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Advancing Translation and Dissemination Research and Practice Through the Physical Activity Policy Research Network Plus

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In the United States (U.S.), physical inactivity is the fourth leading cause of death, with an estimated 200,000 deaths annually (Danaei et al., 2009). The lack of activity across the life span is important because it is a well-documented risk factor for leading non-communicable diseases including cardiovascular disease, cancers, obesity, and type 2 diabetes, as well as impaired quality of life (U.S. Burden of Disease Collaborators, 2013, U.S. Department of Health and Human Services, 2008). The need for policies and environments that promote population-wide increases in physical activity is important, given that only half of U.S. adults meet the recommended 150 minutes of moderate intensity physical activity weekly, 75 minutes of vigorous intensity activity, or an equivalent combination (U.S. Department of Health and Human Services, 2010). In addition, approximately 25% of adults report no leisure time physical activity (U.S. Department of Health and Human Services, 2010).

Despite the availability of evidence-based interventions targeting the various factors that influence participation in, and opportunities for, physical activity, there is little indication that many of these interventions are being widely disseminated or implemented in the U.S. (King & Sallis, 2009; Owen, Glanz, Sallis, & Kelder, 2006). Eyler, Brownson, and Schmid (2013) recently noted slow progress in the evolution of physical activity interventions that targeted individual behavior change to ones that focus on multilevel policy and environmental changes. Moreover, the authors noted the persistence of health disparities in physical activity and a need for more work on translation, dissemination, and

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implementation (TDI) research, specifically to reduce physical activity disparities (Eyler et al., 2013)

The U.S. Centers for Disease Control and Prevention (CDC) created the Physical Activity Policy Research Network (PAPRN) in October 2004 to study the effectiveness of policies related to increasing physical activity in communities and build the research base on physical activity policy. This national thematic network was led by investigators at St. Louis University and consisted of university researchers, physical activity practitioners, and local partners. Between 2004 and 2014, PAPRN grew from the five original sites to include 18 additional non-funded sites, including 13 Prevention Research Centers (PRCs). To organize and rationalize a research agenda, PAPRN established a policy framework along three axes, including the sector (e.g., health, transportation, parks, worksite, school), scale (e.g., local, regional, state, national, international), and policy status (e.g., policies, determinants, outcomes; Schmid, Pratt, & Witmer, 2006). Recognizing the importance of practitioner participation, a concept mapping process was used to establish a research agenda; 238 practitioners and researchers identified and prioritized policy research. To ensure a wide range of policy research, PAPRN then mapped its ongoing and future research projects across sectors and stage of policy development (Brownson et al., 2008). An evaluation concluded that PAPRN did increase the quality and quantity of physical activity policy research over the last decade. Consensus of those interviewed was that PAPRN had increased the quality and quantity of physical activity policy research and personal connections and networking were one of the greatest benefits of PAPRN (Eyler, Manteiga, Valko, Brownson, & Schmid, in review)

Beginning in October 2014, the Network became known as PAPRN Plus (PAPRN+) to illustrate an increased emphasis on translation and dissemination (i.e., "plus"). The 5-year Network format for PAPRN+ is the same as for PAPRN—one Coordinating Center, several funded Collaborating Centers, and numerous unfunded sites (often at PRCs). The Coordinating Center for PAPRN+ is located at the Johns Hopkins Bloomberg School of Public Health (JHSPH) and is jointly led with a team from Active Living Research (ALR) at the University of California, San Diego. To bridge the gap between research and practice, PAPRN+ also includes several partners from the practice community representing health departments, non-profits from various sectors including parks and recreation and transportation, as well as government agencies. Currently, there are five funded Collaborating Centers, and at the 2016 ALR Conference, each Center will describe how they are advancing the physical activity policy research as part of a special session highlighting PAPRN+. The mission, vision, and functions of PAPRN+ are described in the following sections.

PAPRN+ Mission and Vision

The mission of PAPRN+ is to be a multidisciplinary physical activity policy research network that encourages research on TDI of physical activity policies, with a particular focus on policies that influence walking. Interventions to promote walking and walkability are priorities for the nation, as reflected by increased attention from the CDC's Division of Nutrition, Physical Activity, and Obesity and the recently released *Step It Up! The Surgeon*

General's Call to Action to Promote Walking and Walkable Communities (U.S. Department of Health and Human Services, 2015)

Current PAPRN+ Policy Research

The PAPRN+ Collaborating Centers, which are situated within each institution's PRC, were awarded funding to advance physical activity policy research in a variety of settings and populations, all with an eye toward policy development, implementation, or evaluation. Collectively, these projects are generating important evidence about policies that support environments that promote physical activity and reduce disparities.

The JHSPH Collaborating Center is exploring workplace physical activity policies and programs for 148 businesses enrolled in the Healthiest Maryland Businesses Program as measured by the CDC Worksite Health ScoreCard. The University of Arizona Collaborating Center is studying perceptions of walk-ability and barriers to active transportation in Mexican American neighborhoods in Tucson, Arizona. The University of Illinois at Chicago Collaborating Center is using Google Street View images to measure walk-ability orientation of 20 jurisdictions around the U.S. with progressive-oriented zoning, land use, and Smart Growth policies (e.g., promote efficient and sustainable land development, open space, etc.). The University of Massachusetts Collaborating Center is exploring how to increase the capacity of local health departments to effectively collaborate on municipal policy agendas that affect the built environment and physical activity. The University of Rochester Collaborating Center is investigating a group medical visit intervention to promote physical activity, delivered by primary care and community partners in a federally qualified health center, and potential policy applications related to changes in medical reimbursement as the field moves away from a fee for service environment to population health management.

PAPRN+ Working Groups

To organize the research and TDI efforts of the Network, five thematic Working Groups have been developed. A list of potential Working Group topics was formulated with input from Collaborating Center researchers and a multi-sector Advisory Group. A survey of the Network was then used to identify the following focus areas: (a) Complete Streets, (b) Parks and Recreation, (c) Workplaces, (d) Older Adults, and (e) Rural Settings. The Working Groups will determine research priorities and collaborate on research, grant proposals, presentations, and manuscripts to advance the mission of the Working Group. Each Working Group is directed by at least two expert leaders, with support from the Coordinating Center, and is comprised of Network members with a commitment to collaborating on projects that will fill key knowledge gaps and contribute to the TDI of physical activity research.

PAPRN+ Communications

Prior to the Network's relaunch as PAPRN+, restructured communications efforts were required to represent properly the updated Network, as well as its mission and vision. The former Network, PAPRN, had its own identity and membership, but the reimagined PAPRN

+ would demand a separate, unique branding to embody its mission. To begin, the Network produced a one-page document defining its focus, outlining its aims, and listing its thematic network members. Using Crowdspring—an online marketplace for crowd-sourced creative services—the Network created a call for a new logo design that incorporated details to provide direction for a visual representation. Following more than 60 entries from artists across the Internet, PAPRN+ selected three images for which its Coordinating Center members could vote. Ultimately, the votes led to an image selection resulting in the Network's official new logo (Figure 1).

With the Network's defined goals and logo in place, the next step was to begin recruitment outside of its existing membership, with an emphasis on practice partners as well as researchers. To draw interest from prospective members, PAPRN+ created an interactive recruitment flier shared through Coordinating Center individuals online via social media and e-mail and in person at associated organizations' events, such as the 2015 ALR Conference. The flier featured the new PAPRN+ logo, and its mission and vision. The flier also featured links to a MailChimp mailing list sign-up form and a newly created Google Mail account, as well as an interactive quick-response (QR) code that—when scanned by a smartphone—delivered users to the sign-up form. As of October 2015—following flier dissemination, social media promotion, and word-of-mouth sharing—PAPRN+ totaled 99 members.

The Coordinating Center is now working with the JHSPH PRC, which will provide an online home for the new Network, to create an updated web presence. Within the Center's navigation module, users will be able to arrive at the welcome page for PAPRN+ and explore subpages on the Network overview, membership and working group hierarchies, as well as research profiles across the Network's different member universities. The website project is expected to be finished in the winter of 2015–16.

Conclusion

In recent years, there has been an increased focus on moving beyond generating evidence to translating evidence into practice and policy actions to ensure that scientific discoveries actually reach the populations for whom they are intended and are implemented with fidelity. PAPRN+ was developed in response to this increased focus, and this thematic Network is accomplishing its work by deepening relationships with various sectors responsible for physical activity environments and policies, building capacity for public health professionals to collaborate effectively with non-health physical activity—related disciplines, and developing a research agenda on physical activity—related translation, dissemination, and implementation through interdisciplinary collaboration. Through its efforts to advance policy research, PAPRN+ aims to increase the number of Americans who achieve adequate physical activity to promote and sustain health, and promote walking and more walkable communities.

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Biographies

Keshia M. Pollack, PhD, MPH, is an associate professor in the Department of Health Policy and Management and associate director of Training and Education for the Johns Hopkins Center for Injury Research and Policy. Dr. Pollack's research uses injury epidemiology, health impact assessment, and translational research to advance policies that create healthy environments where people can live, work, play, and travel safely.

Thomas L. Schmid, PhD, is team lead for the Physical Activity Translation and Evaluation Team, Physical Activity and Health Branch in the Division of Nutrition, Physical Activity and Health, Centers for Disease Control and Prevention. His research and practice interests focus on policy and environmental strategies to increase population levels of physical activity.

Amanda L. Wilson, MSRS, is a strategic engagement and project manager for Active Living Research. She has a background in parks and recreation and has worked for over a decade in the growing field of active living, which is a way of life that integrates physical activity into daily routines. Amanda connects decision-makers with evidence that supports

that communities designed for activity are better for health, economic vitality, and environmental sustainability.

Eric Schulman, MPS, is a communications specialist in the Department of Health Policy and Management and for the Johns Hopkins Center for Injury Research and Policy. Mr. Schulman's research and work is in delivering targeted messages to diverse publics using both traditional and digital outreach channels.



Figure 1.PAPRN+ logo. *Note.* PAPRN = Physical Activity Policy Research Network.