th>
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<tr>
<td>Pediatric Research in Office Settings (PROS)</td>
<td>Improve the health of children and enhance primary care practice by conducting and fostering national collaborative practice-based research. PROS is the largest pediatric primary care research network in the Nation representing all 50 States, the District of Columbia, Puerto Rico, and Canada.</td>
<td>Visit the PROS Web site for a full list of publications and abstracts, including: Winickoff JP, Nabi-Burza E, Chang Y, Regan S, Drehmer J, Finch S, Wasserman M, Ossip D, Hipple B, Woo H, Klein J, Rigotti N. Sustainability of a Parental Tobacco Control Intervention in Pediatric Practice. Pediatrics. [published online October 20, 2014].</td>
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**Director:** Richard Wasserman  
**Associate Director:** Alex Fiks  
**Location:** National, Home State Illinois  
**Founded in 1986**  
**1,795 clinicians in 750 clinics**

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For more information about the National Center for Pediatric Practice Based Research and Learning, contact:  
Richard Wasserman, PROS, C-PRL  
Richard.wasserman@uvm.edu  
802-656-5455

For more information about the AHRQ PBRN Resource Center, please visit [www.pbrn.ahrq.gov](http://www.pbrn.ahrq.gov) or e-mail [PBRN@ahrq.hhs.gov](mailto:PBRN@ahrq.hhs.gov)