**Mission Statement**
The mission of the Wisconsin Research and Education Network (WREN) 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.

**History**
WREN was originally founded in 1987 by Dr. John Beasley as a collaborative effort between the Wisconsin Academy of Family Physicians (WAFP) and the University of Wisconsin Department of Family Medicine (UWDFM). Originally named the Wisconsin Research Network, WREN was owned and primarily supported by the WAFP. In 2004, WREN ownership was transferred to the UWDFM and the name modified to become the Wisconsin Research and Education Network to emphasize the increasing importance of educating clinicians, patients and society about our research results.

WREN has participated in or supported more than 60 research projects resulting in more than 30 publications. Research topics have included cancer screening, prevention of heart disease, evaluation of dyspepsia, use of office radiography, health literacy, complexity of ambulatory primary care, transition from hospital to ambulatory care, treatment of asthma, diabetes, heart failure, problem drinkers, depression, hypertension and obesity. WREN has had three grants funded by the Agency for Healthcare Research and Quality (AHRQ) and 8 non-federally funded projects in the last 5 years. In the last year, WREN has collaborated with 8 different primary care PBRNs on projects. Over 120 clinicians have participated in WREN projects in the last 4 years.

WREN has collaborated to conduct research with a variety of researchers and organizations including the AHRQ, the UW Center for Quality and Patient Safety, Wisconsin Literacy, the Center for Urban Population Health, St. Marys Hospital, the Wisconsin Department of Health Services, the WellPoint and Dean Foundations.

**Structure:**
WREN presently consists of 13 practices and over 50 individual clinicians in 35 communities, from 21 different healthcare organizations distributed across Wisconsin in an array very similar to the distribution of Wisconsin’s population. WREN operations are managed by a Director, currently Dr. Paul Smith, appointed by the UW Department of Family Medicine chair. The Director has administrative support from a full time network coordinator, half time administrative assistant and half time project manager/technical writer. In 2007, four Research and Education Practice Support Specialists (REPSS) joined WREN to facilitate research and quality improvement projects.

Two committees guide the direction of the organization. The WREN Steering Committee consists of representatives from the University of Wisconsin and Medical College of Wisconsin Departments of Family and Community Medicine and WREN general membership. The Steering Committee establishes overall direction and policy for the organization. WREN also has an Advisory Committee consisting of the WREN director and a group of public members.
charged with advocating for Wisconsin citizens and making recommendations to the Steering Committee. New research projects are chosen with input from WREN members, the UW Department of Family Medicine Research Committee and the Steering Committee.

**Meetings:**
WREN conducts two annual meetings. A research forum held in conjunction with the WAFP annual meeting and sponsored by the WAFP, UWDFM and Medical College of Wisconsin Department of Family and Community Medicine provides a venue for Wisconsin medical students, resident physicians, new and experienced researchers to present their research findings in a supportive, collegial environment. WREN also conducts an annual convocation of clinicians to update WREN members on current and future projects, present preliminary study results and conduct WREN business.

**Current Projects:**

- **Problem Density, Mental Workload and Medical Error in Primary Care Practice**
The project is funded by the Agency for Healthcare Research and Quality (AHRQ) with Dr. Jon Temte serving as principle investigator, Drs. Beth Potter, Paul Smith, and Bentzi Karsh as the co-PIs. This project involved 31 clinicians enrolling 609 patients to investigate the relationship between the number of medical problems per hour (problem density) and likelihood of medical error. This project is wrapping up data collection and is entering the analysis phase.

- **Educating Physicians and Patients in the Value and Use of Body Mass Index to Reduce Overweight and Obesity-Phase 2**
This project is funded by the WellPoint Foundation with Dr. Paul Smith serving as principle investigator and Dr. Leon Radant as co-PI. This project will conduct a one year follow-up survey of Wisconsin family physicians about use and attitudes about Body Mass Index as a tool to diagnosis and manage obesity. The analysis is completed and we are starting manuscript preparation.

- **AZMATICS: AzithroMycin/Asthma: Trial in Community Settings**
This project is funded from several sources including Pfizer and the Joint Grants Awards Program of the American Academy of Family Physicians/AAFP Foundation. Dr. David Hahn is the principle investigator and Michael Grasmick is the co-PI. This project is a pilot double-blind randomized controlled trial of the treatment of adult asthma with azithromycin. This trial is being conducted in collaboration with six other practice-based research networks: National Research Network (NRN), Alberta Family Practice Research Network (AFPRN), Oklahoma Physicians Resource/Research Network (OKPRN), Los Angeles Practice-based Network (LANet), Ambulatory Network for Scholarship and Research (ANSR), and the Research Association of Practices (RAP). This project has currently enrolled over 50 patients

- **Quality Improvement/Practice-Based Research Pilot Project**
This project is lead by Dr. Paul Smith and was internally funded by the University of Wisconsin Department of Family Medicine. We are piloting the feasibility of having dedicated, paid part-time clinical support staff with a paid research specialist facilitator (PEEA) conducting quality improvement activities at two family medicine residency practices. This project has successfully improved diabetes care at both sites. Brian Armdt, MD, a second year family medicine resident received a one year $25,000 grant from the UW Medical Foundation to expand this program to two additional residency sites at the Wingra and Northeast Family Medicine Clinics. These projects are moving into a maintenance phase.
What are Important Health Issues For Low Literate Adults? A Focus Group Evaluation of Health Literacy Issues
This project is funded by the American Academy of Family Physicians Foundation with Dr. Paul Smith serving as the principle investigator. It is being conducted in collaboration with Wisconsin Literacy and three community-based literacy councils in Wisconsin. We have conducted six focus groups of low literate adults exploring how low literacy impacts their health and health care, completed the data analysis and starting manuscript preparation.

Wisconsin Initiative on Promoting Healthy Lifestyles (WIPHL)
This project is funded by a federal grant by the US Substance Abuse and Mental Health Services Administration Center for Substance Abuse Treatment with Dr. Rich Brown serving as principle investigator. WIPHL will enhance delivery of substance abuse screening, intervention, and referral, and treatment services (SBIRT) in 22 practices affiliated with UW Health, Aurora Health Care, Wisconsin Research and Education Network, Wisconsin Primary Healthcare Association, and the Polk County Health Department. WREN REPSS are supporting two clinical sites implementing this project.

Quality of Life and Depression as Determinants of Treatment Adherence in Hypertensive Patients
The project is funded by the American Heart Association with Leonelo Bautista, PhD in the UW Department of Population Health serving as principle investigator. During this project, we will recruit 280 patients with newly diagnosed hypertension being started on antihypertensive medications. Patients will complete a series of self-administered questionnaires about quality of life and depression over a 1 year period of time. Data collection has begun with 36 patients enrolled from eight WREN practices participating in this project.

Proactive Risk Assessment of Primary Care of the Elderly
This one year project is funded by the Agency for Healthcare Quality and Research (AHRQ) with Bentzi Karsh, PhD in the UW Department of Industrial Engineering as principle investigator. This project will place an engineering graduate student in 15 different practices to observe doctor-patient interactions during an office visit for patients over the age of 75. Data collection is almost complete and we are currently conducting follow up physician and patient focus groups.

Assessing Risk in Ambulatory Medication Use after Hospital Transitions
This project is part of a K award for new researcher training and career development for Tosha Wetterneck, MD. Dr. Wetterneck and her research assistant will evaluate 3 practices to assess and identify hazards during the transition from hospital care to ambulatory care. This project has started data collection. The findings will provide pilot data for a future federal grant.

Improving and Expanding Primary Care Treatment of Chronic Kidney Disease
This one year pilot project is funded by the UW Institute of Clinical and Translational Research with David Feldstein, MD in the UW Department of Medicine as principle investigator. This project will develop and test a web-based system to track the treatment of patients with chronic kidney disease. This project was just funded and is in the planning stage.
**Future Directions:**

WREN has been successful in securing funding through participation in the UW Medical School Clinical Translational Science Award (CTSA) federal grant. This has allowed WREN to expand the staff necessary to support translational research projects and dissemination of research results at WREN practices. Dissemination of research results can be blended into quality enhancement projects resulting in improved health care processes and practices. These, in turn, can result in improved patient safety, patient satisfaction and health outcomes. Future network development will include targeted recruiting of additional WREN practices to increase the participation of underserved populations. WREN is currently in negotiations with five practices in the Milwaukee area. Additional WREN support staff will be added as additional grant funding is secured. WREN is interested in new collaborations with researchers and organizations to develop funded quality improvement and research projects.

WREN is one of the oldest and most respected practice-based research networks in the United States. It has an enthusiastic group of practicing clinicians and academic family physicians with the expertise to conduct high quality translation research in “real world” practices across the state of Wisconsin. With recent CTSA infrastructure support from the University of Wisconsin School of Medicine and Public Health and the Wisconsin Academy of Family Physicians, WREN is poised to become an agent of change in how medicine is practiced in Wisconsin and beyond.