



LOWN
INSTITUTE

California's health care paradox:

Too much health care spending may
lead to poor community health

July 2019

About the Lown Institute

The Lown Institute is a nonpartisan think tank dedicated to transforming America's high-cost, low-value health system. We conduct research, generate bold ideas, and create a vision for a just and caring system of health that works for all.

Acknowledgements



This report was co-authored by Shannon Brownlee, Senior Vice President of the Lown Institute, Vikas Saini, President of the Lown Institute, and Judith Garber, Health Policy and Communications Fellow at the Lown Institute. This project was supported by funding from Well Being Trust, a national foundation bringing together clinical, community, and policy innovators to advance the mental, social, and spiritual health of the nation. Ben Miller, Chief Strategy Officer at Well Being Trust, was instrumental in helping conceive and design this project. Thanks also to Janaya Nichols, project manager at Well Being Trust.

The Lown Institute relied on a research team at George Washington University Milken Institute School of Public Health, including Jeffrey Levi, Brian Bruen and Artisha Naidu, for performing the budget data analysis and reviewing the manuscript. Leif Haase conducted multiple interviews with policymakers and advocates to provide an on-the-ground perspective on local attitudes about budget decisions. Thanks also to the rest of the Lown Institute team: Aaron Toleos for design and communications work, and Carissa Fu and Julia Healey for administrative help on this project.

Introduction

The rising cost of health care has become one of the largest sources of stress on American household budgets in the 21st century. From premiums to co-pays to prescription drug costs, families are finding it increasingly difficult to pay for health care.

Since 2000, health care spending has grown 3.4 times faster than employee compensation, essentially canceling out wage growth for most low- to middle-income families.¹ As health care costs have skyrocketed, controlling them has become an “extremely important” issue for voters, second only to strengthening the economy.² Many families are sacrificing spending on basic necessities like food and clothing to pay medical bills.³



Just as American household budgets are being squeezed by rising health care costs, state budgets are also straining under the weight of health care spending, leading to increasingly tight budgets for what should be necessities—public education, public health, housing assistance, food assistance, and income support.

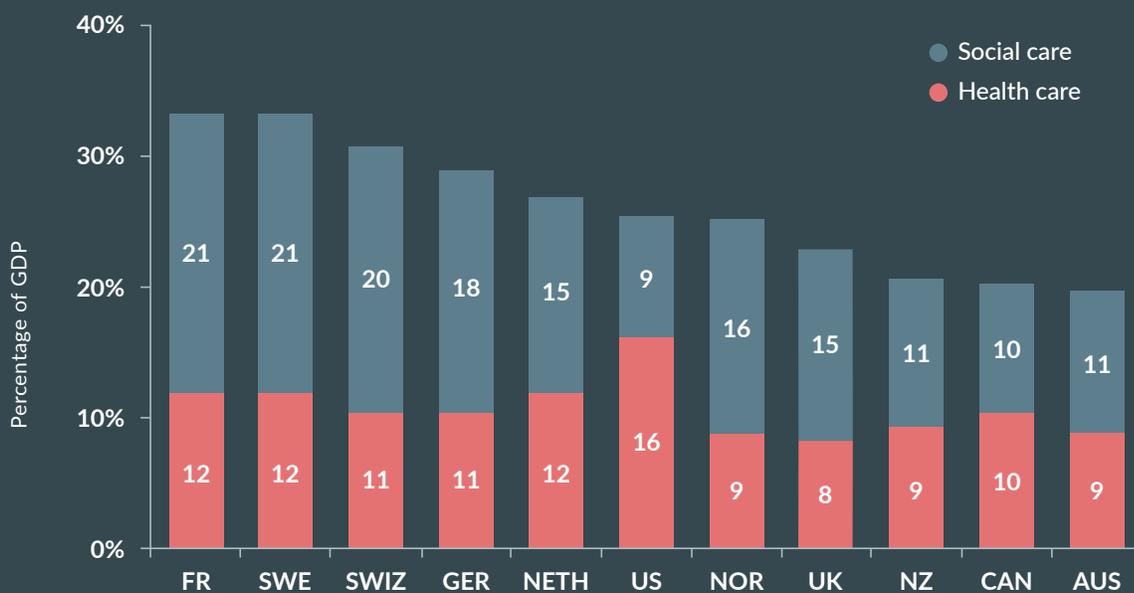
This shift in resources away from “social spending” is having dire and long-lasting consequences for the nation’s health and community well-being. A large and growing body of evidence shows that there are numerous factors besides medical treatment that affect our health.^{4,5} Some of these factors have been traditionally known as “socio-economic determinants,” such as housing stability, financial security, and educational opportunity. Other factors include environmental quality, strong community ties, and adverse childhood experiences, or ACEs, such as trauma or neglect.

Together, these factors can be thought of as vital community conditions, and they determine one's health more than access to medical care.⁴

Yet the U.S. spends only 9 percent of its economy on improving community conditions, through such programs as housing and income support—far less than most other wealthy countries.^{6,7}

This limited public financial investment in community conditions has led to worse health outcomes in America compared to every other high-income country, despite spending vastly more per capita on health care.⁸

The U.S. spends less on community conditions than other wealthy countries



Notes: GDP refers to gross domestic product.
Source: E. H. Bradley and L. A. Taylor, *The American Health Care Paradox: Why Spending More Is Getting Us Less*. Public Affairs, 2013.

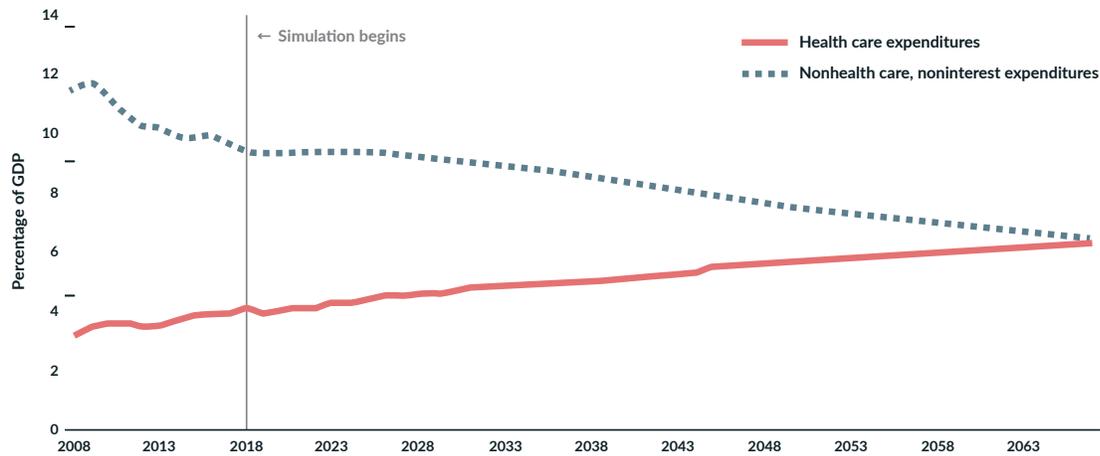
At the same time, high and rising health care costs are also putting pressure on state budgets to reduce spending in other sectors.

MEDICAID SPENDING AS A PERCENTAGE OF STATE SPENDING IN THE US⁹



The Government Accountability Office (GAO) identifies health care spending as the major driver of state spending growth, warning of persistent fiscal instability. The agency predicts that over the next several decades, state spending in all other sectors will significantly decline to make up for increases in health spending.¹⁰

State health expenditures on track to consume greater share of state GDP than all other expenditures



Source: GAO, see GAO-19-208SP.

California is no exception to the state budget squeeze from health care costs; from 2007 to 2018, health care spending rose by 146 percent, consuming 26 percent of the state budget in 2018.¹¹

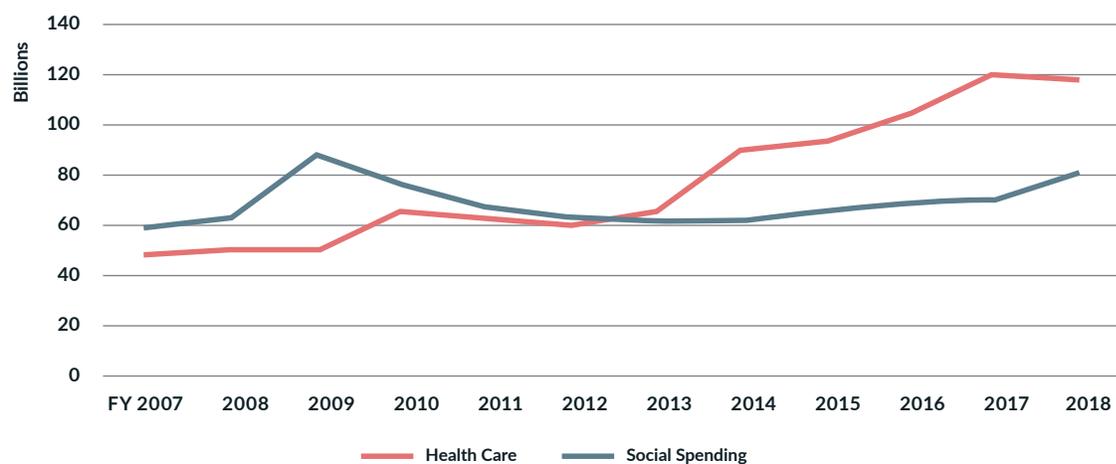
In 2007, California spent \$1.22 on public health, the environment, and social services for every \$1.00 spent on health care—but by 2018, for each dollar spent on health care only \$0.68 went towards public health, the environment, and social services.

At the same time, California continues to face the challenge of ensuring that all people in the state have access to necessary medical treatment.¹² While access to care is essential, the growing imbalance between spending on health

care and spending on community conditions means California is sacrificing potential long-term health gains for short-term health stopgaps.

This report examines the links between rising health costs and spending on community conditions, providing new evidence that health care costs are putting pressure on programs in California that are essential to community well-being and the state's health. In addition, this report describes some of the current barriers to action as well as potential solutions. Key to improving health in the state is to increase funding for community conditions, a portion of which can be funded by curbing the waste in health care and redirecting those savings. California could improve the health of its residents not only by rebalancing investments in community and health care spending within the state budget, but also through the use of the state's convening power and regulation, without sacrificing the recent gains made in much-needed access to medical care.

In California, health care spending has eclipsed spending on community conditions



How is California allocating its resources for health?

Background

Increasing health care costs over the past few decades have forced the state of California to sacrifice much-needed investments in community conditions.

Previous research has shown that California, like other states, has been responding to rising health care costs by constraining spending on such community conditions as education, public health, environmental protections, and social services. A 2017 study by Dr. Linda Tran and colleagues from the UCLA Fielding School of Public Health found that the fraction of California's general fund expenditures spent on public health and social programs fell from 34.8 percent in fiscal year 1990 to 21.4 percent in fiscal year 2014. At the same time, the proportion spent on health care increased from 14.1 percent to 21.3 percent.¹¹ Over 25 years, California's ratio of spending on social services compared to medical care decreased from 2.5 to a ratio of one-to-one.

STATE SPENDING PER CALIFORNIA RESIDENT



Even spending on education has been squeezed in California, where about 40 percent of the state budget is allocated to K-12 and community college (depending on changes in student attendance and state revenues).¹³ Propositions 98 and 111, passed in 1988 and 1990, respectively, mandate this spending. Nevertheless, per capita K-12 spending in California still lags behind the national average when adjusted for cost of living, and the state has the highest K-12 student-to-teacher ratio in the nation.¹⁴ Higher education spending as a share of the state budget has fallen over the past forty years, from 18 percent of the budget in 1976-77 to 12 percent in 2016-2017. This has resulted in significant decreases in funding per student at California's largest public universities, despite Proposition 30 in 2013, which raised taxes for state schools.^{15,16} At the University of California, for example, funding per student fell from \$23,000 in 1976 to about \$8,000 in 2016.¹⁶

Methods

The analysis included in this paper looks at the distribution of California State Budget expenditures between state fiscal years 2007-08 and 2018-19. For 2007-08 through 2016-17, we used actual total expenditure amounts reported in enacted State Budgets from all funds, which include state, federal, and other sources. For 2017-18 we used estimated expenditures and for 2018-19 we used projected expenditures. We obtained State Budget documents from the California Department of Finance at ebudget.ca.gov, between November 2018 and January 2019.

We classified expenditures into the following categories: corrections, education, environmental protection, health care, public health, social services, and other services and operations. Education includes both K-12 education and higher

education. Health care includes Medi-Cal (California's Medicaid program), health care for the incarcerated, state employees' and retirees' health benefits, and other health care services such as state hospitals. Public health includes the Department of Public Health as well as services such as primary, rural, and Indian health clinics and statewide health planning. Social services include expenditures for income and job support programs, housing, food and nutrition services.

We classified expenditures at either the State Agency, Department, or Program level. Program-level assignment was used when we could clearly separate expenditures within a department. For example, we separated expenditures for health care services for the incarcerated from other corrections-related expenditures. We based our classifications on the dominant type of service provided within the State Agency, Department, or Program.

We determined state contributions to health care benefits for public employees and retirees through the California Public Employees' Retirement System (CalPERS) from tables included in the "Statewide Issues" sections of the 2018-2019 Governor's Budget Summary, 2016-17 Governor's Budget Summary, and 2014-15 Governor's Budget Summary documents at ebudget.ca.gov. We classified these expenditures as spending for "Health Care," and removed them from other staff and program administration expenditures under "Other Services and Operations."

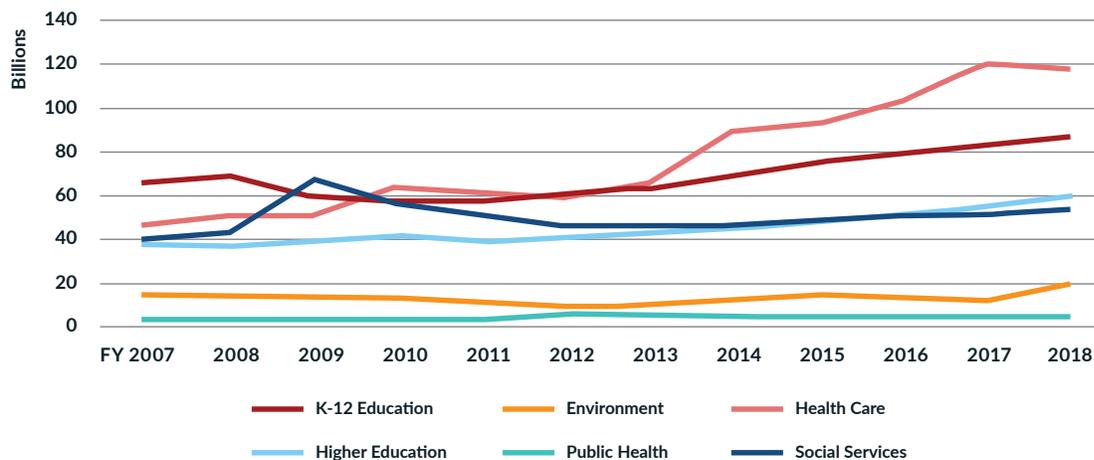
We chose to use total expenditures from All Funds, which includes federal dollars, rather than total State Funds because the State Budget documents do not provide State Fund-level detail below the Department level. Other recent analyses have examined state-only expenditures in California.¹¹

Results

Between 2007 and 2018, spending on health care rose 146 percent, from \$48 billion to \$119 billion, while spending on social services, public health, and the environment grew by just 36 percent.

In 2007, California spent \$1.22 on public health, environment, and social services for every \$1.00 spent on health care. By 2018, however, the state spent much less on these community conditions relative to health care: for each dollar spent on health care, only \$0.68 went towards public health, environment, and social services.

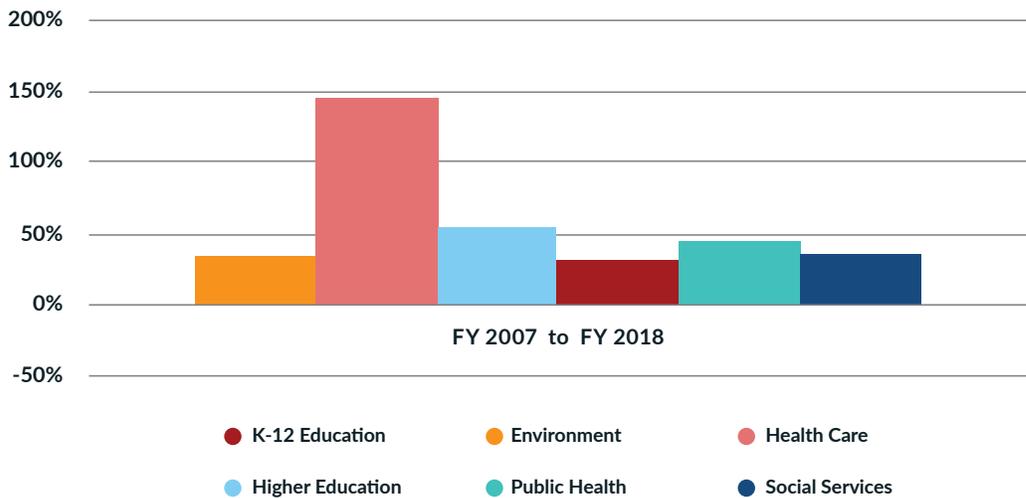
California Budget Spending Over Time



California's spending on social services, including direct income support, housing support, and nutrition services, has increased moderately over the past decade, rising by 36 percent from 2007–2018. Spending on environmental protections, such as parks and recreation, water resources, and wildlife conservation services, increased by 34 percent, and public health spending increased by 46 percent.

As noted earlier, education spending represents a special case in California because the state mandates that K-12 education and community college receive about 40 percent of general fund expenditures. From 2007 to 2018, spending on K-12 education increased by 32 percent, from \$66.8 billion to \$87.8 billion. Per capita K-12 education spending increased by 33 percent, from \$10,644 to \$14,246 per student, as K-12 enrollment declined slightly from 2007 to 2018.^{17,18}

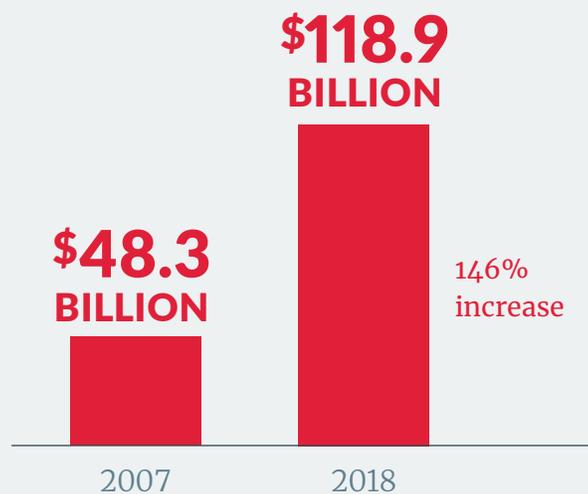
Relative Percent Change in California Budget Spending, 2007-2018



Higher education spending rose by a larger 56 percent, from \$38.4 billion to \$59.8 billion, likely due to increased funding from Proposition 30 passed in 2012. Including spending on education, California's spending on community conditions increased by 39 percent from 2007 to 2018.

However, the increase in spending on community conditions is small compared to the rapid rise of health care spending over the past decade. Health care spending skyrocketed from \$48.3 billion in 2007 to \$118.9 billion in 2018, a relative increase of 146 percent. Total health spending increased from 16 percent of general fund expenditures in 2007 to 26 percent by 2018.

HEALTH CARE SPENDING INCREASED BY \$70 BILLION



Medi-Cal, California's Medicaid program, saw the greatest increase, due to higher enrollment and rising spending per enrollee. From 2007 to 2018, Medi-Cal enrollment increased by 106 percent.¹⁹⁻²¹ Although federal support covered most of the cost of the new enrollees under the Medicaid expansion, it should be noted that total state spending on Medi-Cal also increased by 95 percent from 2007 to 2018.²²

While Medi-Cal accounted for the lion's share of increased spending on health care, spending also increased for other health care categories, including state employees and retirees, and prisoners. Total spending on health care for the incarcerated increased by 44 percent, and per capita spending also rose 93 percent, from about \$13,000 in 2007 to \$25,400 in 2018.^{23,24} Total spending on health care for state employees and retirees increased by 83 percent, from \$4.3 billion in 2007 to \$7.8 billion in 2018. CalPERS accounted for 7 percent of the total health care spend by the state in 2018. This increase in spending was largely due to rising spending per beneficiary. The number of CalPERS beneficiaries increased by 12 percent between 2008 and 2017, while per capita spending increased by 43 percent.²⁵



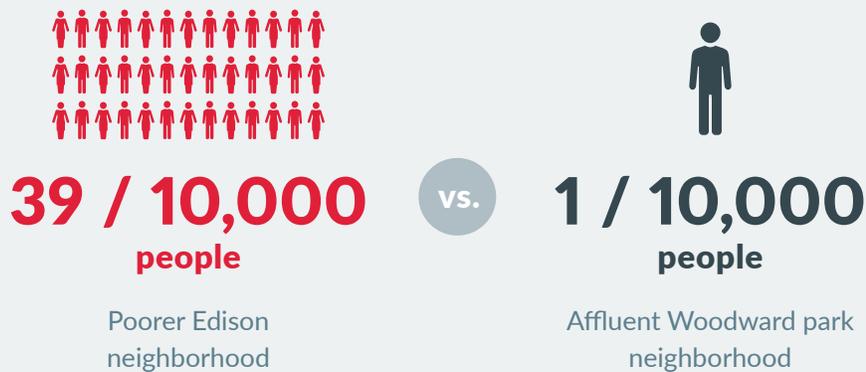
Health and Health Care: Why Community Conditions Matter

While California should be lauded for expanding Medi-Cal, which provides access to needed treatment and care for millions, and protects enrollees from the financial toxicity of health care bills, the expanding costs of health care and relatively meager increase in spending on community conditions have important consequences.

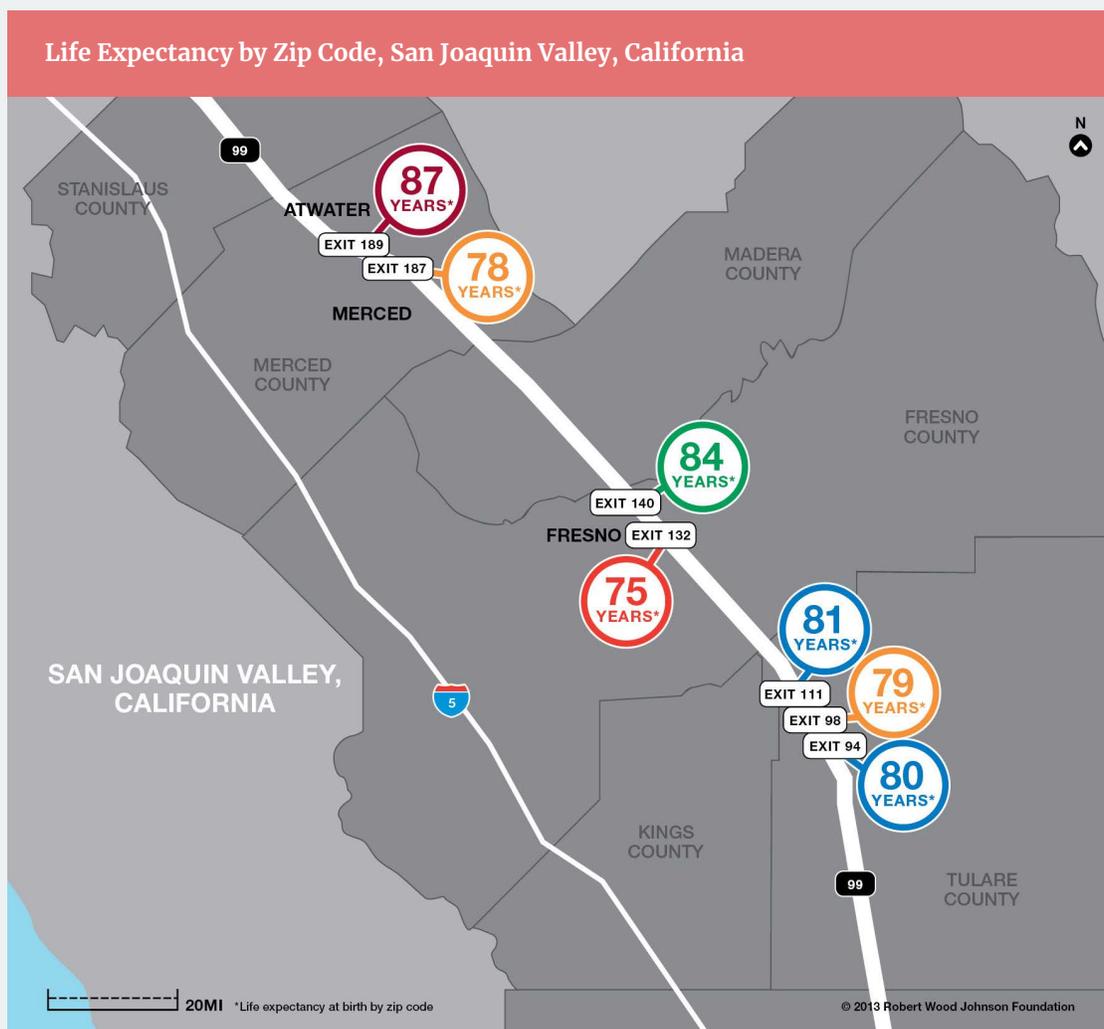
In many zip codes in the San Joaquin Valley, for example, environmental factors such as toxic air and water pollutants, and social factors such as high rates of poverty, food deserts, and low levels of formal education, lead to disproportionately high rates of chronic health issues and lower life expectancy.^{26,27} In Madero, Kings, and Fresno counties, for example, the rates of asthma-related emergency room visits by young children is twice that of the state overall.

Health disparities are stark even within counties. In the poorer Edison neighborhood of Fresno, the rate of hospitalization for diabetes is 39/10,000 people; in the affluent Woodward park neighborhood, the rate is 1/10,000.²⁸

RATE OF HOSPITALIZATION FOR DIABETES



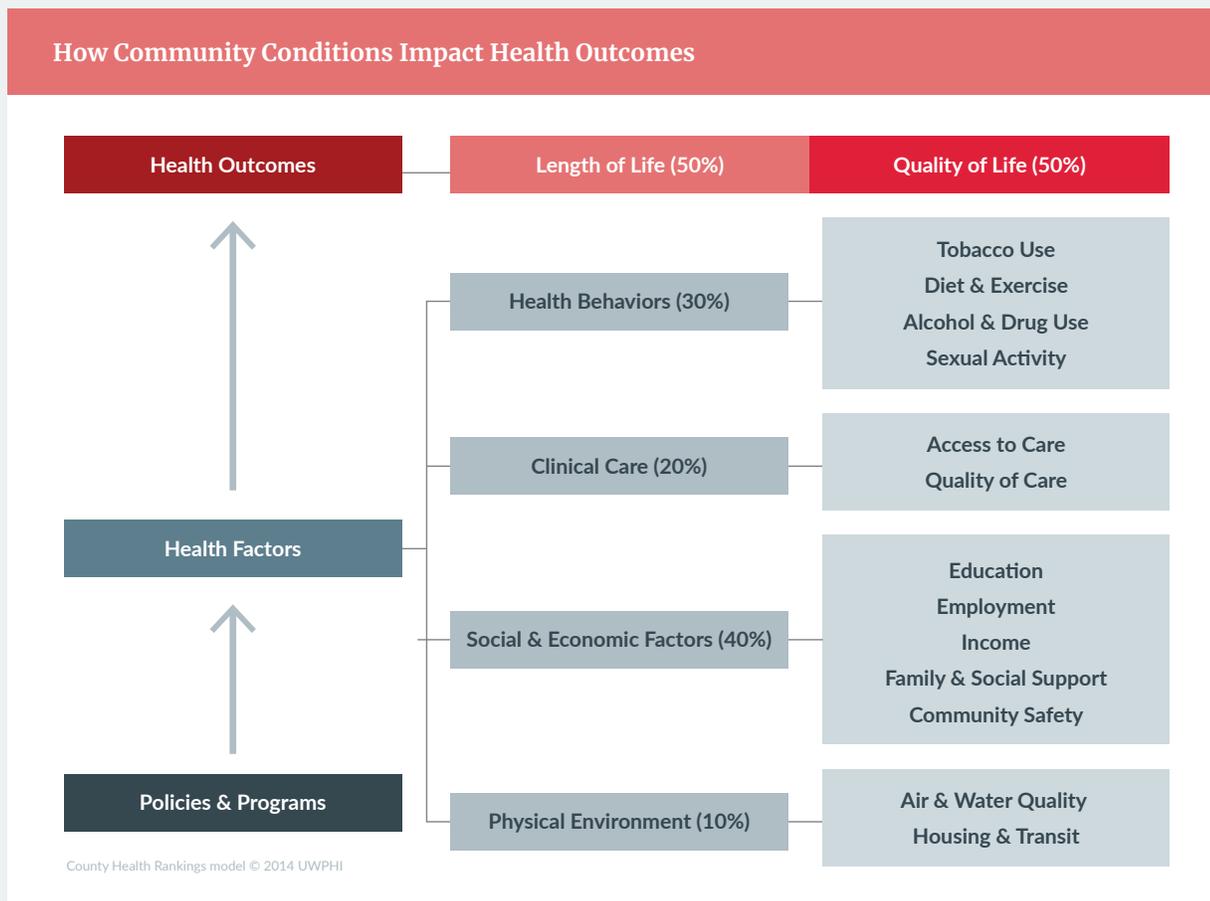
These and many other health disparities can be laid at the feet of poor community conditions. Lack of access to a steady income, education, good food and clean water, stable housing, a safe family environment, and community ties have a significant impact on community health. For example, studies find that lower educational attainment is associated with lower life expectancy, worse reported health, and higher rates of infant mortality. Conversely, higher income levels are linked to better reported health status and lower incidence of chronic disease.^{5,29,30}



The impact of community conditions on population health is substantial. In the year 2000, deaths attributable to low education, racial segregation, and poor social supports were comparable to deaths from heart attack, stroke, and lung cancer.³¹ A 2019 review of determinants of health found that the majority of premature mortality can be attributed to behavioral and social factors; lack of access to health care and poor quality care contribute less than 17 percent to premature mortality.³⁰

The causal links between community conditions and health can be both direct and indirect. For example, substandard housing has a direct effect on health when mold and roaches trigger childhood asthma, or when residential crowding spreads illness quickly.^{32,33} By contrast, a family living in a high-income neighborhood is less likely to encounter asthma triggers. That family will also have an easier time finding fresh food and safe places to exercise, setting up their children with good health habits for life.³³ The connection between community conditions and health is a continuous function and consistent across racial and ethnic groups: regardless of your race, your neighborhood often has a greater impact on life expectancy and health than access to medical treatment.

Investing in community conditions through such programs as providing income support, educational opportunities, and affordable housing, leads to better health outcomes (see **Health and Financial Benefits of Social Spending**). Not only does spending on social programs make people healthier, but these investments pay for themselves many times over, through more productive workers, and fewer emergency room visits and unnecessary hospitalizations.³⁴⁻³⁶



Health and Financial Benefits of Social Spending		
Social Program	Health Effects	Return on Investment
Earned Income Tax Credit	Having a state EITC is associated with a reduced low birthweight rate by 4-11%. ³⁷ A 10% increase in the EITC reduced infant mortality by 0.23%. ³⁸	In California, EITC payments in 2007 contributed \$5 billion in output and added 30,000 jobs to the state economy, for \$4.5 billion in EITC claims. ³⁹
Housing support	Access to affordable housing reduces psychological distress, ED visits, and improves reported health of children. Programs to improve housing quality reduce asthma ED visits in children and increase opportunities for physical activity. ³³	Provision of affordable housing in Oregon decreased Medicaid expenditures by 12 percent, an average of about \$50 per member per month. ³⁶ Another housing program that gives supportive housing to chronically homeless saved an estimated \$29,000 per person per year. ⁴⁰
SNAP (Supplemental Nutrition Assistance Program)	Access to SNAP in childhood reduces rate of stunted growth by 6%, reduces heart disease in adulthood by 5%, reduces rate of obesity by 16%. ⁴¹	Every \$1 increase in SNAP benefits during 2009, when the economy was in a recession, generated about \$1.70 in economic activity. ⁴²
Early childhood education	Early childhood education programs lead to reduced hypertension, obesity, illegal drug use, and high cholesterol in adulthood. ^{43,44}	High-quality early childhood programs yield an estimated \$4 – \$9 dollar return per \$1 invested. ⁴⁵ One early childhood program for disadvantaged children ages 0–5 produced a \$13 dollar return per \$1 invested. ⁴⁴

Implications

Given the influence that community conditions have on health, why has California, and indeed every other state in the U.S., made the choice to prioritize health care over social programs, public health, the environment, and even education? These decisions should not be surprising, given that political discourse on health at the local, state and national level is rarely framed in terms of community conditions, but rather in terms of access to health care and affordability. According to a survey from the Harvard T.H. Chan School of Public Health, more Americans attribute ill health to lack of access to medical care compared to environmental factors, stress, or personal behavior.⁴⁶

For taxpayers and legislators, however, increasing coverage has an additional meaning — more spending on health care. As health care becomes more expensive, coverage becomes more difficult to achieve within a limited state budget. In discussions about coverage, the tension between the need for coverage and the need to control spending may acknowledge the high cost of health care, but it is usually treated as a given. Rarely is the topic of rising health care spending by the state framed as potentially limiting the opportunity to improve health through other forms of public spending (See **Stakeholder Perceptions of Budget Tradeoffs**).

This leaves lawmakers and public officials with a dilemma. To the extent that they recognize the profound importance of community conditions to health, they have a limited number of options. They can raise taxes in order to broaden coverage and simultaneously boost spending on community conditions; or they can cut other programs, such as transportation and law enforcement. Neither of these approaches holds much appeal for either side of the aisle.

There is a third option: cutting health care costs. There are two paths to lower health care costs, one of which is reducing Medi-Cal rolls, restricting benefits to beneficiaries, and/or forcing current and retired state employees to shoulder more of the burden of their own coverage. These actions would impose a harsh burden on millions of Californians, increasing medical debt along with rates of unmet medical needs and ill health, which would worsen health outcomes and could increase health care spending in the long run.⁴⁷

The other path to cutting health care costs lies in addressing the waste in the system, by reducing overpriced or unnecessary health care services.

There is ample evidence for the opportunity to cut waste in health care nationally, and some evidence that health care costs can be reduced even in California, where payment rates to many health care providers are low relative to much of the rest of the country. Cutting waste in the delivery of health care would allow the state to rebalance its investments in community conditions and health care spending without cutting enrollment or benefits.

The remainder of this report examines a variety of approaches to curbing health care costs, some of which also offer the possibility of simultaneously improving the quality of care and making care safer. These solutions include regulatory actions the state can take to rein in health care costs, and ways in which the state can partner with and support organizations that are currently working to improve community conditions and health.

Stakeholder perceptions of budget tradeoffs

In a series of interviews with fifteen local policymakers and state health advocates, we found that, overall, policymakers and advocates saw health care access and funding as the biggest health issues in California.



While the officials and advocates we spoke with had a wide range of understanding of, and interest in, community conditions, most felt that they could not or should not be the focal point of their health reform strategies. The absence of community conditions in public narratives about health and health care is reinforced by two key factors: siloed agencies in charge of funding for various aspects of both health care and health-promoting social, environmental and public health programs; and health care funding structures and incentives that push toward more health care spending, not less.

For example, although Medi-Cal spending as a share of California's budget has grown significantly, many advocates and policy makers expressed concern that California trails behind most states in how much it spends per enrollee. Advocates and policy makers also remain concerned about the more than three million California residents who still lack coverage. They believe that Medi-Cal must raise payment rates to health care providers to address the physician shortage in underserved areas.

State and local officials also have several economic incentives to spend more on health care. For one, the federal government provides matching funds for Medi-Cal, paying for 50% of the cost for those enrolled before the ACA expansion, and 100% of the cost to cover new enrollees after 2014 (dropping to 90% after 2016). There are no obvious economic advantages for state policymakers to reduce health care spending, because saving money in health care only loses them matching federal funds.

On a local level, policy makers are more interested in capturing state health care funding than considering tradeoffs with spending on community conditions. Because most of California's revenue is raised at the state level, not the local level (due to limited property tax revenues and the progressive state income tax), local policymakers have to compete for health care funding from the state. From the perspective of most local officials and advocacy organizations, it is invariably a matter of garnering the most dollars from Sacramento, not worrying about the cost of the care delivered in their locality.

Local policymakers also do not perceive a tradeoff between health care spending and spending on community conditions because, most of the time, they must rely on siphoning off health care dollars to use as seed money for projects that have an impact on those community conditions. Without using health care funding, there is no other way to get these projects off the ground, except for grants from foundations or local business groups, sources that are unstable and often time-limited.

“Getting the ambulance there on time, or the wheelchair for the kid, or the trauma victim to the right specialist dominates the experience of any local administrator who must engineer solutions in perpetual scarcity and the reality of pervasive and preventable human suffering.”

– Alex Briscoe, former public health director, Alameda County

The one area where local and state policy makers are being forced to acknowledge and confront directly the high cost of health care is through the lens of retiree health care obligations to state employees, teachers, firefighters, and other workers. At the state level, CalPERS’ health care obligations to current employees and retirees are dwarfed by monies devoted to Medi-Cal, but even so, there has been an intense debate over the scope, generosity, and eligibility standards for public sector pensions. The argument that pension costs are too high, the reserves for meeting them too low, and the terms for vesting in pensions too permissive, has been made by Republicans and also by some Democrats, and in particular by several mayors. Like the general debate about coverage, the high cost of health care is acknowledged but treated as a given. The argument invariably focuses on whether or not other post-employment benefit obligations can be paid for, rather than on considering ways in which the underlying costs of providing health care can be reduced.

California's options for action to improve health

Tackling health care waste and price inflation

Nationally, a significant proportion of health care spending in the U.S. is wasted on a variety of factors and processes that do nothing to improve the health of patients but merely drive up costs.

At least 18 percent of health care spending, and perhaps as much as 37 percent, is lost due to a combination of inefficient processes, excessive administrative overhead, unnecessary care (also called overuse), and excessive prices.⁴⁸ Assuming the minimum level of waste at the national level applies to California's health care system, that's \$20 billion of health care spending in the state's budget that is wasted each year. These wasteful practices also affect costs for employers, private insurers, and Medicare.

Prices

An essential part of reducing health care waste will be tackling overpriced services and products. Drug prices are a well-known source of unnecessary expense, and market pressures are insufficient to keep medications affordable. The state currently spends about \$38 billion on prescription drugs and other non-durable medical products.⁴⁹ Allowing the state to negotiate drug prices with manufacturers, as Governor Gavin Newsom has proposed, would be a good first step toward reducing costs. California could also go a step further and create a state-run pharmacy benefit manager (PBM) to offer negotiated prices to all Californians, not just state beneficiaries.⁵⁰

Prescription medications are not the only source of inflated prices in health care. Hospital charges and physician fees are often highly inflated, especially when large hospital systems control market share and can dictate prices. These prices affect how much CalPERS must pay for insurance for employees and retirees. A report from the Health

Care Pricing Project found that monopoly hospitals charge 12 percent more for their services than hospitals with four or more local rivals.⁵¹ Price transparency is often raised as a means of controlling prices of health care services, and grassroots efforts like Clear Health Costs, which provide a database of prices patients have paid, can save individuals money in the short run.⁵² However, efforts to make hospital and physician prices transparent have had minimal effect on prices paid by insurers.⁵³

One stronger measure for controlling prices would be enforcing anti-trust laws for monopoly hospital systems like Sutter Health, which has been accused of overcharging patients for health care services and failing to meet community benefit obligations.^{54,55} California policymakers should also consider converting hospital payments to a fixed total revenue system, often called “global budgeting.” In Maryland, the switch to global budgeting for all hospitals has saved Medicare over \$400 million in five years, by reducing growth in hospital spending to an average of 1.38 percent, which is 2.2 percent less than the state’s long-term economic growth rate. Bringing California hospital spending growth down from its current 3.1 percent to 1.38 percent per year would save about \$2.7 billion over five years.⁵⁶

Excess volume of services

When global budgeting is not in place, spending in health care is the result of price multiplied by the volume of services. There is increasing evidence that a significant portion of what is delivered to patients does nothing to improve their health and often needlessly puts them at risk of serious harm.⁵⁷ Regardless of how high or low the price per unit of health care services may be, payers are spending money on care that is unnecessary and may harm patients unnecessarily. Reducing the volume of such “low-value care” (health care services that provide minimal or no health benefit to the patient) is another potential source of significant health care savings. A study in Washington state examined 48 commonly used health care services, and found that 47 percent of spending on these treatments were of low value.⁵⁸ Examples of these services include MRI for low back pain, routine cardiac stress testing, and PSA (prostate cancer) screenings. In a year, the state spent \$341 million on these low-value services.⁵⁸ As a state with more than five times the population of Washington, California likely spends more than \$1.5 billion on these 48 low-value services alone.

Examples of initiatives to reduce low-value services include case conferences, electronic medical record prompts, letters to clinicians showing how their delivery of low value services compares to that of peers, and clinician awareness and education initiatives.⁵⁹⁻⁶¹ One such initiative is SmartCare California (SCC), a public-private partnership led by the Integrated Health Association (IHA) that brings together the state’s leading health care purchasers, who are working together to get providers to avoid unnecessary services. (The targeted services are based on recommendations created by the Choosing Wisely initiative.) Currently, SCC is targeting opioid overuse,

unnecessary c-sections, and surgical procedures for low-back pain.⁶² Additionally, IHA partners with physician specialty groups and large hospital systems on other commonly overused services, such as reducing preoperative stress testing and repetitive lab testing.⁶³ These programs are promising steps toward reducing low-value care. Future initiatives could focus on reducing unnecessary cardiovascular tests and procedures (a highly costly category of overuse), unnecessary hospitalizations, and overscreening for cancer in low-risk populations.⁶⁴

Improving care delivery processes

California has already embarked on initiatives intended to improve health care delivery, such as the Medicaid Delivery System Reform and Incentive Program (DSRIP). The DSRIP pilot in California ran from 2010 to 2015, and was renewed again for 2015–2020. The program gives funding to public hospitals in exchange for achieving certain metrics, including building health technology infrastructure and primary care capacity, improving chronic disease management, reducing in-hospital infections, and integrating health care with human services.^{65,66}

The final evaluation of the 2010–2015 pilot was encouraging. Overall, 97% of the 3,764 milestones set for DSRIP projects were achieved. Participating hospitals reported that DSRIP had a high or very high impact on improving patient outcomes and quality of care, and a medium-to-high impact on containing costs.⁶⁶ Examples of cost-saving outcomes from the demonstration include an overall 20 percent reduction in hospitalizations of diabetes patients for short-term complications and a 22 percent decline in rates of central line infections in the ICU.⁶⁵ The 2015–2020 DSRIP demonstration, “Medi-Cal 2020” builds on the previous pilot, including alternative hospital payment programs, such as global budgeting for uninsured patients.⁶⁷ Maryland hospitals have demonstrated that the shift to global budgets can be made by a large number of hospitals within a few years, and California should consider following in their path, using global budgeting for all patients covered by the state.

Supporting investments in community conditions

The point of reining in health care spending is to provide more resources for community conditions for health. A crucial path to improving health is to increase state spending on social programs, public health, education, and the environment. This could include increasing the minimum wage, increasing the state Earned Income Tax Credit, implementing universal child care, allocating more funding to higher education, anti-homelessness initiatives, rent support and development of more affordable housing, and many more.

Ongoing efforts to improve community conditions

There are multiple ongoing efforts to address the need for greater investment in community conditions in the state. One initiative, called the California Accountable Communities for Health Initiative (CACHI), brings together health care providers with public institutions and community groups, to improve community health through coordination of health care and social services, with a focus on community conditions. CACHI provides formal infrastructure for partnerships, sustainable funding, community engagement, and data collection, to maximize limited resources for the largest impact.⁶⁸

Another current project to unite health and social programs is the Whole Person Care (WPC) pilot program, part of the “Medi-Cal 2020” demonstration. WPC Pilots provide local governments and health care institutions with support to integrate health care, behavioral health, and social services for Medi-Cal patients with poor health outcomes and complex needs. Eighteen WPC pilots were approved in the first round of applications, to provide services including care management, wellness education, addiction treatment, housing services, and more.⁶⁹

Aligning incentives for community health

While current efforts to improve community conditions are promising, these programs exist only in a handful of California communities and have limited support from the state. Too many people are being left behind because government and health care institutions have little incentive to work together with community organizations to fully invest in community conditions.

One of the greatest barriers to states making major investments in community conditions is that the government body making the upfront investment may not receive all of the financial benefit that accrues from improving health.⁷⁰ For example, agencies making investments in education do not see the full return on investment, because the benefits are dispersed throughout society, through lower rates of incarceration, reduced health care utilization, and economic growth. Moreover, large-scale investments in community conditions are often seen as too costly or risky for a single governmental agency to undertake on its own, especially if the benefits will only be seen far in the future.



There are several steps California could take to solve this problem. One is aligning financial incentives of health systems with improving community health through alternative payment models (as do Maryland’s Global Budgeting system and Medicaid Managed Care). Health care institutions that are paid fee-for-service have little incentive to contribute to government investments in community conditions, because they lose money when people are healthier. Rewarding health systems for patient outcomes rather than the volume of services they provide can catalyze more partnerships between health systems and community-based social programs.⁷¹

However, California could go a step further, by uniting all stakeholders that benefit from investments in community conditions to invest together in larger-scale projects to improve health. California should build on the positive experience of CACHI and turn it into a statewide initiative, so that state programs are fully leveraged into these efforts.

By pooling their resources into “Wellness Funds,” as many other cities and communities have begun to do, California government agencies, employers, and hospitals can better improve the health of the state’s residents, and provide a larger health return on investment for all.⁷²

The state should be a catalyst for these “co-venture” projects by providing the seed capital; bringing stakeholders to the table (including health care institutions, community social service providers, and Community Development Financial Institutions); incentivizing non-profit health systems to participate through new community benefit requirements; creating the infrastructure for sustainable pooled funds; providing incentives within Medi-Cal to invest in community conditions; and commissioning research to calculate the downstream savings of upfront investments in community conditions.⁷³

Conclusion

Like many states and the families that live in them, California is feeling the pressure of rising health care costs on its budget, forcing tradeoffs in spending on programs that matter equally as much as health care in terms of their impact on community well-being and the population's health.

This pattern is perhaps less discernable in the state's budget than in family budgets, but it is just as difficult to fix. Moreover, the structure of health care funding in California makes it beneficial for policymakers *not* to acknowledge the tradeoffs that are occurring between health care spending and investing in the community conditions that have such a profound impact on health.

However, if the current trends in state spending continue and tax revenues do not rise, the cost of health care in California will absorb more and more of the budget, further crowding out spending on community conditions. Though some of this health care spending will be put to good use expanding coverage, hundreds of millions—if not billions—more will be wasted on overpriced services, low-value care, and administrative inefficiencies.

The state has three ways it can respond: raise taxes, constrain health care spending, or both. None of these choices will be easy, and they will not be made until state officials, community activists, and the public recognize the importance of community conditions to health—and commit to addressing the waste in health care. Most of the savings from reducing that waste must be redirected toward increasing funding for social, environmental, and community programs. The long-term health of the state depends on it.

References

1. Schieber S, Nyce S. Health care USA: A cancer on the American Dream: Willis Towers Watson, 2018.
2. Blendon R, Benson J, McMurty C. The Upcoming U.S. Health Care Cost Debate – The Public’s Views. *New England Journal of Medicine* 2019.
3. DiJulio B, Kirzinger A, Wu B, Brodie M. Data Note: Americans’ Challenges with Health Care Costs: Kaiser Family Foundation, 2017.
4. Braveman P, Egerter S, Williams DR. The Social Determinants of Health: Coming of Age. *Annual Review of Public Health* 2011; 32(1): 381–98.
5. Braveman P, Gottlieb L. The Social Determinants of Health: It’s Time to Consider the Causes of the Causes. *Public Health Reports* 2014; 129: 19–31.
6. Policy Basics: Where Do Our Federal Tax Dollars Go?: Center on Budget and Policy Priorities, 2019.
7. Squires D. U.S. Health Care from a Global Perspective: The Commonwealth Fund, 2015.
8. Bradley E, Sipsma H, Taylor L. American health care paradox—high spending on health care and poor health. *QJM: Monthly Journal of the Association of Physicians* 2017; 110(2): 61–5.
9. Summary: NASBO State Expenditure Report. Washington, DC: The National Association of State Budget Officers, 2017.
10. State and Local Governments’ Fiscal Outlook. Washington, DC: Government Accountability Office, 2018.
11. Tran LD, Zimmerman F, Fielding J. Public health and the economy could be served by reallocating medical expenditures to social programs. *SSM – Population Health* 2017; 3: 185–91.
12. Fronstin P. 2018 Edition – California’s Uninsured: California Health Care Foundation, 2018.
13. Kapphahn K. A Historical Review of Proposition 98: Legislative Analyst’s Office, 2017.
14. Kaplan J. California’s Support for K–12 Education Is Improving, but Still Lags the Nation: California Budget & Policy Center, 2017.
15. Orszag P. Why Public Universities Are Getting Shortchanged. *Bloomberg* 2018. <https://www.bloomberg.com/opinion/articles/2018-10-17/health-care-costs-push-states-to-cut-funding-for-universities> (accessed 05/10/19).
16. Cook K. Higher Education Funding in California. 2017. <https://www.ppic.org/publication/higher-education-funding-in-california/> (accessed 05/10/19 2019).
17. Finance CDo. California Public K–12 Graded Enrollment and High School Graduate Projections by County—2017 Series. 2017. <https://www.orangeusd.org/uploaded/District/Departments/EdServices/DAC/DACHR13118.pdf> (accessed 05/10/19 2019).
18. Education CDo. CalEdFacts. 2019. <https://www.cde.ca.gov/re/pn/fb/index.asp> (accessed 05/10/19 2019).
19. Medi-Cal Monthly Enrollment Fast Facts, June 2018 as of the MEDS Cut-off for October 2018. In: Division RaAS, editor.: California Department of Health and Human Services; 2018.
20. Medi-Cal Monthly Enrollment Fast Facts, June 2018 Characteristics of the Medi-Cal population as captured by the Medi-Cal Eligibility Data System (MEDS) – ADA Supplement In: Division RaAS, editor.: California Department of Health Care Services; 2018.
21. California So. Trend in Medi-Cal Program Enrollment – January Month of Enrollment for 2000–2013. In: Services DoHC, editor.; 2013.
22. Services CfMaM. Expenditure Reports From MBES/CBES. In: System MBaESScSHIPBaE, editor. Medicaid.gov; 2018.
23. Xu H, Sotelo J, Villon J, Belnas J, Livanios E, Lizarde M. SPRING 2019 POPULATION PROJECTIONS. Sacramento, CA: California Department of Corrections and Rehabilitation, 2018.

24. Rehabilitation CDoCa. Adult Population Projections , 2010–2015: California Department of Corrections and Rehabilitation, 2009.
25. Health Benefits Program 2017 Annual Report. Sacramento, CA: CalPERS, 2017.
26. Anderson B. Chronic diseases take their toll among central San Joaquin Valley residents. *The Fresno Bee*, 2015. <https://www.fresnobee.com/news/local/article19648839.html> (accessed 05/10/19).
27. London J, Huang G, Zagofsky T. Land of Risk, Land of Opportunity: Cumulative Environmental Vulnerabilities in California’s San Joaquin Valley: UC Davis Center for Regional Change, 2011.
28. Valley Health Snapshot: Fresno. Fresno, CA: Fresno State Central Valley Health Policy Institute, 2014.
29. Hood C, Gennuso K, Swain G, Catlin B. County Health Rankings. *American journal of preventive medicine* 2016; 50(2): 129–35.
30. Kaplan R, Milstein A. Contributions of Health Care to Longevity: A Review of 4 Estimation Methods. *Annals of family medicine* 2019; 17(3): 267–72.
31. Galea S, Tracy M, Hoggatt K, Dimaggio C, Karpati A. Estimated deaths attributable to social factors in the United States. *American Journal of Public Health* 2011; 101(8): 1456–65.
32. Ganesh B, Scally CP, Skopec L, Zhu J. The Relationship between Housing and Asthma among School-Age Children Urban Institute, 2017.
33. Taylor L. Housing And Health: An Overview Of The Literature. *Health Affairs*, 2018. <https://www.healthaffairs.org/doi/10.1377/hpb20180313.396577/full/> (accessed 05/10/19).
34. Morse S. What Montefiore’s 300% ROI from social determinants investments means for the future of other hospitals. *Healthcare Finance*, 2018. <https://www.healthcarefinancenews.com/news/what-montefiores-300-roi-social-determinants-investments-means-future-other-hospitals> (accessed 05/10/19).
35. Pruitt Z, Emechebe N, Quast T, Taylor P, Bryant K. Expenditure Reductions Associated with a Social Service Referral Program. *Population Health Management* 2018; 21(6).
36. Wright B, Li G, Weller M, et al. Health in Housing: Exploring the Intersection between Housing and Health Care: Center for Outcomes Research and Education Enterprise Community Partners, 2016.
37. S M, K K, M L. Effects of state-level Earned Income Tax Credit laws in the U.S. on maternal health behaviors and infant health outcomes. *Social Science and Medicine* 2017; 197: 67–75.
38. PS A, N S, D V, C. S. Bringing health and social policy together: the case of the earned income tax credit. *Journal of Public Health Policy* 2009; 30(2): 198–207.
39. Avalos A, Alley S. The Economic Impact of the Earned Income Tax Credit (EITC) in California. *California Journal of Politics and Policy* 2010; 2(1).
40. Larimer ME, Malone DK, Garner MD, et al. Health Care and Public Service Use and Costs Before and After Provision of Housing for Chronically Homeless Persons With Severe Alcohol Problems. *Journal of the American Medical Association* 2009; 301(13): 1349–57.
41. Hoynes H, Schanzenbach D, Almond D. Long-Run Impacts of Childhood Access to the Safety Net. *American Economic Review* 2016; 106(4): 903–34.
42. Policy Basics: The Supplemental Nutrition Assistance Program (SNAP)2018. <https://www.cbpp.org/research/policy-basics-the-supplemental-nutrition-assistance-program-snap> (accessed 05/10/19).
43. Campbell F, Conti G, Heckman J, et al. Early Childhood Investments Substantially Boost Adult Health. *Science* 2014; 343(6178): 1478–85.
44. Garcia JL, Heckman J, Leaf DE, Prados M. The Life-Cycle Benefits of an Influential Early Childhood Program. *NBER Working Paper No 22993* 2016.
45. Philanthropy TCfHI. High Return on Investment (ROI). *Invest in a Strong Start for Children: A Toolkit for Donors on Early Childhood*, 2019. <https://www.impact.upenn.edu/our-analysis/opportunities-to-achieve-impact/early-childhood-toolkit/why-invest/what-is-the-return-on-investment/> (accessed 05/10/19).
46. Dwyer M. Poll: U.S. public sees ill health as resulting from broad range of causes. Boston, MA: Harvard T.H. Chan School of Public Health Robert Wood Johnson Foundation NPR; 2015.
47. Carlson M, DeVoe J, Wright B. Short-Term Impacts of Coverage Loss in a Medicaid Population: Early Results From a Prospective Cohort Study of the Oregon Health Plan. *Annals of family medicine* 2006; 4(5): 391–8.

48. Lallemand NC. Reducing Waste in Health Care. *Health Affairs* 2012.
49. Wilson K. California Health Care Spending: California Health Care Foundation, 2017.
50. Candisky C. State report: Pharmacy middlemen reap millions from tax-funded Medicaid. *The Columbus Dispatch*, 2018. <http://gatehousenews.com/sideeffects/state-report-pharmacy-middlemen-reap-millions-from-tax-funded-medicaid/> (accessed 05/10/19).
51. Cooper Z, Craig S, Gaynor M, Van Reenen J. The Price Ain't Right? Hospital Prices and Health Spending on the Privately Insured: Health Care Pricing Project, 2015.
52. Lipinski J. Blood test: \$522 or \$19? MRI: \$750 or \$495? Tell us what health care is costing you. *The New Orleans Times-Picayune*, 2017. https://www.nola.com/health/2017/04/new_orleans_health_prices.html (accessed 05/10/19).
53. Rosenberg T. Revealing a Health Care Secret: The Price. *The New York Times*. 2013.
54. Terhune C. Big California Firms Take On Health Care Giant Over Cost of Care. *Shots: Health News from NPR*, 2016. <https://www.npr.org/sections/health-shots/2016/04/07/473253558/big-california-firms-take-on-health-care-giant-over-cost-of-care> (accessed 05/10/19).
55. Bannow T. Questions loom over Sutter Health's community benefit spending. *Modern Healthcare*, 2018. <https://www.modernhealthcare.com/article/20181201/NEWS/312019953/indepth-questions-loom-over-sutter-health-s-community-benefit-spending> (accessed 05/10/19).
56. Sabatini N, Antos J, Haft H, Kinzer D. Maryland's All-Payer Model—Achievements, Challenges, And Next Steps. *Health Affairs Blog* 2017.
57. Berwick D, Hackbarth A. Eliminating Waste in US Health Care. *JAMA* 2012; **307**(14): 1513–6.
58. First Do No Harm: Calculating healthcare Waste in Washington State. Seattle, WA: Washington Health Alliance; 2018.
59. Taylor LJ, Nabozny MJ, Steffens NM, et al. A Framework to Improve Surgeon Communication in High-Stakes Surgical Decisions. *JAMA surgery* 2017; **152**(6): 531–8.
60. Cho H, Lutz C, Truong T, et al. Occam's Conference: Overuse As a Medical Error. *Journal of hospital medicine* 2016; **11**.
61. Wheeler D, Marcus P, Nguyen J. Evaluation of a Resident-Led Project to Decrease Phlebotomy Rates in the Hospital: Think Twice, Stick Once. *JAMA Intern Medicine* 2016; **176**(5): 708–10.
62. Association IH. Smart Care California. 2019. <https://www.iha.org/our-work/insights/smart-care-california> (accessed 05/10/19 2019).
63. Yegian J. Decreasing Inappropriate Care in California in Partnership with Choosing Wisely®: Integrated Health Association, 2015.
64. Schwartz AL, Landon BE, Elshaug AG, Chernew ME, McWilliams JM. Measuring low-value care in Medicare. *JAMA Intern Med* 2014; **174**(7): 1067–76.
65. California's Delivery System Reform Incentive Program 2010–2015. Oakland, CA: California Association of Public Hospitals and Health Systems California Health Care Safety Net Institute, 2015.
66. Nadereh Pourat P, Ying-Ying Meng D, Arleen Leibowitz P, et al. Final Evaluation Report of California's Delivery System Reform Incentive Payments (DSRIP) Program: UCLA Center for Health Policy Research, 2016.
67. Services CDoHC. Global Payment Program. 2019. <https://www.dhcs.ca.gov/provgovpart/Pages/GlobalPaymentProgram.aspx> (accessed 05/10/19 2019).
68. Initiative CACfH. California Accountable Communities for Health Initiative — About 2017. <http://cachi.org/about> (accessed 05/10/19 2019).
69. Services CDoHC. Whole Person Care Pilots. 2019. <https://www.dhcs.ca.gov/services/Pages/WholePersonCarePilots.aspx> (accessed 05/10/19).
70. Butler S, Cabello M. An antidote to the “wrong pockets” problem? *Pay for Success Perspectives*, 2018. <https://pfs.urban.org/pay-success/pfs-perspectives/antidote-wrong-pockets-problem> (accessed 05/10/19).
71. McGuire J. PAYING FOR POPULATION HEALTH: Case Studies of the Health System's Role in Addressing Social Determinants of Health: Academy Health, 2018.
72. Center GHP. Bridging for Health: Improving Community Health through Innovations in Financing. In: Heberlein E, editor.: Georgia Health Policy Center; 2019.
73. Opportunities for Medi-Cal to Support Community Health Initiatives: California Accountable Communities for Health Initiative JSI, Inc, Center for Health Care Strategies, 2018.



LOWN
INSTITUTE



21 Longwood Avenue
Brookline, MA 02446-5239

lowninstitute.org

info@lowninstitute.org

617.992.9322