

PSE PLAYBOOK

Implementing Policy, System, and
Environmental Change in Our Communities



A child wearing a red jacket and blue sneakers with red accents is stepping on a puddle on a gravel path. The child's hands are visible, and they appear to be holding something. The background is a blurred outdoor setting with green grass and brown soil.

**what is
PSE change?**

PSE change is vital to creating **HEALTHY COMMUNITIES** across California.

Imagine a healthy community where families have access to nutritious food, children can safely walk and bike to school, seniors are physically active, and residents have the opportunities and resources they need to lead an active and nourishing life. *Policy, system, and environmental (PSE) change* refers to interventions that affect the upstream causes of health, such as access to nutritious food and opportunities for physical activity.



How Can **HEALTHCARE PROVIDERS** Support PSE Change?

Healthcare providers are valuable partners because of their health expertise, experience with at-risk populations, and role as respected members of the community. They can play many roles with varying levels of involvement in order to support PSE change.²

ROLE		LEVEL OF INVOLVEMENT	
Connector	Identifies other providers in the community to augment support for an issue	Low	A one-time role that requires a limited time commitment and is not central to the implementation or sustainability of the intervention (e.g., testifying at a public meeting)
Advocate	Advocates for a specific policy, decision, or change	Low	
Amplifier	Writes, speaks, blogs, or is interviewed about an issue	Medium	An ad-hoc role that requires a moderate time commitment and is not central to the implementation or sustainability of the intervention (e.g., attending three task force meetings to help design a policy)
Team Expert	Joins an existing collaboration or partnership or provides subject matter expertise	Medium	
Leader	Identifies or produces resources, convenes stakeholders, or establishes multi-sectoral partnerships	High	An ongoing role that requires a significant time commitment and is central to the implementation or sustainability of the intervention (e.g., securing funding for and helping to design and manage a community-wide physical activity program)

Putting the *PSE PLAYBOOK* to Work for You

Healthcare providers and local health departments play distinct roles in making communities healthier, and the two can collaborate to be more effective. This Playbook showcases examples of collaboration between providers and local health departments on PSE change in the following areas:

- Healthy food and beverage standards
- Food security
- School wellness
- Safe routes to school
- Structured physical activity

For each topic, the Playbook describes the problem, offers a menu of PSE solutions, and highlights two case studies, one of which focuses on implementing PSE change in a rural area.

Each case study is unique. Readers will notice that: interventions fall into multiple PSE categories; providers play more than one role or play the same role repeatedly, making for a larger time commitment than indicated above; and institutions or support teams are sometimes central to the intervention.

There is no one-size-fits-all approach to collaboration between providers and local health departments, and this Playbook is intended to inspire action rather than prescribe a specific path forward.

A chef in a light green shirt is working in a kitchen. The background shows stainless steel equipment and a tiled wall. A large blue semi-transparent rectangle is overlaid on the middle of the image, containing the title text in white. Below the blue rectangle, there is a close-up view of several clear plastic containers filled with fresh green leafy vegetables and red cherry tomatoes, arranged on a metal tray.

Healthy Food & Beverage Standards

What's The **IMPACT?**

The food environment affects community health.

Research shows that the availability, affordability, and marketing of foods and beverages in stores, restaurants, schools, workplaces, healthcare settings, and other places where residents spend their time have a substantial impact on diet and diet-related disease.³⁻⁵

Disproportionate exposure to unhealthy food environments and messages.

Low-income residents, communities of color, and rural residents are disproportionately exposed to unhealthy food environments and messages. They are also more likely to face barriers to accessing healthy food.⁶ Stores located in low-income communities of color stock more processed

foods and alcohol, and carry lower quality produce and meats.³ Low-income Latino and African-American communities are disproportionately targeted by unhealthy food advertising: for example, African-American and Latino youth are significantly more likely than white children to see fast food advertisements.^{7,8} Rural residents have fewer stores offering nutritious lower-cost food options compared to urban areas and the majority of these are convenience stores which offer less nutritious foods.⁹

Poor health outcomes. These individuals are disproportionately affected by poor health outcomes associated with diet and physical activity, including obesity, diabetes, heart disease, and dental decay infection.^{10,11}

What Are **HEALTHY FOOD & BEVERAGE STANDARDS?**

For the purposes of this Playbook, *healthy food and beverage standards* are a set of requirements that define the types of foods and beverages available and the way they are promoted in stores, restaurants, schools, workplaces, healthcare settings, and other places where individuals can get food.

Interventions that create healthy food and beverage standards could:

Require the stocking, serving, and sale of healthy items, such as fresh produce, whole grains, low-fat dairy and low-sodium snacks.

Prohibit or limit the stocking, serving, and sale of unhealthy items, such as sugary drinks, candy, high-sodium snacks and alcohol.

Make unhealthy foods and beverages less attractive by changing the price, adding a tax, removing signage, or altering the location of these items within the food environment.

CASE STUDY:

Choose Health LA Restaurant Program¹²



HEALTHCARE PROVIDER ROLES: Leader / Team Expert / Advocate / Connector **LEVEL OF INVOLVEMENT:** High

INTERVENTION SUMMARY

The Choose Health LA Restaurant Program was established by the Los Angeles County Department of Public Health in 2013 to incentivize restaurants in the LA area to offer healthier menu items. In exchange for offering healthier options, restaurants are given free promotional materials and assistance redesigning their menus.¹³ The program's healthy food and beverage standards include:

- Smaller portion sizes
- A healthy kids' menu, that includes fruit, vegetables, and non-fried food
- Water upon request, free of charge¹³



PROVIDER AND TEAM ROLE

Dr. Elisa Nicholas, MD, MSPH and Chief Executive Officer of The Children's Clinic (TCC), led efforts to secure funding from the county of Los Angeles and First 5 LA to operate the Choose Health LA Restaurant Program in Long Beach (*leader*). Chhou Ou-Ratunil, CHES, Health Education Advocate and other MPH professionals at TCC reached out to and educated local restaurants about the program (*advocate /connector*). They also partnered with the local health department and Long Beach restaurants to redesign menus (*team expert*). One of the restaurants they partnered with was Kim Sung Kitchen, a Cambodian-Chinese restaurant.¹⁴

RESULTS

Since the program's launch in 2013, more than 700 restaurant locations have joined the program and agreed to offer smaller portion sizes and healthier menu options.¹⁵ Already, local restaurants, including Kim Sung Kitchen, are seeing customers regularly order from the smaller portions menu. Staff at Kim Sung Kitchen report eating and feeling better as a result of healthier menu options and smaller portion sizes.¹⁴

CASE STUDY: Measure AB 2782 – Healthy California Fund (“Health Impact Fee”)¹⁶



HEALTHCARE PROVIDER ROLES: Leader / Amplifier

LEVEL OF INVOLVEMENT: High

INTERVENTION SUMMARY

In 2016, a policy titled *Measure AB 2782 - Healthy California Fund* was introduced to the California State Legislature. The measure aimed to establish a “health impact fee” of two cents per ounce on sugary drinks in California, which includes sodas and energy drinks. Revenue from this fee was proposed to be put into a fund supporting localities, community based organizations, and licensed clinics to create and maintain childhood obesity and diabetes prevention programs.¹⁶ The money was also proposed to go toward increasing access to safe drinking water and creating oral health programs.¹⁷

PROVIDER ROLE

Dr. Jim Wood is a dentist and a California 2nd Assembly District representative. Representing a largely rural district that includes Humboldt, Del Norte, Mendocino, Trinity, and Sonoma counties, he has made rural health a cornerstone throughout his career. From his experience in clinical practice, he can tell immediately whether someone consumes large amounts of sugary beverages by the condition of their teeth. Given the connection between consumption of sugary beverages and decreased oral health, he thinks it makes sense for beverage companies to chip in for treatment.¹⁸

In 2016, Dr. Wood co-authored Measure AB 2782 because he believes a fee on sugary drinks is an effective strategy



to reduce consumption and, therefore, decrease the need for restorative dental work (*leader*). In order to increase support of the measure, he issued a press release and participated in a news conference to raise awareness about the proposed legislation (*amplifier*).¹⁸

RESULTS

Though this bill did not move forward in the Legislature, Dr. Wood believes it is possible to reintroduce this legislation. He also believes passing similar measures at the local level may be a more effective strategy because it can compel the beverage industry to uniformly change their product rather than having to comply with various ordinances.¹⁸

Other **EXAMPLES OF PSE CHANGES** Using Healthy Food & Beverage Standards

- P** **E** Adopt a municipal policy requiring food stores to place healthy items near the checkout counter instead of unhealthy items
- P** **E** Adopt a municipal policy requiring food stores to stock a minimum amount and variety of specific healthy foods
- S** **E** Implement a healthy corner store program incentivizing small food stores to stock and sell healthier foods and beverages while limiting the promotion of unhealthy items
- S** **E** Pilot a pricing initiative at a hospital or workplace subsidizing the cost of healthy food options
- S** **E** Change procurement practices at a workplace to prioritize vendors offering low-sodium menu items



Food Security

What's The **IMPACT?**

Food insecurity affects community health.

Food insecurity is the lack of consistent, dependable access to an adequate supply of food for a healthy life.^{19,20} Individuals experiencing food insecurity make tradeoffs between food and other necessary expenses, such as rent.²¹ Research shows that food insecurity affects nutrition and childhood development, and can lead to or exacerbate physical, behavioral, and psychological health conditions.^{22,23}

Disproportionate effect.

Low-income residents, communities of color, and rural residents are disproportionately affected by food insecurity. Nationwide, African-Americans and Latinos are almost twice as likely to experience food insecurity compared to white households.²⁴ Among U.S. counties with the

highest rates of food insecurity, half are located in rural areas.²⁶ Rural residents have more limited access to affordable food, face higher prices for food, and are less likely to receive Supplemental Nutrition Assistance Program (SNAP, commonly known as food stamps) benefits than their urban counterparts.²³ Low-income rural residents, particularly those living on Native American reservations, have high rates of hunger and poor access to healthy food.³

Poor health outcomes.

Low-income individuals, communities of color, and rural individuals are disproportionately affected by poor health outcomes associated with diet and physical activity, including obesity, diabetes, heart disease, and dental decay infection.^{10,11,26}

What Is **FOOD SECURITY?**

For the purpose of this Playbook, *food security* refers to the consistent availability and usability of affordable, nutritious food among at-risk communities. Interventions that improve food security could:

Increase the affordability and supply of healthy foods and beverages for low-income individuals by increasing enrollment of eligible residents and retailers in SNAP; the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC); the Senior Farmers' Market Nutrition Program (SFMNP); and other food benefit programs.

Incentivize the purchase of healthy foods and beverages by subsidizing the price of healthy items bought using SNAP, WIC, and SFMNP benefits.

Increase the supply of healthy foods and beverages in food banks by encouraging donations of surplus healthy items from grocery stores, restaurants, farmers' markets, and farms.

Educate community members about SNAP, WIC, SFMNP and other food benefit programs, available food sources, selecting healthy food, and preparing healthy food.

CASE STUDY: San Diego Food Rx²⁷



HEALTHCARE PROVIDER ROLES: Leader / Amplifier / Connector

LEVEL OF INVOLVEMENT: High

INTERVENTION SUMMARY

In 2017, Kaiser Permanente in San Diego County launched a pilot program called Food Rx.²⁷ The goal of Food Rx is to adopt the American Academy of Pediatricians' (AAP) recommended policy which adds questions to screen for food insecurity in patients' medical records.^{27,28}

Program activities include:

- Educating pediatricians and medical staff about the link between food insecurity and obesity
- Raising awareness about how pediatricians and medical staff can become a resource to their patients to address food insecurity
- Identifying an organization to refer patients to who screen positive for food insecurity
- Creating a referral form

PROVIDER AND INSTITUTION ROLES

Dr. Pat Cantrell is a Champion Provider Fellow and the president of the AAP San Diego and Imperial County chapter. During her tenure as president, AAP issued a policy recommendation to screen for food insecurity. Dr. Cantrell led the charge to have this policy adopted in San Diego and Imperial County.²⁷ Dr. Cantrell knew she needed to engage partners in order to build momentum for the policy. She initially partnered with the San Diego Food Bank, San Diego Hunger Coalition, and Medical Society (*connector*). Together, they determined that doctors have limited time with their patients and would

need to have a “one-stop-shop” organization to refer patients to. The Medical Society recommended 2-1-1 San Diego, which serves as a nexus to bring community resources together to help people navigate and access services, including food access.²⁹

Dr. Cantrell then integrated food insecurity screening into patient medical records, conducted trainings in pilot sites located in medical offices, identified a single organization to direct referrals, and worked with her coalition to create a referral form called Food Rx, which resembled a prescription pad (*leader*).²⁷

RESULTS

San Diego FoodRx was piloted in a Kaiser Permanente medical office and will expand to 11 additional offices, including two rural offices in El Cajon and Escondido. Dr. Cantrell explains that gathering buy-in was an “easy sale.” Once physicians and medical staff learned about food insecurity's link to patient health, they were eager to help their patients by incorporating the screening questions.

Through the coalition, Dr. Cantrell was able to partner with 2-1-1 San Diego to provide a free referral service to patients. One of Dr. Cantrell's original goals was to amplify the importance of the policy. Recently, she met with the president of AAP in Texas to explore how they can implement similar efforts (*amplifier*). Dr. Cantrell considers this an indication that the policy can be adopted nationwide through the AAP network.²⁷

CASE STUDY:

Downtown Dinuba Certified Farmers' Market



HEALTHCARE PROVIDER ROLES: Leader / Team Expert

LEVEL OF INVOLVEMENT: Moderate

INTERVENTION SUMMARY

The Downtown Dinuba Certified Farmers' Market was established in Tulare County in 2014 to improve food security and increase access to physical activity.³⁰

It was created by Network Leaders on the Move (NLOM), a collaborative that includes healthcare providers, healthcare networks, the local health department, the city of Dinuba, and other community organizations and government agencies.^{30,31}

To ensure that low-income residents have access to affordable healthy food, the farmers' market accepts cash, WIC benefits, and Electronic Benefit Transfer (EBT) payments.^{30,31} In California, EBT includes SNAP benefits, California Food Assistance Program benefits, and cash aid benefits. The farmers' market matches EBT purchases up to \$10, so shoppers receive \$20 worth of produce for only \$10 in EBT benefits. It provides seniors 60 and older with \$20 vouchers to spend at the market. It also offers Zumba dance classes and stations where community members can check their blood pressure, apply for Medi-Cal, or sign up for EBT.³¹

PROVIDER AND INSTITUTION ROLES

The Family Health Care Network and Kaweah Delta Health Care District planned and implemented the farmers' market (*leader*). Several clinics and providers have staffed booths at the farmers' market, sharing information about



nutrition and opportunities to improve oral and physical health (*team expert*). Participants included Dinuba Orthodontics and Alta Family Health Clinic.³¹

RESULTS

Since the market was established, it has become a community gathering place and venue for concerts, performances, and workshops. Vendors report more residents pay for produce using EBT benefits than cash, which suggests the market is successfully increasing access to fresh, healthy food for low-income community members.³¹

Other **EXAMPLES OF PSE CHANGES** That Improve Food Security

- P** **S** Adopt a payment policy at a local farmers' market allowing SNAP participants to purchase produce with their SNAP benefits
- P** **E** Adopt a healthy food and beverage standards policy at a food bank to ensure it only accepts healthy donations
- S** **E** Implement a voluntary program matching purchases made with SNAP benefits at a farmers' market, allowing SNAP participants to double the amount of produce they can purchase with their benefits
- S** **E** Implement a voluntary program distributing surplus food donations from stores, restaurants, farmers' markets, and farms to food banks
- E** Develop a community garden program enabling residents to voluntarily learn about, grow, and eat fresh produce



School Wellness



What's The **IMPACT?**

The school environment affects student health.

Research shows that school features — including the types of foods and beverages available, marketing of those foods and beverages, availability of and access to physical education, and design of outdoor activity areas — affect student diet, exercise, academic performance, and behavior.³³

Disproportionate effect.

Low-income youth, youth of color, and rural youth disproportionately rely on schools as a source of food and physical activity, yet they are more likely to attend schools with limited healthy food and beverage options, limited physical education programs, and outdated recreational equipment.³⁴ Latino children disproportionately experience food insecurity, make up 32 percent of students receiving free lunch, and are less likely to have healthy snacks available at school compared to white students.³⁵

Schools located in low-income neighborhoods are less likely to have physical education classes or incorporate physical activity practices in the school day compared to schools in high-income neighborhoods.³⁶ Low-income youth of color have the shortest recess periods.³⁷ Unhealthy foods are more pervasive in rural schools than in urban and suburban schools.³⁷ Despite a 2010 federal law requiring schools to adopt a local school wellness policy, rural elementary schools' recess periods, physical education, and offerings of health foods did not increase due to lack of funding.³⁹

Poor health outcomes.

Low-income students, communities of color, and rural students are disproportionately affected by poor health outcomes associated with diet and physical activity, including obesity, diabetes, heart disease, and dental decay infection.^{6,10,11}

What Is **SCHOOL WELLNESS?**

For the purpose of this Playbook, *school wellness* refers to any effort to improve a school's food or physical activity environment over and above changes required by federal law. Federal law requires schools participating in the National School Lunch Program and other child nutrition programs to adopt a local school wellness policy. These policies include standards requiring healthy foods and beverages in cafeterias, and limiting the sale of unhealthy foods and beverages in vending machines. This law is applicable to most public schools.⁴⁰

Interventions that improve school wellness could:

Apply healthy food and beverage standards to snacks available at after-school events, such as club meetings, sports games, or fundraisers.

Require or encourage improvements to physical education programs and recreational facilities to make physical activity more culturally appropriate, safe, and widespread among students.

Establish recess and lunch break policies maximizing physical activity among students and ensuring recess and lunch breaks are not taken away as a form of discipline.

CASE STUDY:

Sacramento Local School Wellness Policy⁴²



HEALTHCARE PROVIDER ROLE: Team Expert

LEVEL OF INVOLVEMENT: Medium

INTERVENTION SUMMARY

In 2015, the Sacramento City Unified School District (SCUSD) began updating its school wellness policy to maximize student wellness during the school day and streamline existing district policies.⁴³ Based on a series of community input sessions, SCUSD drafted a new policy that:

- prohibits offering food as an incentive or reward for behavior and performance,
- requires all food offered during the school day, including for birthdays, meets the Smart Snacks for Schools guidelines,
- encourages staff to choose water and use non-branded containers if they drink sugary beverages at school,
- ensures physical activity and recess are not taken away as a form of punishment, and
- requires schools to meet and exceed physical activity requirements by grade level.⁴⁴

Some of these requirements go above and beyond the federal requirements, such as encouraging staff to model nutritious choices. SCUSD is currently soliciting community input on the draft policy and hopes to finalize and adopt the policy later this year.⁴³

PROVIDER ROLE

Dr. Zoey Goore, a Champion Provider Fellow and pediatrician, has been active in her community for years on issues of food security and obesity prevention.



When the new school wellness policy was being drafted, she was asked to join the Coordinated School Health Committee. Dr. Goore provided input on nutrition and physical activity requirements for student wellness as well as up-to-date information on child nutrition standards during a series of meetings with stakeholders, including SCUSD staff, parents, teachers, health and counseling staff, food services staff, and expert community organizations (*team expert*).⁴²

RESULTS

Once adopted, this policy will be unique for encouraging staff to model healthy food and beverage choices for students.⁴² Furthermore, SCUSD will join the ranks of school districts maximizing and ensuring equitable access to daily physical activity for all students, including those being disciplined, recognizing it as a critical form of stress release and an important opportunity to promote physical and mental wellness and increased cognitive functioning.⁴⁵

CASE STUDY:

Bakersfield City Unified School District Wellness Centers⁴⁶



HEALTHCARE PROVIDER ROLE: Leader / Team Expert

LEVEL OF INVOLVEMENT: High

INTERVENTION SUMMARY

In 2016, Bakersfield City Unified School District opened their first school wellness center. Since many students within the district do not have health insurance, they rely on federally qualified clinics for care. These clinics are inundated, and it can take weeks to receive care. The goal of the school wellness centers is to increase healthcare access and availability to students so they can return to school in a shorter period of time. Initially, the district launched two centers, and they were so well utilized by the students that grant funds were used to build two more centers. All of the wellness centers are stand-alone clinics that provide sick and well visits, dental, and vision care. Recently, the district partnered with the local health department to offer screening for sexually transmitted diseases and contraception.⁴⁶

PROVIDER ROLE

Dr. Tiffany Pierce is a physician and volunteers as medical director for Bakersfield City Unified School District Wellness Centers. As medical director, Dr. Pierce develops protocols for nurse practitioners that enable them to provide care to students (*leader*). She supervises all of the nurse practitioners and is available to them at any time via phone or email to answer their questions (*team expert*). Dr. Pierce also trains the nurse practitioners on how to bill to medical administrators (*team expert*).⁴⁶

In addition to volunteering as medical director, Dr. Pierce is also a member of the school district's wellness policy



group. In this capacity, she aims to address childhood obesity by improving the district's nutrition standards above and beyond federally approved school lunches. This focus was prompted when she visited her son's elementary school and discovered they served Doritos[®] with taco beef. Even though she was able to speak with the head of nutrition to stop serving the chips at the school (*team expert*), she believes this is still offered at other schools and wants to change the district's nutrition standards.⁴⁶

RESULTS

The first two wellness centers demonstrated success to the school board by lowering health-related absences. As a result, the district has dedicated funds to staff and maintain the centers. The district now has four centers and plans to open a fifth. In addition, Dr. Pierce has increased the capacity of the wellness centers to offer more services to students by doubling the number of protocols for nurse practitioners.⁴⁶

Other **EXAMPLES OF PSE CHANGES** That Improve School Wellness

- P** **E** Adopt a comprehensive school wellness policy expanding nutrition requirements to snacks provided at afterschool activities
- P** **E** Adopt a healthy vending policy prohibiting sugary beverages and candy from being sold at afterschool events
- S** **E** Change the recess schedule to increase the amount of time available for students to be physically active during the school day
- E** Redesign a playground to make it more appealing, safe, and accessible to students with a range of interests and abilities
- E** Redesign a school cafeteria, including the display and placement of lunch food, to promote healthy choices in line with the Smarter Lunchroom Movement recommendations

A group of children, some with backpacks, are walking across a crosswalk marked with yellow diagonal stripes. A person in a yellow safety vest is holding a stop sign. The scene is set outdoors on a paved street with trees in the background. A blue banner is overlaid on the top half of the image, containing the title text.

Safe Routes to School

What's The **IMPACT?**

The route between students' homes and schools affects their health.

Research shows the quality and presence of sidewalks, bike lanes, and crosswalks and the accessibility and affordability of public transit all affect physical activity levels and safety for residents in nearby areas.⁴⁷

Disproportionate effect.

Low-income youth and youth of color walk and bike at very high rates, yet they disproportionately live and go to school in areas that are unsafe for walking and biking.⁴⁸ Low-income neighborhoods are less likely to have sidewalks and streetlights.⁴⁹ Low-income students are more likely to walk to school in the face of hazardous conditions, making them

more vulnerable to injury and fatality on their way to school.⁴⁸ African-American children are 50 percent and Latino children are 40 percent more likely than white children to be killed while walking; they are also more likely to be killed while bicycling.⁴⁷ In rural areas, pedestrian fatalities are higher for all age groups at any posted speed limit.⁵⁰

Poor health outcomes.

Low-income students, communities of color, and rural students are disproportionately affected by poor health outcomes associated with diet and physical activity, including obesity, diabetes, heart disease, and dental decay infection.^{6,10,11}

What Are **SAFE ROUTES TO SCHOOL?**

For the purpose of this Playbook, *safe routes to school* refers to any effort making it safer and more convenient, accessible, and affordable for students and their families to walk, bike, or take public transit to school.

This definition is based on The National Safe Routes to School program, which encourages active transportation — such as walking and biking — as a form of exercise and supports bicyclist and pedestrian safety between home and school.⁵¹ The program is supported by federal funding and incorporates six elements: evaluation, engineering, education, encouragement, enforcement, and equity.⁵²

Interventions that create safe routes to school could:

Create or improve walking, biking, and public transit infrastructure, including sidewalks, crosswalks, protected bike lanes, and bus stops.

Improve safety conditions near schools by creating street features or enforcement mechanisms that force cars to stop and slow down.

Make walking, biking, and public transit more affordable by reducing the cost of using public transit to get to school.

Educate or encourage students to walk, bike, or use public transit to get to school.

CASE STUDY: Cupertino Safe Routes to School⁵³



HEALTHCARE PROVIDER ROLE: Advocate

LEVEL OF INVOLVEMENT: Low

INTERVENTION SUMMARY

In 2015, the city of Cupertino adopted a resolution launching a pilot Safe Routes to School (SR2S) Working Group and initiating a formal partnership between the City of Cupertino and the Cupertino Union School District (CUSD). The goal was to identify and address opportunities to improve safety for students walking and biking to school, while reducing traffic congestion and air pollution.⁵⁴ The Working Group has met bimonthly over the last two years to identify priority projects that meet this goal, including:

- creating bike lanes and separating bike paths from cars,
- improving traffic flow and safety along the Foothill Expressway,
- improving bicycle infrastructure and connections to schools on Stevens Creek trail, and
- educating community members, including parents and kids, about the benefits of biking and basic bike safety, in order to encourage biking and decrease morning traffic.^{53,54}



PROVIDER ROLE

Dr. Jyoti Rau is a Champion Provider Fellow and the parent of a 15-year old student who attends a CUSD school. While Dr. Rau grew up biking in Cupertino and Sunnyvale without traffic safety concerns, today she worries about her son's safety when he asks to bike to school. She also sees the negative impacts of physical inactivity and stress on her patients. Dr. Rau got involved with the SR2S Working Group when she and her son attended a city-sponsored training and learned about bike safety and options for improving bicycle infrastructure citywide. Since the training, Dr. Rau has been attending Working Group meetings and participating as a vocal community member to ensure that her son and his friends can enjoy the same freedom and opportunities for physical activity that she experienced as a young person (advocate).⁵³

RESULTS

The SR2S program is now active at all CUSD schools.⁵⁴ Since the launch of the SR2S Working Group, city and school officials have tracked data on student mode choice and found that more students are using an active mode of transportation to get to school: nearly a quarter walk and a tenth bike.⁵⁵ As for Dr. Rau, she has noticed her son is more vocal about bicycle safety, and is educating his friends and members of his Boy Scouts troop about it.⁵³

CASE STUDY:

Calaveras County Safe Routes to School⁵⁶



HEALTHCARE PROVIDER ROLE: Team Expert

LEVEL OF INVOLVEMENT: Medium

INTERVENTION SUMMARY

Calaveras County convened a Safe Routes to School (SRTS) workgroup to strategize how to increase walking and bicycling in the county. The workgroup decided to focus their efforts on San Andreas, a town with 3,000 residents and home to four schools within the Calaveras Unified School District (CUSD). To maximize their impact in the community, the workgroup extended its membership to stakeholders from the community, including the Mark Twain Medical Center (MTMC). The workgroup met monthly to organize a community health walk to promote safety and to identify “healthy mile walks” from the local school to other parts of the town.⁵⁶

For the first community health walk, school children were led by the County Supervisor and accompanied by teachers and parents. The walk’s halfway point at Turner Park hosted hula hoop demonstrations, Zumba® dance, and bottled water. Community Emergency Response Team members assisted with traffic control for places along the route that were less walkable.⁵⁶



PROVIDER AND INSTITUTION ROLES

Mark Twain Medical Center healthcare providers participated in the workgroup to plan the community walk and identify routes for “healthy mile walks” (*team expert*). During the community walk event, MTMC provided hula hoops for demonstrations and water bottles to participants.⁵⁶

RESULTS

Since the first community walk, the event has grown to attract more than 300 people each year. The Community Emergency Response Team has added the community walk to their budget to sustain their participation. Public health members of the workgroup were invited to join the Calaveras Council of Governments Technical Advisory Committee to ensure safety and walkability remain a priority among decision-makers.⁵⁶

Other **EXAMPLES OF PSE CHANGES** That Create Safe Routes to School

- P** **S** Adopt a transit agency policy that sets aside funding for free and reduced-cost youth bus passes for low-income students
- P** **E** Develop a municipal Bicycle and Pedestrian Plan that directs funding to projects that create and improve pedestrian and bicycle infrastructure in neighborhoods with high injury and fatality rates
- S** **E** Implement a volunteer crossing-guard program that provides assistance and supervision at crosswalks near schools before and afterschool hours to ensure traffic yields to students
- S** **E** Create remote drop-off locations where students can voluntarily be dropped off by bus or car to safely walk the remainder of the way to school to increase physical activity
- S** **E** Implement a voluntary walking school bus program where adults walk with groups of children between specific neighborhood locations and school



Structured Physical Activity

What's The **IMPACT?**

Access to physical activity opportunities and facilities affects community health.

Research shows the availability, affordability, safety, and convenience of physical activity programs and facilities — such as playgrounds, parks, public pools, or gyms — in schools, workplaces, and neighborhoods affects the amount of exercise that nearby residents get.^{57,58}

Disproportionately effected.

Low-income residents, communities of color, and rural residents disproportionately live in areas with limited access to physical activity programs or safe and convenient facilities.⁵⁹ Low-income areas and communities of color have

fewer parks and recreational spaces near their homes than white and high-income neighborhoods.^{60,61} Parks in low-income areas are less likely to receive adequate maintenance or have resources for physical activity programs.^{57,61} Over a quarter of the U.S. population is completely inactive, and inactivity is most prevalent in rural areas of the country.⁶²

Poor health outcomes. Low-income residents, communities of color, and rural residents are disproportionately affected by poor health outcomes associated with diet and physical activity, including obesity, diabetes, heart disease, and dental decay infection.^{10,11,26}

What Is **STRUCTURED PHYSICAL ACTIVITY?**

For the purpose of this Playbook, *structured physical activity* refers to convenient, planned, guided, and culturally appropriate recreational opportunities in community centers, schools, workplaces, healthcare settings, or other venues. Unstructured physical activity, by contrast, refers to unplanned activity, such as playing games at recess.

Interventions that improve access to structured physical activity could:

Make physical activity programs more affordable through free or low-cost guided exercise classes and team sports.

Make physical activity programs more convenient by incorporating exercise and movement into the daily operations and activities of a school, workplace, healthcare setting, or other venue.

Increase the number of places physical activity programs can be offered by creating or improving facilities, or expanding access to public facilities such as school gymnasiums, playgrounds, fields, courts, and tracks.

CASE STUDY:

Park Prescriptions: Stay Healthy in Nature Every Day⁶³



HEALTHCARE PROVIDER ROLE: Leader / Advocate

LEVEL OF INVOLVEMENT: High

INTERVENTION SUMMARY

Park Prescriptions: Stay Healthy in Nature Every Day (Park Rx SHINE) is a partnership between the UCSF Benioff Children's Hospital Oakland and the East Bay Regional Park District (EBRPD). It was established to alleviate high levels of stress and correlated physical inactivity and chronic disease among the hospital's 35,000+ low-income patients.⁶³ The program increases access to nature, which it considers a social determinant of health, for clinic patients by:

- bringing nature into the clinic with posters of East Bay parks and open space areas,
- scheduling outings to East Bay parks and providing transportation, food, and trauma-informed programming for children and adults, and
- integrating questions about access to nature into electronic medical records as a routine piece of health information to collect.^{63,64}



UCSF Benioff Children's Hospital Oakland

PROVIDER ROLE

Dr. Nooshin Razani has been a champion for Park Rx SHINE since the beginning. When the hospital was approached by EBRPD, Dr. Razani was already involved with grassroots and community-based efforts to advance environmental justice. Dr. Razani and EBRPD recognized that patients who face chronic levels of stress due to poverty and housing instability stand to benefit greatly from access to green space, and they worked together to envision the program and secure funding from EBRPD and the East Bay Regional Parks District Foundation (*leader*). Dr. Razani also convinced other clinic staff to implement the program (*advocate*). In her words, "my role was to be the fanatic."⁶³

RESULTS

As of March 2017, Parks Rx SHINE has organized 44 structured park outings, attracted as many as 75 patients to individual outings, and inspired patients to make 900 total visits to parks. A group of regulars always attends the outings, and clinic staff attend in higher numbers than before. Dr. Razani is the principal investigator of a clinical trial assessing the impact of Parks Rx SHINE on patient health, which includes stress and physical activity. Her work also led to institutional shifts in 2016, when UCSF Benioff Children's Hospital Oakland established a Center for Nature and Health to support ongoing research and education on the health benefits of nature. In 2016, REI awarded the center a \$200,000 grant to support clinical research and programming on the outdoors and health.⁶³

CASE STUDY:

Pajaro Valley Unified School District *Fitness 4 Life* Program⁶⁶



HEALTHCARE PROVIDER ROLE: Leader / Connector

LEVEL OF INVOLVEMENT: High

INTERVENTION SUMMARY

Fitness 4 Life is a successful afterschool program of the Pajaro Valley Unified School District. The district is located in a rural area that is centered on agriculture. The majority of the students in the district are Latino. To address childhood obesity, the program seeks to provide more opportunities for physical activity, increase access to healthy foods, and promote healthy eating habits. Students in the program participate in activities like swimming, dance, biking, and hula hooping. They also take hands-on nutrition education classes, learn to garden, and cook healthy meals. *Fitness 4 Life* also partners with health and dental clinics to enroll students who may benefit from the afterschool program.⁶⁶



PROVIDER ROLE

Dr. Robert Kennedy, Chief of Public Health at the Santa Cruz Department of Public Health, began and led a pilot workgroup called Starlight Chavez Group (*leader*). He invited leaders from *Fitness 4 Life*, Salud Para La Gente (a local clinic), Dientes Community Dental Care, the school site principal, and food services (*connector*). The group convened to explore increasing collaboration between *Fitness 4 Life* and the clinics to better serve the health needs of students and their families. As a result, the clinics began referring students who would benefit from increased physical activity to the afterschool program. Though Dr. Kennedy has since left the health department, he continues to support *Fitness 4 Life* by leveraging his relationships. He helped secure funding from the Pajaro Valley Diabetes Center, whose board he is on, for the program's garden (*leader*).⁶⁷

RESULTS

The program's motto — an apple a day keeps the absences away — demonstrates the school district's understanding of the connection between children's health and their ability to perform well in school. The program consistently has more than 2,500 students participate in the program each year. As a result, more students in the district are learning how to stay active and eat healthily.⁶⁶ Additionally, many *Fitness 4 Life* student wellness leaders have developed an interest in health and gone on to pursue degrees in agriculture, medicine, nursing, and teaching. An unexpected success is that these same students are returning as regular teachers in the *Fitness 4 Life* program to continue to improve the health of their community.⁶⁷

Other *EXAMPLES OF PSE CHANGES* That Create Structured Physical Activity

- P** **S** Adopt a school policy that requires teachers to incorporate physical movement into daily classroom activities
- P** **E** Adopt an open use, shared use, or Facilities Use Agreement that makes school facilities available for structured physical activity
- P** **E** Adopt a municipal policy that converts vacant land or underutilized parking lots into public open spaces
- S** **E** Change workplace practice and culture to incorporate voluntary walking meetings into employees' regular routines
- S** **E** Create a hospital-based physical activity program that offers dance and yoga classes on hospital grounds

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Funded, in part, by USDA SNAP-Ed, an equal opportunity provider and employer.