PROLOGUE

WHY I CARE ABOUT THE BUILT ENVIRONMENT

A few years ago I was on a morning radio talk show and the host challenged me. "You work for the government? You must be lazy or stupid or corrupt," he said. I responded, "No, I am none of those. I am a physician, a pediatrician, and I picked the career of public health to make a difference, to embrace life's challenges, not to control people's lives, but to assure conditions where people can be healthy."

As a public health officer, I use every tool I have learned in my training—medicine, pediatrics, epidemiology, statistics, toxicology, and psychiatry—but the most important tool I use is communication, in order to share information that is technically competent but also compassionate and honest. How we use our words, our lexicon, is important. Doctors call the tracking of disease *surveillance*, though that word has a very different meaning to the FBI. *Development* means child fulfillment to pediatricians, but to the State Department it means nation building. So in this book I am communicating ideas, and I hope the words I use are tools of health.

This book is intended to communicate some of the public health challenges that arise from our built environment, to help others see what I see, so we can all play a part in designing healthier communities for our children and grandchildren.

The *built environment* is everything we have made in order to live our lives. It is our homes, places of business, public spaces, and parks and recreational areas—or the lack thereof. It extends to electric transmission lines, waste disposal facilities, and transit pathways that keep us moving, communicating, and functioning. Every building and designed space we see was at one time a sketch in someone's imagination and at some point a decision was made to build solely a functional structure or one that functions while it inspires.

The Golden Gate Bridge, in my opinion the most beautiful large bridge in the United States, was built at about the same time as the Empire State Building in New York City. The Grand Coulee Dam on the Columbia River was open by the beginning of World War II, irrigating the Northwest and bringing water and electrical power to war efforts. The theme here is capturing our culture in concrete. These iconic structures were created during an economic downturn, when labor and materials, including

concrete, were less expensive and people needed work. The government put people to work creating not only functional structures but also magnificent gifts to our grandchildren and future generations.

The United States and other civilizations must work not just for the economy but also for people in communities that are stressed and in need of support. If we are going to make changes, we ought to be creating spaces that work for our health, the economy, and the planet—places that are *of the heart*. When we look around our communities, what we see are the choices people made in the past manifested as the communities in which we live now. We can choose to keep the parts that work for us and to change what does not.

We have paved over 60,000 square miles of the United States, an area the size of Georgia. We have gotten rid of trees and we have created impervious surfaces, with the result that rainwater and melting snow run off the streets and into concrete sluices rather than percolating into the soil to nourish and cool the planet. Then we buy bottled water because we are made to think that we do not like our local drinking water. We have more cars in the United States than we do licensed drivers. No wonder the parking lots and streets feel so congested—and we build this landscape at a cost.

I believe that *how* and *where* we build affects people's health. To build communities that are good for people will require new partnerships and new thinking. Children have value intrinsic to the gift that they are. Today's children deserve a planet at least as healthy, beautiful, and biodiverse as the one we received from our parents and grandparents.

In nature, everything is fascinating. Ecosystems are remarkably biodiverse yet stable and produce little waste. In an ecosystem, something is always consuming something else. There is a balance of old and young, big and small, with immense functional variety. A forest can sit on a patch of land for 80,000 years and the land will be richer for it, unlike what Western civilization has done to the land. Biological systems can digest sugars and proteins—all kinds of natural products. It was not until we began bonding large amounts of organic molecules to elements like chorine, fluorine, and bromine that molecules that could not be readily degraded in natural systems became pervasive in the biosphere, that is, in all the living things around us. These molecules, which have health effects, concentrate in the bodies of animals and humans, with the human infant at the top of a *bioconcentrating* food chain. Through our habits and practices, we humans are creating the next great mass extinction of species, comparable to the earth being hit by an asteroid. Nature does not tolerate dysfunctional systems for very long. Thanks to the astonishing molecule DNA, biological systems change and do so much faster than we once thought; indeed, evolutionists have been stunned to realize how quickly change happens. We are learning that our current exposures affect our own DNA and, in turn, these changes will affect not only us but also the generations who follow. As we look at our own communities, we must ask whether we are leaving the next generation a gift or a staggering burden.

GROWING UP

Children learn about the world around them through experience, and the primary providers of that experience are their parents and the other adults in the community. When I was little and lived in Portland, Maine, my father was an air traffic controller (Figure P.1). When he took me for a walk he would say, "Stay close to me. There are bears in these woods." I remember picking blueberries and bringing back a bucketful. Maybe that is where I began to make the connection between love and belonging with the natural world and the connection between food and joy.

Figure P.1 Robert "Bobby" Jackson and his P-51 Mustang in Iwo Jima, September 1945.

Source: Photograph from the Jackson Family.

My father flew P-40 and P-51 fighter planes in the South Pacific during World War II. He crashed at least once and survived a massacre while at Iwo Jima. He married the love of his life at twenty-two, my mother. After the war they had three sons in three years. I was the oldest son, named after my father's brother, a landing ship, tank (LST) skipper stationed in the South Pacific.

On August 19, 1949, when I was three, polio stopped my father's breathing after two days of illness. After the funeral, when I still had no idea what death was, my grandmother told me, "You're the man of the family now. You have to take care of your mother and your brothers." That message has been a gift and burden.

Growing up I was a good reader, and I studied yearbooks, magazines, and pictures, especially pictures of my father. These images had a profound impression on me, and I stored the insights, memorable comments, and Irish family jokes of the people around me. I still remember when I was six, after my grandmother died, my mother saying, "the angel of mercy holds the veil over the future." She tried to help me worry less about the future so I could focus on fulfilling the present.

My widowed mother remarried when I was eight years old, and then had four more children. The nine of us lived in a three-bedroom, one-bathroom house in Nutley, New Jersey. My stepdad struggled with poor health and was intermittently out of work. There just never seemed to be enough food in the house, especially with five boys, and we would go and get USDA surplus

milk powder, macaroni, and other foods to help stretch our family's food budget. Dinner was a verbal free-for-all. There were many meals we barely could finish because we were laughing so much at the stories our youngest sister, Kathleen, would tell.

I joined the Jesuit seminary Saint Andrew-on-Hudson, in Poughkeepsie, New York, at age eighteen. I planned to be a priest. When I entered the seminary I weighed 132 pounds, and I must have gained a dozen pounds in the first two weeks I was there. I was delighted to eat whatever was put in front of me, and I did not mind that we ate in silence for many of the meals. My young Jesuit friends stunned me. No subject would come up, not a year in history, a thought leader, or a political event, on which someone at our table did not have a remarkably deep knowledge and the ability to provide commentary.

For two years I prayed five hours a day, lived mostly in silence, spoke in Latin, and learned the Jesuit life and the insights of Greek, Roman, Catholic, and modern philosophers. I also learned about Henry David Thoreau and read his book *Walden* about five times in two years. He spoke right to my core as he observed the beauty of the natural world. The Jesuits used to say *age quod agis*—"do what you are doing"—but I became restless. The seminary was intellectually stimulating, but it certainly did not meet all my needs as a young man. I left the seminary, completed a range of college science courses compressed into two years, and ended up in medical school in San Francisco.

PRACTICING MEDICINE

I loved the Bay Area, Yosemite, and Point Reyes. The city, the mountains, hiking, music, the bay, and the wonderful quality of life in San Francisco transfixed me. I married a beautiful woman, and I became a pediatrician. I graduated medical school in 1973 and completed my internship (I used to call it my internment as the hours were so long) and residency at the University of California, San Francisco, and San Francisco General Hospital.

During my residency I soon realized that to doctors a patient is defined by data—the statistics and lab results. To me the data are only a part of the picture. When I was working at the San Francisco VA Hospital, I got to know and like an old veteran who talked a lot about World War I. I had grown up with stories about WWII and had not heard these earlier stories. Sixty years after the war, he would still have nightmares about being gassed, and his stories moved me. One day I had to present his case to the attending internist, and of course no one wanted to know his fascinating stories. He was a *case* to be solved, not a *person* to know. He died after I had known him for a few weeks, and being an ex-seminarian, I wanted to go to his funeral. I was told, "doctors don't do that," with the clear message that I was not going to amount to much of one.

When I was in my third month of internship in pediatrics, a delightful fifteen-year-old girl came in

for chemotherapy for leukemia. She was a very lively and bright girl, who had taught herself American Sign Language so she and her friends could gossip at school soundlessly during class. I was glad to see her on morning and evening rounds. She seemed to be in stable health when I left on Saturday, but when I returned on Monday, I learned she had died. I was instructed to go to the morgue in the basement to observe the autopsy. Though I had known all along that she would eventually die of leukemia, I learned that she had died more directly from the chemotherapy we gave her.

I remember going home feeling very low and realizing that there are no safety nets for emotions in medicine. There is an ugly saying in medicine that "you learn the most from the patients you kill." No one makes mistakes on purpose, but as horrible as it sounds, doctors do learn from each case. I was doing what I was told and administering the medications according to protocol, but this experience taught me about myself, and my limits. I stuck with my residency but surprised myself at the end when I told my favorite and most supportive cardiology professor, "Dr. S., I am not going to do an infectious disease fellowship. I'm going to do public health." He sat back in his chair and sighed. "Where did we fail?" he asked. I loved medicine, but I was also very intuitive, social minded, and political. I realized I could do more good in public health than I could seeing one patient after another. I also think that my medical school professors did not fail.

LEAVING TRADITIONAL MEDICINE

There is a long tradition of service to our country in my family. My great-great-grandfather served in the Union Army throughout the Civil War. His father was an officer in the War of 1812 and his uncles had served during the American Revolutionary War. My father and uncle served in World War II. My brother Jim became a Marine and served twenty-four months near the demilitarized zone in Vietnam during some of the worst fighting. At the same time, my brother Bill served in the Air Force. I was deferred from service until 1975, when I served in the U.S. Public Health Service, as does my son Brendan now.

I went to the Center for Disease Control (CDC), as the agency was then known, and was assigned as an epidemiologist to the State of New York. It was an amazing experience. I was working at least one epidemic per week, with terrific staff, and I never knew what was going to happen next. The most remarkable case was a cluster of hundreds of school children with severe bellyaches and fevers leading to sixteen appendectomies. We discovered that the cause of illness was the production procedure used by the dairy supplying the school. The dairy was adding chocolate syrup to already pasteurized milk under unsanitary conditions. When we stopped the chocolate milk supply to the school, the epidemic stopped. The bacteria that caused the illness, *Yersinia enterocolitica*, grew beautifully in

sugary, alkaline, cold solutions, such as refrigerated chocolate milk.

The CDC assigned me to work for three months for the World Health Organization. In 1976, I was sent to Bihar State in India to work on smallpox eradication. I was in my twenties and I had 400 to 500 people working for me doing *containments* for suspected smallpox outbreaks. I am very proud to have helped in eradicating that terrible disease. There is a power to working in public health—one person or a small team can make a world of difference.

After working for the CDC and finishing my service, I returned to the Bay Area where I went to work as a pediatrician and also studied more epidemiology, especially as it involved chemicals. I wanted to help farmworkers and was fortunate to take on a position at the California Public Health Department as an epidemiologist looking at the health impacts of pesticides. It took me close to ten years to learn the hundreds of chemicals, often used in combination and with an ocean of brand names, the varieties of toxicity, and the dozens of health effects involved in pesticides. Some of the chemicals had toxicity close to that of nerve gas. In the process I learned not just about toxicology but also about worker health, social justice, air and water pollution, regulatory schemes, food contamination, and a *whole lot* of complicated, bare-knuckle politics (remember, I was in California). I learned that many of the pesticides had been legislatively grandfathered, meaning that if they were in use when the original pesticide law had been passed, they needed little additional testing for continued use. As a result, the data gaps were stunning. I knew this, and some of the people in the state agriculture department knew this too because we had access to the trade secret files that the public did not. I found that there was no tracking of birth defects in the state and no cancer registry in the larger agricultural areas.

In one case, I was investigating a baby boy with *tetramelia* (the absence of the arms and legs) born to a farmworker. We tried to learn what the mother had been exposed to, but it was impossible. The mother could scarcely remember the farms where she had worked, especially during the vulnerable first two months of pregnancy. Farmers had to keep records of use only for the most toxic chemicals. For weed and fungus killers, the chemicals more likely to cause birth defects, there was no record keeping required. These chemicals tended to be not immediately toxic. As a result, there were few toxicology data, negligible record keeping of pesticide use, and no tracking of birth defects.

With the help of lawyer friends and the American Academy of Pediatrics, I helped to draft bills to address the tracking issues, but they were quickly "killed" by the political process. The agricultural community saw adding these regulations as an unnecessary expense. I felt helpless until the medfly came to the rescue.

In 1980, the medfly threatened a large portion of California agriculture, one of the largest economies in the United States. The remedy was to spray the pesticide malathion over areas where infestations had been detected.

Unfortunately, most of these areas were urban and suburban. The public and the governor were deeply opposed to spraying over heavily populated areas. Because of the enormous outcry from the public, I was told to convene a health advisory committee on the issue. In the course of briefing the committee and while discussing the toxicity of malathion, issues stemming from data gaps and the lack of disease tracking emerged. These discussions became a powerful impetus for fixing the data gap problems and this led to support, even among members of the California legislature's agriculture committees, for addressing health concerns and establishing disease registries.

There is also a larger message in this story. Sometimes elected officials, the public, and doctors and scientists do not pay enough attention to a problem until it reaches the point of crisis, yet that moment of impending crisis is extremely important and must be used as a *teachable moment*, to create conditions in which people and communities can be healthier.

ESTABLISHING THE CONNECTION BETWEEN ENVIRONMENT AND HEALTH

In 1994, I moved back to the CDC to become director of the National Center for Environmental Health (NCEH). By this time the CDC had undergone a name change, becoming the Centers for Disease Control *and Prevention*, because we have learned that we must do much more than control disease—we have to move upstream to prevent it. I believe that a critical way to do this is by changing the environment.

In April 1997, President Clinton issued an Executive Order requiring protection of children's environmental health and safety. Because of my work on pesticides and children's environmental health issues, I was named to lead this effort for the U.S. Department of Health and Human Services. Ten federal agencies were challenged to work together in ways that were unprecedented outside of wartime. Although most of the group wanted to focus on their own specialized diseases or toxic substances, I felt that the effort should focus on dealing with the larger issues affecting children's health. After much discussion, and not a little argument, we focused on preventing developmental disorders (including lead poisoning and birth defects), preventing injuries (a major health problem in children and a major cause of children's death), reducing asthma morbidity (the most common chronic disease in children), and establishing a children's research effort, a longitudinal cohort study now known as the National Children's Study. There had never before been a long-term, longitudinal study on the impact of environmental factors on children from conception through adulthood. This study remains in progress and promises important and groundbreaking information for the fields of medicine and public health.

In many ways, what came out of this effort was unprecedented. By focusing on, for example, the

prevention of childhood asthma, we could move beyond academic battles over which air pollutant was most important and turf battles over which agency was making the greatest contribution. I wanted to see these conflicts fall into the background as each of the departments unified around a goal to protect and promote children's health. This experience was for me both an inspiration and a goal for what I think we must do with the redesign of our communities in the United States. By making our goal the improvement of children's health and well-being, and setting aside the turf battles over zoning, planning, and air and water pollution, we can focus on giving our children healthy places, and we can offer solutions that work for future generations—and perhaps for some of us alive today too.

Frederick Law Olmsted is one of my heroes in this regard. He is considered the father of landscape architecture, and he was the designer of Central Park in New York (Figure P.2), the Emerald Necklace in Boston, and many other parks that make urban living enjoyable and even delightful in the United States. Olmsted did not recognize that social health and personal health were separate. He never would have accepted the idea that mental health and physical health were divorced. He also served as the head of the U.S. Sanitary Commission created by Abraham Lincoln during the Civil War. The work of the commission, building and maintaining the hospitals for the wounded Union soldiers, employed new methods that vastly improved survival rates. Olmsted's policies made sure that hospitals—including the food and water, wounds and bandages—were clean. He and many other heroes of the time met the fundamental goal of public health, "to assure the conditions where people can be healthy" or in this case, can regain their health. What the commission did was simple, elegant, and it worked. My friend Larry Cohen, the founder and director of the Prevention Institute in Oakland, California, says, "a good solution solves multiple problems." Sanitation is one example of this. A safe, green neighborhood park, what Olmsted called the "lungs of the city," is another. It clears the air; captures rainwater; reduces pollution; raises property values; and improves physical, mental, and social well-being.

Figure P.2 Olmsted realized his idea of a public park as a green space accessible to all citizens in his design of Central Park.
Source: Flickr; photograph by David Shankbone. Used with permission.

Early on in my work at the NCEH, I realized that the CDC's activities were poorly integrated with each other, in a way sometimes described as *stove-piped* or *siloed*. As a result, those of us who practice public health, in order to confront and reduce diseases, have not been dealing with some of the upstream environmental health threats that cause lung disease, injuries, depression, and many other health problems. We need to identify good, smart solutions that cross multiple domains. Communities must put in place business and taxation interventions and new building codes and laws. And this nation needs to shift its awareness of what constitutes a good quality of life. Advocating for and working toward these changes may not sound very interesting, but for too long we have had doctors talking only to doctors, and urban planners, architects, and builders talking only to themselves. The point is that all of us, including those in public health, have got to get out of the silos we have created, and we have got to connect—actually talk to each other *before* and *while* we do our work—because there is no other way we can create the environment we want. Public health in particular must be interdisciplinary, for no professional category owns public health or is legitimately excused from it. It is also critical that public health have strong links to the medical world.

When we think about community design, it is like ecological thinking. There is a question of spatial scale. Some issues are small scale, like the way a porch is situated on the front of a house; some issues are intermediate scale, like the way a neighborhood looks (are there good sidewalks, stores within walking distance of homes, or a nearby park?); and then there are issues on the large scale, like an entire metropolitan area (is there a mass transit system, and is there a concern with striking a balance between constructing roads and making trolleys, trains, and buses available?). It may be relatively new to most people, including those in public health, to think in design and geographical terms, yet as all of us who are concerned about our communities come to think like geographers, we can think about different spatial scales and we can focus in on what we can do at each spatial scale to create the safest, healthiest places possible.

CONSIDERING THE FUTURE

Nowadays I am much more focused on chronic diseases, and today our society is facing an avalanche of them, especially diseases related to obesity. Doctors frequently measure health and examine patterns. They use the data and their experience to determine what will happen if patterns of health and sickness remain unchanged. When children are seen in a clinic, their height and weight are tracked by age to determine if their growth is on a healthy track. When I teach, I tell a story that I made up but that every health care provider knows is far too common. A ten-year-old child comes in for a physical exam. For his age, he is in the 50th percentile (right in the middle) for height and in the *95th percentile* for weight.

He is much too heavy, and his blood pressure is too high, which is probably related to his weight. His blood sugar is too high, but he is not diabetic yet. His cholesterol is too high, and he seems kind of depressed. When the physician talks to him, she learns he is lonely, he is not very good at sports, and life isn't going very well. She wants to help him but knows the success rate with these cases is not high (Figure P.3).

What is she supposed to do? She gives advice and refers him to a nutritionist. She says, "Mom, no soft drinks in the house. Get the television out of the bedroom. Let's make some changes in his life. Let's get him into an exercise program." She also says, "Make sure he doesn't bypass physical education," knowing that a lot of parents permit this because children who are not in great shape don't enjoy it. Two months later the child comes back and says, "I lost one pound but there's no place to walk. They pick me up and take me to school on the bus. The only real exercise I get is at school, and I can't control what they're feeding us in the cafeteria."

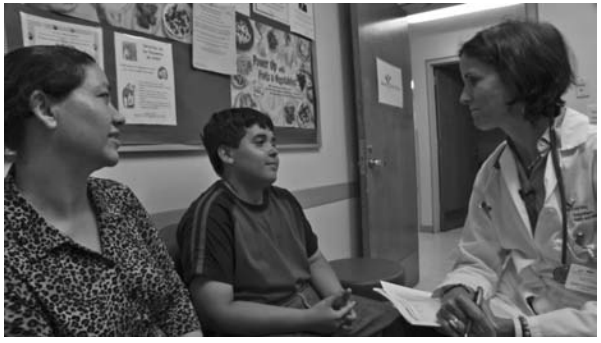

Figure P.3 Patient and doctor talk about changing habits.
Source: Photograph from the Media Policy Center.

Two months after that, the child is medicated for elevated cholesterol, glucose, and blood pressure, and perhaps for depression. How did this problem start, and is it really his fault that he's not getting well on his own? This is, at its core, a toxic event, but is it the result of personal choice or due to greed, lack of knowledge, and pollutants in the environment? I assert that the built environment is rigged against this boy. It is also rigged against the doctor. The cumulative impact of this injustice, if it is not remedied, will crush the United States.

Let's go back to this same patient. What if he, with the support of his family, decides he is going to bicycle or walk the one mile to school four days a week? That would be about a thirty-minute trip on foot and would consume about 125 calories each way, or 1,000 calories a week. After a year he has burned 40,000 more calories than he did in previous years and is doing better in school because he has gotten some exercise. He has lost eleven pounds of body fat in one year. He goes back to the doctor at the end of two years. He has grown four inches (because kids grow about two inches a year). He is now down to the 65th percentile for weight. His blood pressure, cholesterol, and sugar are now normal. His energy level is good. His walking has also saved about 1,200 miles on the family car (assuming the parent drives a round trip morning and evening) and about

$600 in car costs. He has made new friends and perhaps has a girlfriend. If we multiply this scenario times fifteen million children, what we get is a sea change. This is not an absurd thing to ask. It is how the United States was in 1960.

The more I looked at chronic disease and epidemic issues, the more I realized that I needed to look upstream. Policymakers do not often design communities and buildings. In 2003, I gave a talk to about 500 professionals from the American Institute of Architects (AIA). I told them how important physical activity is and how they needed to design buildings with beautiful and attractive stairways so when we enter the buildings we can walk up and down the stairs. I asked them "to stop putting the stairs in some dark and dirty corner, key-controlled, too narrow and unlit, that are kind of scary. People want and need to use the stairs and it's good for health. It will help us lose weight and strengthen our bones. I want people to take stairs at least once a day." Afterward, I was worried that some important architect would corner me and berate me for not knowing anything about architecture, telling me that I should keep quiet. But instead, what the AIA president said to me was, "Doc, we love what you're saying. We love vertical features. We can have much more fun designing interesting spaces with stairways. Get the fire marshals off our backs, but what you are asking us to do is what we really want to do."

The AIA put me on its board of directors for a couple of years. I had a great time. (I suspect that architects want to be doctors and doctors want to be architects.) Kaiser Permanente is also taking on this challenge by running an ad that encourages people to walk up stairs (Figure P.4). It is a beautiful picture, though I would imagine it is somewhat hard to walk up stairs with no handrails while wearing high heels.

There are great ideas everywhere. For example, Gary Cohen of Boston's Health Care Without Harm has been working with green hospital-building projects. Energy-efficient hospitals are being built in Europe and around the world. When case studies of these projects are compiled, they will start cross-pollinating good ideas for healing and environmentally responsible medicine. As the scientific evidence accumulates, we are gathering very good indications that people travel, live, and play differently when the design of their built environment reflects connectivity, density, and mixed use.

For a while I was chairman of the American Academy of Pediatrics Committee on Environmental Health, and recently I helped to produce a policy statement from the academy about designing communities to promote physical activity in children. It took time to get this statement through four committees and one hundred chapter chairpersons. At first there was some pushback; members asked why pediatricians would issue a statement offering guidance on urban planning. The statement, now approved and made public, asserts that children need to grow up in environments where they can have increased physical activity and autonomy. I frequently have colleagues come up to me now to tell me that this statement just makes good clinical sense.

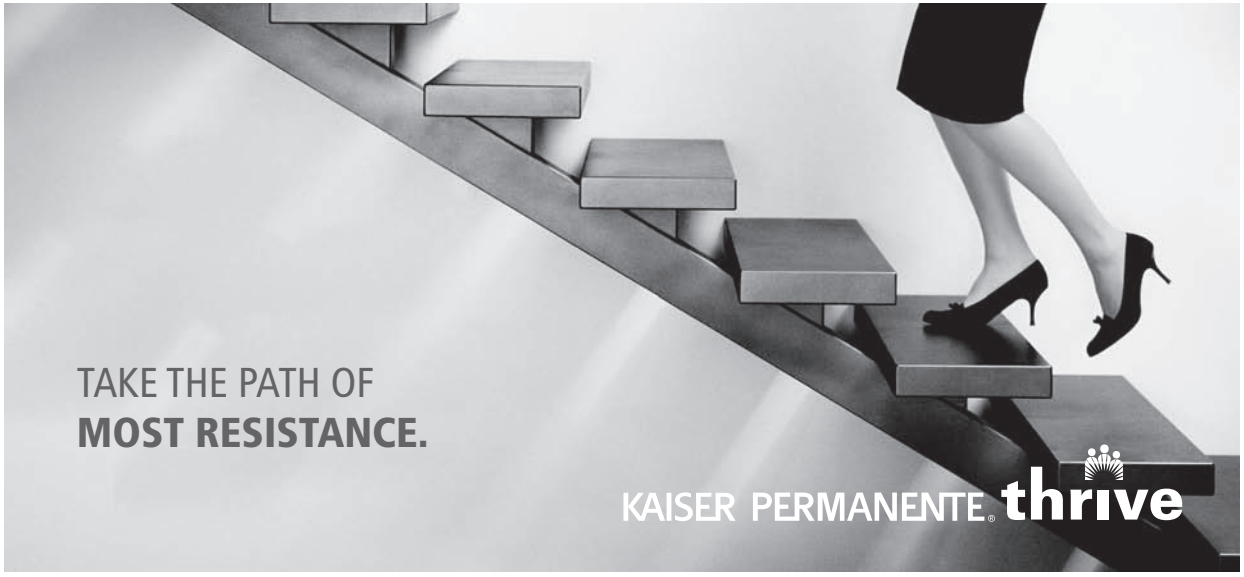

Figure P.4 A poster to encourage taking the stairs.
Source: Kaiser Permanente.

When I was a young pediatrician, my colleagues and I never saw a child with "adult onset" diabetes. It is now called type 2 diabetes, and my endocrinology colleagues at the University of California, Los Angeles, tell me that currently about half the children seen in the diabetes clinic have type 2 diabetes. Young people in their late twenties and early thirties with diabetes are now developing diseases that we think of as associated with old age. At the rate that the epidemic of obesity and diabetes is progressing in the United States and worldwide, it is clear that if we do nothing about a third of our children will become diabetic at some time in their lives, with a reduction in their average life span of fifteen years, and a reduction in their quality of life of about twenty years.[1] Someone who has gangrene from diabetes and is going to dialysis three times a week does not have a good quality of life.

We are also on a trajectory of declining life expectancy for the first time in our country's history. When I was a young pediatrician, people thought that having 7 percent of all the money in the United States going to

medical care was a staggering amount. That amount is now at 17 percent.[2]

We ought to be the healthiest people in the world given our economic investment, but we are actually about dead-middle in terms of health statistics worldwide. I think this outcome has to do with the difference between *medical* care and *health* care. We are not creating health and we do not create well-being simply by medicating people at the ends of their lives. We are adding millions of jobs in the health care industry, but we cannot build an economy based on medical care. Eventually we have to grow things and produce products that add to the authentic wealth of the nation.

The public health community is starting to look at these issues. One sign of this is that at the American Public Health Association Annual Meeting in 2002 there were no abstracts of papers on land-use issues. In 2005 there were 55 abstracts, in 2008 there were 82, and in 2009 there were 130.

If we are going to build health, then we need healthy communities. Many places are working on this, with varying degrees of success. Most impressive so far are efforts in Boulder, Colorado; Charleston, South Carolina; and Portland, Oregon; and similar efforts are also increasing in big cities like San Francisco and New York.

The following chapters offer three distinct conversations. Chapters One, Two, and Three discuss the lenses through which we view the built environment and the ways that environment affects our health. Chapters Four through Ten describe seven places around North America that are making notable efforts to improve community health. And Chapters Eleven, Twelve, and Thirteen detail ways in which the reader can use this information to improve his or her local community. Through your own efforts you can join in—and even improve upon—the kinds of positive health impacts being created by the organizations and individuals whose stories you are about to read.