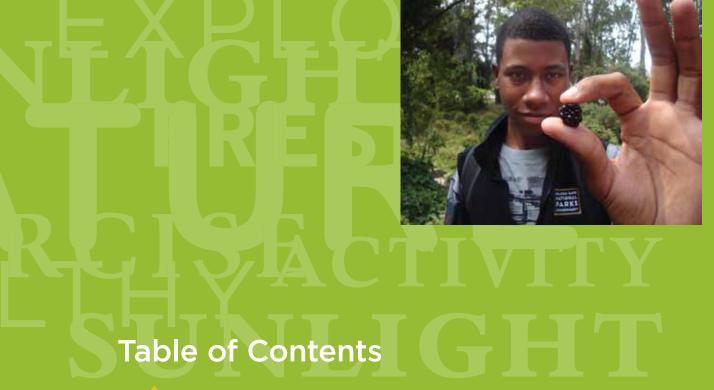


HEALTHY PARKS HEALTHY PEOPLE

San Francisco

{a guide for health care providers}







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Introduction

Healthy Parks, Healthy People: San Francisco

ealthy Parks, Healthy People: San Francisco represents a partnership between parks and health care, with a mission to better serve and engage San Franciscans of all ages and backgrounds in healthy outdoor living. Park professionals and health care providers are allies in our mutual goal of nurturing healthy, active residents of San Francisco. There is growing evidence that being outdoors, especially in natural settings, has a variety of health benefits. Public parks offer free or low cost access to open natural spaces, playgrounds, and recreational programming that encourage physical activity and overall enjoyment.

This manual was developed through a collaboration of the Institute at the Golden Gate, with professionals from the San Francisco Department of Public Health, San Francisco State University, University of California at San Francisco, and Children's Hospital & Research Center at Oakland. Our efforts aim to foster partnerships and further opportunities for "warm handoffs" between clinicians and park professionals. Providers looking for more information or to establish formal partnerships with their local parks professionals are encouraged to contact the Institute at the Golden Gate.

Thank you for joining us in this movement to integrate San Francisco's natural environment with the health of our population. As a next step, we hope that San Franciscans will play an active role in maintaining the health of our local green spaces and habitats.







Dear health care provider,

We are on the front lines in the current epidemic of chronic diseases facing our patients — obesity, heart disease, diabetes, and mental health illnesses. Many of us struggle with how to integrate preventive measures into our clinical practice. We face stringent demands on our time and a hierarchy of needs for each patient. When we do have time to discuss healthy living, we may perceive resistance from our patients and find that they have a hard time adhering to our recommendations. These challenges have led some of us to question the efficacy of clinical interventions in chronic illness; is it even possible within a clinical encounter, to inspire our patients to undertake the behavior change necessary and to overcome barriers to a healthy and active lifestyle?

These health issues will clearly take various levels of intervention; clinician efforts are part of a greater movement. At Healthy Parks, Healthy People, we are committed and respectful of the role clinicians play in this public health response. We present the concept, with empirical evidence, that nature can be of help in sustaining a healthy lifestyle, and may be of benefit in countering a host of chronic diseases. This concept, plus our recommendations on strategies for talking to patients about getting active outdoors, is to be used at your discretion. This manual is intended to give you the knowledge and sample tools necessary to integrate outdoor physical activity into your daily practice of engaging your patients on healthy living.

The manual begins with a general review of the literature on health benefits of the outdoors, parks, and nature. We review common barriers to getting outdoors, then present specific resources for integrating nature as a tool for health into your clinical practice. The last section lists useful outdoor resources in San Francisco.

Thank you for your ongoing dedication to the health of San Franciscans. We are hopeful that you and your patients will benefit from the abundance of green spaces right here in the city.

Sincerely,

Nooshin Razani, MD, MPH

Health Benefits of Nature:

A Summary of the Evidence

Physical activity and the role of parks

n general, the United States population is less physically active than recommended. Fewer than three in 10 high school students meet the goal of 60 minutes of physical activity a day set by the Centers for Disease Control and Prevention (CDC); less than half of all American adults meet the CDC's 2008 Physical Activity Guidelines (Division of Nutrition, 2012). Physical inactivity contributes to the increasing incidence of obesity, along with obesity-related diseases such as high blood pressure, diabetes, congestive heart failure, and stroke, and is among the top causes of mortality (Ogden, Carroll, McDowell, & Flegal, 2007); (Troiano et al., 2008).

Physical activity has decreased among many populations in the United States partly because of fewer opportunities for physical activity in our daily lives. In the past, much of our physical activity came from incidental activities in the workplace, at school, or in our neighborhoods. Walking was a form of transportation and much of it occurred outdoors. A

variety of changes in built environment, commute patterns, school environments, decreased social support in our neighborhoods, and other factors have affected whether people have the opportunity to be physically active outdoors. Schoolaged children are particularly vulnerable since they often depend on their care-givers for transportation or permission, or on their immediate environments for spaces that are conducive to being outdoors (Buchner & Gobster, 2007).

In the context of these changes in the way we live, leisure-time physical activity and recreation have become important ways to meet recommended physical activity goals (Bedimo-Rung, Mowen, & Cohen, 2005); (Mowen, 2010).

Parks serve a vital function in providing convenient locations for physical activity during leisure time. Clinicians may find that the patients who need physical activity the most are the ones who also have the least access to neighborhood parks. This echoes national findings showing that, disproportionately, low-income communities of color tend to be less physically active, have a higher risk of obesity and

> associated diseases, and have less access to parks and other recreation areas (Floyd, Taylor, & Whitt-Glover, 2009); (Dahmann, Wolch, Joassart-Marcelli, Reynolds, & Jerrett, 2010).

In addition to the lack of access to green spaces for physical activity for some, there has been a shift in social norms and priorities in terms of how we may spend our leisure time. In general, there has been an increase in sedentary activities that do not increase energy expenditure such as sitting, watching television, playing video games, using a computer, and talking on a telephone (Byun, Dowda, & Pate, 2011).

Another shift is that fewer people are spending their outdoor leisure time in natural settings. As an example, per capita visits to state and national parks, as well as other forms of nature recreation, such as camping, decreased each year since 1987 (Pergams, & Zaradic, 2008).

A recent survey of 1,450 households, with children between the ages of six and 19 conducted by the United States Forest Service found that technology-centered activities were more popular than nature-based activities when kids are outdoors (Larson, Green, & Cordell, 2011).

In San Francisco, we are lucky to have an abundance of green spaces. According to the Trust for Public Land (TPL), San Francisco has 5,384 acres of parkland within the city limits; that's 6.7 acres per 1,000 residents. In addition, San Francisco boasts 132 playgrounds, or 1.6 playgrounds per 10,000 residents. According to TPL, San Francisco ranks number one in terms of walkable access to a publicly owned park, with 98% of our population living within a half-mile walk from a park. Our state and local parks agencies manage over 220 parks and recreation centers throughout the city. While these areas are heavily visited, their distribution across the city is not equal and visitation is not





regular among ethnically diverse and lower income groups (Roberts & Chitewere, 2011). Even in affluent areas, children, elderly, disabled, or socially isolated individuals may not regularly be experiencing the green spaces San Francisco has to offer.

Health benefits of nature

while the quality and rigor of the literature varies, there is growing consensus that nature has health benefits. We summarize a collection of the key studies below showing benefits of nature, related to increased physical activity, as well as mental, emotional, and community health benefits.

NATURE AND PHYSICAL ACTIVITY

Being outdoors in either a green or built setting, in general, increases physical activity amongst children. In a global positioning system (GPS) and accelerometer study of 1,010 eleven year old children in the UK, children were two to three times more likely to be physically active outdoors than indoors (Cooper et al., 2010). In addition, physical activity tends to be more vigorous in outdoor settings as compared to indoor settings (Dolinsky, Brouwer, Evenson, Siega-Riz, & Ostbye, 2011). In a separate study comparing parental reports of outdoor time to



accelerometer data, each additional hour outdoors was associated with an extra 27 minutes per week of physical activity among girls, and an extra 20 minutes each week of physical activity among boys (Cleland et al., 2008). When these children were followed over five years, the prevalence of overweight was lower amongst those who spent more time outdoors at baseline. It is worth noting that in a variety of studies, boys are more physically active than females in either setting.

Being outdoors in natural settings can also involve meaningful but sedentary recreation activities such as picnicking with friends or family, or taking a moment to relax (Buchner & Gobster, 2007). These activities have mental health and stress-reduction benefits, and may help

our patients engage with their neighborhood communities and parks, and so should not be discouraged. However, extra steps need to be taken if the goal is increasing a patient's physical activity level (Lachowycz & Jones, 2011).

In general, physical activity increases if a person lives closer to a park in good condition that is perceived to be safe (Mowen, 2010). Physical activity increases with specific amenities such as trails, playgrounds, sports facilities, recreational centers, or programming. In a study of people living near eight parks in Los Angeles (approximately 1,800 individuals were observed in each park), after controlling for age, gender, race, and perceived safety, people who lived within one mile of a park were four times

The American Academy of Pediatrics recommends 60 minutes of daily, unstructured free play as essential to children's physical and mental health (American Academy of Pediatrics, 2008). as likely to visit the park once a week or more, and had an average of 38% more exercise sessions per week than those living further away (Cohen et al., 2007). Park proximity has also been associated with lower Body Mass Index (BMI). For instance, 3,173 children were followed over eight years in 12 Southern California communities. Children with access to parks and recreation sites within 500 meters of their homes had a reduced risk of being overweight or obese at 18 years of age (Wolch et al., 2011). Older adults, racial/ethnic minorities, females, and lower income families visit parks less frequently (Shores, Scott, & Floyd, 2007). Living close to a park, especially one with amenities, can help these populations in particular get physically active.

Children tend to engage in "active play" (meaning more physically active) outdoors when they have access to

a variety of landscapes that include "hardscapes" such as asphalt and more natural features. Time studies with school-aged children show that while 30% of total physical activity occurs outdoors, less than 13% of time after-school is spent outdoors, and 2% of that in green space (Wheeler, Cooper, Page, & Jago, 2010). That means the majority of the observed play is in urban, non-green settings. Some argue that play in outdoor settings with natural elements, such as a hiking trail or boulder-size rocks, has been shown to have added benefits including improved motor strength, balance, and coordination for young children (Fjørtoft, 2001). In addition, a variety of landscapes may engage a wider variety of personalities or temperaments of children in physical activity. Researchers surveyed parents and teachers at 59 recently "greened" schools in Canada. Greening was defined as the addition of natural elements including shelters, rocks to climb, logs, trees, and shrubs. They found that asphalt encouraged vigorous, organized, and competitive physical activity. However, in the asphalt-only schoolyards some

> children were sidelined and not active at all. When both the green space elements and the asphalt were involved, the play was moderate in vigor. The types of active play were broadened to include imaginative and cooperative play. In result, more total children were engaged in active play (Dyment & Bell, 2008).

Exercising in a natural setting as opposed to

indoors has mental health and emotional benefits. In a review of 25 studies comparing the physical activity conducted in a human-made setting (such as inside a gym), to the same activity conducted in a natural setting, activities in a natural

environment resulted in reduced negative emotions (e.g., anger, fatigue, sadness) as well as improvements in attention (Bowler, Buyung-Ali, Knight, & Pullin, 2010). Blood pressure and cortisol showed less consistent changes, but the studies conducted to date have small sample sizes and heterogeneity in target population and in how they have defined their outcome (Thompson Coon et al., 2011).

OTHER PHYSICAL HEALTH **BENEFITS**

Being outdoors has been associated with a variety of physical health benefits ranging from increased vitamin D to decreased blood sugars for diabetics (F.E. Kuo, 2010), (McCurdy, Winterbottom, Mehta, & Roberts, 2010). Large proportions of the United States population may be producing insufficient levels of vitamin D due to lack of time outdoors (Misra, Pacaud, Petryk, Collett-Solberg, & Kappy, 2008). Regular doses of bright natural light also help children stay alert during the day, elevate their moods, and make it easier to sleep at night. Spending time outdoors is also associated with improved distance vision; this association seems to be related to time outdoors independent of engagement in any particular sport, as well as exposure to natural light and possibly vitamin D levels (Rose et al., 2008); (Morgan, Ohno-Matsui, & Saw, 2012).

Nature exposure seems to increase physical resilience. As one example, wound healing and decreased analgesic use improve for surgical patients when given views of natural landscapes. Ulrich (R. Ulrich, 1984) randomly assigned 23 surgical patients recovering from gall bladder surgery to one of two rooms. One of these rooms looked out on a brick wall,



and the other on trees and grass. Patients were matched for socio-demographics and prognosis. Recovery was faster for those with the view of trees and grass, and analgesic medication use was lower.

Neighborhood green space is associated with longevity. A survey of 3,000 elderly residents living in Tokyo was conducted about their health as well as their residential environments (Takano, Nakamura, & Watanabe, 2002). Even after age, sex, marital status, socio-economic status, and health status were accounted for, the presence of walkable streets and green spaces near the person's home was associated with survival at five years. Those living in areas with more green space had lower rates of mortality overall (deaths from any cause), and lower rates of mortality due to circulatory disease in particular, amongst a population of 40 million.

Outdoor time is thought to have important contributions to children's cognitive, emotional, social, and educational development regardless of their race or socio-economic status (Strife & Downey, 2009).

Time outdoors in natural settings has been associated with improved cognition for elderly patients in a residential living setting (Ottosson & Grahn, 2005).

MENTAL HEALTH BENEFITS OF NATURE

Nature exposure has demonstrated benefits for general well-being as well as for specific outcomes including anxiety and depression. In a cross-sectional survey of 1,895 people living in an Australian city, respondents who perceived their surroundings to be highly green were found to be nearly twice as likely to report better physical and mental health then respondents who reported the lowest level of neighborhood greenness. This relationship remained even if income was statistically adjusted for. Once recreational walking was adjusted for, the difference in physical health was no longer significant, but the mental health benefits to perceived greenness remained (Sugiyama, Leslie, Giles-Corti, & Owen, 2008).

Other improved mental health outcomes include physician-diagnosed anxiety disorders. Among 345,000 residents examined

in the Netherlands (Maas et al., 2009), lower rates of anxiety disorders were found in people living in places with more parks, agricultural lands, and other forms of green space regardless of income. Annual prevalence of physician-classified depression in areas containing 10 percent green space was 32 per 1,000; in areas containing 90 percent it was 24 per 1,000 (R. S. Ulrich et al., 1991).

A number of studies examined whether green environments enhance attention in children with Attention Deficit Hyperactivity Disorder (ADHD). One of these includes a trial of seven-11 year old children with ADHD randomized to individual guided 20 minute walks in three quiet and safe settings: a neighborhood, downtown, and an urban park. After each walk, the children went inside and took a test measuring concentration. Children's concentration was better after the walk in the park as opposed to a walk downtown or in a neighborhood. The improvement in performance was comparable to the improvement shown from some ADHD medications (Taylor & Kuo, 2009). In a survey, 450 parents nationwide rated their children's ADHD symptoms after a variety of activities. They also rated the greenness of the setting where the activity occurred. Parents rated activities conducted in relatively green settings as having helpful effects on symptoms, and these effects were more helpful than activities conducted indoors or outdoor settings without vegetation (F. E. Kuo & Taylor, 2004).

COMMUNITY BENEFITS OF NATURE

Parks and green spaces have social, economic, and environmental benefits for surrounding communities (Bedimo-Rung et al., 2005). Public spaces with more natural landscaping attract more people than those spaces with no nature, improving the chances for social interactions, and social integration for some populations such as the elderly (Kweon, Sullivan, & Wiley, 1998). Increasing the amount of green space in a community (e.g., tree planting)





can positively affect the presence of aggression, violence, and crime (F.E. Kuo & Sullivan, 2001a, 2001b). Economic benefits include improved property values; environmental benefits include improvements in air pollution and temperature moderation by trees (Bedimo-Rung et al., 2005).

Another environmental benefit is that individuals who experience nature directly, as opposed to learning about it indirectly, are more likely to have an emotional attachment to certain natural settings and develop a "sense of place." This emotional attachment has been correlated with

ongoing visits into nature, as well as with increased environmental stewardship. In fact, "wild nature activity" before age 11 is the most direct route to future environmental stewardship as an adult (Davis, Le, & Coy, 2011)

Common barriers to outdoor activity

Since the early 1960s scholars in the parks and outdoor recreation profession have studied motivations and constraints to outdoor activity. Some motivations for spending time outdoors are common across ethnic groups. These include a belief in physical, mental, emotional, and spiritual benefits to nature, stress relief with "fresh air" or while in "natural beauty," and a belief in the

importance of environmental conservation and stewardship (Roberts & Chitewere, 2011). Common barriers to getting outdoors (whether it be to a neighborhood park, recreation center, or wilderness) include lack of time, lack of access, and not feeling comfortable or "welcome." Patients often face multiple constraints in getting outdoors during their leisure time (Shores et al., 2007). Alleviating one barrier (for example, waiving an entry fee to a park) does not necessarily solve the problem, and will not necessarily lead to increased park visitation. In general, the number of constraints that discourage people from leaving home for leisure increases for individuals with lower socio-economic status.

LACK OF TIME:

"Time" is a cultural variable and it is important to clarify what the patient means when they cite time as a limitation. For some people lack of time may mean competing priorities during their leisure time (Shores et al., 2007). Others lack any leisure time at all. For example, for a patient working two or more jobs, "lack of time" to visit parks or engage in physical activity has a different meaning, needing different solutions. For others, lack of time may mean lack of childcare or elder-care thereby prohibiting their personal leisure time.

LACK OF ACCESS:

Lack of access may mean there is no green space close to a person's home, no way to get there, too much intervening traffic, or that existing green spaces are not perceived to be safe or acceptable. Safety may include worries about the toxicity in public lands or a fear of wildlife (for example, coyotes have been spotted in the Presidio). Women may express concerns about personal safety outdoors. Others may be concerned about not having "proper" outdoor equipment or gear necessary for enjoyment, comfort or even safety. Some patients lack the discretionary money that might be needed (e.g., entry fee, parking, food) for a simple day-long outing.

LACK OF COMFORT OR FEELING WELCOME:

Language and other communication barriers in a park might include signage, interpretation, messaging, lack of information (where to go, and once there, what to do); lack of culturally appropriate programming, or a lack of ethnic diversity among the workforce (Roberts & Chitewere, 2011). There may be a concern about racism experienced when interacting with other park visitors. In addition, specific barriers to being in natural spaces may include never having had outdoor experiences as a child, resulting in a lack of knowledge about the outdoors.

Strategiesfor Health Care Providers

dvising outdoor activity in nature can be a practical method for health care providers to address chronic conditions (McCurdy et al., 2010). Specific guidelines and validated interventions on nature as a therapeutic have not yet been established (Annerstedt & Wahrborg, 2011). While this is an important area of future research, we do know that time in nature is an affordable activity that benefits certain patients. Until there are specific guidelines, we present potential strategies based on a review of the medical and outdoor recreation literature.

We first discuss prescriptions for outdoor activity and how to connect your patients with programs in local parks. For those whose practices allow time for counseling and case management, we provide discussion points for encouraging patients to get outdoors and be active (a schematic is presented on page 13). For those practices with less support, the clinician's role can be

to identify who will benefit from outdoor activity and provide those patients with a referral to a specific entry point. We also discuss ways to integrate the outdoors into a clinical practice and mention other opportunities for advocacy.

Park prescriptions

iscussion of outdoor activity should ideally be tailored to each individual and situation. Given the many constraints in getting outdoors, persistence and patience are warranted. We present a patient-centered model, with nonjudgmental and encouraging interviewing (Britt, Hudson, & Blampied, 2004); (Resnicow, Davis, & Rollnick, 2006).

OUTDOOR **EX**PERIENCES

Establish rapport by listening and gathering history about the patient's own experiences and beliefs about nature and outdoor activity. Listening to a patient's

own experiences in nature will help you assess strategies for overcoming constraints. One way to begin the conversation is by stating you have recently learned that spending time in natural settings or outdoors has health benefits. You can highlight a few of the benefits. Explain that you would like to spend several minutes discussing how getting outside may benefit their health. You can ask:

"Have you had positive expe-

riences outdoors? What made the experience special?" Elaborate where and when they have had positive experiences outdoors, and with whom.

A follow up question can solicit the patient's constraints in getting outdoors:

"What are some negative experiences you have had outdoors? What made it challenging?"

Once you have discussed past experiences and beliefs, get a sense of their current practice:

"Do you spend time outdoors? Would you say that happens daily or weekly?"

"Would you like to spend more time outside?"

If you note a low level of outdoor activity, but a history of positive experiences outdoors, point this out. Ask whether they have considered the discrepancy between their current behavior and their memory of the benefits of being outdoors. Have they contemplated the need for change?

ASSESS PHYSICAL AND MENTAL HEALTH

While it is reasonable to recommend outdoor activity to all patients as a way to encourage healthy, active living, specific populations may benefit in particular from time in nature. Anyone who would benefit from an increase in physical activity could benefit from a park prescription. As summarized above, there is convincing evidence that physical activity, which increases with outdoor time, improves health in a variety of conditions. There is also evidence that nature in particular

The strategy we recommend in talking to patients can be remembered using the mnemonic

EXPLORE:

EXperiences

Physical and mental health

Limitations

Opportunities

Resolution

Evaluate



can improve attention, reduce stress, provide emotional benefits, and has added benefits above those of indoor physical activity. Specific conditions that may benefit from outdoor time are chronic conditions such as obesity and its sequelae (diabetes and hypertension), ADHD, depression, and anxiety.

Children and the elderly will benefit from your recommendation for outdoor activity. Children have much to gain from time spent in nature (e.g., motor development, coordination, social development, preventing myopia), but may also have the least independent access to outdoor spaces. Elderly patients can benefit from the cognitive stimulation and social component of being in nature with others. Children and elderly are under represented in outdoor spaces and may benefit from counseling on where and how to get outside.

Assess the patient's current fitness and physical activity level. If they are hoping to spend more time in nature, but are not yet ready for vigorous physical activity, you can note this. Note whether there are health conditions that would require limiting physical activity.

EXTERNAL LIMITATIONS

Once you have gathered the history of outdoor experiences, and have assessed their physical and mental health, you can start working with the patient to list the limitations they face in getting outdoors. Write down important limitations and a few potential solutions. Here are some suggestions:

Lack of time: Visiting their local park,

or stepping outside their own home, can be just as good as traveling remote distances. Local community gardens or gardens in schools may serve as an in between. For those wishing to find a park, provide them with simple entry points that acknowledge their time constraints. For people who need child or elder-care resources, suggest

parks with programming specifically for children and/or elderly. Alternatively, you can emphasize that being in nature can be a great family activity and discuss ways they can get outdoors as a family.

Lack of access: If there are transportation barriers, help your patient map the way to the park. Help them think through the logistics of an outing, including public transportation routes, how long the outing will take, what and where they will eat there, and what they can do there (activities of interest). Let them know what kind of amenities are around a park, including restrooms, playgrounds, and places to eat. To address safety concerns, it is important to ask the patient which outdoor spaces they themselves perceive as being safe.

Lack of comfort or feeling welcome: San Francisco has a range of parks with programming available in different languages and for different cultures. Explore your parks and tell patients details about what they may find there, the people they may see, and what they should be prepared for. Guide patients to park natural-



ists or environmental resources that help them learn about San Francisco's plants and animals so they feel prepared in dealing with potential wildlife experiences as well as provide an opportunity for education when interested.

UNCOVER OPPORTUNITIES

In partnership with the patient, brainstorm specific opportunities for physical activity in their own neighborhood. The best opportunities will be the ones the patient comes up with. In discussing local nature opportunities, it is useful to have a map and list of available programs open while you talk. Review the patient's age, park preferences, activity preferences, and social situation. Make use of the contacts in this manual to find out which parks and recreation centers offer programming and materials that will make the patient population you serve feel more welcome and included. Find out the names of staff in your local parks and refer to them in your conversations with patients.

Draw on their history of positive experiences outdoors. Family gatherings and picnics may resonate with some patients;





for others, family elders may keep the memory of rituals or community activities practiced in nature. Alternatively, talking about gaining life skills and/or health may be more pertinent for some than "leisure." For some patients the idea of learning how to grow food and live off the land will resonate more than messages of conservation. Finally, some patients may be motivated by physical or mental health.

Being outside in nature is an experience that can be shared with family or friends. Patients can commit to spending certain amounts of time outdoors with a family member for their mutual health, or can find an outdoor buddy. Suggest or organize walking groups, or help connect patients in your practice who seek to go to the same park.

MAKE A RESOLUTION

Work with the patient to make a specific resolution or goal related to the outdoors. Let the patient know you will follow up with stated goals at the next visit. Review strategies to limits as listed above and incorporate the opportunities generated.

Meet the patient at their level of motivation. For patients who are not ready for physical activity, you can start out by recommending a "green hour" when electronics are turned off to spend time outdoors "unplugged" instead. This can take place in a garden, a backyard, the park down the street, or any place that is a safe and accessible green space. You can suggest a list of activities to do in any outdoor space as listed in the resource section of this manual.

For patients who are not currently physically active, but are willing to start an

Parks, nature, or green space? These terms may have different connotations for each patient. Use the one that resonates best.

activity regiment, you can recommend a visit to a specific park or a green space. You might consider suggesting a single entry point that you know well and suggest parks with recreation centers, trails, playgrounds, or other amenities that will encourage physical activity. Show it to them on a map, or talk them through the steps to get there. Walking is easy, low impact, can be done in every park, and has the lowest drop-out rate of any type of exercise. Remember that for young children, unstructured time outdoors and play is physical activity.

For patients who are already physically active, you can direct them towards the recreational resources available to San Franciscans as listed in the resource section of this manual. There is a range of activities and experiences people have in the outdoors; free activities ranging from walking, biking, and jogging to different outdoor sports and an adventure challenge course experience. For a small fee, outdoor activities providing both fun and exercise include everything from kayaking and rafting to rock climbing and surfing.

Once the goal is chosen, review the plan. For example, "So, you are going to walk for 30 minutes in Golden Gate Park with your son on Sundays, and stop at the playground so he can climb the monkey bars. That sounds wonderful!"

FOLOW UP & EVALUATE

Evaluate the patient's progress by asking about their specific resolution in a follow up appointment. You can then repeat the process and find out their outdoor experiences.





Integrating the outdoors into a clinical practice

utdoor activity can be integrated into the office flow as well by creating consistent messaging throughout the clinical visit. Creating this change in your clinical setting will benefit from support and input from the entire staff and front office. If there is someone with interest in this area, they can serve as your "Nature Champion," i.e. your liaison with the parks. This person may organize group nature walks by patients of a particular health clinic. They can also host a neighborhood nature walk with their patients where a nurse or doctor joins them.

Resources for your waiting rooms and patient rooms are available for free or for a small fee. These include:

- Healthy Parks, Healthy People brochures that include a parks and transit map
- National Environmental Education Foundation infographic, fact sheet, prescription pad (available at: neefusa.org)
- California Children's Outdoor Bill of Rights poster
- Activity/program brochures from the SF Recreation & Parks Department and/or subscribe to their e-Newsletter with local activities

Finally, get outside! Visit the parks, take care of yourself, and encourage your staff to do likewise.

Opportunities for advocacy

- Join the Healthy Parks, Healthy People movement by contacting the Institute at the Golden Gate.
- Find out about environmental stewardship and volunteer opportunities for your patients in their local parks. These events can be a great opportunity to meet park staff and to learn about the plants in San Francisco's parks.
- If you note that patients are looking for specific programming, advocate for culturally appropriate programming at your local park.
- If you find local resources lacking, advocate for better parks and playgrounds in your neighborhood or where your patients live by contacting your elected officials or attending local meetings and expressing the importance of local parks for health.



Accounting for a patients developmental stage in setting an outdoor goal

YOUNG CHILDREN (ages 0-5) This age group is physically active in ways that are different from the activities of older children, adolescents, or adults. In this age group, play is spontaneous and self-directed; bouts of gross motor play are followed by rest (Burdette & Whitaker, 2005). The outdoor environment is an important part of encouraging movement and physical activity for young children. Preschoolers are more active and engage in more gross motor play when outdoors. Further, natural environments that are enriched - that is, with natural elements such as sticks, rocks, and streams - will foster healthy development and invite young children to explore. Encourage parents to find a safe outdoor space and to give their preschooler unstructured time to discover and play.

SCHOOL AGE (ages 6-12) For elementary school children, parental involvement is associated with increased outdoor time, as are social factors such as the opportunity to play with friends outdoors (Burdette & Whitaker, 2005). Suggest that parents join in the fun and make it a family event, or bring a friend along for company.

ADOLESCENTS (ages 13-18) To successfully engage an adolescent, it is important to listen to his/her ideas on how he/she might benefit from being outdoors and what activity referrals they would enjoy. It is best to probe until you figure out what their specific constraint may be and address this directly and head on.

Researchers have noted that barriers to outdoor time for adolescents differ by gender and ethnicity (Perkins & Noam, 2007). Staying off the streets, a desire to learn new skills, avoiding boredom, and opportunities for fun and enjoyable activities while doing something positive are some reasons cited for visiting a park or recreation center after school. Reasons youth did not participate included lack of time (e.g., sports practice, studying, familial responsibilities that took precedence over program participation, other interests), feeling they are too old for the park or recreation center,



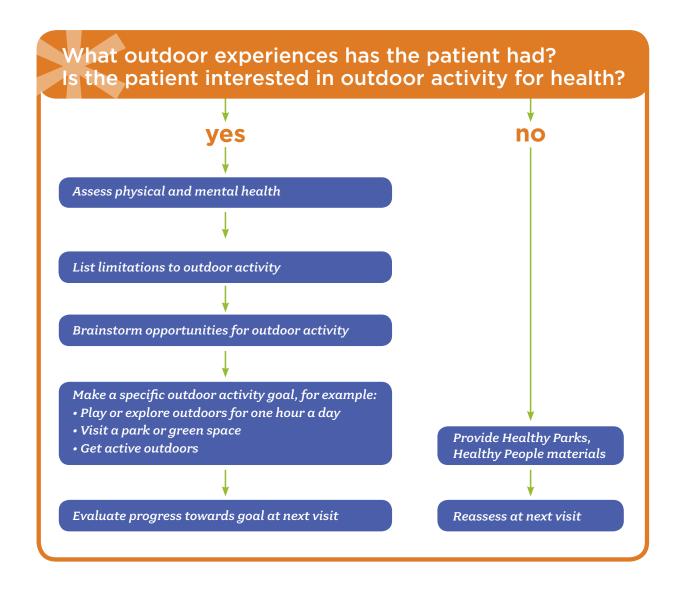
and lack of parental permission. Parents can be encouraged to go with the youth on their first visit or to meet San Francisco's teen outreach staff (e.g., SF Recreation & Parks Department).

ELDERLY On the other end of the spectrum, elderly are currently under represented amongst park visitors in some areas. You may be able to suggest specific parks with moderate walking trails or suggest a peer group they can join for a park visit.





For more information and to get involved with Healthy Parks, Healthy People visit: instituteatgoldengate.org





Outdoor Resources

in San Francisco



Where to go

SF Recreation & Parks Department: sfrecpark.org

SF Parks Alliance: sfparksalliance.org

The Presidio, Urban **National Park:** presidio.gov

Transit and Trails: transitandtrails.org

Golden Gate National Parks Conservancy: parksconservancy.org

Golden Gate National Recreation Area: nps.gov/goga

Be prepared

(remember, safety first!)

- Dress comfortably in loose clothing
- Wear sneakers or other walking shoes
- Bring layers (light jacket, sweatshirt)
- If any question of rain, when in doubt, bring your raingear
- Pack a small bag, easy to carry, such as a day pack for water bottle, camera, cell phone, snacks, sunscreen, and other small items of interest
- If outdoor annoyances are known (such as pollen allergies) bring medication, or a non-pharmaceutical such as herbs, for comfort
- If you suffer from asthma you can still enjoy the outdoors, just be sure to bring your inhaler or other medication as suggested by your physician, and discuss your exercise goals with your physician
- If you have other health conditions check with your doctor
- Use common sense about safety
- Depending on the activity and location, consider a small first aid kit

What to do

Offering patients with ideas for what do to outdoors should be linked to their preferences, hobbies, and even climate likes and dislikes.

BACKYARD

Eat outside and invite your neighbors to join • Explore every corner of your yard and count every type of flower and plant you find • Play catch • Look for shapes in the clouds • Read

a book under a tree • Close your eyes, touch things, and guess what they are • Look under rocks for little salamanders

Follow each path or trail • Climb a tree • Look at spider webs up close • Fly a kite • Walk barefoot in the grass • Smell a flower • Take pictures of what makes you smile

WILD OPEN SPACE

Count how many birds you find • Look for animal tracks and scat • Roll down a hill • Find five different kinds of rocks • Dig in the dirt for worms and insects • Paint or draw what you see • Take lots of pictures

CALIFORNIA CHILDREN'S **OUTDOOR BILL OF RIGHTS**

Every child in California should, by the end of their 14th year, have the opportunity to experience the following activities:

Play in a Safe Place • Follow a Trail • Explore Nature • Camp Under the

- Stars Learn to Swim Ride a Bike • Connect with the Past • Go Fishing
- Go Boating Plant a Seed

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ABOUT US

The Institute at the Golden Gate

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The Institute at the Golden Gate contributes to a more sustainable and healthy world by harnessing the power of parks and public lands to advance environmental stewardship and human wellbeing. A program of the Golden Gate National Parks Conservancy in partnership with the National Park Service, the Institute fosters new ideas, shares best practices, encourages leadership, and supports and implements public policy changes that will benefit people and the planet.

Golden Gate National Parks Conservancy

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The Golden Gate National Parks Conservancy is the nonprofit membership organization created to preserve the Golden Gate National Parks, enhance the experience of park visitors, and build a community dedicated to conserving the parks for the future. The Conservancy is an authorized "cooperating association" of the National Park Service and is one of more than 70 such nonprofit organizations working with national parks across the United States.

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The NPS manages the Golden Gate National Parks, as well as 398 other parks across the United States.

PROGRAM FUNDERS

Financial support for Healthy Parks, Healthy People comes from: Kaiser Permanente and the S.D. Bechtel, Jr. Foundation.

ACKNOWLEDGEMENTS

This manual was prepared by Nooshin Razani, MD, MPH (Children's Hospital & Research Center at Oakland) and Kristin Wheeler (Institute at the Golden Gate). Peer review was conducted by: Curtis Chan, MD, MPH; Nina Roberts, PhD; and June Tester, MD, MPH. We also acknowledge the help of: Jamal Harris, MD; Elsa Tsutaoka, MD; Laurie McElroy; and Dayna Long, MD. Special thanks to the National Environmental Education Foundation (NEEF).







