THE FUTURE OF HEALTH AND WELLNESS

A CALIFORNIA 100 REPORT ON POLICIES AND FUTURE SCENARIOS

CALIFORNIA 100
VISION & STRATEGY FOR THE NEXT CENTURY
ABOUT CALIFORNIA 100

The California 100 Initiative envisions a future that is innovative, sustainable, and equitable for all. Our mission is to strengthen California’s ability to collectively solve problems and shape our long-term future over the next 100 years.

California 100 is organized around 15 policy domains and driven by interrelated stages of work: research, policy innovation and engagement with Californians. California 100’s work is guided by an expert and intergenerational Commission. Through various projects and activities, California 100 seeks to move California towards an aspirational vision—changing policies and practices, attitudes and mindsets, to inspire a more vibrant future.

This California 100 Report on Policies and Future Scenarios was produced as part of California 100’s research stream of work, in partnership with 20 research institutions across the state. California 100 sponsored grants for data-driven and future-oriented research focused on understanding today and planning for tomorrow. This research, anchored in California 100’s 15 core policy domains, forms the foundation for the initiative’s subsequent work by considering how California has gotten to where it is and by exploring scenarios and policy alternatives for what California can become over the next 100 years.

The California 100 initiative is incubated through the University of California and Stanford.

CALIFORNIA 100 RESEARCH TEAM

Henry E. Brady, Ph.D., Director of Research
Lindsay Maple, M.P.P., Senior Research Analyst
Ava Calanog, M.P.P., Assistant Director of Research

THE CALIFORNIA 100 EXECUTIVE LEADERSHIP TEAM

Allison Berke, Ph.D., Director of Advanced Technology
Henry E. Brady, Ph.D., Director or Research
Amy Lerman, Ph.D., Director of Innovation
Jesse Melgar, M.P.P., Director of Engagement
Karthick Ramakrishnan, Ph.D., Executive Director

READ MORE ABOUT THE FUTURE OF HEALTH AND WELLNESS IN CALIFORNIA

For additional background information, read the related Facts-Origins-Trends report at California100.org. The Facts-Origins-Trends report contains all of the references and citations to support the content of this report.

DISCLAIMER The contents of this report reflect the views of the authors, who are responsible for the facts and the accuracy of the information presented herein. This document is disseminated under the sponsorship of the University of California in the interest of information exchange. The University of California assumes no liability for the contents or use thereof. Nor does the content necessarily reflect the official views or policies of the State of California. This report does not constitute a standard, specification, or regulation.
THE FUTURE OF HEALTH AND WELLNESS

A CALIFORNIA 100 REPORT ON POLICIES AND FUTURE SCENARIOS
CALIFORNIA 100
RESEARCH PARTNERS

This Report is one of 15 reports that will be released in 2022 as part of the California 100 Initiative. We are proud to partner with the following research centers and institutes across California on our work:

ADVANCED TECHNOLOGY AND BASIC RESEARCH
- Bay Area Council Economic Institute/Bay Area Science and Innovation Consortium
- Silicon Valley Leadership Group Foundation’s California Center for Innovation

AGRICULTURE AND FOOD SYSTEMS
- California Polytechnic State University, San Luis Obispo, Natural Resources Management and Environmental Sciences

ARTS, CULTURE, AND ENTERTAINMENT
- Allosphere at the University of California, Santa Barbara

BUSINESS CLIMATE, CORPORATE GOVERNANCE, AND ASSET FORMATION
- Loyola Marymount University, College of Business Administration

CRIMINAL JUSTICE REFORM AND PUBLIC SAFETY
- University of California, Irvine School of Social Ecology

EDUCATION
- University of California, Berkeley Institute For Young Americans
- University of California, Berkeley Graduate School of Education
ECONOMIC MOBILITY, INEQUALITY, AND WORKFORCE
• Stanford University Digital Economy Lab
• Stanford University Institute for Economic Policy Research

ENERGY, ENVIRONMENT, AND NATURAL RESOURCES
• University of California, Berkeley Goldman School of Public Policy's Center for Environmental Public Policy

FEDERALISM AND FOREIGN POLICY
• Stanford University’s Bill Lane Center for the American West

FISCAL REFORM
• The Opportunity Institute

GOVERNANCE, MEDIA, AND CIVIL SOCIETY
• Stanford University Center for Democracy, Development and the Rule of Law

HEALTH AND WELLNESS
• University of California, Los Angeles Center for Health Policy Research

HOUSING AND COMMUNITY DEVELOPMENT
• University of California, Los Angeles Lewis Center for Regional Studies
• cityLab at UCLA
• University of California, Berkeley Terner Center for Housing Innovation

IMMIGRANT INTEGRATION
• University of Southern California Equity Research Institute

TRANSPORTATION AND URBAN PLANNING
• University of California, Los Angeles Institute of Transportation Studies
ABOUT UCLA CENTER FOR HEALTH POLICY RESEARCH

The UCLA Center for Health Policy Research (CHPR) is one of the nation's leading health policy research centers and the premier source of health policy information for California. UCLA CHPR is the home of the California Health Interview Survey (CHIS) and is based in the UCLA Fielding School of Public Health and affiliated with the UCLA Luskin School of Public Affairs. Since its founding in 1994, the UCLA CHPR has produced high-quality, objective, and evidence-based research and data that have informed effective policy making and improved the lives of millions of Californians. With nearly 100 UCLA CHPR faculty, staff, and graduate student researchers and 45 Faculty Affiliates, we tap expertise across all areas of health and well-being impacting Californians, from analyzing and addressing health disparities in underserved communities to providing credible enrollment estimates that helped implement health care reform, the Center has been a leading force in health policy issues.
THE FUTURE OF HEALTH AND WELLNESS REPORT AUTHORS:

Ninez A. Ponce, Ph.D., M.P.P.  Director, UCLA Center for Health Policy Research (UCLA CHPR)

Susan H. Babey, Ph.D.  UCLA CHPR

Linh Chuong, M.P.H.  UCLA CHPR

AJ Scheitler, Ed.D.  UCLA CHPR

Riti Shimkhada, Ph.D.  UCLA CHPR

Sean Tan, M.P.P.  UCLA CHPR

Karla Thomas, M.P.H.  UCLA CHPR

Report development, revisions, and publication by California 100

Collaboration and consultation on future scenarios provided by Institute for the Future (IFTF)
“As California Goes, So Goes the Nation, Alas.” That was a headline from a Los Angeles Times opinion column on April 30, 1989, which noted that, even though “Californians have long considered their state the cutting edge of social and political change... [it] no longer seems the vanguard of political innovation. Other states rarely look to California for policy initiatives.”

Fast-forward to 2022, and few would proclaim that California lacks in policy innovation. Quite the contrary. The state has enacted a variety of policies ranging from expansions in immigrant rights and voting rights to health care and higher education, and from large-scale experiments in guaranteed income to ambitious moves towards net-zero emissions in a variety of sectors. And despite the periodic waves of “doom and gloom” reporting about the state, California’s economic output over the last 25 years has grown faster than the national average, and on par with GDP growth for the state of Texas.

Even so, much remains to be done. The California Dream has always been marred by a high degree of racial exclusion, and it remains out of reach for millions in the state—whether measured by health outcomes, unaffordable housing, or massive disparities in income and wealth. California also recognizes that future progress depends on recognizing and correcting historical wrongs. Its Truth and Healing Council, for example, will provide recommendations aimed at prevention, restoration, and reparation involving California Native Americans and the State. If California’s racial diversity represents America’s demographic reality by 2100, our work is essential—not only for the long-term success of the state, but also for our country’s innovative and equitable future.

This future-focused work is especially pressing today. The COVID-19 pandemic has scrambled a state and nation already undergoing significant changes in economics, politics, and society. The harmful consequences of climate change are at our doorstep,
with forest fires and droughts that grow in frequency and intensity each year. The weakening of local media and the growth of disinformation threaten both our civic health and our public health. And staggering inequities in income and wealth, homeownership and health, threaten the state’s reputation as a haven for migrants, domestic and international alike.

In addition to immediate threats that affect our long-term future, we also see plenty of opportunity. Record increases in federal and state spending mean that billions of additional dollars are flowing to state, local, and tribal governments in California. Many jurisdictions are looking to invest in infrastructure that meets the long-term needs of their communities. Philanthropic institutions and individual donors are also looking to make transformative investments that have enduring impact. We have an opportunity to inform and enrich all of these plans and conversations.

Most institutions and organizations in California are focused on immediate challenges, and don’t have the luxury of time, dedicated talent, and resources to focus on long-term futures. California 100 is grateful for the opportunity to provide added value at this critical time, with actionable research, demonstration projects, and compelling scenarios that help Californians—government agencies, stakeholder groups, and residents alike—to envision, strategize, and act collectively to build a more innovative and equitable future.

Karthick Ramakrishnan, Ph.D.  Henry E. Brady, Ph.D.
Executive Director         Director of Research
California is a bellwether for the United States, providing lessons and examples of the successes and major challenges faced by health systems that aim to achieve health equity for a diverse population. California’s healthcare delivery system has largely been successful in providing coverage and access to care compared to other states in the U.S. However, important challenges remain for California given the approximately 7.7 percent of its population that remains uninsured and the presence of wide disparities in health outcomes.
Approximately 7.7 percent of California’s population remain uninsured and wide disparities in health outcomes across socioeconomic groups exist. Across socioeconomic groups, racial/ethnic populations, and regions of California. These disparities suggest that a healthcare system can only do so much to achieve wellness in society.

Health care researchers, policymakers, and practitioners now understand that the social and structural determinants of health (SSDoH) are critical to health and wellness. In the framework (see Figure 1) put forth by the World Health Organization (WHO), the socioeconomic and political context determines an individual’s or a whole population’s position in society, and this position constitutes the social and structural determinants of health. These determinants include the factors or conditions in the places where people live, learn, work, and play. The health system is the way in which populations or individuals obtain access to health care, thus making it an intermediary determinant of health. The social and structural determinants – which are the hardest to change – largely determine who gets sick and who stays well. A focus on SSDoH requires a focus on improving the systems and deeply embedded structures that marginalize whole communities and regions, making it difficult to achieve good health for all.
The purpose of this report is to describe the many ways in which California has made strides in laying the groundwork for achieving health equity through the establishment of policies and laws that either target the structural determinants directly or indirectly by changing intermediary determinants of health. As shown in Figure 2, the SSDoH include the structural determinants such as the physical environment, responsible for roughly 10 percent of health outcomes, and the social and economic factors, responsible for 40 percent. Even health behaviors that account for 30 percent of outcomes are often exacerbated by social and structural factors that lead to poor diet, lack of exercise, and risky behaviors. So addressing the SSDoH is critical to move beyond reactive systems that result in costly and inefficient approaches to clinical care and towards mitigating and preventing the production of inequities in health. Creating an environment in which
all Californians can thrive requires moving beyond treating sickness and towards treating the SSDoH through an integrated health system that also tackles social and structural barriers and needs for all. Achieving health equity through universal effective coverage requires consideration of not only insurance and access to care, but the specific needs for an aging population, communities of color, immigrant communities, mental health, children’s programs, environmental impacts, and effective and integrated systems of care providers.

**Figure 2** Contribution of Physical Environment, Social and Economic Factors, Clinical Care, and Behaviors on Health

![Diagram showing the contribution of different factors to health outcomes.](source: County Health Rankings, 2014)
It is difficult to argue that the health care system in the U.S. is functioning effectively and providing the health care for all that live in the country given its:

- **Disparities** – There are marked socio-economic and health disparities between population groups that have not improved over the years and appear to have gotten worse as evidenced by the COVID-19 pandemic.

- **Costs** – The healthcare system is the most expensive in the world yet life expectancy in the U.S. continues to be shorter and health outcomes are generally worse than other comparable countries.

- **Lack of Coverage** – Despite efforts to improve health care coverage there are still many—about 30 million—who remain without health insurance coverage, and the population largely suffers from chronic conditions, many of which are preventable.

- **Failure to Keep Up with the Rest of the World** – The U.S. is the only wealthy, industrialized country that has not achieved universal health coverage. More is also needed to address the SSDoH and the systemic problems that have brought upon the marginalization of populations in the U.S. that have the highest burdens of disease.
There are fierce debates on how a multi-payer health system, such as the one that has developed in the U.S. over many decades, could possibly turn into one that would provide universal health care coverage. One proposal for doing that is a single-payer system such as Medicare for All, but there are debates over whether such a transformation would compromise quality of care. These debates will likely continue; however, the urgency is real given the costs of healthcare as a top of mind worry among households in the U.S. and in California. Although California has taken steps to increase healthcare coverage and reduce costs throughout the state, California’s healthcare system continues to fall in providing equitable care to its diverse populations.

**CALIFORNIA’S HEALTHCARE SYSTEM**

California has been a trend setter in developing and implementing bold policies that are not just driven by politicians, but through the work of advocates—who are a voice to the people and often driven by research—as well as industries that have a financial interest in health care policy. The California legislature regularly introduces bills that impact multiple aspects of health insurance including benefits, cost-sharing, and providers. According to the National Conference of State Legislatures, state legislature decisions can include budget appropriations, requirements for doctors obtaining their licenses, which services are covered by insurance, how personal health information is managed, and which immunizations children must receive, among many other issues. California is one of a few states that has an independent body to review medical, financial, and public health evidence to assess how they are impacted by proposed health benefit mandate legislation, called the California Health Benefits Review Program, which has informed decision-making. California also has advocates representing consumers, communities of color, and other vulnerable populations, who work together to advance their interests, to increase access to health care services and to work towards a more equitable health care system.

Charged to protect consumers’ health care rights and to ensure stability in the health care delivery system, California Department of Managed Health Care (DMHC), serves as California’s primary health insurance regulator. DMHC regulates over 95 percent of commercial and government health plan enrollment (some provider organizations are regulated by the California Department of Insurance (CDI)). DMHC uses a number of key indicators to regulate: rates, timely access to care, continuity of care, and health equity.

Consistent with national trends, the main sources of health insurance for Californians are employer-sponsored insurance (ESI) (48%), followed by Medicaid (25%), and Medicare (11%) (see Figure 3 on the next page). An estimated 7 percent of coverage is through individually-purchased insurance—a critical option for the 2.2 million residents who do not qualify for ESI or public insurance. Moreover, Covered California—the state’s health care marketplace established under the Affordable Care Act (ACA)—is considered likely the most successful ACA marketplace for individually-purchased insurance in the U.S.
Average annual employee contributions to premiums in California were slightly below the national average, according to an analysis conducted by the Kaiser Family Foundation: $1,302 compared to $1,489 respectively. For comparison, employee contributions in Texas are $1,512. In contrast, employer contributions in California are higher than the national average: $5,637 compared to $5,483, respectively. And, in Texas employer contributions are lower than the national average at $5,455.

While these California values may appear promising relative to the nation, Californians report struggling to afford job-based coverage premiums, with about 15 percent...
reporting being “very worried.” In California, premiums for the average family health plan in the employer market in California have increased 133 percent since 2002, outpacing inflation. Covered California, the state’s health care marketplace established under the ACA, has had a good track record of keeping premiums low with an average premium rate increase of 1.8 percent in 2022, and a three-year average of only 1.1 percent (2020-2022).

Californians—government, nonprofits, communities, health systems, researchers—have been investing in a variety of innovative initiatives to promote and integrate health and wellbeing. Researchers and health delivery systems are co-developing an array of screening tools for social needs. Hospitals and clinics have built out food “farmacies” and fostered partnerships to improve education, housing, and income outcomes. California has invested in multi-billion-dollar housing initiatives and localities have made commitments to racial equity, children’s health, the environment. A variety of actors, including government, foundations, and nonprofits, are funding community development and place-based initiatives. Health insurers are also researching and spending hundreds of millions on housing and food insecurity interventions.

HEALTHCARE COVERAGE IN CALIFORNIA

California has made significant efforts to regulate the individual market. Covered California enrolled 1.6 million people in 2021, with more than 85 percent of enrollees in health plans with ratings of three or more stars. Covered California successes include a number of initiatives and policies that have increased coverage while keeping premiums down and maintaining a healthy risk pool such as:
Covered California’s community-based organization (CBO) navigator program to improve enrollment, a standardized health benefit plan for all insurers to comply with, state subsidies to supplement federal Advanced Premium Tax Credits (which served as a model for the American Rescue Plan’s increased federal tax credits for 2021 and 2022), a corresponding state health coverage mandate/penalty, and requiring plans meet certain quality measures and health outcomes to reduce health disparities. California is the only state that requires all plans on the individual market be standardized.

California is proposing the creation of the Office of Health Care Affordability (OHCA) in recent legislation AB 1130 and the 2021-2022 Governor’s Budget, which would study high costs and would include a commitment to shifting further towards value-based care that would optimize services to ensure high quality care at the lowest costs. It will also set enforceable cost-growth targets, by sector and region and offer tools to meet those goals, and focus on accountability, for example requiring performance improvement plans and including commensurate financial penalties when not met.

CALIFORNIA INITIATIVES TO IMPROVE THE QUALITY OF HEALTH CARE

Quality care is that which is “consistent, affordable, patient-centered, timely, and delivered in a linguistically and culturally competent manner.” Quality care was propelled by the ACA with its mandate that at least 80 percent of health insurance premiums be spent on medical claims and improving quality of care. Covered California set an example in the state by setting benefit and quality rules for participating insurers to meet that required more standardization than what the ACA required.

At the wider state level there are state initiatives to track quality of care. Let’s Get Healthy California, for example, provides health assessment reports and improvement plans for a number of health indicators, with many metrics from the Healthcare Effectiveness Data and Information Set (HEDIS) and Office of Statewide Health Planning and Development—tracked across race/ethnic groups and regions across the state.
California Has Reduced Its Number of Uninsured Over the Past Two Decades

Lack of Universal and Effective Coverage

Despite expansion of Medi-Cal, California’s Medicaid program, to provide for the poorest Californians and the establishment of Covered California to facilitate purchase of subsidized and affordable individual health insurance following the ACA, close to 8 percent of California’s population remains without health insurance (see Figure 4). Although Figure 5 shows that uninsurance rates have declined for all race/ethnic groups and coverage disparities between groups have narrowed over time, there continues to be a lack of affordable options for some Californians, lack of knowledge of available benefits and programs, or ineligibility due to immigration status. Among the

Figure 4

Health Insurance Type in California for all ages, 2001-2019

- Public
- Private
- Uninsured
- Uninsured

Source: California Health Interview Surveys
Figure 5  
Trends in Uninsured Rates in California by Race for All Ages from 2001-2019

Figure 5: Trends in Uninsured Rates in California by Race for All Ages from 2001-2019

Figure 6  
Uninsured Adults Aged 18-64 Identify Cost as the Main Reason for Uninsured Status

Figure 6: Uninsured Adults Aged 18-64 Identify Cost as the Main Reason for Uninsured Status

SOURCE FOR FIGURES 5 & 6: California Health Interview Surveys
uninsured, the ACA implementation was correlated with a decline in uninsured rates but the significant remaining uninsured Californians report cost as the main factor for their uninsured status and these numbers are steadily rising (see Figure 6).

Among the insured, ESI remains a main source of health insurance but there has been a two-decade decline in the number of individuals covered by ESI; ESI coverage has dropped 5 percentage points within California from between 2001 and 2019. ESI provides more affordable insurance than that purchased on the individual market, despite subsidies for the latter. Individuals who rely on the individual market are reporting difficulty paying for their insurance plans and cost-sharing (such as deductibles, co-pays, and co-insurance), resulting in one-quarter deferring or not obtaining care altogether. Beyond financial barriers, there are also access issues such as finding reliable transportation and culturally and linguistically competent care. These challenges raise concerns for affordability, access, and care coordination among the insured. Unemployment during the COVID-19 pandemic has also demonstrated the volatility of relying on ESI as a source of health insurance.

**FRAGMENTATION IN FINANCING AND DELIVERY AND LACK OF CARE COORDINATION**

There is considerable fragmentation and inequity in the current healthcare system, related in part to funding siloes that have led to silos in delivery of health care. Many patients struggle to find a provider that accepts their health insurance including specialty care, mental and behavioral health services, and social services. Recognizing this failure, the Healthy California for All Commission was established in 2019 to develop a plan for advancing progress toward achieving a health care delivery system for California that provides coverage and access through a unified financing system. This includes exploration of how a single-payer financing system can be established. In 2022, the California Department of Healthcare Services announced CalAIM: California Advancing and Innovating Medi-Cal. The plan explicitly aims to increase whole-person health across the state, building on top of existing programs and creating new data-sharing pathways between them. Despite CalAIM and delivery of care coordination to Medi-Cal beneficiaries, not all providers are trying to develop a unified system.

Access to care is a major concern for Californians and depends on health insurance, provider supply, and availability. Access to care also differs considerably across regions in California. Specifically, access to care is reduced when the regional market has been consolidated with only a few providers, when there is little managed care, when there are provider shortages, and when there is little availability of safety net providers. Residents of the North/Sierra Counties in California have the most difficult time accessing care (see Table 1).
Far North/Sierra Residents Report the Most Difficulty Finding Health Care

<table>
<thead>
<tr>
<th>Source: California Health Interview Survey, 2019 data</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>PRIMARY CARE</th>
<th>SPECIALITY CARE</th>
</tr>
</thead>
<tbody>
<tr>
<td>North/Sierra Counties</td>
<td>17.1%</td>
</tr>
<tr>
<td>Greater Bay Area</td>
<td>7.3%</td>
</tr>
<tr>
<td>Sacramento Area</td>
<td>7.4%</td>
</tr>
<tr>
<td>San Joaquin Valley</td>
<td>9.6%</td>
</tr>
<tr>
<td>Central Coast</td>
<td>9.6%</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>8.2%</td>
</tr>
<tr>
<td>San Bernardino, Riverside</td>
<td>9.0%</td>
</tr>
<tr>
<td>Orange</td>
<td>4.7%</td>
</tr>
<tr>
<td>San Diego</td>
<td>5.1%</td>
</tr>
<tr>
<td>All</td>
<td>8.0%</td>
</tr>
</tbody>
</table>

Although regions throughout the state continue to experience disparate levels of access to quality care, California has been working to fix the problems with its health care system statewide. Since 2018, California’s Health and Human Services (HHS) has consistently proposed and increased spending by 18 percent in 2020. The year-over-year increase is primarily due to significant growth in projected General Fund spending in Medi-Cal. This increase in budget has been consistently supported by Governor Newsom in his 2020 and 2021 budget proposals and the implementation of his Master Plan for Aging executive order, but it has created a strain on the general fund budget. One of the major questions facing California is how to simultaneously expand coverage and deal with structural determinants of health while also keeping health care costs within bounds.
CALIFORNIA’S DIVERSE COMMUNITIES EXPERIENCE DIFFERENT HEALTH OUTCOMES AND ACCESS TO HEALTHCARE, DEMONSTRATING CALIFORNIA’S NEED TO IMPROVE SSDoH

LIMITED FOCUS ON SSDoH DEMONSTRATES CALIFORNIA’S NEED TO EXPAND ITS EFFORTS

The challenges in the existing health care system requires culturally and linguistically competent care, a culturally diverse workforce, and integrating oral, mental and behavioral health. However, for all Californians to achieve health and wellbeing requires an increasing focus on overall wellbeing and giving everyone an equal opportunity to thrive by dealing with the SSDoH. This includes equitable access to quality education, access to clean environments and green spaces, access to healthy foods, financial security, safe housing, and employment opportunities that support a living wage. While California has made some notable progress in this area through the use of various programs, more needs to be done to achieve equity in SSDoH.

California is one of the country’s most racially and ethnically diverse states. The demographic makeup is 39.4 percent Latino, 36.3 percent white, 14.6 percent Asian, 5.5 percent African American, 0.4 percent American Indian/Alaska Native (AIAN), and 0.4 percent Native Hawaiian and Pacific Islander (NHPI). California has more immigrants than any other state. In 2021, California was home to almost 11 million immigrants, about a quarter of the foreign-born population nationwide. California also ranks the highest in linguistic diversity compared to other states.

Black, Latino, Asian, AIAN and NHPI populations face inequities in overall health outcomes, health care access, and quality of care.
One national study shows that of U.S. adults who experienced discrimination in the health care system, racial/ethnic discrimination was the most frequently reported.

Among California’s Asian, Black, AIAN, NHPI and Latino adults, 2.7 percent report being treated unfairly because of race/ethnicity due to the COVID-19 pandemic.

Moreover, communities of color face empirically unequal health outcomes in the U.S. For example, Black and Native American populations have higher age-adjusted death rates—865.4 and 766.7, respectively—per 100,000 compared to the state’s average of 618.7. Life expectancy in the state also varies by race/ethnicity: Asian and Latino populations have higher life expectancies at ages of 86.3 and 83.2 respectively, and Black and Native American communities with lower life expectancies of 75.1 years and 80.2 years.

Latino and Black populations have higher rates of those ever diagnosed with diabetes at 12.9 percent and 15.6 percent, respectively, compared to the state average of 10.9 percent. AIANs have the highest rate of high blood pressure of all racial and ethnic populations at 44.2 percent. 37.9 percent of Black Americans and 21.4 percent of Asian and Latino populations report having or have had high blood pressure in 2020. Almost two-thirds of all Black Americans have asthma (63%).

Black Americans have the highest rates of new cases of prostate, lung, and colorectal cancers. Latinos have the highest rate of new cases of cervical cancer compared to all other racial groups. Although whites have the highest rates of new cases of breast cancer, Black Americans have the highest breast cancer mortality rate at 31.7 deaths per 100,000 compared to 20.2 deaths for white Americans.

HOMELESSNESS

According to the U.S. Interagency Council on Homelessness, California has both the largest number and highest proportion of people experiencing homelessness in the country. California has almost double the number of homeless individuals as New York, which has the second largest homeless population.

Nationwide, 55 out of every 10,000 African Americans experience homelessness but in California that rate is 194 out of every 10,000. Most Asians experiencing homeless (76%) live in just 5 states, including California. NHPIs are nine times as likely to experience homelessness as the general U.S. population, and 25 percent of all NHPIs live in California.
IMMIGRANTS

Immigrants in California tend to have fewer or similar numbers of doctor visits, emergency room visits, and preventive services use compared to U.S. citizens and other immigrant groups. Immigrants tend to arrive in the United States when they are young and healthy. However, as they continue to work and grow older, there is an increasing need for care, treatment, preventive screening services, and emergency health care, especially given the risk stemming from poor living and work conditions.

Evidence suggests that the immigrants provide a net benefit to California’s economy. For example, in 2010, undocumented workers contributed as much as $13 billion in payroll taxes to social security, but received only $1 billion in benefits. This disparity suggests that immigrants may be paying an excessive share of the state’s health care system without receiving proportionate health benefits.

The majority (89%) of low-income (below 138% FPL) undocumented immigrants in California are uninsured, and 7% had private insurance. In comparison, only 11% of documented adults reported being uninsured and 21% had privately purchased insurance.

Among immigrants, there is variation by immigration histories, and immigration integration trajectories. The Affordable Care Act (ACA) has led to major gains in coverage for lawful permanent residents in California, similar in scope to changes among citizens. However, undocumented immigrants have experienced only modest increases in coverage, with the resulting disparity in uninsured rates for this group relative to citizens and permanent residents widening considerably since 2014.
SOCIAL DETERMINANTS OF HEALTH FOR CALIFORNIA’S MARGINALIZED COMMUNITIES

Many health disparities by race and ethnicity are driven by the social and structural determinants of health.

The California Healthy Places Index (HPI) is one tool to measure community conditions that influence health, but may not fully capture the disparities of smaller communities. The SSDoH discussed below are not exhaustive but highlight a few examples of how these factors may contribute to health disparities.

**Food insecurity** – Even though California produces almost half of the U.S.’ fruits and vegetables, 35.8 percent of Californians with low-income are unable to afford enough food. Food insecurity rates are higher among Black and Latino communities at 50.4 and 37.4 percent, respectively.

**Penal system** – On average, California prisons are 30 percent over capacity and there are significant racial inequities among incarcerated populations. African Americans make up only 6 percent of California residents but make up 20 percent of the incarcerated population (with Latino communities comprising 38 percent of residents and 41 percent of the incarcerated population). Black incarceration rates have increased 260 percent since 1978, and Native Americans are incarcerated at 3.7 times the rate of white people. For Southeast Asian Communities, Cambodian and Laotian youth are incarcerated at 4 and 9 times the rate expected by their population proportions.

**Discrimination and safety** – Safety and discrimination are also important SSDoH that have impacted communities of color disproportionately. Most notably, hate crime events against racial and ethnic minorities have increased during the onset of the pandemic. Between March 2020 to June 2021, 39 percent of anti-AAPI hate incidents reported nationally to Stop AAPI Hate occurred in California—more than any other state. In California, Anti-Asian hate crimes saw a 107 percent increase in
The California Health Interview Survey’s 2020 Preliminary COVID-19 Estimates show that 6.8 percent of Asian American and Native Hawaiian/Pacific Islander adults reported a hate incident directly due to COVID-19 during 2020. Of those, 63.7 percent reported verbal abuse and attack, and 22.4 percent reported cyberbullying. Prior to the pandemic, there was an 87.7 percent increase in anti-Black hate crime events and 38.2 percent increase in anti-Latino events from 2019 to 2020.

**Economic resources** – Income and poverty also impact health. California’s poverty status shows Black Americans, AIANs, and Latinos having the highest percentages of people living below the poverty level (19%, 17.8%, and 15%), while 10.6 percent of NHPIs and 9 percent of Asians live below the poverty level in California. Racial and economic gaps are also wide and persistent when examining the state’s median hourly wage from 1980 to 2017: the median wage for workers of color is $11 less than the median wage for white workers. These issues compound for women of color and vary widely by ethnicity.

**Educational opportunities** – Education is strongly linked with health outcomes, health behaviors and health beliefs. People with more education experience lower levels of morbidity, mortality, and disability. Demographics of California’s educational attainment show that Latino and AIAN have the lowest numbers of high school graduates or higher (66.4% and 78.4%). At least 90.5 percent, 88.5 percent, and 86.5 percent of Black, Asian and NHPI populations have at least a high school education, respectively; however, when we look at subgroup communities within these umbrella racial/ethnic groups, there are still disparities.
STRUCTURAL DETERMINANTS OF HEALTH FOR CALIFORNIA’S MARGINALIZED IDENTITIES

Along with the social determinants of health, structural determinants of health such as governing, social or economic policies affect how and whether resources for health are distributed unjustly on the basis of race, gender, sexual identity, ability or disability or other socially defined groups of people. For example, LGBTQ+ communities have higher rates of mental health needs and utilization than the general population and bisexual adults have the highest rates of disability of all sexual orientations—in part due to chronic stress from discrimination and stigma. For those who have multiple marginalized identities, these barriers may compound. For example, families of low-income children of color face labyrinth-like challenges in education and health systems to identify their children’s mental or physical health needs and then additional hurdles as they seek proper accommodations. This report is unable to explore the full complexity of assets and needs; however we hope a social and structural determinants of health framework can help guide readers towards understanding that the current and future health and wellness of all Californians requires thorough investigation of how systems—including but not limited to education, public safety, criminal justice, and immigration systems—impact population health outcomes.

AGING IN CALIFORNIA: PROTECTING THE HEALTH OF THE YOUNG AND THE OLD

The health and wellbeing of all Californians, from children and adolescents to older adults, is influenced by the high cost of living, poverty, uneven access to care and services, and disproportionate exposures to threats to health including environmental pollution. In the face of California’s uncertain future regarding extreme climate events, water shortages, and funding for health care, there will be burdens on all communities and all regions of the state. These burdens may fall especially heavily on the young and old who have historically faced challenges because of their dependency on others for their support and care.
CALIFORNIA’S OLDER ADULT POPULATION

California’s older adult population (ages 65+) will grow from 6 million to 9 million within the decade. By 2030, more than 9 million Californians will be over the age of 65. With an expected increase in Latino and Asian, Native Hawaiian, or Pacific Islander senior populations this decade, it is projected that no racial or ethnic group will comprise a majority of California’s seniors by 2030. The good news is that fewer than 1 percent of California seniors are uninsured; 16 percent have Medicare and Medi-Cal; 72.4 percent have Medicare and some other type of insurance; and 5.4 percent have Medi-Cal. However, this group still suffers from social and structural barriers to health and well-being.

Seniors with disabilities or who have limitations in activities of daily living will grow from 1 million in 2015 to 2.6 million by 2060. The number of seniors living with Alzheimer’s disease is projected to increase from 690,000 in 2020 to 840,000 in 2025. Seniors with Alzheimer’s disease or other dementias require more skilled nursing facility stays and home health care visits per year compared to other older adults. California’s Master Plan for Aging provides a compelling policy framework for addressing the needs of California’s older adult population, but gaps remain especially for addressing challenges in long term care services.

On average, it is expected that people aged 65-years-old in the United States will live 20 or more years, a 50 percent increase during the past century. It is projected that by 2030, around 1 million seniors will require some assistance caring for themselves and around 900,000 of these seniors will not be living in nursing homes. Only about 2 percent of California seniors live in nursing homes.
Limited English Proficiency (LEP) – Approximately 5 million of America’s older adults are LEP. In most CA counties, more than 1 in 5 low-income Medicare beneficiaries are LEP. About 34.9 percent of California seniors said they spoke English “Not Well or Not at All” in 2019.

Financial Security – There are 655,000 “hidden poor” seniors in California; these seniors live alone or only with their spouse and had a 2013 income above the federal poverty level (FPL) but below the Elder Economic Security Standard Index – a measure of poverty that considers the true cost of living in California’s 58 counties. These older adults lack sufficient income to meet their basic needs without a subsidy as defined by government standards for housing, food, and medical care as well as transportation and other basic necessities.

Food Insecurity – The most recent report, released in 2020 using 2018 data, found that 5.3 million seniors, or 7.3 percent of the U.S. senior population, were food insecure in 2018. California had the lowest percentage of seniors enrolled in SNAP when compared to all states in 2016. While there has been a steady increase in senior SNAP enrollment over the past decade, only 48 percent of those who are eligible for the program are enrolled.

Housing Insecurity – According to the 2018 Greater Los Angeles Homeless Count, there are 12,698 older adults (aged 55 and older) experiencing homelessness in the Los Angeles Continuum of Care. In a study of 350 adults ages 50 and over in Oakland, older homeless adults were found to have experienced high rates of victimization.

Mental Health – Depression is the most common mental illness in late life and decreases quality of life. Older Californians who lived alone or with only a spouse/partner were three times as likely as those with incomes above the Elder Index to say that they had felt depressed “some, most, or all” the time. Older adults’ incidence of suicide is high among older men. Among older white men (ages 85+), the suicide rate is more than four times higher than the overall rate in the nation.

Digital Divide – In 2016, 38.8 percent of Californians ages 65 and older did not use the internet and 36.7 percent of California seniors used the internet for health information. Researchers showed that African American, Latino, and Asian American older adults had lower odds of using the Internet for health information when compared to White older adults. Further, lower socioeconomic status reduced the odds of using the Internet for health information when compared to higher socioeconomic status. Over 80 percent of COVID deaths in the U.S. have been older Americans, and research estimates that about 40 percent of them were unable to access needed online resources because they lacked in-home internet.
California is home to 9 million children and adolescents (ages 0-17) and an additional 5 million young adults (ages 18-26). California ranks 20th in terms of the proportion of children in the state – lower than Utah and Texas, similar to Arizona and Nevada, and higher than New York and Florida. Forty percent of California’s children are Latino. The racial/ethnic composition has changed over time with the Latino, Asian, and multiracial populations increasing. Although California has a large immigrant population, the majority of children (95%) and young adults (80%) in the state were born in the U.S. The health and wellbeing of children and adolescents is influenced by many factors including their family environment, economic resources, where they live, whether they attend preschool, and their school or preschool environment.

Income is strongly associated with health. Nearly one out of every six children in California lives in poverty (16%). Although this is the lowest rate since 2000 and is similar to the national rate of 17 percent, it is higher than more than half of the states. Although the standard poverty measure accounts for household size and income, it does not account for differences in cost of living. However, according to the Supplemental Poverty Measure, which incorporates geographic variation as well as expenses like shelter, clothing and utilities that are not included in the official poverty measure, more than one out of five children (24%) in California are living in poverty (Figure 7). Although the proportion of children living in poverty in California has declined since 2012, California has the highest child poverty rate in the country.
Moreover, Figure 8 shows that under 3 percent of children and adolescents in California have no health insurance, considerably lower than in 2001 (9% and 29% respectively). In contrast, 15 percent of young adults are uninsured, approximately half of what it was in 2001 (29%). Nearly 7 percent of children, 17 percent of adolescents, and 30 percent of young adults have no usual source of care other than the emergency department. Eight percent of children and adolescents and 29 percent of young adults have not seen a doctor in the past year.
Despite Increased Coverage for Children in the Past Decade, 15 Percent of California’s Young Adults Are Still Uninsured

**Figure 8** Percent of Uninsured Children and Young Adults, 2001-2019

- **Source:** California Health Interview Survey

---

**Health Outcomes for Children in California**

Current trends point to an increasing prevalence of chronic conditions and disability among children and adolescents that carry on into adulthood, such as overweight/obesity and diabetes. Prevalence of mental health disorders like depression and anxiety have also been increasing and are most apparent among populations of color and young adults. One in three Californian adolescents reported serious psychological distress and one in seven reported moderate psychological distress.
**General health status** – In California, 79 percent of children and adolescents reported health status as “excellent” or “very good.” However, this varies across regions, ranging from a low of 74 percent in the San Joaquin Valley to a high of 84 percent in the Central Coast and Bay Area.

**Obesity** – Fifteen percent of children are overweight for their age. Nearly one-fifth of adolescents (19 percent) are obese and nearly one-fourth (23 percent) of young adults are obese. These rates are higher than in 2001 (12 percent for both age groups). In addition, recent evidence suggests that pediatric obesity increased further during the Covid-19 pandemic.

**Food insecurity** – Nearly half—46.8 percent—of low-income families with children were food insecure in 2019, increasing substantially from 39.9 percent in 2017. In addition, 42.8 percent of young adults reported not being able to afford enough food. This proportion has been increasing and is the highest proportion since 2001 at 25.3 percent.

**Vaccination rates** – The majority, 95 percent, of kindergartners in California have all required immunizations. School requirements have contributed to California’s high vaccination rates among school-aged children, which increased in 2016 following legislation that eliminated personal belief exemptions.

**Reach of nutrition assistance programs** — In 2019, 44 percent of families with low-income (below 200% FPL) and with children under age 6 were participating in the WIC program, and 25 percent were participating in CalFresh (California’s SNAP program). However, 72 percent of families with low-income and with children who experienced food insecurity in the past year were not participating in CalFresh—suggesting significant unmet need for nutrition assistance. This could be due in part to administrative or bureaucratic barriers to participation as well as to not meeting income eligibility criteria despite experiencing food insecurity and having low-income.

**Housing cost burden** – California has the highest proportion of children living in households with a high housing cost burden of any state in the U.S. (41% in 2019). For those in low-income households nearly three-quarters (73%) have a high housing cost burden. Yet, this has declined from a high of 55 percent in 2008, following national trends.

**Childhood trauma** – Violence exposure can have significant health consequences. However, there is emerging evidence that the negative effects of community and individual-level violence exposures can be mitigated and contained more effectively than in prior
decades, especially among youth. For example, community cohesion programs such as Parks After Dark and policies that reduce problems such as youth truancy or promote positive programming such as youth diversion for at-risk youth.

**Neighborhood safety** – According to the National Survey of Children’s Health, 57 percent of California children live in neighborhoods that their parents feel are safe. In a similar measure collected by CHIS, 50 percent of respondents with children reported always feeling safe in their neighborhood. This proportion is higher in rural areas (60%) and varies regionally ranging from 43 percent in Los Angeles County to 57 percent in the Central Coast region.

**OTHER STRUCTURAL DETERMINANTS OF HEALTH AFFECTING CALIFORNIA’S COMMUNITIES**

**IMMIGRANTS & STRUCTURAL RACISM**

Racialized legal status can affect health by structuring access to resources and facilitating discrimination. For example, exclusionary immigration policies, as a form of structural racism, have led to a sizeable undocumented population that is largely barred from access to resources in the United States, despite evidence of lower overall health care expenditures compared to U.S. citizens and other immigrant groups. Undocumented immigrants have lower rates of hospitalization for non-childbirth-related reasons, fewer visits to physicians, lower likelihood of receiving blood pressure and cholesterol checks.

Long-term stressors in the immigrant experience lead to high incidences of mental health problems. Researchers call out constant intra-ethnic exploitation, reduced access to services, fears of deportation, and social isolation leading to high mental health services need. Long-term stressors play an integral role in the vicious cycle that perpetuates mistrust, isolation, and silence. Higher levels of acculturation led to a significant increase in discrimination’s association with mental illness. When all respondents were undocumented, psychological wellbeing was predicted almost exclusively by socioeconomic status. However, current psychological wellbeing is most strongly predicted by deferred action for childhood arrivals (DACA) status, underscoring the impact of immigration policies on mental health.
ENVIRONMENTAL EFFECTS ON HEALTH

Pollution or contaminants in the environment negatively impact health, which has been shown through decades of research on environmental effects on mortality and morbidity with the World Health Organization estimating that 24 percent of all deaths in the world are due to modifiable environmental factors. Negative effects due to exposures to air, water, and soil pollutants, worsened by wildfires, and climate change in California, mostly affect communities that have faced disadvantage for decades. Environmental health must thus be examined through the lens of distributive or environmental justice with the goal of achieving equity in clean and safe places to live.

*Environmental Justice* – Low-income communities and communities of color and indigenous peoples are more likely to be exposed to climate change threats (e.g., flooding, storms, droughts, wildfire) and structural inequalities that expose communities to inadequate housing and infrastructure. California has a long track record of trying to address the injustices in environmental exposures. Per California’s Environmental Protection Agency (CalEPA), the principles of environmental justice call for fairness, regardless of an individual’s characteristics such as race, county of birth, or income, in the development of laws and regulations that affect every community or neighborhood. California codified environmental justice in statute, making it one of the first states to do so. The code calls on decision makers to include individuals disproportionately impacted by pollution in decision-making processes to lift the unfair burden of pollution from those most vulnerable to its effects. At the national level, the U.S. Department of Health and Human Services (HHS) just recently established a new Office of Climate Change and Health Equity in 2021.

People living with low-income, people of color, immigrants, and indigenous communities face higher environmental pollution and related health burdens than other groups and have also been found to have greater increases in adverse health effects at the same level of increase in exposures compared to other race/ethnicities and high income groups. CalEPA’s CalEnviroScreen calculates pollution burden, population characteristics, and health metrics for California’s census tracts. Using the CalEnviroScreen’s impact analysis of pollution burdens, decision-makers can craft and implement policies that can improve the overall health and quality of life in these neighborhoods. *Pollution burden* is identified through 12 exposure and environmental effects indicators, such as diesel exposures, drinking water contaminants, pesticide use, traffic density, ground-water threats, hazardous waste, and impaired water bodies. Also taken into account are vulnerable population and socioeconomic factor indicators. Pollution burden varies significantly across the state, with urban centers and the Central Valley having the highest burden of pollution in the state.

*Wildfires* – California has faced larger, more frequent, and more intense wildfires across the state in the last decade. Apart from the massive economic loss and potential for death and destruction of families and their livelihoods, wildfires contribute to poor health
by the emissions they cause. Health problems related to wildfire smoke exposure range from eye and respiratory tract irritation to worsening of asthma, heart and other lung disease, and even premature death. Communities most heavily impacted are low-income communities and elders.

**California’s Agricultural Activities** – Covering about 20,000 square miles, the agricultural region that makes the Central Valley is not only geographically a large part of the state but also an economic center as it produces 25 percent of the food supplied to the country and 40 percent of the country’s fruits and nuts. Residents and farm workers in the Central Valley are exposed to extreme heat, intensified by the drought in the state, poor air and water quality, and to a host of pesticides and other agricultural and industrial contaminants.

**Regional Disparities and Injustice** – Apart from urban centers, the Central Valley is another area in the state that is disproportionately impacted by not only air pollution due to its geography, but to industrial and agricultural contaminants. The Central Valley, home to many of California’s immigrants and communities of color, continues to be one of the most polluted regions in the U.S. Farm workers in the state continue to be at risk of exposure to contaminants and extreme heat. Advocates are worried that climate change will only worsen the situation as the severity and frequency of extreme weather conditions increases, which leads to a greater dependence on pesticides for crops. Similarly, as described above, environmental burden suffered by communities near ports and in communities where industries have polluted and continue to pollute remain high in California. Indeed, the rapid growth of warehousing in the Inland Empire has accelerated concerns about adverse health outcomes for low-income residents and communities of color in the Ontario, Riverside, and San Bernardino areas. Looking at pollution from non-industrial sources, communities of color and neighborhoods facing disadvantages bear the biggest burden from air pollution from vehicles. These facts have not changed despite all the action and attention put on the climate and environment in California.
A chronic illness is one that lasts one year or more and requires ongoing medical care or limits daily activities, such as diabetes, obesity, hypertension, cancer, asthma, heart disease, or arthritis. Chronic conditions are the leading causes of death and disability in the U.S. An estimated 39 percent of people in California suffer from at least one chronic condition or disease.

Almost 50 percent of all people with chronic conditions have multiple chronic conditions and 25 percent of people with a chronic condition have some type of activity limitation. A recent analysis found that California had one of the lowest proportions of adults with multiple chronic conditions, lower than every other state except for Colorado and Minnesota.

**Costs of Chronic Conditions in California** – Chronic conditions are a primary driver of healthcare costs in the U.S. as well as in California. The costs of six common chronic conditions in California represented about 42 percent of total health care costs in 2010 and likely has risen since then (more recent cost data by condition are not available for California).

**Regional differences in select Chronic Conditions** – The proportion of California adults with chronic conditions varies by region in the state. For example, San Joaquin Valley had the highest prevalence of obesity as well as of diabetes compared to other regions and North/Sierra Counties had the highest prevalence of heart disease as well as of hypertension compared to other regions in the state (Table 2). Note there are other regional differences in chronic conditions not shown here.
### Percent of Californian Adults with Select Chronic Conditions by Region

<table>
<thead>
<tr>
<th>Region</th>
<th>Obesity (Body Mass Index &gt;= 30)</th>
<th>Ever Diagnosed with Heart Disease</th>
<th>Ever Diagnosed with Diabetes</th>
<th>Ever Diagnosed with Hypertension</th>
</tr>
</thead>
<tbody>
<tr>
<td>North/Sierra Counties</td>
<td>29%</td>
<td>9.5%</td>
<td>8.6%</td>
<td>34.5%</td>
</tr>
<tr>
<td>Greater Bay Area</td>
<td>21%</td>
<td>7.3%</td>
<td>7.8%</td>
<td>27.3%</td>
</tr>
<tr>
<td>Sacramento Area</td>
<td>28%</td>
<td>9.4%</td>
<td>10.1%</td>
<td>29.4%</td>
</tr>
<tr>
<td>San Joaquin Valley</td>
<td>39%</td>
<td>6.4%</td>
<td>13.6%</td>
<td>32.1%</td>
</tr>
<tr>
<td>Central Coast</td>
<td>21%</td>
<td>7.4%</td>
<td>9.0%</td>
<td>27.7%</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>28%</td>
<td>6.7%</td>
<td>10.1%</td>
<td>30.3%</td>
</tr>
<tr>
<td>San Bernardino, Riverside</td>
<td>31.7%</td>
<td>6.7%</td>
<td>13.8%</td>
<td>31.0%</td>
</tr>
<tr>
<td>Orange</td>
<td>21.8%</td>
<td>5.8%</td>
<td>7.1%</td>
<td>20.4%</td>
</tr>
<tr>
<td>San Diego</td>
<td>28.8%</td>
<td>6.2%</td>
<td>9.3%</td>
<td>22.9%</td>
</tr>
<tr>
<td><strong>All</strong></td>
<td><strong>27.9%</strong></td>
<td><strong>7.2%</strong></td>
<td><strong>10.2%</strong></td>
<td><strong>26.4%</strong></td>
</tr>
</tbody>
</table>

**Source:** California Health Interview Survey, 2019 data

---

**MENTAL HEALTH AND SUBSTANCE USE**

The bad news: self-reported mental health issues are rising. Rates of suicide ideation among adults have increased steadily, from 8.7 percent in 2009 to 14 percent in 2019. Self-reported rates of serious psychological distress have increased from 9.1 percent in 2015 to 14.6 percent in 2019. Left untreated, serious mental illnesses don’t only impact quality of life, they also impact survival: On average, Americans with serious mental illnesses have life expectancies 25 years shorter than the general population, in part due to untreated physical health conditions.
The good news is that views about mental illness and people with mental illness have been changing. Civil rights for people with mental illness led to the attention of horrific treatment and deplorable environments of some state institutions, which then led to the closure of these institutions. An increased public awareness and reduction in stigma have led more people to recognize their own needs and seek assistance. Along with the recognition is an increase in those seeking services from a professional for mental/drug/alcohol issues. Advancements in treatments have helped many individuals with serious mental illness (SMI) reach recovery and successfully live in community settings.

But is California meeting the challenge? There are three categories of mental health services, those for SMI (for adults) and severe emotional disturbance (SED) for children; mild to moderate mental health issues; and substance use disorders (SUD). Services in California are divided: Mental Health Services are split across departments which makes continuum of care and treatment for comorbid substance use disorders difficult for consumers and family.

However, the need for mental health services for a spectrum of challenges is on the rise in California.

**MENTAL HEALTH SERVICE SYSTEM**

Gaps in mental and behavioral health parity continue to exist in the private sector despite parity laws existing since 2008. The continuum of mental and behavioral health care in the public sector are provided across multiple systems and funding sources, and services and resources for acute mental health crises are limited. National standards require 1 psychiatric bed per 2,000 population. California has 1 psychiatric bed per 5,856 population and this varies by county. Almost half of California’s counties have no adult psychiatric beds and the vast majority have no psychiatric beds for children.

Among California individuals with SUD, only about one in ten received treatment. In California, approximately one-half of adults with serious mental health issues do not receive the
care they need. In California, one in six Latino adults and nearly one in seven Asian adults did not receive needed mental health care.

Californians seeking care face many barriers due to a shortage in the mental-health workforce. The issue is not merely a matter of numbers, there is also a lack of diversity in mental-health workforce by race, ethnicity, language, and specialization in child and older adult populations. Patients seeking care are more likely to seek services outside the network covered by their insurance and mental health providers receive less reimbursement than physical health providers. Individuals needing mental health services are less likely to receive care in the private sector than in the public sector.

The state is working to try to address these gaps. In September 2020, the Office of Statewide Health Planning and Development awarded $17.3 million in grants to seven programs to help further build the pipeline of public mental health professionals in California. Collectively, the grantees will add 36 Psychiatry Residency slots and fund 336 Psychiatric Mental Health Nurse Practitioner slots. The funding will also help launch a new Child and Adolescent Psychiatry Fellowship program.

Cost remains a major barrier. Medi-Cal outside of county Behavioral Health services in 2020 is estimated at: $118 billion (includes the mild to moderate benefit). Funding for Medi-Cal, uninsured and privately insured served by the public safety net is at approximately $8 billion, despite the fact that physical health services dropped in 2020 and mental health services increased.

A 2017 law established new requirements for data in access to mental health care for Medi-Cal recipients. The required reports indicate racial and ethnic gaps in access, inform policy makers and program providers, and develop important evidence to develop new strategies to address these inequities.

Major disparities in the digital divide were seen among populations of color and for the homeless population during the pandemic for tele mental health services.
HOW DID WE GET TO THE PRESENT STATE OF CALIFORNIA HEALTHCARE?

In the U.S., the Affordable Care Act (ACA) in 2010 was a major policy shift for the U.S. to expand health care coverage. The ACA offered states the opportunity to expand public and private health care coverage through the use of premium subsidies for private coverage purchased in a health insurance exchange, an individual health insurance mandate, and the option to expand Medicaid. As of 2021, 39 states (including Washington, D.C.) chose to expand Medicaid. California was among the first to adopt and implement expansion. Many of California’s key policy decisions to improve health care delivery happened after the ACA. Though numerous attempts at introducing a single-payer system have failed, they are notable for the fact that it has been an issue that policymakers have thought about and grappled with.

However, under the ACA, noncitizen immigrants comprised the largest group facing various forms of exclusions from federally-financed health coverage programs. This is because the ACA retained many of the same exclusions for eligibility in public programs that were introduced decades earlier, namely from the Personal Responsibility and Work Opportunity and Reconciliation Act (PRWORA) of 1996, which excluded most noncitizens from federally-funded Medicaid eligibility and other federally funded public benefit programs. Those eligible for public benefits according to PRWORA are: lawful permanent residents, refugees, Cuban and Haitian entrants, asylees, those paroled into the United States for a period of at least one year, those granted withholding of deportation, those granted conditional entry into the United States, and certain spouses and children who have been abused.
To improve access to care for all, California took steps to implement immigrant-inclusive laws and policies – from education, employment, to health care - despite efforts of the federal government to exclude immigrants and the stalled efforts in the U.S. Congress to be more inclusive. California’s pro-immigrant policies create an environment that not only offers opportunities for immigrants to participate in health insurance programs, but one that supports the inclusion of immigrants in society as a whole.

While many of the policy actions on health have focused on coverage expansion, there are examples of others that attempt to achieve SSDoH-focused health and wellbeing in the state. Specifically, California has recently attempted large scale policy making to integrate SSDoH with clinical care as exemplified in its Master Plan for Aging. Governor Gavin Newsom implemented the California Master Plan for Aging by executive order in 2019 establishing a 10-year plan to address a broad spectrum of aging population needs. The Master Plan outlines five goals, which includes housing for all ages, tackling issues in caregiving, improving quality of life as we age, enabling seniors to afford retirement, and making prescription medication more affordable and addressing care services for Californians with Alzheimer’s and Dementia. As one of his first executive actions in 2019, Governor Gavin Newsom has consistently allocated state budget to funding the implementation of the Master Plan and set-up a Cabinet Work Group responsible for kickstarting the implementation of the Master Plan until 2022.

Moreover, state and federal policies together have led to historic lows in the proportion of uninsured children in California. The Children’s Health Insurance Program (CHIP) was created in 1997, a state-federal partnership that provides health insurance to low-income children in families who earn too much to qualify for Medicaid. In 2015, California became the fifth state to expand health insurance coverage to all children when Governor Brown signed the Health for All Kids Act into law. California joined the small group of states that had already expanded coverage to all children regardless of the immigration status of the child—Washington, New York, Massachusetts, Illinois, and the District of Columbia. Then, starting May 2016, children under nineteen years of age became eligible for full-scope Medi-Cal benefits regardless of immigration status, as long as they meet all other income eligibility requirements (Welfare and Institutions Code section 14007.8) through the Full Scope Medi-Cal for All Children. In 2019, Medi-Cal was expanded to adults under twenty-six years of age starting in 2020 via the Young Adult Expansion, which also amends specific sections of the California Welfare and Institutions Code. Most recently, in 2021, Medi-Cal was expanded to all eligible adults ages 50 and over regardless of immigrant status.

Children’s health is influenced by both their educational opportunities and their school environments. California has enacted several policies that support healthy eating and physical activity for children, particularly in the school setting. These include prohibiting sales of sugary beverages at school, setting nutri-
tion standards for food sold outside school meal programs (competitive foods), and mandating physical education at school. However, many California schools struggle with insufficient funding to provide quality education and enrichment activities and there are wide disparities in resources by school district and even within school districts. Proposition 13, which limited increases in property taxes until property is sold, reduced availability of funding for schools. California went from having some of the highest per student funding of schools to among the lowest in the nation. In addition, there is a persistent achievement gap between low-income students and students of color relative to more affluent and white students. Efforts have been made to address resource disparities and the achievement gap, but both persist.

In summary, California has been a leader in expanding coverage for all and it has gone beyond simply providing “healthcare” to developing approaches for dealing with the social determinants of health. Yet major health disparities remain, and California still has neither provided coverage for everyone nor fully tackled the social determinants of health.

TRENDS UNDERLYING CALIFORNIA’S FUTURE HEALTH AND WELLNESS

COSTS OF HEALTHCARE AND BUDGETS EXPAND

The healthcare budget in California has been growing larger each year and is tied closely to the overall economy both at the state and federal level. When financially strained, California has made major cuts and limits to public health care benefits, as seen during the Great Recession and threatened early on in the COVID-19 pandemic. Financial pressures also lead employers to begin to shift towards offering high deductible plans, putting a high burden on individuals and families to pay for health care.

SEEKING TECHNOLOGICAL SOLUTIONS

Technology and innovation may provide numerous opportunities to improve connectedness of patients with providers and treatment through the growth and development of telehealth and data-sharing platforms. California
has seen an increased use of and reimbursement for telehealth services which has uncovered the need for a more integrated WiFi network across California, especially in rural communities. Technology offers the opportunity of reaching patients through telehealth and a variety of digital interventions, and targeting testing and treatment through precision medicine, particularly in California as it is home to numerous technology companies and start-ups working on health solutions. Apart from the connectedness of providers with patients, better technology or data platforms offer the opportunity of systems to communicate with each other (interoperability) to improve care delivery and integration of clinical care with social determinants of health. While technology may have the potential to improve access to care for all, it also threatens to increase disparities in access by creating a larger digital divide and may deepen racial hierarchies. As such, technological solutions still need to be evaluated under an SSDoH and equity lens.

**INNOVATIONS IN SSDoH**

Solutions are needed that bring together decision-makers, organizations, and agencies from across a range of sectors that impact health and wellbeing, such as health departments, housing, parks and recreation, education, and stakeholder groups. California has made some recent investments in housing initiatives and localities have made commitments to solutions around racial equity, children’s health, the environment; a variety of actors, including government, foundations, and nonprofits are funding community development and place-based initiatives; health
insurers are also researching and spending energy on figuring out how to link to housing and food insecurity interventions.

**TACKLING REGIONAL DISPARITIES AND INJUSTICE AS THE CLIMATE CHANGES**

Away from inner city urban core regions, rural parts of the state are disproportionately impacted by pollution and lack of infrastructure for health and wellness. For example, the Central Valley, home to many of Californian’s immigrant and communities of color, and to many non-Hispanic whites with low income, continues to be one of the most polluted regions in the U.S, putting farmworkers in the state at risk of exposure to contaminants and extreme heat. Climate change will only worsen the situation as the severity and frequency of extreme weather conditions increases. Similarly, the health burden suffered by communities near ports and in communities where industries have polluted and continue to pollute remain high in California. These facts have not changed despite all the action and attention put on the climate and environment in California.
California faces challenges of extending coverage to those without health care, dealing with the social and structural determinants of health, and doing this without severely straining the state budget. Experts agree that California would be healthier if these things could be done, but the cost is daunting. Technology and interoperability may provide a path that might reduce costs and increase efficiency, however technology has the threat of deepening disparities between communities and may worsen racial hierarchies. Another possibility is improving the organization of the healthcare system to focus more on preventative care to rein in costs. Ultimately, the need is to create systems that address SDoHs that integrate and communicate with each other, not only working on interoperability within the healthcare system, but within the larger health ecosystem in which we live, work, and play. The healthcare system fundamentally requires a shift towards using a SDoH-lens to support the future of Californians, who are growing up and aging in an environment constrained by high housing costs, environmental pressures, and societal tensions.
THE FUTURE OF HEALTH AND WELLNESS IN CALIFORNIA

FOUR ALTERNATIVE SCENARIOS
**SCENARIOS FROM THE FUTURE**

**HEALTH AND WELLNESS IN CALIFORNIA**

**Foresight practitioners use scenarios to help make future possibilities more vivid and tangible.** Scenarios immerse the reader in the details of a future world so that they can imagine what it would feel like to live there. Without scenarios, the signals, trends, and other research that underlie strategic foresight work can feel distant and abstract. Scenarios can be used to center a group conversation in a positive and concrete picture of a future. Stakeholders can then pursue a shared vision for how to reach a desired possibility, or they can mobilize to avoid an undesirable outcome.

To imagine future scenarios for health and wellness in California, we have selected two critical uncertainties based on the origins and trends identified: whether the state adopts a wider or narrower definition of health, and whether the state’s healthcare systems are more or less interoperable with each other. A narrow definition of health concerns itself mostly with clinical care, whereas a wider definition includes social determinants of health such as racism, housing, education, employment, and crime. The interoperability of the healthcare system greatly influences how effectively systems of health can coordinate with each other to deliver greater benefits to Californians.
Health and wellness are not just clinical and not limited to the individual. Healthcare goes beyond clinic walls to include the social determinants of health—e.g., care systems that support the connections between housing, education, employment, and health at a community (i.e. whole person), not just individual level. Some areas have transformative systems and localized innovations due to local community political will, but other areas may not. Overall financial and political systems are not aligned to support scaling or learning.

**HISTORICAL PRECEDENTS**

*Increase in recognition* of the importance of social and structural determinants of health (SSDoH).

*County Departments of Health* have shown to be capable of coordinated care with programs in housing, mental health, employment, aging, etc.

2016: California introduces Whole Person Care program, a pilot project to integrate medical, behavioral health, and social services for Medi-Cal.

*County-led healthcare coverage* for undocumented and indigent care.

**FUTURE DRIVERS**

Social: Recognition of health disparities & social determinants, but high regional variation in attitudes.

Technology: Local systems can coordinate, more difficult at the state level.

Economics: Local funds to make investments in structures and systems to support wellbeing.

Environmental: Recognized need for local solutions in response to local problems.

Political: High degree of community-oriented attitude only in some regions/highly localized.

**SIGNALS**

*Accountable communities for health*

**WHAT:** ACH offers models of collaboration across sectors to increase regional health outcomes.

**SO WHAT:** For systems as complex as healthcare, connecting the dots between sectors and systems can yield more immediate results than waiting on legislative change.

[preventioninstitute.org](http://preventioninstitute.org)

*Richmond City’s general plan focuses on whole person health*

**WHAT:** Richmond City’s Community Vision for 2030 aims to tackle broader determinants of health.

**SO WHAT:** More holistic wellness visions require more lead-time and discussion to rally relevant stakeholders.

[ci.richmond.ca.us](http://ci.richmond.ca.us)
In this future, health and wellness include social determinants of health and are scaled for the whole state population. Health is highly integrated with social needs such as housing or education, and there is little regional variation in health and social services systems. To achieve this vision, California has embarked on something similar to a single payer option for healthcare, with state-sponsored SSDoH services. The potential downsides of this scenario may include decreasing innovation, stagnation, poor quality of care, and a lack of data privacy.

**HISTORICAL PRECEDENTS**

**2010:** California establishes Health in All Policies Task Force.

**2012:** California establishes the Office of Health Equity to reduce health disparities.

**2019:** Governor Newsom established Healthy California for All Commission to study universal health coverage.

**2019:** California Master Plan for Aging includes goals on housing affordability, healthcare, caregiving, economic security.

**FUTURE DRIVERS**

**Social:** State recognition of health disparities & social determinants.

**Technology:** Better data systems that communicate with each other.

**Economics:** Large state (and federal) funds to make investments in structures and systems.

**Environmental:** Recognized need for coordination with housing and sectors outside of health due to increasing climate disasters and other environmental emergencies.

**Political:** Community-oriented attitude.

**SIGNALS**

**California named “Age-Friendly State” by AARP**

**WHAT:** In 2021, California joined AARP's Network of Age-Friendly States and Communities.

**SO WHAT:** In joining the network, California committed itself to improve a wide range of conditions for its aging population, beyond just the cost of clinical care.

[states.aarp.org](states.aarp.org)

**Proposed Assembly Bill 1400 Guaranteed Healthcare for All act**

**WHAT:** Bill 1400 would introduce a new CalCare system that treats high-quality healthcare as an essential human right.

**SO WHAT:** By reframing healthcare as a right, the incentives and evaluation metrics of the system would be held to a much higher standard than just clinical care.

[nationalnursesunited.org](nationalnursesunited.org)

**CalAIM and health data sharing**

**WHAT:** In 2022, the California Department of Healthcare Services announced CalAIM: California Advancing and Innovating Medi-Cal.

**SO WHAT:** The plan explicitly aims to increase whole-person health across the state, building on top of existing programs and creating new data-sharing pathways between them.

[chcf.org](chcf.org)
In this scenario, healthcare is oriented toward providing care primarily to the sick, operating from a narrow definition of wellness where clinical care is emphasized and siloed, with few efforts made towards integration with specialty and primary care. This system places a strong emphasis on individual responsibility, with limited focus on prevention, and no larger interest in community wellness.

**HISTORICAL PRECEDE NTS**

- **Origins of health insurance** (German system, before 1960) ushered in employee-sponsored insurance (ESI).
  - Include CA policies on ESI.
- **Movement toward individual responsibility** (i.e., deinstitutionalization of mental health).
- **Original Medicare/Medicaid focus** on episodes of care.
- **Organization of healthcare tiered** by primary, secondary, tertiary care.
- **Hospital acute care** dominates healthcare delivery system; reliance on pharmaceuticals.

**FUTURE DRIVERS**

- **Social**: Increasing wealth disparities where people with highest income get the best care.
- **Technology**: Rise of home-based care and remote monitoring, precision medicine, AI.
- **Economics**: Fewer funds for state-based investments in health, thus extreme privatization and individualization of care, largely ESI, health tied to employment.
- **Political**: Individualistic attitude towards health.

**SIGNALS**

- **Rise of concierge services in CA**
  - **WHAT**: Concierge medical services prioritize high-end health experiences for VIPs.
  - **SO WHAT**: These services offer benefits to wealthy and high-status individuals at the expense of marginalized communities that have the greatest needs.
  - lamag.com
- **Apple Watch helps patients identify early warning signs**
  - **WHAT**: The popular Apple Watch collects some rudimentary health data through on-device sensors.
  - **SO WHAT**: As traditional healthcare systems fail populations, individual smart devices like this may be asked to help fill in the gaps.
  - 9to5mac.com
- **AmazonCare grows its reach**
  - **WHAT**: AmazonCare provides limited healthcare services to Amazon employees and their families.
  - **SO WHAT**: As companies attempt to fill gaps in the healthcare system, they create more momentum for narrowly-defined, fragmented services across populations.
  - fiercehealthcare.com
In this scenario, healthcare is oriented toward individualized care, focusing on improvements in integration and communication between clinical systems to provide coordinated care to the individual. Similar to a one-stop shop for all types of healthcare needs, this approach emphasizes clinical care solutions and individual responsibility to improve health outcomes rather than addressing community level health disparities and inequities.

---

**HISTORICAL PRECEDENTS**

California has transitioned Medicaid delivery from fee-for-service to managed care since the 1970s. Over 80% of all Medi-Cal beneficiaries are enrolled in 1 of 6 managed care models. Managed care organizations cover medical procedures, office visits, and other health-related expenses.

1997: Medicare+Choice (now Medicare Advantage) was signed into law by President Clinton.

2012: ACA authorized the use of Accountable Care Organizations (ACOs), groups of providers and service suppliers that collaborate on coordinated care for patients they serve.

---

**FUTURE DRIVERS**

**Social:** Chronic conditions are the leading causes of death and disability in the U.S. An estimated 39% of people in California suffer from at least one chronic condition or disease.

**Technology:** Increased interest and engagement in private data management and coordination, coupled with financial incentives for healthcare coordination, efficiency, and effectiveness. Big data used to augment direct measurement insights.

**Economics:** Healthcare costs continue to rise. An individualistic attitude towards health prevails.

---

**SIGNALS**

**Kaiser Permanente provides managed and integrated care**

**WHAT:** Somewhat unique in the private healthcare space, Kaiser Permanente offers a more tightly-integrated suite of services to patients.

**SO WHAT:** By combining insurance and service provision in a single system, Kaiser demonstrates how a private system might more closely emulate a single-payer model.

[woodruffsawyer.com](http://woodruffsawyer.com)

---

**Interoperability and patient access federal policy**

**WHAT:** In May 2020, new policies required hospitals to share more patient data with other providers.

**SO WHAT:** The more data that can be safely shared between providers, the better the consistency and delivery of care to patients is likely to be.

[cmspatientaccessrule.com](http://cmspatientaccessrule.com)

---

**Rise of accountable care organizations**

**WHAT:** The number of accountable care organizations has grown in recent years.

**SO WHAT:** These organizations offer new levers of advocacy for the healthcare system, putting pressure on leaders and providers to raise the bar for healthcare services.

[ajmc.com](http://ajmc.com)
Choices among governmental policies depend partly upon which future scenarios seem most attractive to us, but they also depend upon our perspectives on the proper role of government, on the resources available to government, and on the likelihood that government will succeed in its endeavors. Doing nothing is sometimes the best policy option, but doing nothing often uncritically accepts the current mix of policies and the future they entail without considering the alternatives. Over the past seventy-five years in California, that meant accepting discriminatory racial housing covenants, restrictive zoning laws, few restrictions on air or water pollution, “separate but equal” schooling, the dismantling of transit systems, and many more things that are now thought to have been wrong or misguided. We have also seen aggressive policy measures in California that have had unintended consequences, from the impacts of Proposition 13 on local government budgets to the way the California Environmental Quality Act has affected housing supply and manufacturing.

Because we are thinking about the future and we do not want to be hemmed in by the status quo or a lack of imagination, we put forth an array of alternative policies, and we tie them to different scenarios. Readers can decide which ones (or combinations of them) they prefer, but, as the team that did research on this topic and based upon interviews with stakeholders across the state, most prefer the Uniform Health and Wellness future. Many of our policy suggestions will favor this scenario, and look critically at approaches that do not include both a high level of interoperability and a broad definition of health and wellness. Readers should consider which scenario best captures the California they want to live in, and evaluate which policy recommendations they believe will get us there.

In this section, we discuss the future policies that would be necessary to deploy if we find ourselves in each of the four potential scenarios. Given the complexity of health policy and its interconnectedness with federal, economic, social, and environmental policies and programs, these policies are necessarily broad in scope. The details are what matter for any policy or set of policies; for example, depending on how they are designed, employer health care requirements can increase the rates of employer-supported insurance, or they can create a perverse incentive for businesses to employ staff at lower hours below the mandated threshold. And because the details are what matter, the details are what we tend to fight about. Our goal is to highlight the principal barriers to realizing each scenario, focusing on general policy areas we believe deserve attention, with the understanding that the details will — and must — be hashed out in the political arena.
SICKNESS SYSTEM

Narrow Definition of Health & Low Interoperability

“You are Responsible for Your Own Health”

Health care becomes oriented towards only providing care to the sick. Socially, health and wellness is seen through a narrow lens, which considers health care as clinical and siloed. This perspective results in no integration between specialty and primary care. The Sickness System places an emphasis on individual responsibility, with generally no interest in community wellness. It also places limited focus on health prevention.

**Patent Rights on Technology**

Federal government enacts laws regarding patent rights on health care technology; federal and state government enacts laws on consumer protection.

**Equity-Centered Algorithms**

California requires health care delivery, research, and technology organizations to develop and use equity-centered algorithms.

**Adopt Wellness Programs**

Employer programs augment sickness-based programs with wellness programs and target lower wage and non-contract (“peripheral”) employees.
California sustains and expands the state’s support of Covered California and the off-exchange individual market, which includes subsidies for enrollees.

**EFFECTIVE SICKNESS SYSTEM**

*Narrow Definition of Health & High Interoperability*

*“Systems Can Manage Clinical Care”*

Health care continues to be oriented towards individualized care, but it also focuses on improvements in integration and communication between clinical systems to provide coordinated care to the individual. This approach is similar to a one-stop-shop for all types of health care needs. The Effective Sickness System emphasizes clinical care solutions and individual responsibility to improve health outcomes rather than addressing community level health disparities and inequities.

California supports a uniform health care data environment to integrate health systems data, create health metrics to allow for transparency, and make it comparable across all health care delivery systems. This policy is similar to how Federally Qualified Health Centers utilize a Uniform Data System (UDS). Health centers report their performance using measures defined in UDS.
This policy would also pursue integrating health systems data similar to the North Carolina Immunization Registry (NCIR). Patients, parents, health care providers, schools and child care facilities have access to immunization data. Israel also serves as a model for this policy. In Israel, the four competing nonprofit health plans’ health information systems link primary and specialty care providers, and a national health information exchange adds hospital data to the system to provide access to electronic health records. Through this policy, California would encourage platforms such as the PICASO project in the European Union, which seeks to become a Europe-wide Continuum Care service platform for older adults. Project PICASO uses a cloud-based system to share health information across a variety of users.

This policy would enable California to respond quickly, effectively, and efficiently against shocks and uncertainties. For example, a uniform health care system data environment would allow for better vaccination tracking efforts to fight off a pandemic similar to what has been done in North Carolina in its fight against COVID-19. While a uniform data environment allows for greater access to health information for a variety of users including patients, communities—particularly marginalized communities—would not necessarily have the power to determine aspects of the health care data environment such as its governance and data security. It may also put certain communities at risk. For example, questions on whether immigration status is considered protected health information (PHI) under HIPAA raises concerns on how undocumented immigrant health information would be protected as well as whether ongoing threats to use data such as social security or lack thereof could discourage immigrants from seeking health care.

This policy would promote health over multiple generations. However, if the uniform health care systems data does not go beyond clinical care data, this policy would miss out on opportunities to greatly improve population health. This policy would create better allocation of resources for health with health care cost-savings and improved efficiency in resource allotment. But, it faces the same perils listed on sustainability. Without data that informs social determinants of health, this policy would fall short in closing the gap in health disparities and inequities.
California enacts policies that incentivize health care systems to adopt and innovate models for coordinating care and integrating health plans, departments, hospitals and medical groups. This policy would promote and provide incentives for health systems that adopt coordinated and integrated care, such as the Kaiser Permanente model, a prepaid integrated system consisting of three separate, but related entities: a health plan that bears insurance risk, a medical group of physicians, and a hospital system.

This policy would create state-based incentives similar to the Medicare Shared Savings Program, which provide incentives to Accountable Care Organizations or a network of doctors and hospitals that share financial and medical responsibility for providing coordinated care. ACOs attempt to reduce health care spending in order to divert savings to fund research and development and technological innovation to further improve health care systems.

Moreover, this policy would enable California to withstand and provide robust responses to shocks and uncertainties through improved and coordinated care delivery. With integration of care, health care systems can create and use “patient centered tools” that individualizes coordinated care based on patient needs and possibly enabling better health outcomes. Integration of care would also allow for health care cost savings and better health care delivery. However, integration of care through vertical integration may create health care system monopolies which may lead to increased health care costs and stifle innovation as well as make California susceptible to economic uncertainties as California would rely on health care systems that are “too big to fail” similar to banks in 2008. This policy also does not allow for communities—particularly communities that are historically marginalized and excluded—from participating in the decision-making of health care delivery and health care systems. Instead, Coordination of care is limited to hospital systems, care providers, and doctors to provide “value-based care”. If the
California would expand health benefits to require health plans to include physical, oral, vision, and mental health as essential benefits. The ACA mandates a set of 10 categories of services or essential health benefits that health insurance plans must cover. This policy would mandate health plans to include physical, oral, vision and mental health. This policy would be similar to Medicare Advantage. MA covers all medically necessary services plus vision, hearing, dental, and others. At the federal level, Congress is attempting to expand “traditional” Medicare to include vision, dental, and hearing care. As a state-based policy, all payers must have a core set of essential benefits.

Expanding essential health benefits may allow for improved health outcomes for generations to come. When the ACA introduced “essential health benefits”, people were able to get health insurance that provided greater coverage. Under the ACA, health insurance plans covered pediatric services, which allowed for children to get comprehensive care such as treatment for vision and dental problems. Individuals on maternity were able to go through pregnancy and birth without having to face the financial burden. People who suffered a stroke were able to get rehabilitative and habilitative services covered. Moreover, expanding coverage may allow for increased access to care, which can narrow health disparities and inequities. Under the ACA, states are able to provide a benchmark plan to define the specific services covered under each of the categories of essential health benefits. However, this policy does not strengthen health care systems and systems may be susceptible to shocks. For example, during an economic downturn, the state may be pressured to narrow essential health benefits to keep health plans affordable.
PATCHWORK OF WELL-BEING

Broad Definition of Health & Low Interoperability

“Whole Person Wellness Localized”

Health and wellness is not just clinical and not limited to the individual. Health care goes beyond clinic walls to include the social determinants of health – e.g. care systems that support the connections between housing, education, employment and health at a community (i.e. whole person) level. Some areas have transformative systems and localized innovations due to local community political will, but other areas may not. Overall financial and political systems are not aligned to support scaling or learning.

Local Innovation Waivers

The state creates innovation waivers to allow local health departments to change/bypass funding mechanisms if they promote streamlined resource delivery and allocation for the existing populations funding was meant to serve. These waivers could be modeled after existing state innovation waivers and could allow localities to attempt pilot projects to change financing for health care, with a focus on social determinants of health rather than on care delivery alone.

These local innovation waivers must be paired with institutionalized changes for projects that work. They would also need support to be scaled for spread. Technologies may both help and hinder local innovation efforts. They are part of what is driving up health care costs; however, they also provide potential for access. These policies must consider ensuring common access to technological resources through these waivers to ensure that inequality does not persist based on which communities can access these technologies.
Local jurisdictions adopt participatory budgeting for a predetermined amount of the city’s budget to create a community health and wellbeing fund or for multiple funds for different priorities (e.g., expanding parks and recreation funding into an environment fund, children’s fund, etc.). Spending is determined by councils and/or committees that are representative of different segments of the local population. Participatory budgeting allows citizens to be involved in the democratic process of setting local spending priorities in the U.S. and globally. The process used to engage the community for participatory budgeting may also be connected to existing efforts to have more input from children, families, and community members in general.

Efforts must be made to institutionalize participatory budgeting and not leave it to the whims of current elected officials. Depending on the economy, it may be difficult to maintain participatory budgeting. In fact, New York City suspended their participatory budgeting during COVID-19. When employed consistently, participatory budgeting has great potential to increase inclusion and civic engagement by ensuring that citizens have real power to determine policy agendas rather than serving simply as passive stakeholders. However, policies and accommodations must be in place to ensure diverse representation is possible. Efforts, such as having dedicated positions for diverse voices, institutionalizing policies, ensuring accessibility (e.g., language access, childcare accommodations, accessibility for individuals with various forms of physical and mental disability), must be made to ensure full community representation.

The state promotes and facilitates learning networks to promote innovation in health and wellness. Learning networks, such as those run by Cincinnati Children’s
Hospital, are used by health systems to use research and data to improve treatments, care delivery and patient health outcomes. Funding and other resources (such as technical assistance and training) can be allocated to ensure health and social services systems can work in tandem to improve health and wellbeing.

Best practices for developing interventions through learning networks use engagement and feedback from stakeholders. They should, anecdotally, result in robust interventions that are co-created with the patient in mind. Although learning networks require a lot of effort to maintain, their innovations should be more sustainable. Learning networks are not in and of themselves equitable and considerate of intersectional identities; however, they can be designed to promote equity.

**UNIFORM WELL-BEING**

*Broad Definition of Health & High Interoperability*

*“Health in All for All”*

Health and wellness include social determinants of health and are scaled for the whole state population. Health is highly integrated with social needs, such as housing and education. The state observes little regional variation in health and social services systems. Rather, California has established a single payer option and state-sponsored social determinants of health services. Threats to this system include a lack of innovation, stagnation, poor quality of care, and a lack of data privacy.

*Dedicate State Funds to Dismantle Structural Inequities*

California dedicates a state budget allocation across sectors to reflect the investments needed to dismantle structural inequities, such as in housing. While California has
made some headway on investments in addressing structural issues that impact health, such as the 2021 $2.75 billion expansion of Project Homekey to address homelessness, the state would need to look towards making other major investments in housing infrastructure and other determinants of health, including in early childhood education and employment opportunities. As part of this budget allocation, the state would consider paying reparations to address racial justice for the African American community in California.

As part of this structural investment, California expands its mandates regarding health equity to agencies outside of the Department of Health. For example, California could require the Department of Education to invest in and establish programs to support health equity in schools. The state could similarly establish an inter-agency council on statewide Whole Person Care.

**Invest in Data Systems**

California invests in data systems that better and quickly detect health and social needs of Californians. The data system would then be able to connect people to programs and resources and monitor and track the resolution of the needs. Currently proposed in 2021, California Advancing and Innovating Medi-Cal (CalAIM) will build a secure information sharing infrastructure that integrates health with social needs for Medi-Cal members with complex needs. The system proposed here would be a larger scaled version of such a data system proposed in CalAIM. New technology is crucial to build a data system that can track the social and health needs of residents in the state that is robust and safe. Investments in data systems must also include data collection plans to ensure data on key equity and intersectionality variables are collected, but with protections regarding identifiability/confidentiality and safety such that there are no data breaches that violate the privacy of individuals.
California enacts data privacy laws and regulations to protect the large amounts of data the state manages on Californians. The data collection system needs include:

- Consent gathering for all those whose data are collected,
- Possible mandates requiring agency participation in the health information sharing system,
- Standards and guidance on the data collected,
- Data safeguards, and
- Penalties regarding data breaches.