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)
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.
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.

Interviews conducted by Kristin Wheeler and Liz Willetts, MPH
21 Programs in 26 Locations

- 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

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

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

Charm Lindblad  
Executive Director, Prescription Trails Program

Draft Loop Trail
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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