

The National Park Prescriptions Initiative Prescribing Wellness at Parks in the United States

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Images as credited

In the United States, a new model of wellness is taking shape—one that is less focused on prescribing medication to improve overall health and more about prescribing a walk in the park. “Park prescriptions” is a concept that links the healthcare system and public lands and facilities, such as local parks, to encourage healthier people.¹ Park prescription programmes are designed in collaboration with healthcare providers and community partners to utilise parks, trails, and open space for the purpose of improving individual and community health. Over the last several decades, American society has become characterised by environments that promote increased consumption of unhealthy food and physical inactivity. While people are getting heavier and more depressed each day due to inactivity and poor diets, park and recreation agencies across the United States are reaching out to the medical community to work together and offer services that help to prevent and treat both physical and mental health problems.

Obesity has become an epidemiologic challenge for doctors in the United States. More than one-third of adults (or 35.7 percent) and 17 percent of children and adolescents in the United States are obese.² Additionally, obesity is associated with a higher incidence of a number of diseases, including diabetes, cardiovascular disease, and cancer, causing a significant economic impact on the US healthcare system. The consequences of an inactive, indoor lifestyle are borne not only by individuals, but also by family members, employers, and the healthcare system. In 2008, overall medical care costs related to obesity for adults in the United States were estimated to be as high as US\$147 billion.³ Chronic diseases, many of

which are associated with obesity, are driving the increase in the costs of the national social insurance programme, Medicare, accounting for 70 percent of all deaths and 75 percent of all Medicare spending. Reducing obesity rates by five percent would save nearly US\$30 billion in five years.⁴

Reducing obesity rates is a top health priority and parks are a critical part of the solution. In early 2012, the US Centers for Disease Control and Prevention, National Recreation and Park Association, and Institute at the Golden Gate⁵ collaborated to develop the National Park Prescriptions Initiative that brings together experts and stakeholders to promote the use of park prescriptions and to advance the movement and create awareness among various audiences. The initiative aims to strengthen the connection between healthcare and parks and public lands to improve the physical and mental health of individuals and communities. A first step in strengthening this connection will be launching national standards based on qualitative and quantitative evidence from programmes across the country, elevating park prescriptions from a new idea to a best practice in preventive health.

The National Park Prescriptions Initiative

In September 2012, an expert panel of park and health professionals, national organisations, and experts convened to understand the current scope of park prescription programmes at the local and state levels and to provide input on steps to move the national implementation of park prescriptions forward. It was determined that three areas needed closer examination:

1. **Create a national definition** for park prescriptions that will help to create a coordinated effort for improving and implementing park prescriptions nationally.
2. **Understand the national landscape** by collecting existing park prescription models and identifying innovative strategies that can be shared with and implemented in communities across the United States.
3. **Examine and define the “effectiveness” of park prescriptions** by identifying methods for measuring success and existing data or data needs for standardised measures.

Experts met over several months to address these areas and gather information that would be used to inform a National Park Prescriptions Convening that took place in person in October 2013. At this meeting, experts reviewed the progress made and finalised a national definition for park prescriptions: “Programmes designed in collaboration with healthcare providers and community partners that utilise parks, trails, and open space for the purpose of improving individual and community health”. Experts analysed information gleaned from interviews with 21 park prescription programmes to identify best practices, understand programmatic challenges faced within communities, and develop a national agenda for the initiative.

The National Landscape

Park prescription programmes vary from community to community, with some efforts being launched from the healthcare community and others from the parks community. Findings show that programmes initiated by pediatricians often aim to increase levels of physical activity and reduce the health risks associated with chronic disease

among patients, while programmes led by park professionals are often part of an overall community strategy to build healthy environments and improve the health of visitors. Objectives of park prescription programmes focus not only on increasing levels of physical activity. Many programmes incorporate a connection to nature and outdoor exploration. While some efforts are challenged with evaluating their programmes, others are tracking health outcomes using clinic electronic medical record systems. Programmes in South Carolina, Ohio, California, and Washington, DC, shed light on some of these differences:

- A coalition of more than 100 public and private partners in Greenville, South Carolina, developed a clinic-focused park prescription effort to reduce obesity in underserved youth and encourage healthy lifestyles through increased connections to parks and recreation. The coalition, LiveWell Greenville, used Greenville County Health System's New Impact programme, which actively treats low-income youth aged 6 to 21 with Body Mass Indexes (BMIs) at or above the 85th percentile. After medical and psychological assessments, patients undergo eight weekly clinical visits with dietitians and exercise specialists, during which weight goals, activities, and accomplishments are set and assessed. Follow-up sessions take place in the fourth, seventh, and twelfth months.
- After observing that a majority of patients' health issues were due to sedentary lifestyles, a cardiologist in Columbus, Ohio, Dr. David Sabgir, developed a programme that motivates patients to move along with the medical providers. Walk with a Doc is



1. Walk with a Doc in Columbus, Ohio. Walk with a Doc is a free, year-round, international walking programme, which starts with a presentation by the physician on a health-related topic, followed by a 30- to 45-minute walk, and concluding with a blood pressure check (Photo: Reva Foy).

a free, year-round walking programme that operates in more than 100 communities across America and internationally, including Canada, India, United Arab Emirates, and Russia. One hour a week leads to healthier, more active behaviours among patients. The programme begins with a presentation provided by the physician on a health-related topic, followed by a 30-45 minute walk, and concludes with a blood pressure check. As a result of the programme, 90.8 percent of participants felt they were more educated, 75.2 percent exercise more, and 70 percent felt more empowered.

- Through a Community Benefit grant from Kaiser Permanente, the Institute at Golden Gate partnered with local nature champion Dr. Nooshin Razani to implement best practices from around the country in a pilot project in the Bayview Hunters Point neighbourhood in southeast San Francisco. The 18-month pilot project began with

an extensive six-month needs assessment to understand the existing barriers that the community had to spending time outside in the parks. Through community engagement, interviews, surveys, and focus groups, the steering committee that included the staff of the San Francisco Department of Public Health developed interactive training programmes, resources, and tools to make prescribing time outside to patients of all ages simple and effective. The clinic staff have the tools and knowhow needed to motivate and empower their patients to get outside to better their physical and mental health, and ultimately create long-term behavioural change. In addition to testing and tracking prescriptions filled at the Southeast Health Center, an evaluation of the entire pilot project was completed in hopes that the best practices learnt may be implemented in diverse communities across the country.

Case Study: DC Park Rx, Washington, DC

Since its inception, the DC Park Rx programme has helped disadvantaged youths throughout the District of Columbia to create powerful connections to the outdoors. Launched in 2010 by the DC Department of Health and American Academy of Pediatrics, DC Park Rx was created to help physicians “prescribe” nature to patients in an effort to “increase physical activity in parks, prevent chronic disease and obesity among youth, and create a generation of environmental stewards through outdoor exploration”. The layout of DC, in which local and national resources exist side by side, presented a unique opportunity for collaboration with national and federal agencies. Programme partners emphasise the significant roles they have played in building and maintaining momentum for DC Park Rx.

“We’ve been very successful at creating these partnerships,” affirms Dr. Robert Zarr, a “physician champion” of DC Park Rx. “Everybody has had an invaluable role . . . the parks, the health providers, the agencies, and the champions within those agencies. And those partnerships will carry us into the future.” A pilot programme was implemented in four Children’s National Medical Center clinics in DC in 2011. To enable physicians to prescribe resources as close to patients’ homes as possible, volunteers from George Washington University and National Park Service evaluated and rated 350 local and national parks, noting transportation routes and amenities, and grading each park for safety, cleanliness, and potential for physical activity. Subsequent one-page summaries of each park, called Park Pages, were created and entered in a database searchable by zip code. Physicians could then print out the options that best appealed to their specific patients.

Unity Health Care’s Upper Cardozo Health Center was considered an ideal location for the expansion of DC Park Rx due to the challenges faced by local residents with regard to physical activity. The centre’s diverse population includes a large percentage of low-income African American and Hispanic households and a large percentage of immigrants. The area also has less green space than other wards, reducing the opportunities for residents to engage in outdoor exercise. “Literature clearly shows that low-income people and people of colour have poorer health outcomes in terms of chronic disease, asthma, obesity, and mental health than their Caucasian counterparts,” notes Zarr.

Through detailed training and information sessions, 20 primary care clinicians were recruited and trained in the Unity clinic. The partners made a particularly significant achievement with regard to future evaluation: the seamless merging of Park Pages into Unity’s Electronic Medical Records. This enables the tracking of health data, such as the number of prescriptions reported, biometrics, and acceptance by physicians of DC Park Rx.

Between July and October 2013, 300 prescriptions were prescribed. Responses from healthcare providers thus far have been extremely positive. Many have observed positive impacts on their patients with regard to weight loss and the desire to be in a park. A post-intervention survey was also implemented to study changes in the attitudes and behaviours of 400 youths before, and three months after, prescriptions. The results of the survey will be available in spring 2014.

Clinicians have expressed the need for more search variables for Park Pages, such as by

amenity or by programme, to facilitate more customised searches; programme partners have plans to make the additions in the next year. Additionally, as the digital age replaces paper, there are hopes to make Park Pages more accessible through mobile and hand-held technologies.

Conclusion

The epidemics that result from an indoor, sedentary lifestyle require action from all sectors of society. Parks and public lands are an underutilised, low-cost healthcare resource that can and must be used to help solve the problem. Parks and public lands represent enormous acreage—nearly one in every five acres of the United States is federal land that is open for public use. Often available for free or at low cost, parks can provide a health resource for communities with some of the highest needs. The National Park Prescriptions Initiative fulfils a clear need to increase and improve programmes that utilise parks as health resources that benefit our whole population.

Our capacity to care for parks and public lands will diminish as people spend more time indoors and less time connected to the outdoors. Park prescriptions help to draw the missing link between human and environmental health. Individual and community health are reliant on a healthy parks system, and a healthy parks system is integrally linked to the value placed on it by the community. Today, half of the world’s population lives in urban areas. Thus it has never been more important to ensure that connections to and contributions from the natural environment are not lost. Our health, and the health of our communities, depends on it.

The National Park Prescriptions Initiative will continue to work with leaders representing parks and health to refine on-the-ground tactics for programme development, programme delivery, measurement, and professional training around park prescriptions. In the coming year, the initiative's steering committee will create a central hub to share lessons and best practices and showcase resources for communities across the country to start or improve a park prescription programme. This movement has the ability to be a catalyst for broad policy change that advances the adoption of measureable recreational models to support the delivery of healthcare to improve the physical and mental health of our population. 

1 Adam Grauer, Michael Hsu, Stephanie Duncan, and Patty Debenham, *Parks Prescriptions: Profiles and Resources for Good Health from the Great Outdoors* (Institute at the Golden Gate, 2010), accessed April 29, 2014, <http://www.parksconservancy.org/assets/programs/igg/pdfs/park-prescriptions-2010.pdf>.

2 "Obesity and Overweight for Professionals: Data and Statistics: Facts," Centers for Disease Control and Prevention, last modified April 27, 2012, <http://www.cdc.gov/obesity/data/facts.html>.

3 "Obesity—Halting the Epidemic by Making Health Easier," Centers for Disease Control and Prevention, last modified May 26, 2011, <http://www.cdc.gov/chronicdisease/resources/publications/AAG/obesity.htm>.

4 Jeffrey Levi, Laura M. Segal, and Rebecca Salay, "Bending the Obesity Cost Curve," *Trust for America's Health* (January 2012), accessed April 29, 2014, <http://healthyamericans.org/assets/files/TFAH%202012ObesityBrief06.pdf>.

5 Institute at the Golden Gate is a programme of the Golden Gate National Parks Conservancy in partnership with the National Park Service.



2. Kick-off programmes take place in all nine Bay Area Counties on the first Saturday of every month (Photo: Golden Gate National Parks Conservancy).



3. Kick-off programme at Crissy Field in the Golden Gate National Recreation Area (Photo: Golden Gate National Parks Conservancy).