The Wisconsin Research and Education Network (WREN) is a statewide practice-based research network of over 100 primary care physicians and academic researchers who conduct translational research projects in family practices across Wisconsin.
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Mission Statement

The mission of the Wisconsin Research and Education Network is to improve health outcomes for the people of Wisconsin through education, and through promoting and conducting primary care research in partnership with primary care clinicians and the communities they serve.

WREN Staff

Paul Smith, MD, WREN Director
Michael Grasmick, PhD, Network Coordinator
Veronica Harper, MA, Research Program Assistant
Peggy O’Halloran, MPH, Regional Research Coordinator
Mark Remiker, MA, Regional Research Coordinator
Kate Judge, MSSW, Regional Research Coordinator

WREN Membership

WREN membership is available to primary care clinicians and academic researchers in Wisconsin. WREN confirms membership annually each summer and offers a choice of becoming a dues-paying general member, an affiliate member, or a student member. Currently WREN membership includes 48 general members, and 84 affiliate members, and 3 student members (135 total).

WREN Survey Group

WREN and the Wisconsin Academy of Family Physicians (WAFP) partnered to recruit a group of primary care clinicians to participate in a series of brief electronic surveys that address policy issues and research questions. Survey group members are required to complete at least 80% of surveys on both state legislative issues and important research questions affecting primary care. Surveys will be sent by email 12 times or less over a year and will take 5 to 10 minutes to complete.

WREN and WAFP recruited 102 clinicians to participate in this group in 2010. The first survey on chronic kidney disease care was deployed in September with 69% of survey group members responding. A second survey, deployed in November had an 89% response rate. Looking ahead, WREN and WAFP will focus on recruitment efforts to increase the size of the survey group to at least 200 participants. At the conclusion of the year, WREN plans to evaluate the effectiveness of the survey group in meeting its goals, and assess areas for improving participation for members moving forward.

WREN Infrastructure and Services

The Wisconsin Research and Education Network (WREN) is a statewide practice-based research network of over 130 primary care clinicians and academic researchers who conduct translational research projects in primary care practices across Wisconsin. WREN provides investigators with an established, efficiently run primary care research infrastructure that includes:

- A “real world” laboratory for conducting research that answers questions important to primary care.
- Research support services like grant proposal review and preparation, IRB consultation, subject recruitment, data collection, data analysis, and manuscript consultation.
- Network facilitation of statewide collaborations between academic researchers, primary care clinicians, administrators, and organizations.
WREN Clinics

The WREN network consists of over 40 clinics in 38 communities. One key feature of the network is that WREN maintains full contractual agreements with six medical organizations. These “Full Support Practices” are assigned a WREN Regional Research Coordinator to support implementation of WREN projects at the practice, and receive $10,000 per year to offset the cost of clinic staff time dedicated to WREN projects. WREN works with the practice to identify a Practice Liaison, an individual at the practice to serve as a conduit between clinic staff and researchers.

2010 Full Support Practices:

- Milwaukee Health Services, Inc. (Milwaukee, WI)
  - Isaac Coggs Heritage Health Center
  - MLK Heritage Health Center
- Aurora Health Care (Milwaukee, WI)
  - Aurora Sinai Family Care Center
  - St. Luke's Family Practice Center
  - Aurora Wiselives Center
- Mile Bluff Clinic (Mauston, WI)
- Medical Associates (Dubuque, IA)
- Lake Tomah Clinic (Tomah, WI)
- Richland Medical Center (Richland Center, WI)

Projects

AZMATICS: AzithroMycin/Asthma: Trial in Community Settings
This project is funded by Pfizer and the Joint Grants Awards Program of the American Academy of Family Physicians (AAFP)/AAFP Foundation. David Hahn, MD, is the principal investigator (PI) and Michael Grasmick, PhD, is the co-PI. This project is a pilot double-blind randomized controlled trial of the treatment of adult asthma with azithromycin. Patients could elect to receive a randomized bottle of placebo or control (referred to as the “randomized” group) or they could elect to receive the antibiotic without taking the chance of getting placebo (referred to as the “open arm” group). This project has been completed, and manuscript production has started.

Quality of Life and Depression as Determinants of Treatment Adherence in Hypertensive Patients
This project is funded by the American Heart Association with Leonelo Bautista, MD, MPH, DrPH, in the University of Wisconsin Department of Population Health serving as principal investigator. WREN recruited 220 patients with newly diagnosed hypertension who were being started on antihypertensive medications. We hypothesized that patients who stop taking their medication also suffer with depression. Patients completed a series of self-administered questionnaires about health-related quality of life and depression over a one-year period of time. This project was completed in June, and a manuscript has been submitted for publication.
A Human Factors Intervention to Reduce Risk In Primary Care Of The Elderly

Building on the findings of a previous WREN study, this project will evaluate an intervention to improve care of the elderly in primary care practices. This three-year project is funded by the Agency for Healthcare Research and Quality with Bentzi Karsh, PhD, in the UW Department of Industrial and Systems Engineering serving as principal investigator. This project will involve nursing staff calling patients one week before a clinic visit to clarify the agenda for the visit, gather all information needed to address the agenda issues, and brief the care team the day of the visit. Preliminary clinic observations and intervention planning are complete. Intervention activities will begin summer 2011.

Assessing Risk in Ambulatory Medication Use after Hospital Transitions

This project, funded by the National Institutes of Health, evaluated three Wisconsin practices to assess and identify hazards during the transition from hospital care to ambulatory care. Tosha Wetterneck, MD, was principal investigator. Data collection was completed in 2010.

Improving and Expanding Primary Care Treatment of Chronic Kidney Disease

This one-year pilot project was funded by the UW Institute of Clinical and Translational Research (ICTR) with David Feldstein, MD, in the UW Department of Medicine as principal investigator. This study used needs assessment findings to develop a web-based patient management tool to track the treatment of patients with Stage 3 chronic kidney disease. The electronic tool was then used in clinics to test its feasibility in an everyday primary care setting. Twenty physicians throughout the state were recruited to test the tool over a six-month intervention period. This project is complete, and WREN continues its partnership with Dr. Feldstein on new projects to improve care of chronic kidney disease in primary care.

Establishing Benchmarks for the Medical Office Survey on Patient Safety

This project was funded by the Agency for Healthcare Research and Quality (AHRQ). Lyle J. Fagnon, MD, from the Oregon Rural Practice-based Research Network served as principal investigator. Paul Smith, MD, was the local PI. This project was a collaboration of 12 practice-based research networks and 300 practices to establish a national benchmarking database for a survey on the patient safety environment of primary care practices. WREN conducted the survey in 47 pediatric, internal medicine, and family medicine practices. Results have been shared with all 47 practices, and a manuscript describing Wisconsin results is in production.

Improving Care for Patients with Chronic Kidney Disease: Helping Practices Implement CKD Guidelines

This project is funded by the AHRQ. Jim Mold, MD, is principal investigator, and Paul Smith, MD, is local PI. The purpose of this project is to implement and test ways to help primary care practices who are part of WREN to improve implementation of the current chronic kidney disease (CKD) guidelines developed by the National Kidney Foundation. We will test the use of practice facilitators and local learning collaboratives to determine how well these practice interventions improve uptake of and adherence to CKD guidelines. WREN is one of four practice-based research networks that will take part nationwide. Eight Wisconsin practices will take part in the first phase of the project, and an additional 16 WREN practices will take part in the second phase.

Acute Pain Dental and Medical Treatment Survey, A PEARL and WREN Study

This project is a collaboration with New York University’s Practitioners Engaged in Applied Research and Learning (PEARL). We will survey dentists and physicians about attitudes and practices related to treatment of acute pain. Collaborators designed and tested two surveys about acute pain care in 2010, the first of which will be sent to clinicians in February 2011.

Interaction Analysis as a Novel Approach to Understanding Patient Trust in Physician and Patient Outcomes

This project is funded by a training grant awarded to principal investigator, Enid Montague, PhD. The factors that influence the
development of a trusting relationship between a physician and his or her patients will be evaluated through analysis of video recordings of doctor-patient interactions and a post-visit patient interview. Ten clinicians and 100 patients will be recruited to participate in this study.

Evaluating **HeartDecision**: A Computer Decision Support Tool for Primary Care

The UW General Internal Medicine Department will fund Jon Keevil, MD, to investigate **HeartDecision**, a computer-based decision support tool for health care providers and their patients to use to assess and manage the risk of cardiovascular events. WREN will help to recruit clinicians who will help to define the barriers and enablers to using **HeartDecision**.

**Primary care clinician comfort in caring for patients with chronic kidney disease (CKD)**

CKD guidelines are not as well recognized and used as other guidelines, such as those used to care for diabetic patients. David Feldstein, MD, developed a survey to measure the comfort level of primary clinicians have in caring for their patients with CKD. WREN worked with Dr. Feldstein to conduct a survey validation study with members of the WREN and WAFP Primary Care Survey Group participating. Project data was completed in November, and data analysis is in progress.

### Strategic Planning

In 2009, WREN leaders developed a strategic plan that identified organization goals for 2010-2011. Each quarter, WREN conducts a review of the progress made toward meeting strategic plan objectives outlined for five major initiatives:

- **Continue to increase the number of research projects and capacity to do research**
- **Sustain current and develop new collaborations**
- **Increase the number of new clinician members**
- **Increase dissemination of research findings**
- **Measure the effectiveness of activities**

Highlights of progress made toward these goals in 2010 included the receipt of funding for several new projects, many of which were the result of a focused effort on collaboration with other organizations, including practice-based research networks in other states and UW researchers. Also, WREN developed a new process for member registration in 2010 that resulted in an increase in WREN general membership this year over 2009 numbers. WREN will continue to work toward all objectives outlined in the strategic plan throughout 2011.

### Annual Meeting

Over 70 family practice clinicians, researchers, and students attended WREN’s Primary Care Research and Quality Improvement Forum on September 16 & 17, 2010. Forum topics included biofilms and microbial infections, the common cold, and motivational interviewing. WREN projects highlighted at the forum were an overview of WREN’s collaboration with PEARL, a dental practice-based research network, to assess acute pain treatment; findings on primary care workflow gathered from two observational studies conducted by researchers in the UW Department of Engineering in partnership with WREN; a presentation of results from the quality of life and hypertension medication adherence study which was completed this year; and a poster presentation that summarized findings of the WREN project on patient safety culture.

Past WREN Directors, John Beasley, Michael Fleming, and Jon Temte and outgoing steering committee chair Dennis Baumgardner, were recognized for their work to build WREN and their continued support of the network and its mission. Each received a commendation from Governor Jim Doyle, and a watercolor print of a wren, the original WREN logo.

Plans to expand the reach of the next annual forum were made in late 2010. WREN will collaborate with other organizations who share the goal of providing a forum for primary care practitioners and researchers to share and learn about Wisconsin research and quality improvement efforts in primary care.
Publications


Presentations


Smith PD. WREN/WAFP Primary Care Survey Group. UW Department of Family Medicine 40th Anniversary Celebration. July 2010. Madison, WI.


Communication

In 2010, WREN published three issues of its newsletter, the WREN Review, and two issues of the Liaison Quarterly, a new publication targeted toward Practice Liaisons at each WREN full support practice. WREN developed membership and promotional videos, posting this new information on its website, www.wren.wisc.edu.

Budget

WREN had a total operating budget of $429,681 in 2010. The portfolio of funding sources was diverse with 81% of funding from ICTR-CAP (MERK and NIH) and the Department of Family Medicine, and 19% from other funding sources, of which 15% was from other federal funding sources.

Fund raising

In 2010, WREN received $1700 in private donations in response to its annual appeal that was added to the University of Wisconsin Foundation WREN Endowment fund, bringing the fund total to $42,563.59.

In addition to gifts to its endowment fund, donors supported three medical students with research interests in primary care to attend the Wisconsin Primary Care Research & Quality Improvement Forum in September. WREN secured sponsorship support from Metastar for the annual research forum, which helped to offset the costs of the event.

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<tr>
<th>FY 2009-10 Funding Sources</th>
<th>Funding Amount</th>
<th>Percent Total</th>
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<tr>
<td>ICTR-CAP (MERK)</td>
<td>$282,225</td>
<td>66%</td>
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<tr>
<td>Dept of Family Medicine</td>
<td>$50,972</td>
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<td>AHRQ (SAFE-C)</td>
<td>$25,622</td>
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<td>American Heart Association</td>
<td>$20,623</td>
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<td>ICTR-CAP (NIH)</td>
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<td>Clinical and Translational Science Award (CTSA), National Center for Research Resources, NIH (Patient Trust Study)</td>
<td>$7,511</td>
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<td>AAFP Foundation (Azmatic)</td>
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<td>PEARL</td>
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<td>WREN Membership Dues</td>
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<td>Fall Forum Registration</td>
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<td>Donations/Gifts</td>
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<td>AAFP Foundation (Health Literacy)</td>
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<td>Waisman Center</td>
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<td>ICTR Pilot (CKD)</td>
<td>$845</td>
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<td>Fall Forum Sponsorship (Metastar)</td>
<td>$500</td>
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<td><strong>Total</strong></td>
<td><strong>$429,681</strong></td>
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WREN Leadership

Advisory Committee

Howard Bailey, MD  
Wisconsin Network for Health Research (WiNHR)

Marc Drezner, MD  
UW Institute for Clinical and Translational Research

Linda McCart  
Department of Health Services

Cheryl McIlquham  
WEA Trust

Kristin McManmon  
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Bruce L. Van Cleave, MD  
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Steve Yale, MD  
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Steering Committee

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Richland Medical Center, Ltd.

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UW Geriatrics and Adult Development

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Medical College of Wisconsin

Greg Simmons  
MetaStar, Inc

Paul Smith, MD  
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