

Park Prescriptions in Practice: The Community Driven Way



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Active Living Research

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Park Prescriptions Defined

- Programs designed in collaboration with healthcare providers and community partners that use parks, trails, and open space to:
 - Improve individual and community health
 - Create new stewards and advocates for parks and public lands



Nature & Health Lit. Expanding

□ Physical Health Benefits

- Physical activity (Cooper, 2012; Dolinsky, 2011; Cleland, 2008; Cohen, 2011)
- Added benefits to “green exercise” (Bowler, 2010; Thompson, 2011)
- Obesity (Wolch, 2011)
- Vitamin D (Kuo, 2010; Misra, 2008)
- Myopia (Rose, 2008; Morgan, 2012)
- Healing time (Ulrich, 1984), Longevity (Takano, 2002)

□ Mental Health Benefits

- Stress, Anxiety, Depression (Sugiyama, 2008; Maas, 2009; Ulrich, 1991)
- Reduced aggression, anger, fatigue, sadness (Bowler, 2010; Kuo, 2001)
- Improved ADHD symptoms (Taylor, 2009; Kuo 2004)
- Pediatric developmental milestones (Strife, 2009), improved cognition for elderly (Ottosson, 2005)

□ Community Benefits

- Social isolation (Kweon, 1998)
- Sense of place (Davis, 2011)

Health Care Providers Need Park Partnership

- Clinicians are on the frontline of the current epidemic of chronic diseases: physical inactivity, mental health, and social isolation
- Socioeconomic disparities in health parallel disparities in access to parks (Floyd, 2009; Dahmann 2010)
- Parks play an essential role in public health, as they are the most readily available, or sometimes the only, source of nature (Bedimo-Rung, 2005)



Clinic patients enjoy opportunities for nature-art in San Francisco

Parks Need Health Care Partnerships



National Park Ranger Kelli English

- Fewer people are spending time outdoors, and less of it still in natural settings
- Per capita visits to state and national parks, other forms of nature recreation such as camping, decreased each year since 1987 (Pergams, 2008)
- Direct nature experiences lead to emotional attachment to natural settings
- “Wild nature activity” before age 11 is the most direct route to environmental stewardship as an adult (Davis, 2011)

National Park Prescriptions Initiative

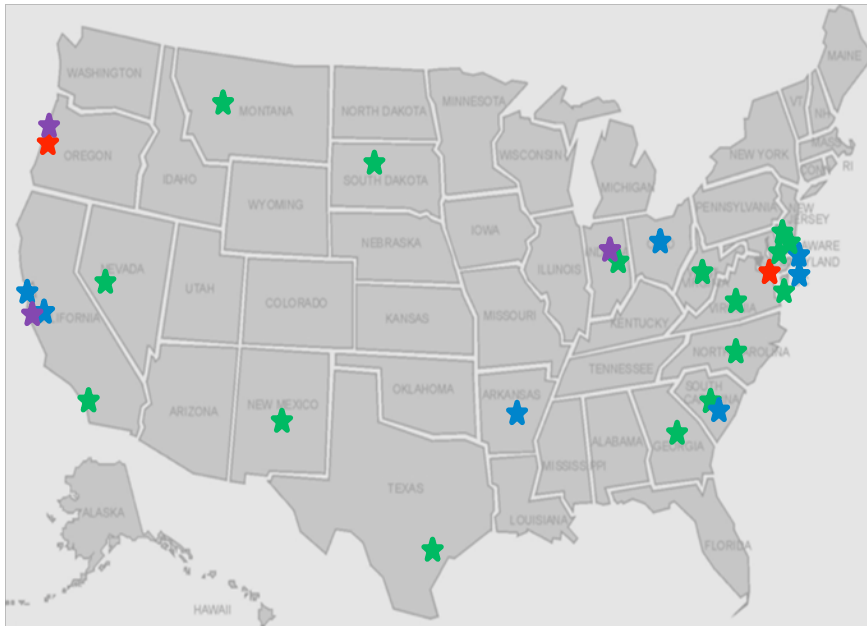
- As movement grew, the Institute was approached to support programs
- In 2012, the Institute partnered with NRPA and CDC to:
 - Recognize leaders and champions within the movement
 - Identify best practices and success
 - Identify challenges and areas for improvement
 - Appropriately support programs across the country



Inventory of Park Rx Programs, 2013

- Recruitment through contacting leaders in:
 - Parks and public lands: National Park Service; State Parks system; U.S. Fish & Wildlife; etc.
 - Health: Kaiser Permanente; Sutter Health; Blue Cross Blue Shield; Unity Health, Inc.; Liberty Hospital; major Departments of Public Health
 - Governmental and NGO: National Environmental Education Foundation (NEEF); City Parks Alliance; Blue Ridge Parkway Foundation; Children & Nature Network
- 50 program interviews were conducted, each connected people to the outdoors for health. Of these, 21 included a point of referral between a health care provider and a park or public land.

21 Programs in 26 Locations



★ **Clinic based**

★ **Community based**

★ **Park based**

★ **Health plan**

- Cost varies from donated time to full-time staff
- Programs initiated between 2003 - Current
- 14 integrate park referral into physician work day
- 5 have designated park programming or trails
- 2 are linked to school nurses, school curriculum
- 3 are at health fairs
- 3 train the trainer models

Does not include the extensive locations from NEEF; Walk With a Doc; Exercise is Medicine

Case Study: DC Park RX

- Physicians prescribe parks or green spaces in DC metro area
- Parks assessed by thousands of community volunteers
- 350 one page park summaries created
- Prescriptions integrated into EMR
- Health outcomes followed



Dr. Robert Zarr and National Park Service Director Jon Jarvis visit with a patient and practitioner



Case Study: Southeast Health Center

- Community based assessment phase
 - Staff and patient involvement
 - Mapping of parks and amenities for clinician use
- Mobilize pre-existing community resources and coalitions



SEHC staff and parks staff participating in case-based learning about history of natural parks in the Bayview

Bayview Hunters Point is a highly industrial area, with the highest levels of toxicity in San Francisco



Clinic Approach: Challenges

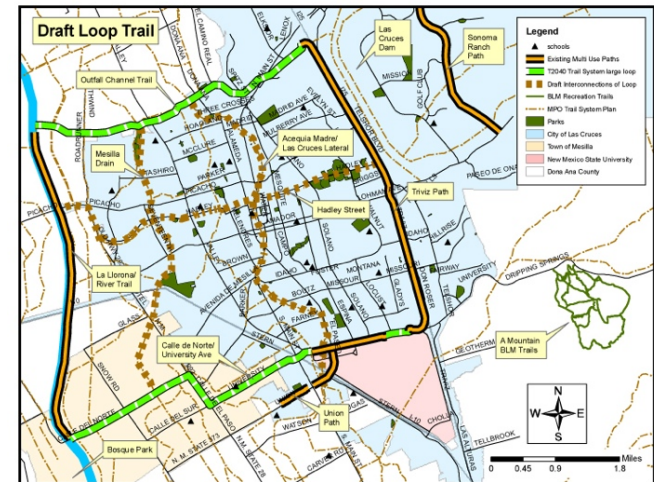
- Creating clinical guidelines
 - indications for nature in health
 - Motivational interviewing
- Implementation challenges
 - Funding, staff
 - Dependent on a champion
 - Clinic visit is busy, hierarchy of needs
 - Providers have not visited parks and have limited knowledge of available outdoor activity
- What happens after the clinic visit
 - Doesn't deal with barriers to outdoor time
 - Park programming may not reflect clinician need
 - Follow up, tracking park visits



Park staff showcasing a park rx and parks and transit map at Southeast Health Center

Case Study: Prescription Trails, NM

- Coalition of national, state, county, and city level parks and public land agencies
- Created a unified map of accessible trails, rated trails for fitness level, uniform prescription signage across park lands
- Health insurance plan lowers premiums for participants



Case Study: Healthy Parks, Healthy People

- Coalition of national, state, regional, county, and city park agencies across 9 Bay Area counties to improve the health and wellbeing of all Bay Area residents, especially those with high health needs, through regular use and enjoyment of parks and public lands
- Consistent programming introductory, free, culturally relevant program, first Saturday of every month



San Francisco Medical Director of Maternal and Child Health, Curtis Chan kicks off 1st Saturday event

Parks Approach: Challenges

- ❑ Creating collective impact
- ❑ Several years of meetings, weaving the work into job descriptions
- ❑ Creating an MOU between a variety of park agencies
- ❑ The concept of consistent and introductory programming
- ❑ Staffing and resources
- ❑ Diversity of the community not always reflected in parks staff
- ❑ Relationship building: finding health partners
- ❑ Evaluation



Nina Roberts, PhD and Charm Lindblad at a Healthy Parks, Healthy People coalition building meeting

Conclusions

- Healthcare/Parks partnerships succeed with community input
- Current research gaps include:
 - Best clinical practices, health outcomes including mental health and population based health
 - In the parks: tracking visits, making visits active
 - Community engagement
- National Park Prescriptions Initiative is a platform for researchers to help create a national model

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