WISCONSIN PARTNERSHIP PROGRAM

Outcomes Report
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Strategies for improving nutrition environment identified: Waupaca Eating Smart pilot

**Description:** The Assessing the Nutrition Environment in Wisconsin Communities project examined the strengths and weaknesses of the nutrition environment along with the link to individual eating habits and weight. It also developed, implemented and evaluated a pilot intervention to promote healthy eating by improving the nutrition environment of restaurants and food stores in Waupaca. The nutrition environment is defined as the access to food as well as the availability, pricing, quality and promotion of food.

**Relevance:** More than two-thirds of adults in the United States are overweight or obese, and research increasingly suggests that the nutrition environment influences what individuals eat. Thus, interventions aimed at restaurants and food stores are important tools for obesity prevention.

**Results:** Researchers used the Nutrition Environment Measures Survey and the Survey of the Health of Wisconsin to develop a statewide surveillance system for identifying strategies to improve the state’s nutrition environment in restaurants and grocery and convenience stores. They also used a social marketing and community-based participatory research approach to develop the Waupaca Eating Smart pilot intervention with local stores and restaurants.

The project team found significant differences in the characteristics of the nutrition environment of various types of stores. Supermarkets and grocery stores generally had better availability and overall scores compared with convenience, gas station and other stores. For restaurants, the researchers found significant differences in the characteristics of the nutrition environment depending on the type of restaurant.

In addition, the project team worked with the Wisconsin Restaurant Association and Wisconsin Grocers Association to develop two toolkits: Check Out Healthy and Order Up Healthy. Research indicated high levels of participation, implementation and maintenance among association members as well as improvement of restaurant nutrition environment scores and a modest improvement in customer attitudes and behaviors for some demographic groups.


Wellness plan making strides in Cashton

**Description:** The Cashton Community Wellness Program developed a long-term and sustainable plan for creating convenient and engaging opportunities to combat the negative health impacts of living in a physically isolated region of the state. With the strength of current opportunities in Cashton and the addition of a well-designed plan, the project leaders are prepared to move on to the next phase of programming.

**Relevance:** Cashton, a federally designated health professional shortage area and medically underserved area, is located in Monroe County. Almost 4,000 people live in the Cashton School District, including 1,000 in the village of Cashton. The nearest urban center is La Crosse – 30 miles to the west.

Because of the community’s small size, residents often must travel to La Crosse or elsewhere for employment, shopping, medical and dental care, and other services. Thus, driving can consume a large portion of a resident’s day. Not only is driving a sedentary activity, the time required for traveling detracts from residents’ physical and social activities.

In addition, more than one-third of the school district’s students meet federal poverty criteria, 60 percent of sixth-graders in 2007 failed the Presidential Fitness Challenge and approximately 40 percent of students are considered overweight or at risk of overweight based on body mass index.

**Results:** This small development grant allowed the Community Wellness Committee to take the next step in its efforts to create a healthy community. Building on an existing partnership between the Cashton School District and Scenic Bluffs Health Center, the committee embarked on setting the stage for the future of this rural village.

Academic partner Will Cronin, MPA, of the University of Wisconsin Extension led the committee through a strategic planning process for improving the health and wellness of community members. This included program evaluations and a community needs assessment.

The evaluations showed that wellness programs generally attracted women and identified the need to improve outreach to men and Hispanic residents. Rather than a traditional survey of residents, the committee used a photo-visioning process that allowed Cashton residents to illustrate their health and wellness interests. The photos were displayed at a wellness celebration, and community members were invited to add their comments and suggestions.

The Cashton Community Wellness Program Strategic Plan, which serves as a framework for future programming and grant opportunities, identified four primary issues to be addressed:

- making wellness a year-round community norm for all ages and populations
- influencing village planners and decision makers to include wellness and multi-modal transportation in their planning
- developing a marketing and communication plan to better promote its vision
- creating a sustainable space to grow wellness programs
Neighbors set framework for Milwaukee’s Wellness Commons

**Description:** The Community Investment in Health project brought together a diverse group of more than 70 partners to re-imagine a healthier Lindsay Heights neighborhood. Over 15 months, the project’s Program Integration Committee (PIC) convened neighborhood residents and community and academic partners to develop an implementation plan for the Innovations & Wellness Commons. The Commons is a catalytic new development project on Milwaukee’s near-north side that will integrate evidence-based wellness programs, community health research, economic development initiatives and neighborhood action for sustained impact.

**Relevance:** The Lindsay Heights Neighborhood is a 110-square-block area of Milwaukee facing numerous socio-economic and health challenges. For decades, Lindsay Heights was a vibrant neighborhood with many local businesses. By the late 1950s, however, the neighborhood was the target of harmful land-use policies that precipitated its decline. By 2000, it was characterized by numerous city-owned vacant properties, a poorly maintained public infrastructure and diminished air, water and soil quality. Residents also face disproportionate rates of obesity and chronic diseases such as diabetes and hypertension.

In 2008, after a decade of successful community organizing, Walnut Way Conservation Corp. received funding from the Zilber Family Foundation to lead a community-driven process for developing a Quality of Life Plan to improve the neighborhood’s social, economic and physical conditions. The seeds for the Wellness Commons grew out of that plan as a next step in transforming a currently underdeveloped stretch of North Avenue into a vibrant commercial corridor that promotes neighborhood well-being.

**Results:** The PIC used a shared visioning process to develop a comprehensive implementation plan for the Innovations & Wellness Commons. PIC members created guiding principles; mapped individual, community and institutional assets; and identified principles to guide implementation of the Wellness Commons. Three design teams also created action plans for the initiative’s core areas: wellness services, navigation and connectivity, and skill-building and training. The process led to a deep commitment to the Wellness Commons and built transformative relationships that will be critical to its success.

In addition, 15 people participated in Healing Circles, a demonstration project that introduced community members to the types of services that will be offered at the Wellness Commons. Sessions focused on health coaching, nutrition information, stress management and integrative medicine. Upon completion of the program, 92 percent of participants expressed interest in continuing to meet with the group.

To advance sustainability, Walnut Way secured external funding to support site renovation for the Wellness Commons as well as funding to expand the Healing Circles. Walnut Way also secured a $400,000 Wisconsin Partnership Program implementation grant in 2013.


Walnut Way Community Newsletter, Summer 2013.

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The Healing Circles demonstration project introduced community members to the types of services that will be offered at the Wellness Commons. Sessions focused on health coaching, nutrition information, stress management and integrative medicine.

**KEY INFORMATION**

- **Grantee:** Walnut Way Conservation Corp., Sharon Adams
- **Grant Title:** Community Investment in Health: Developing the Lindsay Heights Wellness Commons
- **Academic Partner:** John Frey, MD, UW School of Medicine and Public Health, Department of Family Medicine
- **Dates:** April 1, 2012 – September 30, 2013
- **Amount:** $50,000
- **Program:** Community-Academic Partnership
- **Project ID:** 2292
Communities embrace alcohol, tobacco and drug screening tool

Description: The project Connecting Regionally to Prevent Youth Abuse of Alcohol, Tobacco and Other Drugs educated members of the Alliance for Wisconsin Youth-Southeast (AWY-SE) about Screening, Brief Intervention and Referral to Treatment (SBIRT) – an evidence-based alcohol, tobacco and drug screening tool. It also laid the groundwork for implementation of SBIRT in community-based settings throughout the region.

Relevance: In its 2007 Youth Risk Behavior Survey, the Centers for Disease Control ranked Wisconsin first in the rate of current alcohol use among youths; third in the rate of binge drinking among youths; fourth in the rate of youths who rode with a driver who had been drinking; and fifth in the rate of youths who drove after drinking. The state also has some of the highest adult drinking rates in the nation.

Results: This project provided AWY-SE members with a half-day training on SBIRT’s process, utility and benefits. In addition, AWY-SE members developed informal plans for recruiting interested community partners and identified possible settings and tools that best suited local needs.

After the training, 86 percent of AWY-SE members were confident their group could successfully develop a strategy to implement SBIRT locally for high school students. That compared with 73 percent of members who agreed before the training that they could develop a strategy.

Presentations about SBIRT were given to community partners in Milwaukee, Ozaukee, Racine, Washington and Waukesha counties. After the presentation, 92 percent of community partners agreed they had a clear understanding of SBIRT and its benefits – up from 11 percent before the information was shared.

The AWY-SE members and community partners then determined the most appropriate setting for local SBIRT implementation. For instance, one county decided to work with the county human services department rather than with a school district. Two communities wanted to move forward immediately.

Community partners representing rural, suburban and urban communities decided to implement SBIRT, with letters of commitment secured from the following six AWY-SE members and seven community partners:

- Jefferson County Delinquency Prevention Council and Jefferson County Human Services Department (Rural)
- Prevention Network of Washington County and Hartford Union High School (Suburban)
- Prevention Network of Washington County and Kewaskum Community Schools (Rural)
- Racine County Youth Coalition and Racine Unified School District (Urban)
- Waukesha County Drug Free Community Coalition and School District of Waukesha (Urban)
- Waukesha County Prevention Network and Community Health Improvement Planning Process (Suburban)
- West Allis/West Milwaukee Community Coalition and West Allis/West Milwaukee School District (Suburban/Urban)

KEY INFORMATION

Grantee: Alliance for Wisconsin Youth-Southeast, Kathleen Pritchard

Grant Title: Connecting Regionally to Prevent Youth Abuse of Alcohol, Tobacco and Other Drugs

Academic Partner: Richard Brown, MD, MPH, UW School of Medicine and Public Health, Department of Family Medicine

Dates: April 1, 2002 – March 31, 2013

Amount: $50,000

Program: Community-Academic Partnership

Project ID: 2290
Incubator for Community Health Center development piloted

**Description:** The project Expanding Access to Care in Rural and Underserved Areas developed a capacity-building program for communities interested in starting a Community Health Center (CHC) to expand health care access. The Wisconsin Primary Health Care Association (WPHCA), in partnership with the University of Wisconsin Center for Nonprofits, created a curriculum for each phase of CHC development and began training for the first three incubator models.

**Relevance:** CHCs have helped improve access to primary care in Wisconsin; however, the state hasn’t been as successful as others in competing for federal grant funding. As part of the Patient Protection and Affordable Care Act of 2010, the federal government provides funding to create and expand CHCs across the country. This project's CHC incubator program enhances capacity to provide subject matter expertise, technical assistance and local grant support for planning CHCs.

**Results:** Collaborating partners created a CHC incubator program model with the following four phases: community organizing, organizational development, Section 330 grant readiness and operational readiness. They also developed a checklist that outlines critical steps that must be undertaken to be successful in each phase of the process. The checklist has been distributed to several community stakeholders throughout the project, including Beaver Dam and Sauk County free clinics, a Walworth community member interested in exploring a federally qualified health center, a Grant County community group interested in submitting a new access point, Lakeshore Community Health Center and Gays Mills community members.

To assist communities with submitting competitive grant applications, WPHCA also significantly improved its needs-for-assistance reporting tool, which guides communities that are exploring options to improve primary care access. The tool was updated with 2010 census data and streamlined for easier use. These updates prompted the development of maps that proactively identify communities with high needs for primary care.

In addition, the incubator program provided training and technical assistance regarding program requirements, opportunities for expansion and other strategies for CHC development. Much of the training was recorded and posted online for use by interested communities.

**KEY INFORMATION**

- **Grantee:** Wisconsin Primary Health Care Association, Lynsey Ray
- **Grant Title:** Expanding Access to Care in Rural and Underserved Areas
- **Academic Partner:** Brian Christens, PhD, UW-Madison, School of Human Ecology
- **Dates:** April 1, 2011 – January 31, 2013
- **Amount:** $50,000
- **Program:** Community-Academic Partnership
- **Project ID:** 2002
Parents, children gain confidence to support healthy family meals

**Description:** The Family Table project engaged low-income and rural families with school-age children in identifying practical and feasible strategies for overcoming obstacles faced in creating healthy mealtime patterns. The project increased accessibility to and consumption of healthy, whole foods through an interactive meal preparation program in Barron, Dunn, Polk, Pierce and St. Croix counties.

**Relevance:** During 2010, the West Central Wisconsin Community Action Agency received requests for assistance from 5,107 households in Barron, Chippewa, Dunn, Pepin, Pierce, Polk and St. Croix counties. Almost three-quarters of these households reported income below 100 percent of the federal poverty level, 31 percent were headed by a single parent and almost 300 households reported being homeless.

In its 2010 needs assessment of low-income households, the agency reported a 47 percent increase in Food Share program participation over a three-year period. Also, 45 percent of households reported using food pantries to supplement their groceries.

**Results:** Project leaders developed a learner-centered curriculum to enhance nutrition knowledge and introduce basic cooking concepts. Participating families met weekly for two-hour classes that focused on increasing fruit and vegetable consumption, using more whole foods and less processed foods, adapting and improvising recipes to incorporate fresh fruits and vegetables, and creating meals that make the most of available time and money.

UW Extension’s Wisconsin Nutrition Education Program (WNEP) was a vital partner in the effort. WNEP nutrition educators participated in curriculum development and revision and led every class session, which represented an enormous leveraging of in-kind human resources. Each class included participatory nutrition education, cooking demonstrations, hands-on meal preparation and facilitated discussion over shared meals. More than 200 adults and children participated in at least some classes during the 11 multi-week sessions.

Participants were asked to complete surveys at the beginning and end of each session, and data was collected on 25 adults who responded on behalf of their participating family members. Results showed statistically significant improvement in three areas: including children in meal preparation, confidence in healthy meal-planning skills and confidence in health meal preparation within time constraints.

Project leaders hoped to train peer leaders who could help sustain the classes through voluntary cooking clubs. However, this component was not implemented because of the difficulty in recruiting and maintaining participants. Notably, though, some families made new social connections and planned to stay in touch after the session concluded.

Momentum has been sustained through WNEP, which has integrated Family Table into its regular programming and continues to organize, lead and evaluate class sessions with diverse audiences, including participants in the Women, Infants and Children program and Hispanic families.


Powers, P. “Family Table unites families in Menomonie around healthy meals.” Eau Claire Leader-Telegram. February 27, 2013.

Portage County residents develop tools for improved health, well-being

**Description:** The Fit Families-Fit Communities project improved Portage County residents’ physical activity by increasing awareness of and involvement in activities, working with employers to offer workplace health promotion programs and collaborating with county and school staff to promote walking or biking to work and school. This was a multi-faceted approach and a good example of one rural community tackling the problem of obesity.

**Relevance:** According to estimates from the Centers for Disease Control and Prevention (CDC), 60 percent of adults in Portage County are overweight or obese. The CDC also estimates that 35 percent of coronary heart disease among people who lead a sedentary lifestyle could have been prevented by increasing physical activity. Heart and cardiovascular diseases are the leading cause of death in Portage County, which includes urban and rural communities in central Wisconsin.

**Results:** This grant allowed Portage County CAN to collect data about the physical activity habits and needs of adults and children in Portage County and to implement six strategies for developing partnerships and improving the well-being of all residents.

To increase residents’ awareness of and involvement in physical activities, Portage County CAN developed a comprehensive website which included a county-wide activity calendar. A 52-page Portage County Physical Activity Guide with descriptions, locations and contact information for physical activity facilities and programs also was published. In addition, the grant helped establish the Central Wisconsin Worksite Wellness Network, which published a resource directory for area businesses.

Another strategy focused on schools and children. Portage County CAN’s Youth & School Committee worked with UW-Stevens Point students to create an online log for children to track their activities and provided assistance with launching four local Safe Routes to School programs. The Bicycle Federation of Wisconsin also facilitated a Safe and Accessible Streets discussion with local government officials.

According to a Community Profile Survey conducted in 2012, more than one-third (38 percent) of respondents were as physically active as they wanted compared with 26 percent of respondents in 2008. Two-thirds of respondents in 2012 also increased their walking (67 percent) and 60 percent increased their working out during the previous year. In addition, 27 percent of respondents in 2012 believed they had more opportunities to be physically active than one year ago and 23 percent believed there were more opportunities for children to be physically active.


Community members trained to help boost cancer screenings among Hmong women

**Description:** This project developed a lay health education/community health worker (CHW) model and curriculum to address breast and cervical cancer disparities and improve cancer health outcomes among Hmong women.

**Relevance:** Cancer is the leading cause of mortality for Asian American and Pacific Islander (AAPI) women in the United States. AAPI women also have the lowest cancer screening rates of any ethnic group. Of the 50-plus AAPI groups in the United States, the Hmong people have some of the worst cancer screening rates and health outcomes. Wisconsin has the third largest population of Hmong refugees in the United States; approximately one-quarter live in the Milwaukee area. While Wisconsin does not separately report cancer data for the Hmong, AAPI women generally demonstrate the highest incidence and mortality of cervical cancer compared to any other ethnic group.

**Results:** The community and academic partners created a culturally appropriate curriculum and trained seven Hmong women as lay community health workers. These women conducted eight educational workshops, reaching 94 Hmong women in the Milwaukee community. The team also developed a culturally appropriate community health mentor model and curriculum and trained two female Hmong cancer survivors as mentors.

In an attempt to identify newly diagnosed breast and cervical cancer patients, the partners built new relationships with Milwaukee-based clinics and health centers that serve Hmong families. They created a secure online referral form for use by health care providers. Due to several factors, the partners were unable to recruit participants for the project. The main challenges were the low number of newly diagnosed Hmong breast and cervical cancer patients in the Milwaukee area, trust issues on the part of Hmong women toward Western medicine and discomfort in talking about cancer.

Despite these obstacles, the project capitalized on unexpected opportunities. The partners developed and implemented two large educational events that allowed them to partner with other Hmong organizations, increasing the project’s visibility and reach. One of the events grew from the increasing recognition of men in encouraging and supporting Hmong women in their decisions to seek breast and cervical cancer screening.

This pilot project demonstrated that community-based workshops led by lay health educators can positively affect knowledge and attitudes toward cancer screening, which should lead to earlier cancer detection and better health outcomes. The training programs and curricula also can be implemented in other Hmong communities throughout the state, thus increasing the project’s impact.

The partners intend to use their findings and lessons learned for a larger-scale implementation of the CHW and community health mentor programs. They believe there is a great need for this service, but that more education and outreach is needed before Hmong cancer patients will feel comfortable reaching out for mentoring services.
Coalition members rally to boost Milwaukee’s immunization rates

Description: The Immunize Milwaukee Coalition was created as the next step to increasing childhood and adolescent immunization rates within the state’s largest city for both required and recommended vaccinations. This project assessed immunization barriers, resources and opportunities as a follow-up to the successful work of the Milwaukee School Immunization Task Force. To gather this information, 25 stakeholders from community, government and private-sector organizations were interviewed about immunization issues in the state’s largest city.

Relevance: After six years of work that increased Milwaukee’s school immunization compliance rate to 86 percent, the city’s task force agreed that a diverse coalition of community organizations was necessary to increase immunization rates among all people in the Milwaukee area. Much of the literature surrounding low immunization rates focuses on parental determinants. In early 2010, only 39 percent of children 24 months old in Milwaukee had completed their primary immunization series.

Results: Interviews with local stakeholders shed light on stakeholders’ perspectives about addressing barriers to increase immunization rates in Milwaukee. Perceived barriers ranged from missed opportunities in clinical settings to misconceptions about immunization on the community level. This information provided clear direction for the coalition in its beginning stages.

The top strategy identified by stakeholders for getting children immunized was meeting community members in their own neighborhoods (32 percent). Raising provider awareness and physician involvement, choosing respected community members to lead the effort and launching a community wide campaign were other frequently mentioned strategies.

The project focused on increasing community awareness about the need for childhood immunization by increasing the number of organizations actively involved in the coalition. The coalition worked to increase compliance with school requirements, implemented new initiatives to boost immunization rates and, as a result, successfully increased childhood immunization rates for the primary series – from 39 percent in 2010 to 63 percent in 2013.

KEY INFORMATION

Grantee: City of Milwaukee Health Department, Marisa M. Stanley, MPH
Grant Title: Immunize Milwaukee Coalition
Academic Partner: Paul H. Hunter, MD, UW School of Medicine and Public Health, Department of Family Medicine
Dates: April 1, 2011 – December 31, 2013
Amount: $50,000
Program: Community-Academic Partnership
Project ID: 1998
Breastfeeding moms find support at Community Gatherings:
Exploring new strategies

**Description:** The Milwaukee County Breastfeeding Coalition (MCBC), in partnership with the University of Wisconsin-Milwaukee College of Nursing and the African American Breastfeeding Network (AABN), implemented activities to improve the health and nutrition of infants by increasing breastfeeding initiation and duration. The project focused on the north side of Milwaukee and the Women, Infants and Children (WIC) clinics that had the lowest breastfeeding rates.

**Relevance:** Breast milk is widely acknowledged to be the most complete form of nutrition for infants. If a mother breastfeeds, sudden infant death syndrome (SIDS) is decreased by 50 percent, independent of sleep position.

Milwaukee County has significantly lower breastfeeding rates than Wisconsin as a whole. Breastfeeding rates differ substantially by race and socioeconomic level. Nationally, African American mothers are 2½ times less likely to breastfeed than Caucasian mothers. According to Milwaukee County’s WIC program, 51.7 percent of African American mothers initiate breastfeeding in the hospital, but by 3 months, only 9.3 percent breastfeed exclusively.

**Results:** Project organizers developed, implemented and evaluated strategies to support more than 750 African American mothers in Milwaukee County. These strategies included the highly successful Breastfeeding Community Gatherings created by the AABN. Participants in this community support program received dinner, childcare and information about breastfeeding.

The majority of participants during the grant period were pregnant women and breastfeeding mothers, with a significant increase in participation after fathers began attending. Participation grew from 77 during in 2011 to 288 in 2012, when 69 percent of attendees rated the gathering as excellent and 60 percent of pregnant participants reported that they were more likely to breastfeed when their baby was born.

In 2013, the AABN received an additional grant through the Wisconsin Partnership Program’s Lifecourse Initiative for Healthy Families (LIHF) to expand this programming. Another pilot demonstration within this project was the Mama Milk Project, which supported 10 women who participated in the Breastfeeding Community Gatherings. The women received home visits shortly after giving birth and three follow-up visits until their baby was 6 months old or weaned.

The Milwaukee County Breastfeeding Coalition also worked with WIC clinic staff and hospital lactation support staff to develop open communication between health care providers and the community. In addition, the coalition collaborated with the Milwaukee Public Schools to update information about breast health and breastfeeding in the human growth and development curriculum. The goal is to continue to integrate successful project elements into ongoing practices of project partners in the Milwaukee area.

**Media Coverage:**

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**KEY INFORMATION**

**Grantee:** Milwaukee County Breastfeeding Coalition, Carrie Vanden Wymelenberg

**Grant Title:** Implementing Strategies to Increase Breastfeeding Rates in Milwaukee County

**Academic Partner:** Teresa Johnson, PhD, RN, UW-Milwaukee, College of Nursing

**Dates:** January 1, 2010 – June 30, 2013

**Amount:** $400,000

**Program:** Community-Academic Partnership

**Project ID:** 1606
Women find worth through homeless shelter services

**Description:** The Racine Family-Centered Treatment Project addressed gaps in services available for women and their families in the Racine County area. The project team considered three business models for developing and providing evidence-based, family-centered treatment services. This collaborative effort resulted in the development and initial piloting of the Women of Worth (WOW) program, an effort to deliver trauma-informed, gender-specific care to women experiencing mental health and/or alcohol and other drug abuse (AODA) issues.

**Relevance:** For women exploring treatment options, having stable and secure housing and keeping their families united are two major considerations. Homeless shelters provide an important safety net, but they often are unable to provide intensive treatment to women with dual diagnoses, offer long-term housing for an entire family or address other challenges. Additionally, gender-specific care programs such as the WOW project can have a positive impact on the recovery process.

**Results:** Through implementation of the pilot, project partners learned that women value having a sense of independence and that the stigma of being in a homeless shelter affects treatment program participation. All five women enrolled in the WOW program completed a baseline assessment, and four of the five women remained in the program six weeks after their enrollment and completed their follow-up survey. Follow-up surveys showed small decreases in depression, anxiety and self-efficacy. Small increases in self-esteem and decision-making also were observed.

Another notable success was the training component. The program provided project partners and local health professionals with training in evidence-based best practices regarding gender-specific services, trauma-informed care and AODA issues among women. It also trained partners and providers in motivational interviewing and in many aspects of working with women who have mental health and/or AODA issues. Ultimately, the pilot project facilitated the adoption of more effective and sensitive ways to provide care to this population of women.

To track their growth as a team, project partners also completed the Wilder Collaborative Inventory, which showed that a cohesive group emerged. In addition, the pilot project received funding from the Runzheimer Foundation, BMO Harris and numerous private donations. Project leaders also secured a $400,000 Wisconsin Partnership Program implementation grant in 2013.

**Media Coverage:**

**KEY INFORMATION**

- **Grantee:** Racine Interfaith Coalition, Therese M. Fellner
- **Grant Title:** Racine Family-Centered Treatment Project: Pilot Study of Regional Collaboration for Women and Children’s Lifelong Health Improvement
- **Academic Partner:** Ron Cisler, PhD, UW-Milwaukee, College of Health Sciences
- **Dates:** April 1, 2012 – September 30, 2013
- **Amount:** $50,000 over two years
- **Leveraged Funding:** $21,450
- **Program:** Community-Academic Partnership
- **Project ID:** 2284
Rock County coalition tackles STI awareness, prevention

Description: To address the high rate of sexually transmitted infections (STIs), the Rock County Coalition for STI Prevention project focused its initial efforts on community awareness, education and outreach. This was the first collaborative effort in the county to focus solely on STIs, creating an opportunity for individuals and organizations to share their expertise, ideas and resources for effective initiatives aimed at reducing STIs and improving the overall reproductive health of county residents.

Relevance: Rock County consistently has one of the highest STI rates in Wisconsin, and the city of Beloit is disproportionately affected by the high rates. From 2009 to 2012, the number of confirmed STIs in Rock County increased an average of 8.8 percent annually, with the number of confirmed gonorrhea cases rising 23.5 percent between 2011 and 2012.

In the 2012 County Health Rankings, Rock County ranked 68th out of Wisconsin’s 72 counties in health behaviors and had the fifth highest rate of chlamydia infection in the state.

STIs are associated with a significantly increased risk of cervical cancer, infertility and premature death. Risky sexual behavior also can influence infant mortality rates.

Results: This project successfully established a multi-sector and self-sustaining coalition with representatives from 29 community agencies and organizations. The coalition used the Community Readiness Model, developed by the Tri-Ethnic Center for Prevention Research at Colorado State University, to assess the potential for addressing the issue of STIs.

All interviews were recorded, transcribed and scored independently by two people. The scorers then discussed the results and calculated an overall score. Because Rock County’s stage of readiness was extremely low (a two out of nine), the coalition decided its main objective would be to increase knowledge and awareness of STIs among county residents. This included awareness about the level of the problem, basic information about STIs and resources for prevention, testing and treatment.

The coalition developed an implementation plan to address prevention, testing and treatment of STIs. The plan had five phases: start-up, assessment, capacity building, planning and implementation.

Near the end of the grant period, Lesley Wolf of the Healthy Wisconsin Leadership Institute at the UW School of Medicine and Public Health facilitated a three-part capacity building and strategic planning workshop with the coalition. She assisted the coalition with developing a sustainability plan for continued work beyond the funding period and provided guidance on coalition structure and improving participation.


Rock County Coalition for STI Prevention. STI Insider, December 2013.

Rock County Health Department. STI Trends in Rock County: 2013 Data for Chlamydia and Gonorrhea, 2013.
Compliance with at-home injury-prevention program for high school girls lacking

**Description:** This pilot project developed a DVD-based strength training, flexibility, balance and agility program to determine the feasibility of athletes’ use at home to help prevent lower-extremity injuries among female high school basketball players in rural Wisconsin.

**Relevance:** Sports-related knee and ankle injuries are common and more severe in adolescent females than in males. Among directly comparable high school sports (soccer, basketball and baseball/softball), girls sustain more injuries than boys.

Ankle injuries are the most common sports-related injury and result in time lost from sports participation, lead to long term disability and have a major impact on health care costs. Females also are up to eight times more likely than males to sustain an anterior cruciate ligament (ACL) tear of the knee, which often requires surgery and lengthy rehabilitation and result in an increased risk of degenerative arthritis.

Injuries acquired in high school can result in long-term chronic pain, decreased function and poor quality of life; a subsequent decrease in lifetime physical activity increases the risk of developing chronic medical conditions such as diabetes and cardiovascular disease.

**Results:** Sixty-nine female basketball players from nine rural high schools completed several pre-tests and received instruction for using the video and equipment provided. Less than half of the participants completed both pre- and post-testing of balance and jumping activities, and nine of those did the exercises on the DVD more than 50 percent of the time during an eight-week period.

With players sharing various reasons for non-compliance, project partners determined that it was not feasible to expect female high school basketball players to independently perform 15 minutes of exercises three times per week. This was not the answer hoped for; however, the pilot materials can be used under director supervision with little, if any, instruction. Coaches can supervise athletes performing it as part of practice.


**KEY INFORMATION**

- **Grantee:** Rural Wisconsin Health Cooperative, Mary Jon Hauge
- **Grant Title:** Sports-Related Lower Extremity Injury Prevention in Rural High School Female Athletes
- **Academic Partner:** Jill Thein-Nissenbaum, PT, DSc, SCS, ATC, UW School of Medicine and Public Health, Department of Orthopedics and Physical Therapy
- **Dates:** May 1, 2012 – September 30, 2013
- **Amount:** $50,000
- **Program:** Community-Academic Partnership
- **Project ID:** 2281
Examining environmental factors that affect Hispanic students’ fitness and health

Description: The project Effects of Environmental Opportunities and Barriers to Physical Activity, Fitness and Health in Hispanic Children in Wisconsin brought together UW-Madison researchers from a broad range of disciplines to examine the effects of environmental and social factors on middle school students in a predominantly Hispanic area of Milwaukee. Researchers measured and documented precise assessments of the community, school and home environments and the causal relationships of these environments on children’s physical health, community health or other factors (such as attitudes, perceptions and behaviors).

Relevance: Childhood obesity is especially prevalent in the Hispanic community, where nearly one-third of children are overweight. The epidemic has numerous causes, including physical environments that discourage walking, facilitate sedentary lifestyles and promote access to unhealthy food. Obesity, poor cardiovascular fitness and low amounts of physical activity are associated with the development of insulin resistance and subsequent risk for type 2 diabetes mellitus in children and adolescents. Hispanic youths appear to be particularly susceptible to this morbidity.

Results: The project provided evidence-based data on how the built environment affects children’s physical activity. Students used global positioning system (GPS) receivers and heart monitors to collect data about their physical activity and energy expenditure within the home, school and neighborhood environments. The GPS devices documented extremely low levels of moderate to vigorous activity, most of which occurred during or was closely associated to school time.

Students also documented their use of the food and recreation environments, and researchers evaluated the students’ cardiovascular fitness and body mass index (BMI). With 30 percent identified as obese, the middle school students demonstrated higher obesity rates for their age when compared to national rates for Hispanic children.

In addition, the researchers began development of a quantitative model to measure children’s time-use patterns and examine the relationships between time use and children’s risk for diabetes. The self-report instrument is particularly useful for assessing children’s time-use patterns for specific sedentary activities, which typically are difficult to assess using GPS loggers and accelerometers.

Several of the researchers involved in this pilot project are using the data to design an intervention funded in 2012 by the Wisconsin Partnership Program that targets physical activity and healthy eating among students enrolled in the Bruce-Guadalupe Community School in Milwaukee.


Researchers partner with DHS to study medical homes for high-risk pregnant women

**Description:** The project Medical Homes for High-Risk Pregnant Women in Southeast Wisconsin evaluated care delivery processes and birth outcomes of patients who receive prenatal care from clinics participating in a medical-home pilot program in targeted ZIP codes. The study measured participating clinics against their individual benchmark measures for the process of prenatal and postpartum care, how the clinic intervention differs from pre-program standard of care and other attributes of the medical-home pilots.

**Relevance:** In 2011, the Wisconsin Department of Health Services (DHS) began requiring its contracted health maintenance organizations that participate in BadgerCare Plus to implement a medical-home pilot program for high-risk pregnant women in Kenosha, Milwaukee and Racine counties. BadgerCare Plus – the state’s joint Medicaid and Children’s Health Insurance Program – reaches more than three-quarters of racial and ethnic minority pregnant women in Wisconsin, which has one of the nation’s worst infant mortality rates for African Americans.

**Results:** With funding from DHS, the project is continuing for two years and is expanding significantly. Findings from the initial phase funded by the Wisconsin Partnership Program show that the pilot had a statistically significant positive effect on the likelihood of the patient having a timely postpartum visit and on the likelihood of having at least one dental visit. Results also show an increase in appropriate use of emergency department care.

The evaluation team conducted baseline surveys of each participating clinic. One year later, team members visited 15 participating clinics, meeting with 87 staff members and with each of the three participating health plans and health maintenance organizations. Researchers reported that care delivery processes in medical-home models, even when certified by the National Committee for Quality Assurance or recognized by another entity, differ substantially in practice.

Each clinic’s approach to the medical-home model is shaped by its corporate culture and the population it serves, but all models rely on care coordination as the central programmatic element. The implementation appears to depend on the commitment by both administrative and clinical leaders and on the up-front resource commitment to add a care coordinator or other designated capacity.

The study also compared patients’ pre- and post-program experiences with a similar group of patients in the target ZIP codes who received care in non-pilot clinics. The pre-post comparison of birth outcomes for patients receiving care from clinics in the pilot with those in non-pilot clinics is in progress and will continue under the next research phase funded by DHS.

**KEY INFORMATION**

**Grantee:** Jonathan Jaffery, MD, UW School of Medicine and Public Health, Department of Medicine

**Grant title:** Medical Homes for High-risk Pregnant Women in Southeast Wisconsin: Do They Improve Birth Outcomes?

**Dates:** January 1, 2012 – December 31, 2013

**Amount:** $199,541

**Leveraged Funding:** $100,000, Wisconsin Department of Health Services; $75,000, University of Illinois-Chicago

**Program:** Collaborative Health Sciences

**Project ID:** 2073
Skin biopsy leads to new way for creating stem cells

**Description:** The Patient-Specific Induced-Pluripotent Stem Cell (iPSC) Models for Human Disease project generated powerful new ways to study inherited diseases and recruited patients with various heart, brain, skin and blood diseases to donate small skin samples from which the researchers generated iPSCs.

**Relevance:** The iPSC models will advance the basic understanding of diseases and enable the development of new therapeutic strategies. The power of the iPSCs is that they can be grown indefinitely in the laboratory and can be used to form specialized cell types that allow researchers to study the relevant cell type (for example, contracting heart cells for heart disease and functioning neurons for brain diseases).

**Results:** A team of investigators developed improved methods for deriving patient- and disease-specific iPSC lines from simple skin biopsies. These cell lines are similar to embryonic stem cells in their ability to differentiate into essentially any cell type in the body.

The researchers obtained skin biopsies from 23 patients (11 disease and 12 related unaffected controls) from which they generated iPSC lines. Studies with these cell lines have confirmed key features of the diseases, and ongoing studies are investigating mechanisms of disease and novel treatments.

Five laboratories are using the cell lines for studies that advance basic understanding of disease and potentially will lead to the development of new treatment approaches. In the case of heart cells, one of the first published reports about electrophysiological characterization of iPSC-derived cardiomyocytes came out of the principal investigator’s lab.

**Published Articles:**

**KEY INFORMATION**

**Grantee:** Timothy J. Kamp, MD, PhD, FACC, UW School of Medicine and Public Health, Department of Medicine

**Grant Title:** Patient-Specific Induced-Pluripotent Stem Cell Models for Human Disease

**Dates:** September 1, 2008 – August 31, 2012

**Amount:** $499,993

**Program:** Collaborative Health Sciences

**Project ID:** 1333
Lead exposure linked to academic, discipline problems

**Description:** The Wisconsin Children’s Lead Levels and Educational Outcomes project matched data from the Wisconsin Childhood Lead Poisoning Prevention Program (WCLPPP) with test scores from the fourth-grade Wisconsin Knowledge and Concepts Exam (WKCE). Researchers compared the lead levels in children’s blood before age 3 (from the WCLPPP) with WKCE scores and disciplinary records for children from 1,133 families in Milwaukee and Racine that met the study criteria.

**Relevance:** Childhood lead poisoning is a well-known major public health issue, and it is estimated that children’s blood lead levels in Wisconsin are more than twice the national average. The levels of lead poisoning commonly seen in the state are not widely associated with serious health problems, but they may be linked to cognitive and behavioral problems that affect children’s school experience and performance.

**Results:** Almost 3,800 children were matched via the WCLPPP and WKCE records. In this group, approximately 80 percent of African American children and 64 percent of Hispanic children had lead in their blood, compared with 38 percent of white children.

After controlling for demographic and socioeconomic differences, data analysis found that children who had moderate lead exposure before age 3 scored significantly lower than non-exposed children on the fourth-grade WKCE. Lead exposure also was associated with a 40 percent to 70 percent increase in the odds of classification in a lower proficiency category, which has important implications for grade advancement and placement.

Additional analysis focused on suspensions and lead exposure. This investigation found that children exposed to lead at an early age were more than twice as likely to be suspended in the fourth grade as unexposed children. Nationally, African American students are three times more likely to be suspended than white students. The same discipline gap was found in this Wisconsin study, but 23 percent of the disparity was explained by differences in rates of lead exposure.

Although lead exposure traditionally has been treated as a public health problem, these results suggest that it also must be considered an educational problem by directly measuring the impact of exposure on educational outcomes. Health interventions among the moderately poisoned should be a funding and policy priority with both health and educational implications.

The researchers plan to use these results in a grant application to the Environmental Protection Agency with the hypothesis that lead exposure is not only higher for children who live in housing built prior to 1950, but children who live closer to major roads. Deposition from lead gasoline in soils has been associated with increased blood lead levels in children in Wisconsin; children who live near major roads may be more likely to have higher levels of lead exposure.


**KEY INFORMATION**

**Grantee:** Marty Kanarek, PhD, MPH, UW School of Medicine and Public Health, Department of Population Health Sciences

**Grant Title:** Wisconsin Children’s Lead Levels and Educational Outcomes

**Dates:** September 1, 2008 – February 28, 2013

**Amount:** $417,956

**Program:** Collaborative Health Sciences

**Project ID:** 1322
Specialized technique shows asthma prevalence, distribution at neighborhood level

**Description:** The project Clinical and Public Health Data Exchange estimated the pattern of asthma prevalence at the neighborhood level (census block group of 600 to 3,000 people) across Wisconsin. These estimates were produced using data from the Behavioral Risk Factor Surveillance System (BRFSS) and the University of Wisconsin Electronic Health Record (EHR) Public Health Information Exchange (PHINEX).

**Relevance:** Asthma is a chronic disease affecting more than 500,000 children and adults in Wisconsin. BRFSS data are used to provide annual statewide asthma prevalence estimates; however, the data consist of small samples and self-reported health outcomes. Although data are provided at the county level, 14 counties are excluded due to insufficient observations. EHR data allows estimation to the neighborhood level, where many policies and interventions are designed and implemented.

**Results:** This study enhances knowledge about asthma prevalence and its distribution across Wisconsin. The focus on individual neighborhoods will allow state and local public health agencies, health care providers, advocacy groups and insurance companies to highlight areas of asthma disparity, allow discovery of novel risk factors and improve targeting of education and health care interventions.

The BRFSS sample of Wisconsin residents with asthma included 3,882 children (younger than 18) and 19,063 adults (age 18 and older). The PHINEX sample included 12,667 adults and children with asthma. At the county level, the BRFSS and PHINEX samples had similar estimates.

Using individual records from the BRFSS, Dr. Guilbert produced an asthma prevalence estimate for all 72 counties in Wisconsin. Simultaneously, she produced an estimate for the 72 counties using EHR data and associated demographic characteristics. EHR data also was used to produce an estimate for the asthmatic population at the census block group level.

Dr. Guilbert used small area estimation (SAE), a specialized analysis technique, to provide asthma prevalence estimates in the 14 counties with insufficient BRFSS observations (SAE was comparable to direct estimates in counties with sufficiently large sample sizes). Using census covariates, SAE was able to define areas of higher asthma prevalence at the neighborhood level.

Results showed that asthma prevalence was higher in children and around metropolitan areas. In Milwaukee, asthma prevalence among children exceeded 17.9 percent in several census block groups – the highest in the state.

This project helped establish the UW e-Health PHINEX project as a campus-wide collaborator through the Institute for Clinical and Translational Research. Research groups interested in other chronic diseases, such as diabetes and obesity, plan to use these methods and results for future grant submissions.

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**KEY INFORMATION**

**Grantee:** Theresa Guilbert, MD, UW School of Medicine and Public Health, Department of Pediatrics

**Grant Title:** Clinical and Public Health Data Exchange: Estimating Asthma Prevalence across Wisconsin

**Dates:** June 1, 2011 – May 31, 2013

**Amount:** $100,000

**Leveraged Funding:** $17,826, Wisconsin Department of Health Services

**Program:** New Investigator

**Project ID:** 1980
Harnessing antibody-based therapies for treating triple-negative breast cancer

Description: Triple-negative breast cancer (TNBC) is an aggressive form of breast cancer that has a poor prognosis and high rate of relapse. This type of breast cancer cannot be treated with hormone therapies or therapies targeting the growth factor receptor HER2. Recent research indicates that another growth factor receptor, the epidermal growth factor receptor (EGFR), is expressed and active in TNBC. This receptor increases the growth and metastasis of TNBC and thus represents a therapeutic target for the treatment of this disease.

Relevance: Currently, TNBC can be treated only with standard chemotherapy and radiation, thus, the need for more advanced treatment options is urgent. Studies by the Wheeler laboratory indicate that nuclear EGFR enhances TNBC growth and cannot be blocked by anti-EGFR antibody therapies such as cetuximab. The results of this study revealed that blocking EGFR trafficking to the nucleus could increase the efficacy of cetuximab in TNBC providing a new treatment option for patients.

Results: Therapies that inhibit the EGFR have been used for decades to treat several cancers. One such therapy, cetuximab, is an antibody that can bind to the EGFR on the cell surface to prevent its activation. However, clinical trials testing the efficacy of cetuximab have yielded minor benefits.

Research in Dr. Wheeler’s laboratory may explain why TNBC cells do not respond to cetuximab. In approximately 20 percent of TNBC patients, the researchers found the EGFR localized inside the tumor cells’ nucleus, a cellular compartment that cannot be penetrated by antibody-based therapies such as cetuximab. Inside the nucleus, the EGFR can promote tumor cell growth and survival, which may lead to decreased overall survival of breast cancer patients.

Further studies indicated that a group of enzymes in TNBC cells called Src Family Kinases (SFKs) regulated nuclear EGFR translocation. Researchers found that inhibition of SFK activity blocked nuclear EGFR trafficking and led to an accumulation of EGFR on the cell surface. On the cell surface, the EGFR can be blocked by antibody-based therapies; thus, researchers observed an increase in tumor sensitivity to cetuximab. Collectively, these data indicate that targeting both nuclear EGFR and cell surface EGFR simultaneously may be a viable approach for treating patients with TNBC.


Mitigation of colorectal cancer screening disparities targeted

**Description:** The project Reducing Cancer Disparities through Comprehensive Cancer Control increased targeted colorectal cancer screening among the underserved African American community and developed an urban patient navigation program. It also identified health literacy barriers and patient navigation needs of rural cancer patients in Wisconsin.

**Relevance:** Many cancer patients experience literacy barriers and navigation needs, especially in medically underserved communities in the state. Low health literacy can lead to delays in care, preventable hospitalization, medication errors and increased mortality among cancer patients. In rural Wisconsin, 33 percent of cancer patients have low health literacy skills.

**Results:** The Rural Oncology Literacy Enhancement Study (ROLES) surveyed six UW Carbone Cancer Center Oncology Outreach Clinics to evaluate health literacy barriers and patients’ navigation needs. The assessment confirmed that the rural oncology clinics are a significant asset to the communities in which they serve.

Results from the needs assessment showed that approximately 50 percent of patients indicated that they sometimes or always have trouble understanding written materials from their clinic and more than 37 percent sometimes or always have trouble filling out medical forms by themselves. Health care professionals also identified several areas of concern, including the lack of referral agreements, limited access to previous medical records and lack of a system to assess and address patients’ non-medical needs.

Based on the information received, researchers designed a patient navigation program that was implemented at Beaver Dam Community Hospital. The study partners continue to evaluate and strengthen the program for new cancer patients, and health literacy training is a mandatory element of nurses’ orientation. Researchers also are seeking funds to expand the patient navigation program’s evaluation protocol and to ease processes and data collection by integrating technology into daily nurse procedures.

The project also established the Milwaukee Westside Colorectal Cancer Screening Collaborative within the Milwaukee Regional Cancer Care Network. The collaborative implemented a colorectal cancer screening and navigation program for patients 50 and older who had not been screened in the previous year. Screening with the immunological fecal occult blood test (iFOBT) has increased, patients are more aware of and engaged in screening for colorectal cancer and many are pleased to have the iFOBT option.

**Publications:**