



SD CHILDREN & NATURE

San Diego Health Sector Community Asset Inventory

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Project Summary

A community asset map was generated to describe opportunities in the health care sector to increase outdoor and nature activities as part of children's health services. Through interviews with health care professionals and an internet search, baseline information was gathered on organizations beginning to incorporate outdoor and nature activities into children's health care. The most promising sectors are pediatricians, childhood obesity prevention, and public health. Pediatricians and other health professionals already emphasize physical activity for children, and that can be expanded to spending time in nature. The benefits of children and nature can be provided in educational materials, prescriptions, health fairs, presentations at workplaces and professional associations, and continuing education.

Table of Contents

Project Summary.....	1
Project Methods.....	2
Overview of Children's Health Services in San Diego.....	2
Opportunities for Collaborating with Health Services Organizations.....	2
Pediatricians.....	3
Large Health Care Providers.....	3
North County Health Services.....	3
Health Referrals in the 211 Program.....	3
San Diego County Childhood Obesity Initiative.....	3
Public Health Services.....	4
Mental Health Services.....	4
Opportunities for Health Education Programs.....	4
Educational Materials.....	4
Prescriptions for Outdoor Play.....	5
Connections to National Initiatives.....	5
Health Fairs and Conferences.....	6
Awards Program.....	6
Workplace-based Presentations.....	6
Continuing Medical Education.....	6
Research Dissemination.....	6
Research Grants.....	7



References Cited 7

Project Methods

San Diego Children and Nature Collaborative (SDCaN) members and associates provided several names of key people and organizations in the health professionals sector in San Diego County. Information was gathered on the internet and from professional and personal contacts. Several contacts were interviewed on the phone and in person. A large spreadsheet was produced, listing many health care organizations in San Diego that could be contacted. Because the health care sector is too large to cover in its entirety, the project was focused on individuals and groups (particularly pediatricians and the Childhood Obesity Initiative) who have begun recognizing the importance of children and nature.

The *Community Action Guide: Building the Children & Nature Movement from the Ground Up* (Children and Nature Network 2008) was used to guide this project. The community asset map approach is taken from the report, *Community Culture and the Environment: A Guide to Understanding a Sense of Place* (U.S. Environmental Protection Agency 2002).

Overview of Children's Health Services in San Diego

Children in San Diego County generally receive routine medical care at community clinics or group practices of physicians (pediatricians, family practitioners, or internists), physician assistants, and nurse practitioners. The health care sector primarily provides health care services in the standard tradition of Western medicine (in-house treatments, medicine, surgery, etc.) and does not routinely provide services directly relating to children and nature.

Indeed, the time is ripe to bring the health care sector – and the rest of society – to the cause of connecting children and nature. With this shift, the health care sector will be expanding its horizons, providing opportunities for non-health sector providers of children's services and programs such as SDCaN. Furthermore, the health care field incorporates many disciplines (psychology, health care, promotion, education) which can be explored for potential synergies with SDCaN.

San Diego has 849,303 children under the age of 20: 225,080 under 5 years (26.5%), 195,070 ages 5 to 9 (23.0%), 201,072 ages 10 to 14 (23.7%), and 228, 081 ages 15 to 19 (26.8%). Census data reports 3.0% with disabilities, 13.2% living in households receiving public assistance in the past 12 months, and 16.7% living in households with income below poverty level in the past 12 months (U.S. Census, undated). There is limited data on the number of children in San Diego receiving care for Type II diabetes and/or obesity, conditions that could particularly benefit from additional exercise (e.g., outdoor play, nature exploration).

Opportunities for Collaborating with Health Services Organizations

The greatest opportunities are to partner with the health professionals and health care-related groups in San Diego that already address the importance of physical activity, focusing on spending time in nature. The challenge for SDCaN is to ensure that health professionals are aware of the relevance of “children and nature” to their own practices, even with personal and professional pressures to see additional patients and stay current in their field.

With adequate resources, SDCaN could contact those organizations to assess their interest in SDCaN and in proposed health-related programs. Priority should be placed on making presentations to associations of health care professionals, in the next year. Some individuals identified during the course of this project could be invited to serve on the Health Committee of SDCaN, or be part of a Health Professionals Advisory



group that meets once or twice a year.

Pediatricians

Because pediatricians' patients are children and their families, and pediatricians are primary care providers, many have a clear interest in exploring how the children and nature movement can be an effective "tool" for healthier kids. SDCaN-centric conversations and cooperative projects could be started with those pediatricians that enjoy outdoor and nature activities in their own lives, belong to local environmental groups, and/or frequent local nature areas. The "founding father" of the Children & Nature Network, Richard Louv, is the keynote speaker on October 2, 2010 at the American Academy of Pediatrics (AAP) national conference in San Francisco. Many San Diego pediatricians are likely to attend and hear the strongest arguments yet for their field to collaborate with advocates of connecting children and nature. That experience is likely to generate additional interest in SDCaN.

Large Health Care Providers

San Diego health care providers (certainly physicians) are generally organized into larger health care organizations (for example, physician groups, hospital systems, community clinic groups). Many work for Kaiser Permanente (2010) (www.kp.org), Scripps Health (www.scripps.org), Sharp HealthCare (www.sharp.com), University of California, San Diego (<http://health.ucsd.edu>), and others. Contacts need to be developed within each organization to provide more information and to encourage health care professionals to recommend unstructured outdoor play for children.

North County Health Services

The North County Health Services (NCHS, www.nchs-health.org) group has ten community health centers, ten WIC offices, two mobile clinics, two HIV/AIDS Community Case Management offices, and three dental offices. NCHS uses a prescription pad, "RX for Fitness," that lists specific nearby parks and activities including Fitness/Dance/Karate; Swimming; Basketball/Softball; After School/Summer Camps; and Free Activities (Ride a Bike, Take a Walk, Play at the beach, and Other), with a check box for each activity type and room for notes. One pediatrician said she would gladly distribute a "children and nature" flyer to her patients. Since a majority of her patients speak Spanish as a native language (and their children speak Spanish and English), she responded well to the suggestion of a bilingual flyer and video to screen in the waiting room to complement the clinic's existing coloring book promoting physical activity.

Health Referrals in the 211 Program

The 211 Program in San Diego is part of a national program to provide free, bilingual social services and health referrals via phone and online. On March 15, 2010, the County of San Diego Public Health Officer, the Center for Healthier Communities for Children at Rady Children's Hospital, and the President of the local American Academy of Pediatrics chapter sent these local 211 Program-branded prescription pads and an encouraging letter to health care providers with an emphasis on its relevance to Type II diabetes in children. On the 211 website (www.211sandiego.org), users can search for physical activity "programs and services," which results primarily in a list of parks and recreation centers but not specific nature activities and events (which the forthcoming SDCaN website will have). The staff of the 211 Program would like to coordinate with SDCaN in order to ensure the new SDCaN website and its "find a nature activity" tool incorporates appropriate 211-listed activities, and that nature activities can be included in the 211 database.

San Diego County Childhood Obesity Initiative

One of the best opportunities for SDCaN to partner with the health professional sector is the San Diego County Childhood Obesity Initiative (COI). The organization is a public/private partnership whose mission is "to reduce and prevent childhood obesity in San Diego County by creating healthy environments for all children and families through advocacy, education, policy development, and environmental change" (www.ccwsd.org). Like SDCaN, COI is all about collaboration, and their stated purpose is to "create, support and mobilize partnerships among multiple domains; provide leadership and vision; and coordinate



county-wide efforts to prevent and reduce childhood obesity.” The COI has several domains that represent key sectors in society including governments, schools, early childhood, communities, media/marketing, and businesses. A presentation about SDCaN was made at the April 2010 meeting of the COI's Health Care Systems and Providers Domain group. Many of the 30 attendees expressed an interest in inviting SDCaN to speak to other relevant domains such as the Schools and Before- and After-school Providers Domain.

In March 2010, the County of San Diego Health and Human Services Agency (HHS) was awarded \$16 million from the federal Centers for Disease Control and Prevention to promote physical activity and healthy eating. Throughout the two-year *Communities Putting Prevention to Work* grant period, HHS will collaborate with numerous community partners to increase levels of physical activity, improve the accessibility of nutritious foods, and reduce obesity and other chronic diseases. Grant projects include increasing opportunities for physical activity in before/after school programs.

Public Health Services

The public health sector is huge and influential, and includes such professionals as health educators, administrators, epidemiologists, nurses, and members of allied health fields; physicians working in the public health sector (government or non-profit); and physicians simply interested in public health. SDCaN could make inroads with parts of the public health community interested in children's health, especially relating to physical activity and to obesity.

The American Public Health Association is well-regarded, tends to be at the forefront of movements (or certainly not afraid to take strong stances whether they are popular or not), and has strong local chapters. The Southern California chapter is dominated by Orange and Los Angeles Counties (<http://www.scpha.org>), and it is recommended that SDCaN attend local meetings and gauge interest. It might be worthwhile for SDCaN or one of its member organizations to join the APHA and attend the national convention, which is November 6-10, 2010 in Denver and has the theme "Social Justice: A Public Health Imperative" (<http://www.apha.org/meeting>). SDCaN could relate to that theme by emphasizing in work in ensuring that low-income neighborhoods and schools have access to nature activities.

APHA has recognized the value of connecting children and nature, as evidenced by its broad, community-level definition of health and articles like the following that appeared on the front page of the APHA's monthly publication, *The Nation's Health* in 2007 (http://www.childrenandnature.org/news/detail/american_public_health_association_features_a_front_page_article_on_the_mov):

The intersection between healthy people and a healthy environment is becoming clearer every day, with public health advocates emerging as crucial defenders of sustaining clean water and skies far into the future. That future, however, is in the hands of today's children, many of whom are more likely to view nature through the screen of a television rather than the netted screen of a camping tent.

Mental Health Services

Another important area is that of mental health. Anecdotal reports and some research point to a possible connection between spending time in nature and positive effects in children with conditions such as autism, attention-deficit disorder, and attention-deficit hyperactivity disorder. SDCaN could open new opportunities by finding mental health providers with an interest in children and nature.

Opportunities for Health Education Programs

Educational Materials

Many health care providers enjoy personal time in nature, and they can be more effective advocates for outdoor play when armed with relevant educational materials. Brochures can be designed to educate



health care providers about children and nature's health effects, including facts, research, and specific actions they can offer to their patients. Culturally-appropriate materials or programs can be developed, as health educators tend to work in culturally diverse areas where targeted programs reach constituents with differing cultural norms toward health, exercise, nature, and social roles.

Simple brochures for patients could be produced in various languages prevalent in San Diego, such as Spanish, Vietnamese, and languages of African refugees. They could include a coupon for free entrance to a local nature facility such as the Chula Vista Nature Center or a free nature trinket from a nature center shop, such as a bug magnifier. Donations could be solicited for this offering. Doctor's offices could also offer children and nature-themed coloring and activity books and play nature DVDs in the waiting room. Educational materials and programs need to address the increasing fear of parents for outdoor activities, in the aftermath of two recent murders of girls in San Diego County while they were outside (one was jogging in a park; the other was walking to school).

Prescriptions for Outdoor Play

On the topic of exercise/activity-related prescription pads, there seems to be a mini-movement afoot. The 211 Program has developed prescription pads with check boxes for Nutrition, Diabetes, Healthy Weight, and Physical Activity, and state that the 211 Program "now offers a one-stop shop for programs and services in nutrition, physical activity, healthy weight, and diabetes in San Diego neighborhoods." At NCHS, these pads are typically used for obese children. Most people listen to their doctors and are motivated when a behavior comes officially recommended via a prescription, as this article describes, along with creative efforts undertaken by pioneering doctors (http://www.childrenandnature.org/news/detail/benefits_of_park_prescriptions_noted_in_washington_post):

Eleanor Kennedy, a cardiologist in Little Rock, AR helped create a downtown "Medical Mile" with the support of local funders and the National Park Service's Rivers, Trails, and Conservation Assistance Program. "If my patients feel that they can get outdoors, they are more likely to be consistent about exercise," she told me. "Whether you are waddling, walking or running, going out and exercising will help build your confidence, flexibility and adaptability...."

The city of Santa Fe, NM, launched a Prescription Trails program to target the high rates of diabetes in the community. The program, partially funded by the Centers for Disease Control and Prevention, includes a trail guide that physicians can hand to their patients.

Connections to National Initiatives

The health care sector overall (including pediatrics) and the Federal government are emphasizing wellness and prevention. The comprehensive health reform law (Patient Protection and Affordable Care Act) enacted in March, 2010 will establish a national strategy and fund for prevention and wellness, and the Recovery Act of 2009 includes one billion dollars for wellness and prevention and \$2.8 billion dollars to improve community health centers (<http://www.hhs.gov/recovery/programs/index.html>).

Two federal programs started this year to promote exercise and nature respectively. First Lady Michelle Obama launched "Let's Move!" including an outdoor component, "Let's Move Outside!" (<http://www.letsmove.gov/outside>), a collaborative campaign to address childhood obesity with a focus on healthy eating and exercise, and made an April 15 visit to community gardens in San Diego. In addition, President Barack Obama signed an order to establish the America's Great Outdoors Initiative "to promote and support innovative community-level efforts to conserve outdoor spaces and to reconnect Americans to the outdoors" (<http://www.doi.gov/americasgreatoutdoors>). At the April 16, 2010 launch, Environmental Protection Agency Administrator Lisa P. Jackson said, "Too many of our cities have limited access to parks for children, low-income residents and communities of color. Improving access to open areas and green space in our urban communities should be a focus of a 21st century conservation strategy."



Health Fairs and Conferences

When resources are available, SDCaN could participate in health care sector health fairs and conferences, providing a staffed information table or booth, or even better, incorporate nature play and exploration right into the event. By partnering with a health care provider, researcher, or health educator and a program or project that has incorporated children and nature principles, SDCaN could produce and display a "poster session" at health sector conferences. For all these opportunities, SDCaN could explore the viability of pursuing grants to establish, expand, and evaluate programs.

Awards Program

A few other ideas to reach the health professional community include holding an annual "Leave No Child Inside" awards for health providers and institutions that best exemplify SDCaN ideals in their practice or in programs they promote. These awards could be incorporated into an existing awards event, such as one under development by the San Diego Childhood Obesity Initiative.

Workplace-based Presentations

SDCaN could hold free lectures or workshops at large health clinics, focused on the health benefits of children and nature, and ways to increase children's outdoor and nature play. Ideally, they would be given by someone in the health care field at times convenient for health professionals and with endorsement and encouragement from health care supervisors and top management.

Continuing Medical Education

Many types of health care providers must obtain Continuing Medical Education (CME) credits. Rady Children's Hospital and other local hospitals provide opportunities for CME, and online CME credits can be obtained from many organizations (<http://www.informatics-review.com/cme.html>). The American Academy of Family Physicians has dozens of CME courses, none of which relate to the children and nature topic. The only courses remotely close are entitled, "Well Child Care and Adolescent" and "Well Care Child Breakout." Clearly, there are opportunities in the CME arena for the children and nature movement, perhaps for SDCaN involvement, if resources allow. SDCaN could pursue a grant for seed money to develop a prototype CME program, partnering with a CME provider such as a local health provider trade association or hospital. Another possibility is a children and nature-themed "grand rounds" session and guest lectures to medical students and other students in the health professionals sector.

Research Dissemination

With every research article and statistic that emerges to bolster the positive health association between health and children connecting with nature, interest from the health professionals sector will likewise increase. Reports about the link between health and children's experience in nature further reinforce "children and nature" messages with health care providers, especially when the reports are intended for the health professional community (versus the general public) and derive from respected health journals or health care trade associations such as the American Academy of Pediatrics (AAP). An example is a 2007 AAP clinical report, "Guidance for the Clinician in Rendering Pediatric Care: The Importance of Play in Promoting Healthy Child Development and Maintaining Strong Parent-Child Bonds" (<http://www.aap.org/pressroom/play-public.htm>); the report is by Kenneth R. Ginsburg MD, MS Ed., of the Committee on Communications and Committee on Psychosocial Aspects of Child and Family Health. Additional research is needed about the health benefits of nature.

The "parent" organization of SDCaN, the national Children and Nature Network, has posted a 17-page document about the existing research. Key points from the document (2010) include:

- Direct experience in nature is critical for children (for creativity, problem solving, emotional and intellectual development) and is diminishing in our society.
- Unstructured outdoor free play brings cognitive, social, and health benefits to children.
- Nearby nature boosts children's cognitive functioning and reduces stress in children.
- Nature activities soothe Attention Deficit Disorder symptoms.



- Access to nature nurtures self-discipline among inner-city youth, particularly girls.
- Play in natural environment enhances kindergarteners' motor skills.
- Outdoor experience has self-reported, positive life-changing results on youth.
- Children benefit from appropriate risk-taking in outdoor play.
- Contact with nature has many benefits for children (several literature reviews).

Research Grants

There are many federal, state, and local government programs for the health care sector, increasingly for preventive care and the topic of childhood obesity, and are too numerous to mention here. Federal and state programs for the health professions tend to focus on research grants as well as loans and scholarships for training such as the Health Professions Student Loan Program, Loans for Disadvantaged Students Program, and Nursing Student Loan Program. There may be an opportunity for SDCaN to partner with a local university to obtain a grant for a health education research project. The project could develop, implement, and evaluate a children and nature program that involves a health care setting or health care professionals component.

The San Diego State University's Graduate School of Public Health (<http://publichealth.sdsu.edu>) would be an appropriate potential partner for cooperative research efforts. In addition, University of California, San Diego has a Department of Community Pediatrics and its Center for Community Health (<http://www.sdhealth.org>) is active in the area of public health education. The two universities collaborate on a joint PhD program in public health, including a concentration in health behavior that could offer interesting opportunities for SDCaN if a professor or PhD candidate demonstrated interest in children and nature as a research topic.

Limited research has specifically addressed the relationship between children's health and spending time in nature; most research to date has focused on playgrounds and any outdoor play space. SDCaN and a university research unit could join forces to design a study that truly examines the kinds of behaviors SDCaN endorses to obtain data on what actually works and does not work. This data will be extremely beneficial to health professional and to funding sources, since appropriately enough, they want to spend energy and money on programs with solid evidence of encouraging outcomes.

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