



Published in final edited form as:

*J Public Health Manag Pract.* 2013 ; 19(3 0 1): S5–S7. doi:10.1097/PHH.0b013e31828c826c.

## Making Strides toward Active Living: The Policy Perspective

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Physical activity has been promoted to improve health for decades.<sup>1</sup> A summary of the health benefits and physical activity recommendations gained national support in the 1996 landmark publication of the Surgeon General's Report on Physical Activity and Health.<sup>2</sup> Specific physical activity recommendations have evolved from vigorous exercise for cardiovascular fitness to an accumulation of moderately intense activities (e.g., brisk walking) for general health benefits.<sup>3</sup> The current recommendations make it easier and more appropriate for the general population to achieve them, but less than half of the adults in the US meet these criteria.<sup>3, 4</sup> Despite public health efforts, about 25% of adults report no leisure-time physical activity at all.<sup>5</sup> There is also growing concern over the amount of daily sedentary time, as evidence points to detrimental health effects independent of physical activity.<sup>6</sup>

Many strategies have been attempted to improve population physical activity prevalence.<sup>3, 7</sup> However, there is evidence indicating that interventions targeting individuals to change physical activity behavior are not significantly effective or sustainable.<sup>8</sup> Motivating people to be physically active can be difficult, and made even more challenging by environments where few opportunities to be physically active exist.<sup>9</sup> Because physical activity is a behavior influenced by factors ranging from individual motivation to community policies, a socio-ecological approach to interventions is recommended.<sup>10</sup> Specifically, more effective intervention strategies include policy and environmental changes that are designed to provide opportunities, support, and cues to help people be more physically active.<sup>8, 11</sup>

Given the potential to improve behavior at the population level, there are national efforts to understand and promote these types of interventions. In 2004, the Centers for Disease Control and Prevention (CDC) funded the Physical Activity Policy Research Network (PAPRN) to advance the research on policies influencing population PHYSICAL ACTIVITY across settings (e.g. community, worksite, home) and scales (e.g. local regional, national). The *Guide to Community Preventive Services Taskforce* presents evidence for the effectiveness of four policy and environmental approaches for increasing population physical activity: improved access to places to be physically active with promotion, community scale and urban design and land use policies, street scale and land use policies, and point of decision prompts to encourage the use of stairs.<sup>7</sup> A recent Institute of Medicine

Committee also recommended enhancing the physical and built environment as an approach to reducing obesity.<sup>12</sup> Additionally, there is evidence that environmental interventions to encourage physical activity are cost effective.<sup>13, 14</sup>

Federally-funded programs such as Communities Putting Prevention to Work (CPPW) and Community Transformation Grants (CTG) are examples of the current emphasis on policy and environmental approaches to improve population behavior. The main goal of CPPW is to “implement environmental changes to make healthy living easier.”<sup>15</sup> Evaluation of improvements in community access to healthy options as a result of CPPW and CTG is necessary to measure effectiveness and build the evidence base and rationale for scaling up policy strategies. Since many stakeholders involved in these initiatives may not be familiar with evaluation structures and the process of policy change, a framework such as the one outlined in this supplement by Lyn et. al.<sup>16</sup> can be useful. Part of the complexity in policy and environmental change is due to the varying levels of government at which policies to improve physical activity evolve. For example, Federal policy can influence local or regional policies by the distribution of federal transportation funds for community trails. State plans for improving physical activity can be influenced by the National Physical Activity Plan<sup>17</sup> and in turn, have an impact on implementation at the local level. In an article by Bornstein et. al.,<sup>18</sup> development of national efforts is described, complemented by Kohl et al.<sup>19</sup> and the exploration of state physical activity plan development. Bornstein and Kohl’s work suggest factors associated with “strong or successful” physical activity planning collaborators can be identified, and such factors can guide stakeholders as they develop and assess their own physical activity plans. Another example of policy scale is physical education (PE). State policies and curriculum requirements can guide PE policies at the district level. Articles in this supplement by Craddock et.al.<sup>20</sup> and Chriqui et. al.<sup>21</sup> explore implementation of PE policies at both state and district levels. A common response to studies on the prevalence of polices is that without enforcement they have little effect, yet both of these studies provide some encouraging middle ground. For example, in the study on district PE implementation, districts in states with laws governing PE time or in districts in states with a law and a district policy reported significantly more days of PE and states with PE time laws reported more minutes of PE per week.

Implementing policy and environmental changes for physical activity requires collaboration from a variety of stakeholders outside of the public health sector. Representatives from community organizations, urban planners, transportation, architects, and developers can provide relevant input in developing and implementing sustainable strategies for improving the physical environment of communities that is supportive of physical activity.<sup>22</sup> Transdisciplinary collaboration for these changes, while necessary, can be challenging as strategies and reasons for desired outcome may differ,<sup>23</sup> cooperation and a shared vision are key to successful initiatives promoting population physical activity.<sup>24, 25</sup> Community coalitions have the potential to be effective catalysts in these initiatives. In this supplement, articles by Litt et. al.<sup>26</sup> and Gustat et. al.<sup>27</sup> describe the complexity and effectiveness of groups whose goal is to influence active living policy and environmental change. This research is unique in that the CANAL project (Coalitions and Networks for Active Living) is the first to describe and compare a large sample of coalitions across several states. Their findings demonstrate the broad scope of efforts to increase physical activity through policy

and environmental strategies and groups that aligned goals, strategies, and funding to advance changes in the built environment had the most success. Several built environment strategies include changes in the way streets are designed and managed. Moreland-Russell et. al. describe the diffusion of complete street policies and report that the state obesity rates, percentage of people who bike to work and the presence of a neighboring community with a complete streets policy predicted complete streets adoption in the target community. These factors may be considered for advocates of complete streets policies. In addition to complete streets policies, Open Streets (known as Ciclovias in Latin America) are initiatives where sections of streets are closed to motorized traffic and opened to walkers, cyclists and others—have been found to be cost effective and promote community collaboration.<sup>28</sup> In this supplement, Zieff et. al.<sup>29</sup> describe the process two successful Open Streets initiatives and outline valuable lessons-learned that can be useful to others as this type of initiative continues to grow in cities across the United States.

In spite of the shift in focus from individual to multi-level policy and environmental changes to improve physical activity prevalence as shown by this group of articles, progress is modest at best<sup>10</sup> and disparities remain among low SES and other population subgroups.<sup>3</sup> The increase in national funding for community policy and environmental changes has great potential, but more research is needed in evaluation to help in identifying effectiveness and outcomes of these changes. Additionally, more research is needed on processes and determinants of these initiatives and how these research findings can best be translated into action at state and local levels. The PAPRN is a network devoted to increasing the evidence-base on identification, determinants, and outcomes of policies that can influence population physical activity. Our internationally-recognized team of experts, as reflected by in the papers in this supplement, are taking major steps toward informing active living policy.

## Acknowledgments

The authors would like to thank Ms. Cheryl Carnoske, MPH, RD for her work in the development of this supplement. This work was supported through research grants from the US Centers for Disease Control and Prevention (CDC) to the Physical Activity Policy Research Network (#U48/DP001903; 5U48DP001938-02; U48/DP001946). The content is solely the responsibility of the authors and does not necessarily represent the official views of CDC.

## References

1. United States Department of Health and Human Services. 2008 Physical Activity Guidelines for Americans. Washington DC: 2008.
2. US Department of Health and Human Services. Physical Activity and Health A Report of the Surgeon General. Atlanta, GA: US Department of Health and Human Services; Centers for Disease Control and Prevention; 1996.
3. Committee PAGA. Physical Activity Guidelines Advisory Committee Report. Washinton D.C.: US Department of Health and Human Services; 2008.
4. Hallal PC, Bauman AE, Heath GW, Kohl HW 3rd, Lee IM, Pratt M. Physical activity: more of the same is not enough. *Lancet*. Jul 21; 2012 380(9838):190–191. [PubMed: 22818932]
5. Prevention CfDCa. U.S. Physical Activity Statistics. CDC. Available at: <http://apps.nccd.cdc.gov/PASurveillance/StateSumResultV.asp>. Accessed Dec 26, 2012
6. Owen N, Sugiyama T, Eakin EE, Gardiner PA, Tremblay MS, Sallis JF. Adults' sedentary behavior determinants and interventions. *Am J Prev Med*. Aug; 2011 41(2):189–196. [PubMed: 21767727]

7. Centers for Disease Control and Prevention. Guide to Community Preventive Services. Promoting physical activity: environmental and policy approaches. Available at: [www.thecommunityguide.org/pa/environmental-policy/index.html](http://www.thecommunityguide.org/pa/environmental-policy/index.html). Accessed Aug 27, 2011
8. Brownson RC, Kelly CM, Eyler AA, et al. Environmental and policy approaches for promoting physical activity in the United States: a research agenda. *J Phys Act Health*. Jul; 2008 5(4):488–503. [PubMed: 18648115]
9. Eyler A, Brownson R, Schmid T, Pratt M. Understanding policies and physical activity: frontiers of knowledge to improve population health. *J Phys Act Health*. Mar; 2010 7(Suppl 1):S9–12. [PubMed: 20440018]
10. Sallis JF, Cervero RB, Ascher W, Henderson KA, Kraft MK, Kerr J. An ecological approach to creating active living communities. *Annu Rev Public Health*. 2006; 27:297–322. [PubMed: 16533119]
11. Brownson RC, Haire-Joshu D, Luke DA. Shaping the context of health: a review of environmental and policy approaches in the prevention of chronic diseases. *Annu Rev Public Health*. 2006; 27:341–370. [PubMed: 16533121]
12. Institute of Medicine. *Accelerating Progress in Obesity Prevention: Solving the Weight of the Nation*. Washington DC: National Academies Press; p. 212
13. Beale SJ, Bending MW, Trueman P, Naidoo B. Should we invest in environmental interventions to encourage physical activity in England? An economic appraisal. *Eur J Public Health*. Dec; 2012 22(6):869–873. [PubMed: 23132876]
14. Roux L, Pratt M, Tengs TO, et al. Cost effectiveness of community-based physical activity interventions. *Am J Prev Med*. 2008; 35(6):578–588. [PubMed: 19000846]
15. Centers for Disease Control and Prevention. *Communities Putting Prevention to Work*. CDC. Available at: <http://www.cdc.gov/CommunitiesPuttingPreventiontoWork/>. Accessed Sept. 12, 2012
16. Lyn R. Policy, Systems and Environmental Change for Obesity Prevention: An Advocacy Framework to Inform Local and State Action. *J Public Health Manag Pract*. in press.
17. Pate RR. A national physical activity plan for the United States. *J Phys Act Health*. Nov; 2009 6(Suppl 2):S157–158. [PubMed: 20120124]
18. Bornstein DB, C C, Tabal R, Maddock J, Hooker SP, Evenson KR. Factors Related to Partner Involvement in Development of the U.S. National Physical Activity Plan. *J Public Health Manag Pract*. in press.
19. Kohl, Hr. All Health is Local: State and Local Articulation of the US National Physical Activity Plan. *J Public Health Manag Pract*. in press.
20. Craddock AL. Role and strategies of state organizations related to school-based physical education and physical activity policies. *J Public Health Manag Pract*. in press.
21. Chiqui J, Eyler A, Carnoske C, S S. State and District Policy Influences on District-wide Elementary and Middle School Physical Education Practices. *J Public Health Manag Pract*. in press.
22. Medicine Io. *Does the Built Environment Influence Physical Activity? Examining the Evidence – Special Report 282*. Washington, DC: The National Academies of Science; 2005.
23. Borner K, Contractor N, Falk-Krzesinski HJ, et al. A multi-level systems perspective for the science of team science. *Sci Transl Med*. Sep 15.2010 2(49):49cm24.
24. Eyler AA, Brownson RC, Doescher MP, et al. Policies related to active transport to and from school: a multisite case study. *Health Educ Res*. Dec; 2008 23(6):963–975. [PubMed: 17956883]
25. Eyler AA, Brownson RC, Evenson KR, et al. Policy influences on community trail development. *J Health Polit Policy Law*. Jun; 2008 33(3):407–427. [PubMed: 18469168]
26. Litt J. Advancing Environmental and Policy Change through Active Living Collaboratives: Exploring Compositional, Organizational, and Community Engagement as Correlates of Group Effectiveness. *J Public Health Manag Pract*. in press.
27. Gustat J. Lessons in Promoting Active Living: The Collaborative Perspective. *J Public Health Manag Pract*. in press.

28. Montes F, Sarmiento OL, Zarama R, et al. Do health benefits outweigh the costs of mass recreational programs? An economic analysis of four Ciclovía programs. *J Urban Health*. Feb; 2012 89(1):153–170. [PubMed: 22170324]
29. Zieff S, Hipp J, Eyler A, MS K. Ciclovía initiatives: challenges along the route to success. *J Public Health Manag Pract*. in press.

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