

# 2019 Community Health Needs Assessment





# 2019 Community Health Needs Assessment of Sacramento County

Conducted on behalf of

#### **UC Davis Health**

UC Davis Medical Center 2315 Stockton Blvd. Sacramento, CA 95817



### Acknowledgments

This report was prepared by Community Health Insights on behalf of UC Davis Medical Center and the Sacramento Region CHNA Collaborative. Through the course of the CHNA project, many organizations and individuals contributed input on the health issues and conditions impacting their communities or the communities they serve. We gratefully acknowledge the contributions of these participants, many of whom shared deeply personal challenges and experiences with us. We hope that the contents of this report serve to accurately represent their voices.

Community Health Insights (www.communityhealthinsights.com) conducted the health assessment. Community Health Insights is a Sacramento-based, research-oriented consulting firm dedicated to improving the health and well-being of communities across Northern California. This joint report was authored by:

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# Welcome to our 2019 Community Health Needs Assessment (CHNA) Report

UC Davis Health has a unique dual mission in the Sacramento market and across its 33-county catchment area. The University of California trains nearly one-half of all medical students and residents in California, and UC Davis Health provides both the region's highest quality and most specialized health care services while also acting as an important disproportionate share provider of the region's health care safety net for medically underserved populations. We're proud our role to support the Northern California safety net, in both rural and urban settings, while also working to increase the level of access and specialty care provided across our region for all patients, from Merced to Oregon and from the California coast to the Nevada border (and beyond).

In July of 2017, UC Davis Health signed a Medi-Cal managed care contract with UnitedHealthcare, and, in October 2018, UC Davis Health signed a new and larger Medi-Cal contract with HealthNet. These contracts absorbed many of the high-risk beneficiaries who had previously been either without Medi-Cal coverage or covered by insurers who had since left the market. With this latest addition, UC Davis is now able to provide care to as many as 370,000 of the County's 430,000 Medi-Cal beneficiaries, for both primary and specialty care. This represents more than 4 out of 5 Medi-Cal beneficiaries in Sacramento County.

Sum of Unique MRNs	Discharge Fiscal Year					
Age Group	2014	2015	2016	2017	2018	Grand Total
Adult > 17 Years	23,083	27,823	27,414	25,727	25,702	129,749
Peds < 18 Years	16,445	17,183	16,249	16,190	16,544	82,611
Grand Total	39,528	45,006	43,663	41,917	42,246	212,360

In fiscal year 2018, UC Davis Medical Center treated 25,702 adults and 16,544 children who are Medi-Cal patients. These numbers are largely unchanged since 2014.

Medi-Cal patients also made up 56% of visitors to the Emergency Department (ED), a 39 percent increase since 2014, largely due to the Medi-Cal expansion. Of these ED visits, 79 percent had non-trauma outpatient needs (33,132). Within these ED visits, UC Davis sees a disproportionate number of patients who are still enrolled in Medi-Cal fee-for-service plans, even as over 80% of Medi-Cal patients are enrolled in managed care plans.

UC Davis also provides robust health care services and other forms of support to improve social determinants of health for at-risk populations through a variety of dispersed programs:

 Addressing access to outpatient subspecialty care for all local area underserved patients (via partnership with Sacramento County): By focusing on the Sacramento County Primary Care Center (SPCC), UC Davis Health is working to convert the SPCC to a nation-leading Federally Qualified Health Center (FQHC) that deploys a full range of UC Davis Health subspecialists and provides embedded social services to address social determinants of health.

- 2) Addressing the housing of homeless in expensive hospital beds for non-health conditions: UC Davis Health pledged \$5.6 million in fiscal year 2019 alone to develop local housing solutions and a facility to transition inpatient to outpatient discharges where the medically indigent can recover with support services. UC Davis also provided \$1 million to the City of Sacramento to keep its integrated services homeless shelter open during the 2018–19 winter season.
- 3) Addressing the physician shortages in rural areas: UC Davis is targeting Graduate Medical Education (GME) training programs to train and place physicians and other health care providers in rural community hospitals, to support care across Northern California. UC Davis Health is expanding these GME training programs to best meet the needs of rural community health care needs, including expanding programs for pediatric psychiatry and psychology, embracing innovative early childhood intervention (e.g., autism spectrum disorder access), and expanding partnerships for joint rural primary care training programs (e.g., a new program 2019 in Ukiah).

#### Partnerships with FQHCs provide expert care in convenient urban locations

There's a strong FQHC presence in Sacramento, including 29 separate facilities. (Some specialize in areas such as dental and women's health, in addition to providing a full range of health care, as one of the advantages of an FQHC's reimbursement structure is increased rates for offering more services in one location.) Many of these FQHCs have opened within the last ten years in response to the 2014 Medi-Cal expansion, and following a reduction of county resources during the Great Recession.

Since 2016, UC Davis Health has been entering into partnerships to provide resources to FQHCs in its service area. The goals of these partnerships are several:

- 1) Best-use of existing resources, including brick and mortar clinical facilities, that are lower-cost to operate as compared to UC Davis primary care clinics.
- 2) FQHCs have a payment structure that is different from one that would exist in a Medi-Cal managed care contract with UC Davis. They are eligible for FQHC-only alternative payment models, including a bundled prospective payment system developed to ensure FHC viability.
- 3) FQHCs are governed by federal statutory requirements that require adherence to rigorous cost, governance and quality standards. Partnering with existing FQHCs saves UC Davis from the formation of new legal entities to delivery primary care.
- 4) People don't need to visit the emergency room or be admitted to a large academic medical center if they can get preventive and acute care in lower-cost, more convenient community settings. These partnerships allow UC Davis Health providers to participate in a network of community-based settings to provide appropriate care, while keeping space available in the medical center for sicker patients.
- 5) There's tremendous potential to develop community partners to provide residents with training in these settings, using FQHC staff as preceptors to supplement the time of UC Davis faculty physicians. Not only does this give residents experience practicing with underserved populations, it also allows UC Davis to optimize faculty physician time. Staff employed by FQHC apply for a Volunteer Clinical Faculty appointment to serve in this capacity. (It should be noted that both the FQHCs and UC Davis are severely impacted by California's primary care workforce shortage.)

Clinic	FTE	Contracted Amount
Sacramento County Primary Care Center	5.7	\$1,526,661
OneCommunity Health	1.325	\$344,823
Elica Health Centers	0.8	\$331,025
CommuniCare Health Centers	0.2	\$46,836
Total	8.025	\$2,249,345

#### UC Davis – FQHC Relationships as of August 2018

The UC Davis Health Department of Pediatrics also donates an attending physician to the Sacramento Native American Health Center (SNAHC) to treat children on Medi-Cal, for three afternoon clinics per week for 50 weeks per year. This time is also used as a residency rotation where four residents rotate per quarter. The physician and residents typically see between five and seven patients per clinic. SNAHC is currently making expansion plans to open a clinic in South Sacramento and UC Davis Health is exploring a formal role in that expansion. Additionally, two nurses work at the Sacramento County Health Center, totaling a contracted amount of \$233,203.

Elica Health Centers is network of 10 health facilities in Sacramento that provide care to over 24,000 patients annually. UC Davis entered into an agreement with ELICA to provide clinical care to the organization's at-risk communities in August 2017. The two organizations also jointly launched a mobile van program that will be staffed by volunteer RNs and PAs from UC Davis. This site will be used as a training venue for nursing students at first, and medical students as a physician preceptor structure is developed.

One Community Health was founded as a clinic to treat HIV/AIDS patients but changed their scope as advances in medicine shifted HIV to a manageable chronic disease. Currently, UC Davis provides faculty physician support to One Community Clinic through the family medicine and internal medicine departments.

Communicare is a FQHC in West Sacramento where a family medicine physician works part-time. Residents also spend training time at Communicare clinics throughout UC Davis Health's surrounding counties, where they are trained by Communicare employees who have volunteer clinical faculty appointments.

WellSpace Health is a large FQHC network with several locations throughout Sacramento. Via WellSpace, UC Davis funds the Interim Care Program, a medical care program for homeless people who are inpatients but need to transition to an outpatient environment and cannot simply be discharged to routine outpatient care due to a lack of social support. All four Sacramento health systems participate in this program, but UC Davis makes the largest contribution, \$115,000 annually. UC Davis also recently committed \$4 million to WellSpace to expand the medical respite care program.

#### Increasing levels of care delivered closer to home for rural patients

UC Davis is home to the Center for Healthcare Technology (CHT), an internationally known telemedicine center that has piloted innovative telemedicine tools as a means of improving health care access in rural and underserved areas. Currently, the program serves 59 remote sites in 26 counties in Northern California, bringing UC Davis emergency physicians and subspecialists into hospitals and clinic locations closer to home for patients, increasing the quality and availability of advanced care in rural areas.

Telemedicine	Visits FY 2017
Synchronous Visits	1,280
Asynchronous Visits	225
Inpatient Visits	264
Outpatient Visits	1,241
Adults	924
Pediatrics	581
Specialties	33
Specialists	92

Since the beginning of the program in the early 1990s, the center has provided over 43,000 telemedicine consultations. When the services began, payment was largely fee-for-service, but telemedicine visits are now over 75 percent contracted. Inpatient telemedicine agreements are contracted at a monthly or annual rate for access to unlimited service in certain specialties such as telestroke, neonatology, and pediatric critical care. Outpatient telemedicine agreements are contracted via pre-booked blocks at hourly rates for specialties such as endocrinology.

UC Davis has also partnered with Lodi Memorial Hospital and Rideout Memorial Hospital in Marysville to place UC Davis Health providers in

these facilities, in addition to the established virtual link/telemedicine connections, to increase the level and quality of care provided in both of these more rural areas outside of the Sacramento metropolitan core, and avoid unnecessary car, ambulance, or medical helicopter trips for patients needing this level of care.

#### 2019 and beyond

UC Davis Health is committed to its academic, research, and social services mission for patients across Northern California.

Responding to the 2016 Sacramento County Community Needs Assessment showing patients wanted and needed care that's conveniently located closer to them (an important part of reducing barriers to accessing care), UC Davis Health improved access and care delivery to Medi-Cal patients outside of the hospital setting by creating partnerships with FQHCs and community clinics in Sacramento County.

These neighborhood and community clinics now represent a growing network of high-quality health care delivery from UC Davis Health providers, working in local neighborhoods, community clinics, and mobile health vans. These centers, often strategically located in underserved neighborhoods, are staffed by UC Davis Health care team members.

As an academic medical center, UC Davis Health has an important social responsibility to both create and share knowledge that advances health and health care delivery, as well as to provide health care services to underserved populations. More than one in four UC Davis Health patients are in the Medi-Cal program, which is the state's version of the Medicaid federal public health insurance program for low-income children and adults.

We look forward to our work over the next three years to address the needs identified in this 2019 Community Health Needs Assessment survey, and further developing our ongoing partnerships with the region's other hospitals and health care providers to improve the health of patients everywhere.

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#### **Report Summary**

#### **Purpose**

The purpose of this community health needs assessment (CHNA) was to identify and prioritize significant health needs of the greater Sacramento area community. The priorities identified in this report help guide nonprofit hospitals' community health improvement programs and community benefit activities as well as their collaborative efforts with other organizations that share a mission to improve health. This CHNA report meets requirements of the Patient Protection and Affordable Care Act (and in California, Senate Bill 697) that nonprofit hospitals conduct a community health needs assessment at least once every three years. The CHNA was conducted by Community Health Insights (www.communityhealthinsights.com) and was a collaboration between Dignity Health, Sutter Health, and UC Davis Health. Multiple other community partners collaborated to conduct the CHNA.

#### **Community Definition**

The definition of the community served included most portions of Sacramento County, and a small portion of western El Dorado County, California. Regarded as a highly diverse community, Sacramento County covers 994 square miles and is home to approximately 1.5 million residents. The CHNA uses this definition of the community served, as this is the primary geographic area served by the seven nonprofit hospitals that collaborated on this CHNA.

#### **Assessment Process and Methods**

The data used to conduct the CHNA were identified and organized using the widely recognized Robert Wood Johnson Foundation's County Health Rankings model.<sup>1</sup> This model of population health includes many factors that impact and account for individual health and well-being. Further, to guide the overall process of conducting the assessment, a defined set of data-collection and analytic stages were developed. These included the collection and analysis of both primary (qualitative) and secondary (quantitative) data. Qualitative data included interviews with 121 community health experts, social-service providers, and medical personnel in one-on-one and group interviews as well as one town hall meeting. Further, 154 community residents participated in 15 focus groups across the county.

Focusing on social determinants of health to identify and organize secondary data, datasets included measures to describe mortality and morbidity and social and economic factors such as income, educational attainment, and employment. Measures also included indicators to describe health behaviors, clinical care (both quality and access), and the physical environment.

#### **Process and Criteria to Identify and Prioritize Significant Health Needs**

Primary and secondary data were analyzed to identify and prioritize significant health needs. This began by identifying 10 potential health needs (PHNs). These PHNs were those identified in previously conducted CHNAs. Data were analyzed to discover which, if any, of the PHNs were present in the area. After these were identified, PHNs were prioritized based on rankings provided by primary data sources. Data were also analyzed to detect emerging health needs beyond those 10 PHNs identified in previous CHNAs.

<sup>&</sup>lt;sup>1</sup>See: http://www.countyhealthrankings.org

#### List of Prioritized Significant Health Needs

The following significant health needs were identified and are listed below in prioritized order. Two of the health needs, numbers four and nine, are health needs that have not been previously identified in earlier CHNAs.

- 1. Access to quality primary health care services
- 2. Access to mental/behavioral/substance-abuse services
- 3. Access to basic needs such as housing, jobs, and food
- 4. System navigation
- 5. Injury and disease prevention and management
- 6. Safe and violence-free environment
- 7. Access to active living and healthy eating
- 8. Access to meeting functional needs (transportation and physical mobility)
- 9. Cultural competency
- 10. Access to specialty and extended care

#### **Resources Potentially Available to Meet the Significant Health Needs**

In all, 665 resources were identified in the Sacramento County area that were potentially available to meet the identified significant health needs. The identification method included starting with the list of resources from the 2016 CHNAs, verifying that each resource still existed, and then adding newly identified resources into the 2019 CHNA report.

#### Conclusion

This CHNA report details the health needs of the Sacramento County community as a part of a collaborative partnership between Dignity Health, Sutter Health, and UC Davis Health. It provides an overall health and social examination of Sacramento County and the needs of community members living in parts of the area experiencing health disparities. The CHNA provides a comprehensive profile to guide decision-making for the implementation of community health improvement efforts. This report also serves as an example of a successful collaboration between local health care systems to provide meaningful insights to support improved health in the community they serve.

#### Introduction and Purpose

Both state and federal laws require that nonprofit hospitals conduct a community health needs assessment (CHNA) every three years to identify and prioritize the significant health needs of the communities they serve. The results of the CHNA guide the development of implementation plans aimed at addressing identified health needs. Federal regulations define a *health need* accordingly: "health needs include requisites for the improvement or maintenance of health status in both the community at large and in particular parts of the community (such as particular neighborhoods or populations experiencing health disparities)" (p. 78963).<sup>2</sup>

This report documents the processes, methods, and findings of the CHNA conducted on behalf of UC Davis Medical Center (UCDMC), an acute-care teaching hospital in Sacramento County, Calif. Collectively, these nonprofit hospitals serve Sacramento County, Calif., located in the north-central part of the state. The CHNA was conducted over a period of 10 months, beginning in March 2018 and concluding in December 2018. This CHNA report meets requirements of the Patient Protection and Affordable Care Act (and in California, of Senate Bill 697) that nonprofit hospitals conduct a CHNA at least once every three years.

Community Health Insights (www.communityhealthinsights.com) conducted the CHNA on the behalf of the nonprofit hospitals. Community Health Insights is a Sacramento-based, research-oriented consulting firm dedicated to improving the health and well-being of communities across Northern California. Community Health Insights has conducted multiple CHNAs over the previous decade. To collect and share primary data, Community Health Insights worked in collaboration with Harder+Company, a consulting firm working on the behalf of Kaiser Permanente to conduct a CHNA in the Sacramento region.

#### Organization of this Report

This report follows federal guidelines on how to document a CHNA. First, an overview of the methods used to conduct the CHNA are described, including a description of how data were collected and analyzed. This includes the process of soliciting input from persons representing the broad interests of the community. Second, the community served by the participating nonprofit hospitals is described. Third, findings of the CHNA are detailed, including the prioritized listing of significant health needs that were identified. Fourth, resources potentially available to meet the needs are identified and described, followed by a summary of the impact of actions taken to address significant health needs identified in the previous CHNA, which was conducted in 2016. For readers interested in a detailed description of the methods, see the section titled "2019 CHNA Technical Report" included later in this report.

<sup>&</sup>lt;sup>2</sup> Federal Register, Vol. 79, No. 250, (Wednesday, December 31, 2014). Department of the Treasury, Internal Revenue Service.



#### **Method Overview**

#### **Conceptual and Process Models**

The data used to conduct the CHNA were identified and organized using the widely recognized Robert Wood Johnson Foundation's County Health Rankings model.<sup>3</sup> This model of population health includes many factors that impact and account for individual health and well-being. Further, to guide the overall process of conducting the assessment, a defined set of data collection and analytic stages were developed.

#### **Public Comments from Previously Conducted CHNAs**

Regulations require that nonprofit hospitals include written comments from the public on their previously conducted CHNAs and most recently adopted implementation strategies. The 2016 CHNA was made public for UC Davis Medical Center. The community was invited to provide written comments on the CHNA reports and Implementation Strategies both within the documents and on the website where they are

<sup>&</sup>lt;sup>3</sup> See http://www.countyhealthrankings.org/

widely available to the public. The email address of <u>HS-Community.Relations@ucdavis.edu</u> was created to ensure comments were received and responded to. In addition, the CHNA was presented to UC Davis Health's Community Advisory Board, a diverse group of community of volunteers who advise the health system's leadership on patient and community health concerns, long-range development plans and overall community outreach. No written comments have been received.

#### Data Used in the CHNA

Data collected and analyzed included both primary and secondary data. Primary data included interviews with 121 community health experts, social-service organizations, and medical personnel in one-on-one and group interviews as well as one town hall meeting. Further, 154 community residents participated in 15 focus groups across the county.

Secondary data included four datasets selected for use in the various stages of the analysis. A combination of mortality and socio-economic datasets collected at subcounty levels were used to identify the portions of Sacramento County with greater concentrations of disadvantaged populations and poor health outcomes. A set of county-level indicators was collected from various sources to help identify and prioritize significant health needs. A set of socio-economic indicators was also collected to help describe the overall social conditions within the service area. Health outcome indicators included measures of both mortality (length of life) and morbidity (quality of life). Health factor indicators included measures of 1) health behaviors such as diet and exercise, tobacco, alcohol, and drug use; 2) clinical care, including access and quality of care; 3) social and economic factors such as race/ethnicity, income, educational attainment, employment, and neighborhood safety; and 4) physical environment measures such as air and water quality, transit and mobility resources, and housing affordability. In all, 84 different health outcome and health factor indicators were collected for the CHNA.

#### **Data Analysis**

Primary and secondary data were analyzed to identify and prioritize significant health needs. This began by identifying 10 potential health needs (PHNs). These PHNs were those identified in the previously conducted CHNAs. Data were analyzed to discover which, if any, of the PHNs were present in the area. After these were identified for the county, PHNs were prioritized based on an analysis of primary data sources that described the PHN as a significant health need. Data were also analyzed to detect emerging health needs beyond those 10 PHNs identified in previous CHNAs.

#### Sacramento County – The Community Served

Sacramento County was the designated area served by the participating hospitals for the 2019 CHNA. This definition of the community served was used because this is the primary geographic area served by the seven nonprofit hospitals that collaborated on this CHNA.

Sacramento County was incorporated in 1850, and much of its rich history was influenced by the discovery of gold in the area in 1848. The county is home to California's capital city, Sacramento. The county includes seven incorporated cities, with the City of Sacramento being the largest. Covering a geographic area of 994 square miles and home to approximately 1.5 million residents, Sacramento County sits at the northern portion of California's Central Valley, situated along the Interstate 5 corridor. The area consists

of both urban and rural communities and includes the Sacramento–San Joaquin Delta that connects the Sacramento River to the San Francisco Bay through some 700 miles of winding waterways. Sacramento is often described as a diverse community, and a recent report ranked the city the fourth most racially and ethnically diverse large city in the U.S.<sup>4</sup>

Sacramento County has over 30 cities, census-designated places, and unincorporated communities that include neighborhoods with rich heritages such as Oak Park, known as Sacramento's first suburb, and newer communities such as the City of Rancho Cordova, incorporated in 2003. Sacramento County ranks as California's 31<sup>st</sup>-most overall healthy county among the 58 in the state.<sup>5</sup> The area is served by a number of health care organizations, including those that collaborated in this assessment.

<sup>4</sup> McCann, A. (May 3, 2018). 2018's Most Diverse Cities in the U.S. Washington DC: WalletHub. (Retrieved: https://wallethub.com/edu/ most-diverse-cities/12690/#methodology).



<sup>&</sup>lt;sup>5</sup> See: http://www.countyhealthrankings.org/app/california/2018/

#### Findings – Sacramento County

#### **Prioritized Significant Health Needs – Sacramento County**

Analysis of primary and secondary data was conducted to identify significant health needs for Sacramento County. These are listed below in prioritized order. After identifying each health need, they were prioritized based on rankings provided by community health experts, social-service organizations, medical personnel, and community members. Those secondary data indicators used in the CHNA that performed poorly when compared to state benchmarks are listed in the table below each of the significant health needs. Further, qualitative themes that emerged during analysis are provided in the table. Two health needs, numbers four and nine, are health needs that have not been identified in earlier conducted CHNAs.

#### 1. Access to Quality Primary Care Health Services

Primary care resources include community clinics, pediatricians, family practice physicians, internists, nurse practitioners, pharmacists, telephone advice nurses, and other similar resources. Primary care services are typically the first point of contact when an individual seeks health care. These services are the front line in the prevention and treatment of common diseases and injuries in a community.

Quantitative Indicators		Qualitative Themes
<ul> <li>Life Expectancy</li> <li>Cancer Mortality</li> <li>Child Mortality</li> <li>CLD Mortality</li> <li>Diabetes Mortality</li> <li>Heart Disease Mortality</li> <li>Hypertension Mortality</li> <li>Influenza Pneumonia Mortality</li> <li>Stroke Mortality</li> </ul>	<ul> <li>Cancer Female Breast</li> <li>Cancer Colon and Rectum</li> <li>Diabetes Prevalence</li> <li>Low Birthweight</li> <li>Cancer Lung and Bronchus</li> <li>Cancer Prostate</li> <li>HPSA Primary Care</li> <li>HPSA Medically Underserved Area</li> <li>Preventable Hosp. Stays</li> </ul>	<ul> <li>More chronic conditions appearing in community</li> <li>Health insurance costly</li> <li>Out-of-pocket costs too expensive</li> <li>Medications too expensive</li> <li>Longer clinic hours needed</li> <li>Excessive wait times to get appointments</li> <li>Not enough clinics and providers</li> <li>Providers spending too little time with patients during visits</li> <li>Need more mobile health clinics</li> </ul>

#### 2. Access to Mental, Behavioral, and Substance-Abuse Services

Individual health and well-being are inseparable from individual mental and emotional outlook. Coping with daily life stressors is challenging for many people, especially when other social, familial, and economic challenges occur. Adequate access to mental, behavioral, and substance-abuse services is an essential ingredient for a healthy community where residents can obtain additional support when needed.

Quantitative Indicators	Qualitative Themes
<ul> <li>Life Expectancy</li> <li>Suicide Mortality</li> <li>Poor Mental Health Days</li> <li>Poor Physical Health Days</li> <li>Drug Overdose Deaths</li> <li>Excessive Drinking</li> </ul>	<ul> <li>Anxiety and depression perceived to be prolific in the community</li> <li>Methamphetamine usage problematic and growing</li> <li>Chronic stress of meeting basic needs a root cause of many mental health issues</li> <li>Stigma of seeking/using mental health services as a barrier</li> <li>More services needed to address issues rooted in Adverse Childhood Experiences</li> <li>Residents experiencing a shortage of mental, behavioral, and substance abuse services in the region</li> <li>Mental health treatment facilities not capable of treating medical problems</li> <li>Infrastructure for mental health services severely lacking</li> <li>More services needed for homeless individuals and families</li> <li>Overwhelming mental health issues faced by the newly homeless</li> <li>Mental health services too costly</li> <li>Many in community suffering from PTSD with limited treatment options</li> <li>Community members unable to recognize mental health issues, don't know how to treat</li> <li>Growing role of social media in mental health issues for youth</li> </ul>

#### 3. Access to Basic Needs, Such as Housing, Jobs, and Food

Access to affordable and clean housing, stable employment, quality education, and adequate food are vital for good health. Research shows that the social determinants of health — such as quality housing, adequate employment and income, food security, education, and social support systems — influence individual health as much as health behaviors and access to clinical care.<sup>6</sup> Without access to meeting these basic needs, individuals cannot experience full and healthy lives.

Quantitative Indicators	Qualitative Themes
<ul> <li>Life Expectancy</li> </ul>	<ul> <li>Affordable housing significant issue in region</li> </ul>
Infant Mortality	Rent controls needed
<ul> <li>Age-Adjusted Mortality</li> </ul>	<ul> <li>More low-income housing needed</li> </ul>
Child Mortality	<ul> <li>High cost to move in (first/last month's rent) barrier for many to secure</li> </ul>
Premature Age-Adjusted Mortality	housing
<ul> <li>Years of Potential Life Lost</li> </ul>	<ul> <li>Multiple families living together due to high housing costs</li> </ul>
Low Birthweight	The "working poor" note an inability to make ends meet
<ul> <li>HPSA Medically Underserved</li> </ul>	<ul> <li>Lack of employment opportunities for many in the area</li> </ul>
Area	<ul> <li>New immigrants struggling to find employment</li> </ul>
<ul> <li>High School Graduation</li> </ul>	Trade-offs between meeting basic needs and seeking health care services
Children with Single Parents	No recognition of the link between health and housing
Children in Poverty	Need policy solutions to housing crisis
Median Household Income	<ul> <li>Landlord discrimination toward individuals with housing vouchers</li> </ul>
Limited Access to Healthy Food	<ul> <li>Minimum wage not a living wage</li> </ul>

<sup>6</sup> See: http://www.countyhealthrankings.org/learn-others/research-articles#Rankingsrationale

#### 4. System Navigation

System navigation refers to an individual's ability to traverse fragmented social-services and health care systems in order to receive the necessary benefits and supports to improve health outcomes. Research has demonstrated that navigating the complex U.S. health care system is a barrier for many that results in health disparities.<sup>7</sup> Further, navigating through the complexities of accessing social services provided by multiple governmental agencies also provides an obstacle for many that have limited resources such as transportation access, English proficiency, and the like.

Quantitative Indicators	Qualitative Themes
<ul> <li>No quantitative indicators used in analysis for this health need</li> </ul>	<ul> <li>People unsure where to start in trying to improve health</li> <li>Filling out multiple forms overwhelming to those new to the health care system</li> <li>Automated phone systems stressful and difficult to navigate for those unfamiliar with the health care system</li> <li>Many unaware what services they are eligible for</li> <li>Limited understanding of how to utilize newly acquired insurance</li> <li>Needing insurance to approve medical services confusing</li> <li>Many needing advocates to navigate the health and human services systems</li> <li>Medical terminology confusing to many</li> <li>Need navigators that can connect families to services</li> <li>Health care systems fragmented and difficult to navigate</li> <li>Silos between city and county services as barriers</li> <li>Health care language complex and overwhelming to some</li> </ul>

#### 5. Injury and Disease Prevention and Management

Knowledge is important for individual health and well-being, and efforts aimed at injury and disease prevention are powerful vehicles to improve community health. When community residents lack adequate information on how to prevent, manage, and control their health conditions, those conditions tend to worsen. Prevention efforts focus on reducing cases of injury and infectious disease control (e.g., STI prevention and influenza shots), and intensive strategies in the management of chronic diseases (e.g., diabetes, hypertension, obesity, and heart disease) are important for community health improvement.

Quantitative	Qualitative Themes	
<ul> <li>Infant Mortality</li> <li>Child Martality</li> </ul>	<ul> <li>Diabetes Prevalence</li> <li>Low Pirth Weight</li> </ul>	<ul> <li>More funding needed for preventive care</li> </ul>
<ul><li>Child Mortality</li><li>Chronic Lung Disease Mortality</li></ul>	<ul><li>Low Birth Weight</li><li>Drug Overdose Deaths</li></ul>	<ul> <li>Education to keep people</li> </ul>
<ul> <li>Diabetes Mortality</li> <li>Heart Disease Mortality</li> </ul>	<ul><li>Excessive Drinking</li><li>Adult Obesity</li></ul>	healthy, developing independence
<ul> <li>Hypertension Mortality</li> </ul>	<ul> <li>Physical Inactivity</li> </ul>	<ul> <li>Health and nutrition education needed to combat diabetes</li> </ul>
<ul><li>Influenza Pneumonia Mortality</li><li>Stroke Mortality</li></ul>	<ul><li>STI Chlamydia Rate</li><li>Teen Birth Rate</li></ul>	<ul> <li>Health system treatment focused, not prevention oriented</li> </ul>
Suicide Mortality	<ul> <li>Adult Smokers</li> </ul>	
<ul> <li>Unintentional Injury Mortality</li> </ul>	<ul> <li>Motor Vehicle Crash Deaths</li> </ul>	

<sup>7</sup> Natale-Pereira, A. et. al (2011). *The Role of Patient Navigators in Eliminating Health Disparities*. U.S. National Library of Medicine, National Institutes of Health, 117:15, 3543-3552.

#### 6. Safe and Violence-Free Environment

Feeling safe in one's home and community are fundamental to overall health. Next to having basic needs met (e.g., food, shelter, and clothing) is having physical safety. Feeling unsafe affects the way people act and react to everyday life occurrences. Further, research has demonstrated that individuals exposed to violence in their homes, the community, and schools are more likely to experience depression and anxiety and demonstrate more aggressive, violent behavior.<sup>8</sup>

Quantitative Indicators	Qualitative Themes
<ul> <li>Life Expectancy</li> </ul>	<ul> <li>Violence in schools an issue</li> </ul>
Poor Mental Health Days	<ul> <li>Drug-related activities making communities unsafe</li> </ul>
<ul> <li>Homicides</li> </ul>	Crime and resulting fear for personal safety compounded for homeless population
<ul> <li>Motor Vehicle Crash Deaths</li> </ul>	<ul> <li>Stephon Clark shooting impact on community's sense of safety</li> </ul>
<ul> <li>Violent Crimes</li> </ul>	<ul> <li>Social media portrayal of violence</li> </ul>
	<ul> <li>Domestic violence an issue</li> </ul>
	<ul> <li>Sex trafficking increasing, targeting homeless and foster youth</li> </ul>
	<ul> <li>Gun violence highest among African American youth</li> </ul>
	<ul> <li>Political environment contributing to safety concerns of community members</li> </ul>

#### 7. Active Living and Healthy Eating

Physical activity and eating a healthy diet are important for overall health and well-being. Frequent physical activity is vital for prevention of disease and maintenance of a strong and healthy heart and mind. When access to healthy foods is challenging for community residents, many turn to unhealthy foods that are convenient, affordable, and readily available. Communities experiencing social vulnerability and poor health outcomes are often overloaded with fast food and other establishments where unhealthy food is sold.

Quantitative Indicators	Qualitative Themes
Cancer Mortality	<ul> <li>Healthy food unaffordable</li> </ul>
<ul> <li>Diabetes Mortality</li> </ul>	<ul> <li>Food deserts prolific in low-income communities</li> </ul>
<ul> <li>Heart Disease Mortality</li> </ul>	<ul> <li>Unhealthy food choices leading to many chronic diseases</li> </ul>
<ul> <li>Hypertension Mortality</li> </ul>	<ul> <li>Needing more nutrition education in community</li> </ul>
Stroke Mortality	<ul> <li>Obesity continuing to rise</li> </ul>
Cancer Female Breast	People unaware of how to prepare/cook healthy, fresh foods
<ul> <li>Cancer Colon and Rectum</li> </ul>	
Diabetes Prevalence	
Cancer Prostate	
Limited Access to Healthy Food	
Physical Inactivity	
Adult Obesity	

#### 8. Access and Functional Needs – Transportation and Physical Disability

Functional needs include indicators related to transportation and disability. Having access to transportation services to support individual mobility is a necessity of daily life. Without transportation, individuals struggle to meet their basic needs, including those needs that promote and support a healthy life. The number of people with disabilities also is an important indicator for community health and must be examined to ensure that all community members have access to necessities for a high quality of life.

<sup>&</sup>lt;sup>8</sup> Lynn-Whaley, J., & Sugarmann, J. (July 2017). The Relationship Between Community Violence and Trauma. Los Angeles: Violence Policy Center.

Quantitative Indicators	Qualitative Themes
<ul> <li>Percentage with Disability</li> </ul>	<ul> <li>Public transportation increasing travel time to get to services</li> <li>Distances to some services an obstacle for those using public transit</li> <li>Operating hours of public transit creating barriers to accessing services</li> <li>Cost of public transportation a barrier</li> <li>Public transportation use a challenge for non-English-speaking residents</li> <li>Public transit system needs further expansion across all areas of the community</li> </ul>

#### 9. Cultural Competence

Cultural competence refers to the ability of those in health and human services, including health care, social services, and law enforcement, to deliver services that meet an individual's social, cultural, and language needs. The lack of cultural competence in health and human services, including health care, has been identified as a common barrier to accessing services as individuals are reluctant to put themselves in situations where they may have limited communication capacities, experience discrimination, or face a lack of appreciation for their cultural norms.

<b>Quantitative Indicators</b>	Qualitative Themes
<ul> <li>No quantitative indicators used in analysis for this health need</li> </ul>	<ul> <li>Language barriers when trying to access health care and when navigating the system</li> <li>Undocumented residents fearing deportation</li> <li>Homophobia and racism in the health care system creating barriers</li> <li>County workers treating minorities with disrespect</li> </ul>

#### 10. Access to Specialty and Extended Care

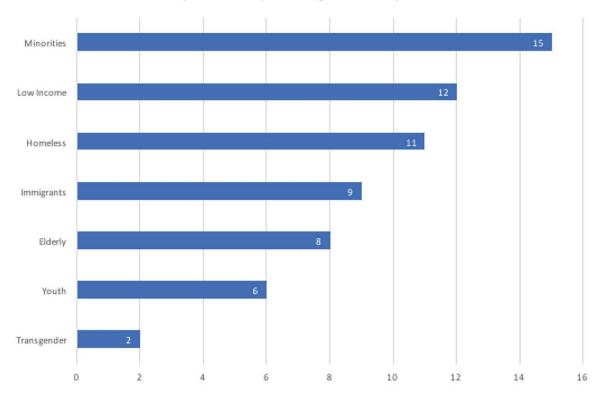
Extended care services, which include specialty care, are care provided in a particular branch of medicine and focused on the treatment of a particular disease. Primary and specialty care go hand in hand, and without access to specialists, such as endocrinologists, cardiologists, and gastroenterologists, community residents are often left to manage chronic diseases, including diabetes and high blood pressure, on their own. In addition to specialty care, extended care refers to care extending beyond primary care services that is needed in the community to support overall physical health and wellness, including skilled-nursing facilities, hospice care, and in-home health care.

Quantitative Indicators	Qualitative Themes
<ul> <li>Life Expectancy</li> </ul>	<ul> <li>Difficulty in getting appointments with specialists</li> </ul>
<ul> <li>Cancer Mortality</li> </ul>	<ul> <li>Long wait times to see specialists</li> </ul>
<ul> <li>CLD Mortality</li> </ul>	<ul> <li>Need more skilled-nursing facilities</li> </ul>
<ul> <li>Diabetes Mortality</li> </ul>	<ul> <li>Lack of custodial beds in nursing homes</li> </ul>
<ul> <li>Heart Disease Mortality</li> </ul>	<ul> <li>Cost of specialty drugs a barrier</li> </ul>
<ul> <li>Hypertension Mortality</li> </ul>	<ul> <li>Some specialty and extended care services not covered by</li> </ul>
<ul> <li>Stroke Mortality</li> </ul>	insurance
<ul> <li>Diabetes Prevalence</li> </ul>	<ul> <li>Cost of copays for some specialty services a barrier</li> </ul>
<ul> <li>Cancer Lung and Bronchus</li> </ul>	
<ul> <li>Preventable Hospital Stays</li> </ul>	

#### **Populations Experiencing Health Disparities**

Health disparities are differences in health status among different groups within a population. Groups can be defined by a number of characteristics, including (but not limited to) race, ethnicity, immigrant status, disability, age, gender, sexual orientation, income, and geographic location. An important part of the CHNA was to identify specific groups in the Sacramento area that were experiencing health disparities.

The figure below describes populations identified through qualitative data analysis that were indicated as experiencing health disparities. Interview participants were asked: "What specific groups of community members experience health issues the most?" Responses were analyzed by counting the total number of times all key informants and focus group participants mentioned a particular group as one experiencing disparities. Figure 1 displays the results of this analysis.



Populations Experiencing Health Disparities

Figure 1: Populations experiencing disparities across all regions

#### **Regions of Sacramento County**

Sacramento County is a diverse county comprised of many communities, each with unique attributes and characteristics that influence community health. In an effort to capture these unique attributes for this CHNA, the county was subdivided into four distinct regions to allow for more detailed data collection and analysis. These regions are displayed in Figure 2. Primary data collection included interviews with community health experts and community residents that lived and worked in the communities within these regions, thus providing a richer and more robust understanding of each community's unique features. When available, secondary data were collected and analyzed within each region as well.

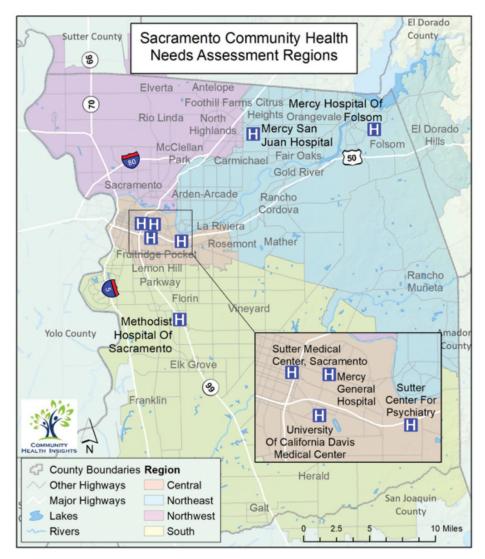


Figure 2: Sacramento County map with designated regions

The following sections give more detailed information and findings that are unique to each region. To begin, a prioritized list of significant health needs unique to each region is displayed. Next, descriptions of each community are presented, followed by socio-demographic information for each ZIP code in the region. These are followed by displays of three informative findings of the CHNA: 1) the Community Health Vulnerability Index, 2) Communities of Concern within each region, and 3) themes from primary data analysis that help describe health needs unique to the region.

#### **Community Health Vulnerability Index**

The Community Health Vulnerability Index (CHVI) is a composite index used to help explain the distribution of health disparities within a geographic area. Like the *Community Needs Index* or CNI<sup>9</sup> on which it was based, the CHVI combines multiple socio-demographic indicators to help identify those locations experiencing health disparities. Higher CHVI values indicate a greater concentration of groups that are more likely to experience health-related disparities. CHVI indicators are noted in Table 1. CHVI maps are provided for each region. In these maps, darker-shaded census tracts are those with the higher CHVI values and represent portions of the community that are most likely experiencing disparities.

Table 1:	Community	Health	Vulnerability	Index Indio	cators

Percentage Minority (Hispanic or Nonwhite)	<ul> <li>Percentage Families with Children in Poverty</li> </ul>
<ul> <li>Percentage 5 Years or Older Who Speak Limited English</li> </ul>	<ul> <li>Percentage Households 65 Years or Older Living in Poverty</li> </ul>
<ul> <li>Percentage 25 or Older without a High School Diploma</li> </ul>	<ul> <li>Percentage Single-Female-Headed Households Living in Poverty</li> </ul>
<ul> <li>Percentage Unemployed</li> </ul>	<ul> <li>Percentage Renters</li> </ul>
<ul> <li>Percentage Uninsured</li> </ul>	

#### **Communities of Concern**

Communities of Concern are geographic areas (defined by ZIP codes) within a region that have the greatest concentration of poor health outcomes and are home to more medically underserved, low-income, and diverse populations at greater risk for poorer health. Communities of Concern are important to the overall CHNA methodology because they allow for a focus on those portions of the region likely experiencing the greatest health disparities.

Communities of Concern were identified through a combination of primary and secondary data. ZIP codes within each region were examined to determine if: 1) they were previously identified as a Community of Concern (in the 2016 CHNA), 2) they intersected a census tract that had a high CHVI value (indicated higher vulnerability), and 3) they had high mortality rates compared to others in the region. This secondary data analysis was combined with primary data to identify the 2019 CHNA Communities of Concern for each region.

#### **Findings for Each Region**

#### **Prioritized Significant Health Needs by Region**

While a goal of the assessment was to identify the health needs of Sacramento County as a whole, it was also important to identify and prioritize health needs for the multiple communities within the county. To accomplish this, data were collected and analyzed at two levels. Health need identification and prioritization for the county overall was based on all qualitative data collected across the county. However, health need identification and prioritization for each region was based on qualitative data collected only within that particular region. This resulted in differences between the health needs identified and prioritization for the entire county, and those identified and prioritized for each region, as these findings were based on a different set of community voices.

<sup>&</sup>lt;sup>9</sup> Barsi, E. and Roth, R. (2005) The Community Needs Index. Health Progress, Vol. 86, No. 4, pp. 32–38.

Whereas 10 significant health needs were identified for the county as a whole, only nine significant health needs were identified for three of the four regions. For the Central Region, only eight significant health needs were identified. After each region's health needs were identified, they were also prioritized for each region based on an analysis of primary data sources that mentioned the health need as a priority. The findings are displayed in Table 2. The health needs are listed in the first column, and the prioritization of that particular need, if applicable, is listed in the column for each region.

Significant Health Need	Northwest	Northeast	Central	South
Access to Quality Primary Care Health Services	1	1	1	1
Access to Mental/Behavioral/ Substance-Abuse Services	2	2	2	2
Access to Basic Needs Such as Housing, Jobs, and Food	3	3	3	3
System Navigation	4	5	4	4
Injury and Disease Prevention and Management	8	4	Did not find for this region	9
Safe and Violence-Free Environment	9	6	6	5
Active Living and Healthy Eating	5	9	7	7
Access and Functional Needs	6	8	8	8
Cultural Competency	7	7	5	6
Access to Specialty and Extended Care	Did not	t find this health ne	eed for any of the re	egions

#### Table 2: Prioritized Significant Health Needs by Region

#### **Northwest Region**

#### Description of the Community Served

The Northwest Region is comprised of 13 ZIP codes and includes those communities depicted in Figure 3. The area is home to approximately 325,000 residents. Table 3 displays population characteristics for each ZIP code. Data are compared to the state and county rates, and ZIP codes that negatively varied or performed poorly when compared to the county benchmark are highlighted.

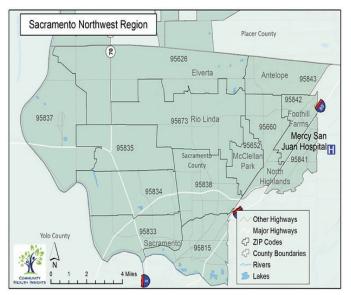


Figure 3: Northwest Region map

Table 3: Population Characteristics for the Northwest Region ZIP Codes

ZIP Code	Total Population	% Minority	Median Age	Median Income	% Poverty	% Unemployed	% Uninsured	% No HS Graduation	% Living in High Housing Costs	% with Disability
95626	5,871	21.6	40.9	\$56,667	10.8	5.5	12.6	11.9	33.6	12.7
95652	966	28.1	32.2	\$26,098	62.6	22.2	5.2	14.3	56.4	31.5
95660	34,303	53.9	31.8	\$39,677	26.5	10.2	13.8	18.9	45.9	14.2
95673	15,140	36.8	38.3	\$54,560	19.4	8.0	11.0	17.8	41.3	14.8
95815	25,206	69.0	33.0	\$29,870	38.4	17.9	16.5	28.9	55.3	14.9
95833	40,029	69.6	31.4	\$58,008	18.7	10.5	10.3	14.1	37.6	9.2
95834	26,560	71.7	31.7	\$53,728	19.0	8.7	11.5	11.7	42.4	8.0
95835	38,847	65.6	35.9	\$83,150	7.6	6.3	9.4	8.0	37.1	7.0
95837	340	18.2	46.7	\$111,786	1.2	1.8	5.0	2.6	20.4	6.5
95838	37,286	74.5	28.9	\$40,815	29.5	12.1	15.1	26.8	50.2	11.8
95841	19,890	39.8	34.5	\$40,693	25.0	8.5	12.4	10.2	46.5	14.6
95842	32,184	46.8	32.7	\$44,462	25.4	10.3	14.5	14.3	44.5	12.3
95843	47,666	42.8	32.1	\$66,178	14.2	8.6	11.9	8.7	40.7	9.8
Sacramento	1,479,300	53.6	35.7	\$57,509	17.9	10.2	10.4	13.2	39.7	12.7
California	38,654,206	61.6	36.0	\$63,783	15.8	8.7	12.6	17.9	42.9	10.6

(Source: 2012–2016 American Community Survey 5-year estimates; U.S. Census Bureau)

#### Community Health Vulnerability Index

Figure 4 displays the CHVI for the Northwest Region. As described earlier, darker-shaded census tracts are those with higher CHVI scores indicating communities most likely experience health disparities.

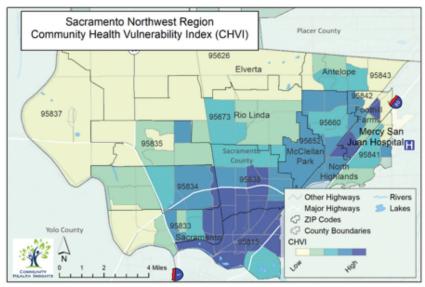


Figure 4: Community Health Vulnerability Index for the Northwest Region

#### Communities of Concern

Five ZIP codes in the Northwest Region met the criteria to be classified as Communities of Concern. These are shown in Figure 5 and described in Table 4 with the census population provided for each.

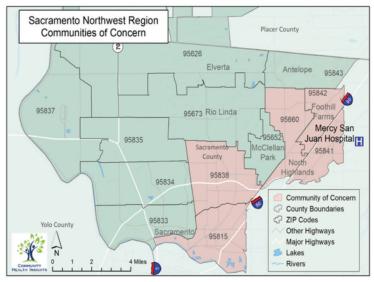


Figure 5: Communities of Concern for the Northwest Region

ZIP Code	Community/Area	Population		
95660	North Highlands	34,303		
95815	North Sacramento	25,206		
95838	Del Paso Heights	37,286		
95841	Arden Arcade, North Highlands	19,890		
95842	95842 Arden Arcade, North Highlands, Foothill Farms			
	Total Population in Communities of Concern			
	324,288			
	Percentage of Northwest Region			

Table 4: Identified Communities of Concern for the Northwest Region

(Source: 2012–2016 American Community Survey 5-year estimates; U.S. Census Bureau)

#### Themes from Primary Data

Table 5: Themes from Primary Data Collection, Northwest Region

Significant Health Need	Primary Data Themes
Access to Mental/Behavioral/ Substance-Abuse Services	<ul> <li>More mental health services specifically for youth</li> <li>Long wait times to receive mental health treatment</li> <li>Services needed to treat effects of Adverse Childhood Experiences</li> </ul>
Access to Quality Primary Care Health Services	<ul> <li>No options for Medi-Cal enrollees</li> <li>Discrimination based on insurance type</li> </ul>
Active Living and Healthy Eating	<ul> <li>Area is food desert, no farmer's markets in area</li> </ul>
Safe and Violence-Free Environment	<ul> <li>Frequent shootings make people stay indoors</li> </ul>
Access and Functional Needs	<ul> <li>Public transportation does not reach all areas of community</li> </ul>

Significant Health Need	Primary Data Themes
and Management	<ul> <li>More education and services preparing youth needed</li> <li>Lack of funding for schools results in poorer education for youth</li> <li>More after-school programs needed for youth</li> </ul>
	<ul><li>County government not representative of community</li><li>Law enforcement needs to partner with community</li></ul>

#### **Northeast Region**

#### Description of the Community Served

The Northeast Region is comprised of 15 ZIP codes and includes those communities depicted in Figure 6. The area is home to approximately 525,000 residents. Table 6 displays population characteristics for each ZIP code. Data provided are compared to the state and county rates, and ZIP codes that negatively varied or performed poorly when compared to the county benchmark are highlighted.



Figure 6: Northeast Region map

ZIP Code	Total Population	% Minority	Median Age	Median Income	% Poverty	% Unemployed	% Uninsured	% No HS Graduation	% Living in High Housing Costs	% with Disability
95608	60,199	28.5	44.2	\$56,891	14.6	12.2	8.5	6.3	38.8	16.9
95610	44,711	31.2	36.8	\$51,271	15.2	10.5	13.2	10.7	40.2	14.6
95621	41,908	30.2	38.4	\$52,462	13.9	9.3	10.0	10	39.9	15.8
95628	41,649	20.9	44.9	\$73,858	11.0	9.7	8.2	6.1	34.2	12.2
95630	74,905	36.0	40.3	\$102,865	4.7	5.6	3.9	7.5	30.7	7.9
95655	4,205	46.2	35.1	\$78,750	18.1	14.1	10.4	9.1	36.5	9.8
95662	32,441	17.4	41.2	\$72,134	10.0	9.5	9.4	6.5	36.2	14.8
95670	54,277	45.6	36.7	\$56,527	15.9	10.6	11.6	10.5	37.2	13.3
95683	6,233	20.0	49.8	\$98,782	3.0	2.9	2.1	4.5	30.8	13.0
95742	10,494	57.8	32.4	\$105,789	8.1	7.8	5.9	4.5	28.4	6.9
95762	40,493	27.1	43.2	\$126,340	4.0	7.3	3.5	3.1	32.6	7.1
95821	35,530	40.8	39.0	\$39,588	26.6	16.3	10.5	12.4	47.8	13.2
95825	33,385	49.7	32.1	\$36,647	33.3	14.7	13.1	12.3	47.6	13.5
95827	20,382	48.1	36.6	\$48,831	15.8	10.0	9.2	11.1	44.8	15.0
95864	23,527	27.0	45.8	\$92,165	7.0	7.4	4.7	3.6	29.2	11.4
Sacramento	1,479,300	53.6	35.7	\$57,509	17.9	10.2	10.4	13.2	39.7	12.7
California	38,654,206	61.6	36.0	\$63,783	15.8	8.7	12.6	17.9	42.9	10.6

Table 6: Population Characteristics for the Northeast Region ZIP Codes

(Source: 2012–2016 American Community Survey 5-year estimates; U.S. Census Bureau)

#### Community Health Vulnerability Index

Figure 7 displays the CHVI for the Northeast Region. As described earlier, darker-shaded census tracts are those with higher CHVI scores indicating communities most likely experience health disparities.

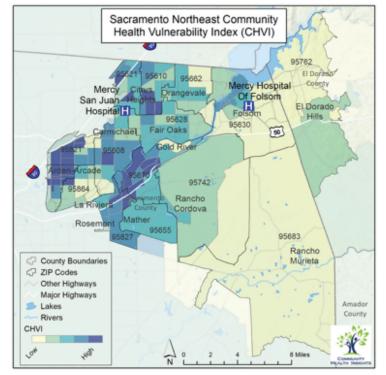


Figure 7: Community Health Vulnerability Index for the Northeast Region

#### Communities of Concern

Six ZIP codes met the criteria to be classified as Communities of Concern in the Northeast Region. These are noted in Table 7, with the census population provided for each, and they are displayed in Figure 8.

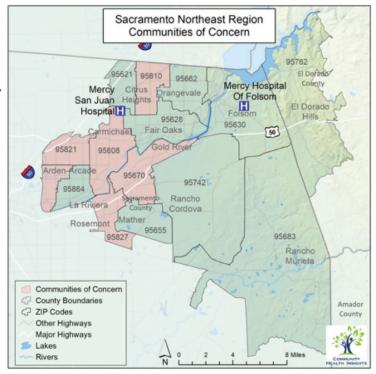


Figure 8: Communities of Concern for the Northeast Region

#### Table 7: Identified Communities of Concern for the Northeast Region

ZIP Code	Community/Area	Population			
95608	Carmichael	60,199			
95610	Citrus Heights	44,711			
95670	Rancho Cordova	52,277			
95821	Arden Arcade, North Highlands	35,530			
95825	Arden Arcade, North Highlands	33,385			
95827	Rancho Cordova, Rosemont	20,382			
	Total Population in Communities of Concern				
	Total Population in Northeast Region				
	Percentage of Northeast Region				

(Source: 2012–2016 American Community Survey 5-year estimates; U.S. Census Bureau)

#### Themes from Primary Data

Table 8: Themes from Primary Data, Northeast Region

Significant Health Need	Primary Data Themes
Access to Mental/Behavioral/ Substance Abuse Services	<ul> <li>Homeless population growing in this region</li> <li>Dramatic rise in prescription drug use contributing to mental health issues</li> <li>Need walk-in mental health treatment centers</li> <li>Sacramento County mental health services severely lacking</li> <li>Opioid addiction crisis</li> </ul>
Access to Quality Primary Care Health Services	<ul> <li>Medi-Cal providers only deal with one health issue per visit</li> <li>Overbooking of appointments—long wait times</li> <li>Inaccessible clinic hours</li> <li>Dirty clinics</li> <li>Clinic staff disrespectful of patients</li> <li>Quality of care depends on type of insurance patient has</li> </ul>
Safe and Violence-Free Environment	<ul> <li>Children feeling unsafe walking to school</li> <li>Sex trafficking on the rise</li> <li>Need larger police presence</li> </ul>
Access to Basic Needs Such as Housing, Jobs, and Food	<ul> <li>Poverty a root cause of most health and mental health issues</li> <li>Income inequality growing</li> </ul>
Injury and Disease Prevention and Management	<ul> <li>More health education and disease prevention services needed</li> </ul>
System Navigation	<ul> <li>Medi-Cal is confusing and difficult to navigate</li> <li>Undocumented residents lack skills to access services</li> </ul>
Cultural Competency	<ul> <li>Many services for immigrants lacking translators</li> <li>Law enforcement lacking cultural competency training</li> <li>Telephone translation services inadequate</li> <li>Cultural norms preventing females from seeing male providers</li> </ul>

#### **Central Region**

#### Description of the Community Served

The Central Region is comprised of eight ZIP codes and includes those communities depicted in Figure 9. The area is home to approximately 160,000 residents. Table 9 displays population characteristics for each ZIP code. Data provided are compared to the state and county rates, and ZIP codes that negatively varied or performed poorly when compared to the county benchmark are highlighted.



Figure 9: Map of the Central Region

Median Income % Living in High Housing Unemployed % Uninsured Median Age Population Minority Graduation % with Disability % Poverty % No HS Costs Total **ZIP** Code % % 95811 33.3 39.0 6,711 48.4 \$38,538 32.7 9.0 13.0 19.1 11.1 95814 10.487 \$31.409 43.7 48.7 35.1 32.2 9.8 11.2 16.0 18.3 7.0 95816 17,178 31.3 35.4 \$54,777 13.5 9.2 4.8 32.6 12.7 30.7 8.5 16.2 17.9 95817 13,918 53.5 34.1 \$38,889 13.0 45.8 95818 20,629 42.0 38.7 \$68,085 18.1 7.4 6.7 8.1 32.6 12.5 95819 18,846 24.9 37.1 \$96,633 5.8 6.4 3.9 2.3 20.9 8.7 95820 33.6 \$42,948 16.2 25.8 35,869 70.5 27.4 11.8 41.9 15.6 95826 34.7 10.3 9.2 39.3 36,992 47.5 \$55,772 19.3 9.9 11.8 Sacramento 1,479,300 53.6 35.7 \$57,509 17.9 10.2 10.4 13.2 39.7 12.7 California 38,654,206 61.6% 36.0 \$63,783 15.8% 8.7% 12.6% 17.9% 42.9% 10.6%

Table 9: Population Characteristics for Central Region ZIP Codes

(Source: 2012–2016 American Community Survey 5-year estimates; U.S. Census Bureau)

#### Community Health Vulnerability Index

Figure 10 displays the CHVI for the Central Region. Darker-shaded census tracts are those with higher CHVI scores, indicating communities most likely experiencing health disparities.

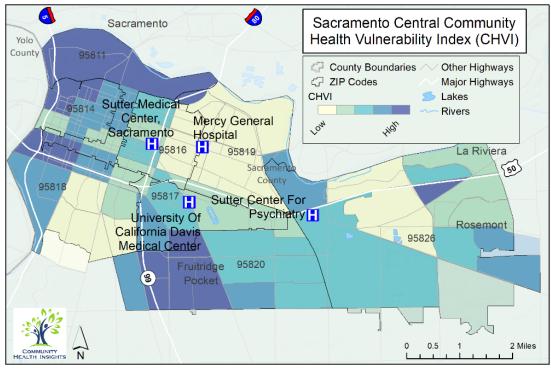


Figure 10: Community Health Vulnerability Index for the Central Region

#### Communities of Concern

Analysis of data revealed four ZIP codes that met the criteria to be classified as Communities of Concern. These are noted in Table 10, with the census population provided for each, and they are displayed in Figure 11.

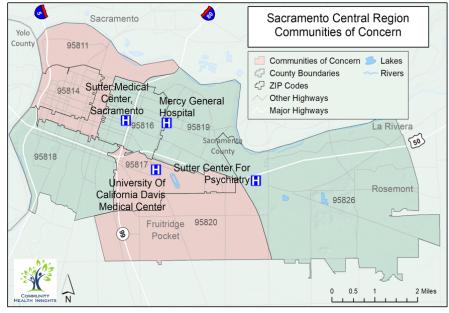


Figure 11: Communities of Concern for the Central Region

#### Table 10: Identified Communities of Concern for the Central Region

ZIP Code	Community/Area	Population
95811	Downtown Sacramento	6,711
95814	Downtown Sacramento	10,487
95817	Oak Park	13,918
95820	Oak Park, Tahoe Park	35,869
Тс	66,985	
	160,630	
Percentage of	41.7%	

(Source: 2012–2016 American Community Survey 5-year estimates; U.S. Census Bureau)

#### Themes from Primary Data

#### Table 11: Themes from Primary Data, Central Region

Significant Health Need	Primary Data Themes
Access to Mental/Behavioral/ Substance Abuse Services	<ul> <li>Homeless population "explosion" in recent years</li> <li>Strong connection between mental health and homelessness</li> <li>Burden of managing care for homeless population shifting to local hospitals (often in the emergency department)</li> </ul>
Access to Basic Needs Such as Housing, Jobs, and Food	<ul> <li>Homeless population drastically increasing</li> </ul>
System Navigation	<ul> <li>Need more patient navigators</li> <li>Need one coordinated entry point to access all related services</li> <li>Whole-person care needed</li> </ul>
Cultural Competency	<ul> <li>Institutional racism a barrier to receiving care</li> </ul>

#### **South Region**

#### Description of the Community Served

The South Region is comprised of 14 ZIP codes and includes those communities depicted in Figure 12. The area is home to approximately 500,000 residents. Table 12 displays population characteristics for each ZIP code. Data provided are compared to the state and county rates, and ZIP codes that negatively varied or performed poorly when compared to the county benchmark are highlighted.

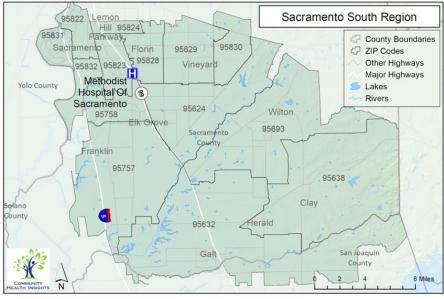


Figure 12: Map of the South Region

Table 12: Population Characteristics	for South Region ZIP Codes
--------------------------------------	----------------------------

ZIP Code	Total Population	% Minority	Median Age	Median Income	% Poverty	% Unemployed	% Uninsured	% No HS Graduation	% Living in High Housing Costs	% with Disability
95624	64,429	55.5	36.1	\$84,854	10.3	8.6	6.1	9.7	33.1	12.3
95632	30,594	51.3	34.6	\$64,668	17.1	9.7	12.4	17.2	38.2	11.7
95638	2,238	31.5	46.5	\$87,361	4.8	4.2	8.3	12.7	35.1	10.1
95693	6,153	28.1	50.0	\$85,417	11.1	5.5	6.3	7.5	33.3	12.7
95757	46,703	74.1	34.2	\$91,539	9.0	7.9	4.7	12.1	38.2	9.7
95758	63,778	67.3	35.3	\$74,164	11.8	9.2	7.2	9.5	35.0	11.0
95822	44,724	74.1	37.2	\$47,405	21.6	11.8	12.7	19.3	40.4	16.2
95823	76,478	85.5	30.7	\$39,294	27.7	14.2	12.2	25.4	50.1	14.4
95824	30,225	85.4	30.7	\$29,747	40.0	16.8	20.4	36.1	54.1	14.3
95828	60,884	81.7	34.7	\$45,710	22.6	14.6	13.7	26.5	46.5	14.3
95829	26,588	66.5	33.5	\$80,118	11.9	8.4	9.3	12.1	38.1	8.8
95830	953	49.6	50.9	\$54,417	22.2	12.4	21.3	10.6	36.1	23.4
95831	41,859	64.3	45.2	\$68,140	8.1	8.2	6.9	6.9	33.9	13.1
95832	11,313	87.8	28.2	\$42,652	27.9	15.0	10.6	27.3	52.3	15.4
Sacramento	1,479,300	53.6	35.7	\$57,509	17.9	10.2	10.4	13.2	39.7	12.7
California	38,654,206	61.6%	36.0	\$63,783	15.8%	8.7%	12.6%	17.9%	42.9%	10.6%

(Source: 2012–2016 American Community Survey 5-year estimates; U.S. Census Bureau)

## Community Health Vulnerability Index

Figure 13 displays the CHVI for the South Region. Darker-shaded census tracts are those with higher CHVI scores, indicating communities most likely experiencing disparities.

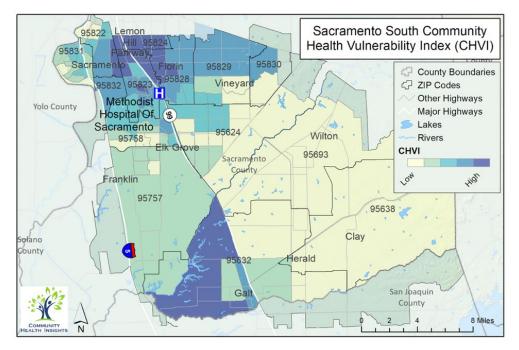


Figure 13: Community Health Vulnerability Index for the South Region

#### Communities of Concern

Analysis of data revealed four ZIP codes that met the criteria to be classified as Communities of Concern. These are noted in Table 13, with the census population provided for each, and they are displayed in Figure 14.

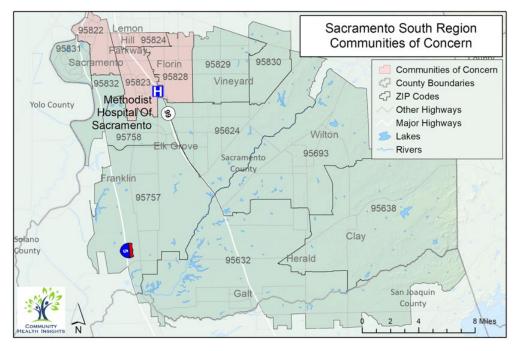


Figure 14: Communities of Concern for the South Region

#### Table 13: Identified Communities of Concern for the South Region

ZIP Code	ZIP Code Community/Area		
95822	South Sacramento	44,724	
95823	South Sacramento	76,478	
95824	South Sacramento	30,225	
95828	South Oak Park, South Sacramento	60,884	
	Total Population in Communities of Concern		
	Total Population in South Region		
	Percentage of South Region		

(Source: 2012–2016 American Community Survey 5-year estimates; U.S. Census Bureau)

## Themes from Primary Data

#### Table 14: Themes from Primary Data, South Region

Significant Health Need	Primary Data Themes
Access to Mental/Behavioral/ Substance-Abuse Services	<ul> <li>Substance abuse and violence significant issues in community</li> <li>Complexity of mental health issues growing</li> </ul>
Access to Quality Primary Care Health Services	<ul> <li>Need more services in Delta, limited options</li> </ul>
Active Living and Healthy Eating	<ul> <li>High housing costs leaving limited money for healthy food</li> <li>Unsafe communities limiting youth outdoor activities</li> <li>Need improved parks</li> </ul>
Safe and Violence-Free Environment	<ul> <li>Substance abuse and violence significant issues in community</li> <li>Poor police-community relationship</li> <li>Dangerous drivers on streets</li> <li>Slow response times by law enforcement</li> <li>Limited safe places for youth</li> <li>Human trafficking a growing issue</li> </ul>
Access and Functional Needs	<ul> <li>Distances to access services a barrier</li> <li>Lack of transportation a barrier to patients seeking care</li> </ul>
Injury and Disease Prevention and Management	<ul> <li>Youth needing better access to college</li> <li>School district not adequately preparing students for college</li> <li>College too expensive</li> <li>Too much focus by educators on test scores</li> <li>Focus on prevention a major health need</li> </ul>
System Navigation	<ul> <li>People unaware what services they qualify for</li> </ul>
Cultural Competency	<ul> <li>The community's lack of trust in health care providers</li> <li>Health care complicated and not fully understood by many</li> <li>Community very diverse, multitude of languages spoken</li> <li>South Sacramento over-policed</li> <li>Inaccurate stereotypes and assumptions about community</li> <li>Can't find health care interpreters for some languages</li> </ul>



# **Resources Potentially Available to Meet the Significant Health Needs**

In all, 665 resources that were potentially available to meet the identified significant health needs were identified in the Sacramento County area. The identification method included starting with the list of resources from the 2016 CHNAs, verifying that the resources still existed, and then adding newly identified resources into the 2019 CHNA report. Examination of the resources revealed the following numbers of resources for each significant health need as shown in Table 15.

Significant Health Need (in Priority Order)	Number of Resources
Access to quality primary health care services	74
Access to mental/behavioral/substance-abuse services	97
Access to basic needs such as housing, jobs, and food	116
System navigation	42
Injury and disease prevention and management	90
Safe and violence-free environment	57
Access to active living and healthy eating	82
Access to meeting functional needs (transportation and physical mobility)	7
Cultural competency	56
Access to specialty and extended care	44
Total Resources	665

Table 15: Resources Potentially Available to Meet Significant Health Needs in Priority Order for Sacramento County

For more specific examination of resources by significant health need and by geographic location, as well as the detailed method for identifying these, see the technical section.

# Impact/Evaluation of Actions Taken by Hospital

Regulations require that each hospital's CHNA report include "an evaluation of the impact of any actions that were taken since the hospital facility finished conducting its immediately preceding CHNA to address the significant health needs identified in the hospital facility's prior CHNA(s)" (p. 78969).<sup>10</sup> For a detailed description of the actions taken by UC Davis Medical Center, and the impact of these actions, see Appendix A.

# Conclusion

This CHNA report details the needs of the Sacramento County community as a part of a partnership between Dignity Health, Sutter Health, and UC Davis Health. It provides an overall health and social examination of Sacramento County and the needs of community members living in areas of the county experiencing health disparities. The CHNA provides a comprehensive profile to guide decision-making for the implementation of community health improvement efforts.



# Sacramento 2019 CHNA Technical Section

# **Results of Data Analysis**

#### **Secondary Data**

The tables and figures that follow show the specific values for the health need indicators used as part of the health need identification process. Each indicator value for Sacramento County was compared to the California state benchmark. Indicators where performance was worse in the county than in the state are highlighted.

## Length of Life

Indicators	Description	Sacramento	California		
Early Life					
Infant Mortality	Infant deaths per 1,000 live births	5.2	4.5		
Child Mortality	Deaths among children under age 18 per 100,000	43.9	38.5		
Life Expectancy	Life expectancy at birth in years	79.0	80.9		
	Overall				
Age-Adjusted Mortality	Age-adjusted deaths per 100,000	744.8	651.6		
Premature Age-Adjusted Mortality	Age-adjusted deaths among residents under age 75 per 100,000	321.6	268.8		
Years of Potential Life Lost	Age-adjusted years of potential life lost before age 75 per 100,000	6,240.3	5,217.3		
	Chronic Disease				
Stroke Mortality	Deaths per 100,000	42.3	37.5		
CLD Mortality	Deaths per 100,000	40.8	34.9		
Diabetes Mortality	Deaths per 100,000	25.8	22.1		
Heart Disease Mortality	Deaths per 100,000	172.8	157.3		
Hypertension Mortality	Deaths per 100,000	15.2	12.6		
	Cancer, Liver, and Kidney Disease				
Cancer Mortality	Deaths per 100,000	170.3	153.4		
Liver Disease Mortality	Deaths per 100,000	12.6	13.2		
Kidney Disease Mortality	Deaths per 100,000	3.9	8.3		
	Intentional and Unintentional Injuries				
Suicide Mortality	Deaths per 100,000	13.7	10.8		
Unintentional Injury Mortality	Deaths per 100,000	37.6	31.2		
Other					
Alzheimer's Mortality	Deaths per 100,000	34.2	35.0		
Influenza and Pneumonia Mortality	Deaths per 100,000	16.1	16.0		

#### Table 16: Length of life indicators compared to state benchmarks

	Length of Life	
Sacramento County Rate	Sacramento County (Po	or Performing)
California Rate (value liste	d above mark)	
	Early Life	
		4.5
Infant Mortality	5.2	38.5
Child Mortality	43.9	80.9
Life Expectancy	79.0	
	Overall	651.6
Age-Adjusted Mortality	744.8	268.8
Premature Age-Adjusted Mortality	321.6	5,217.3
Years of Potential Life Lost	6,240.3	
	Chronic Disease	37.5
Stroke Mortality	42.3	34.9
CLD Mortality	40.8	22.1
Diabetes Mortality	25.8	157.3
Heart Disease Mortality	172.8	12.6
Hypertension Mortality	15.2	12.0
	Cancer, Liver, and Kidney Disease	153.4
Cancer Mortality	170.3	13.2
Liver Disease Mortality	12.6	
Kidney Disease Mortality	3.9	8.3
	Intentional and Unintentional Injuri	les
Suicida Mortality		10.8
Suicide Mortality	13.7	31.2
Unintentional Injury Mortality	37.6	
	Other	35.0
Alzheimer's Mortality	34.2	16.0
Influenza and Pneumonia Mortality	16.1	

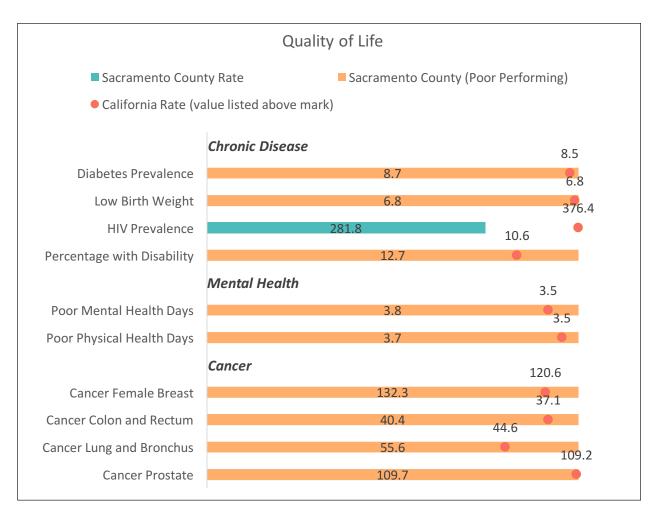
Figure 15: Length of life indicators

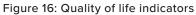
# Quality of Life

Indicators	Description	Sacramento	California		
	Chronic Disease				
Diabetes Prevalence	Diabetes Prevalence Percentage age 20 and older with diagnosed diabetes				
Low Birth Weight	Percentage of live births with birthweight below 2500 grams	6.8	6.8		
HIV Prevalence	HIV Prevalence Persons age 13 or older with a(n) Human Immunodeficiency Virus (HIV) infection per 100,000		376.4		
Percentage with Disability	Percentage of total civilian noninstitutionalized population with a disability	12.7	10.6		
	Mental Health				
Poor Mental Health Days Age-adjusted average number of mentally unhealthy days reported in past 30 days		3.8	3.5		
Poor Physical Health Days	Age-adjusted average number of physically unhealthy days reported in past 30 days	3.7	3.5		

#### Table 17: Quality of life Indicators compared to state benchmarks

Cancer			
Cancer Female Breast	Age-adjusted incidence per 100,000	132.3	120.6
Cancer Colon and Rectum	Age-adjusted incidence per 100,000	40.4	37.1
Cancer Lung and Bronchus	Age-adjusted incidence per 100,000	55.6	44.6
Cancer Prostate	Age-adjusted incidence per 100,000	109.7	109.2

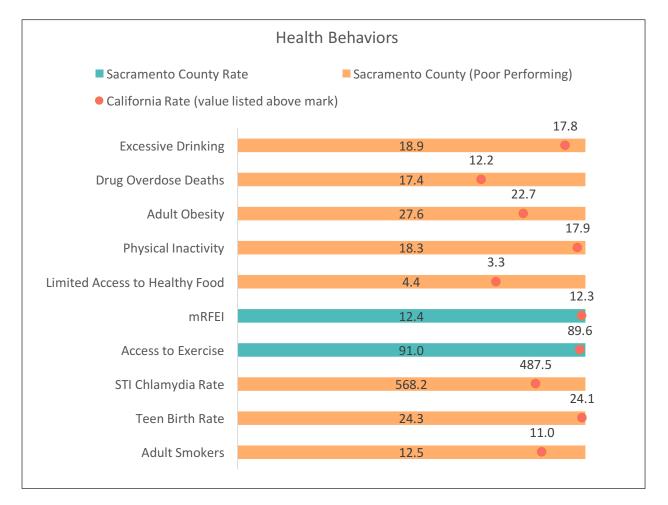




## Health Behaviors

Indicators	Description	Sacramento	California
Excessive Drinking	Percentage of adults reporting binge or heavy drinking	18.9	17.8
Drug Overdose Deaths	Age-adjusted deaths per 100,000	17.4	12.2
Adult Obesity	Percentage of adults reporting BMI of 30 or more	27.6	22.7
Physical Inactivity	Percentage 20 and older with no reported leisure-time     18.3		17.9
Limited Access to Healthy Food	Percentage of population that is low income and does not 4.4		3.3
mRFEI	Percentage of food outlets that are classified as 'healthy' 12.4		12.3
Access to Exercise	s to Exercise Percentage of population with adequate access to locations for physical activity		89.6
STI Chlamydia Rate	Number of newly diagnosed chlamydia cases per 100,000 568.2		487.5
Teen Birth Rate	Number of births per 1,000 females aged 15-19	24.3	24.1
Adult Smokers	Percentage of adults who are current smokers         12.		11.0

#### Table 18: Health behaviors indicators compared to state benchmarks



#### Figure 17: Health behavior indicators

# <u>Clinical Care</u>

Table 19: Clinical care indicators compared to state benchmarks

Indicators	Description	Sacramento	California
Health Care Costs	Amount of price-adjusted Medicare reimbursements per \$8,073		\$9,100
HPSA Dental Health	Reports if a portion of the county falls within a Health Professional Shortage Area		
HPSA Mental Health	Reports if a portion of the county falls within a Health Professional Shortage Area	No	
HPSA Primary Care	Reports if a portion of the county falls within a Health Professional Shortage Area	Yes	
HPSA Medically Underserved Area	Reports if a portion of the county falls within a Medically Underserved Area		
Mammography Screening	Percentage of female Medicare enrollees aged 67-69 that receive mammography screening	60.3	59.7
Dentists	Number per 100,000	75.8	82.3
Mental Health Providers	Number per 100,000	339.5	308.2
Psychiatry Providers	Number per 100,000	14.3	13.4
Specialty Care Providers	Number per 100,000	214.1	183.2
Primary Care Physicians	Number per 100,000	81.5	78.0
Preventable Hosp. Stays	Number of hospital-stays for ambulatory-care-sensitive conditions per 1,000 Medicare enrollees	37.1	36.2

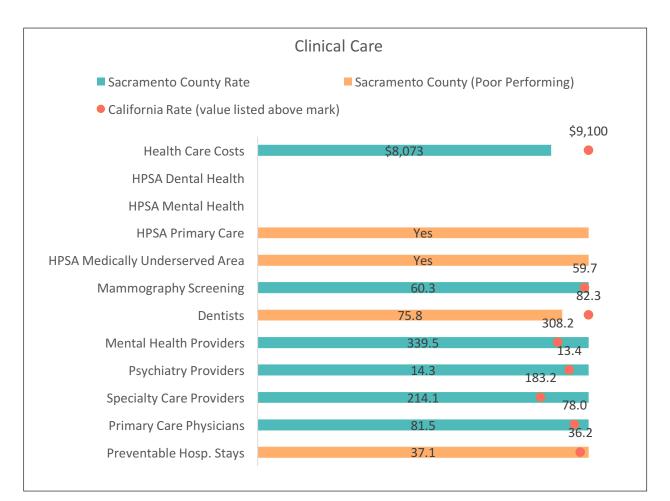


Figure 18: Clinical care indicators

## Social and Economic or Demographic Factors

Indicators	Description	Sacramento	California
Homicides	Deaths per 100,000	6.1	5.0
Violent Crimes	Reported violent crime offenses per 100,000	523.2	407.0
Motor Vehicle Crash Deaths	Deaths per 100,000	9.2	8.5
Some College	Percentage aged 25-44 with some postsecondary education	66.2	63.5
High School Graduation	Percentage of ninth-grade cohort graduating high school in 4 years	80.6	82.3
Unemployed	Percentage of population 16 and older unemployed but seeking work	5.4	5.4
Children with Single Parents	Percentage of children living in a household headed by a single parent	35.6	31.8
Social Associations	Membership associations per 100,000	7.2	5.8
Free and Reduced Lunch	Percentage of children in public schools eligible for free or reduced-price lunch	58.9	58.9
Children in Poverty	Percentage of children under age 18 in poverty	23.1	19.9
Median Household Income	Median household income	\$59,728	\$67,715
Uninsured	Percentage of population under age 65 without health insurance	7.2	9.7

Table 20: Social and economic or demographic factor Indicators compared to state benchmarks

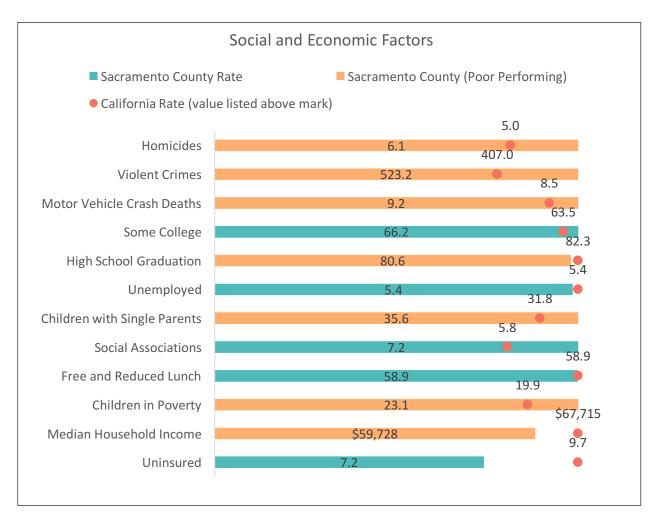


Figure 19: Social and economic factors

#### Physical Environment

Indicators	Description	Sacramento	California
Drinking Water Violations	Reports whether or not there was a health-related drinking water violation in a community within the county	Yes	
Air Particulate Matter	Average daily density of fine particulate matter in micrograms per cubic meter (PM2.5)	9.9	8.0
Pollution Burden	Percentage of population living in a Census tract with a CalEnviroscreen Pollution Burden score greater than the 50th percentile for the state	22.9	50.4
Public Transit Proximity	Percentage of population living in a Census block within a quarter of a mile to a fixed transit stop	73.1	50.0
Housing Units no Vehicle	Percentage of households with no vehicle available	7.5	7.6
Severe Housing Problems	Percentage of households with at least 1 of 4 housing problems: overcrowding, high housing costs, or lack of kitchen or plumbing facilities	23.7	27.9

Table 21: Physical environment indicators compared to state benchmarks

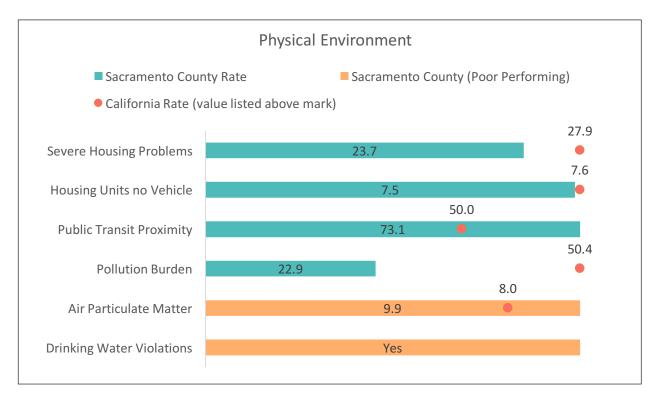


Figure 20: Physical environment



# **CHNA Methods and Processes**

Two related models were foundational in this CHNA. The first is a conceptual model that expresses the theoretical understanding of community health used in the analysis. This understanding is important because it provides the framework underpinning the collection of primary and secondary data. It is the tool used to ensure that the results are based on a rigorous understanding of those factors that influence the health of a community. The second model is a process model that describes the various stages of the analysis. It is the tool that ensures that the resulting analysis is based on a tight integration of community voice and secondary data and that the analysis meets federal regulations for conducting hospital CHNAs.

# **Conceptual Model**

The conceptual model used in this needs assessment is shown in Figure 21. This model organizes populations' individual health-related characteristics in terms of how they relate to up- or downstream health and health-disparities factors. In this model, health outcomes (quality and length of life) are understood to result from the influence of health factors describing interrelated individual, environmental, and community characteristics, which in turn are influenced by underlying policies and programs.

This model was used to guide the selection of secondary indicators in this analysis as well as to express in general how these upstream health factors lead to the downstream health outcomes. It also suggests that poor health outcomes within Sacramento can be improved through policies and programs that address the health factors contributing to them. This conceptual model is a slightly modified version of the County Health Rankings Model used by the Robert Wood Johnson Foundation. It was primarily altered by adding a "Demographics" category to the "Social and Economic Factors" in recognition of the influence of demographic characteristics on health outcomes.

To generate the list of secondary indicators used in the assessment, all partners reviewed each conceptual model category and discussed potential indicators that could be used or that were important to each partner in order to fully represent the category. The results of this discussion were then used to guide secondary data collection.

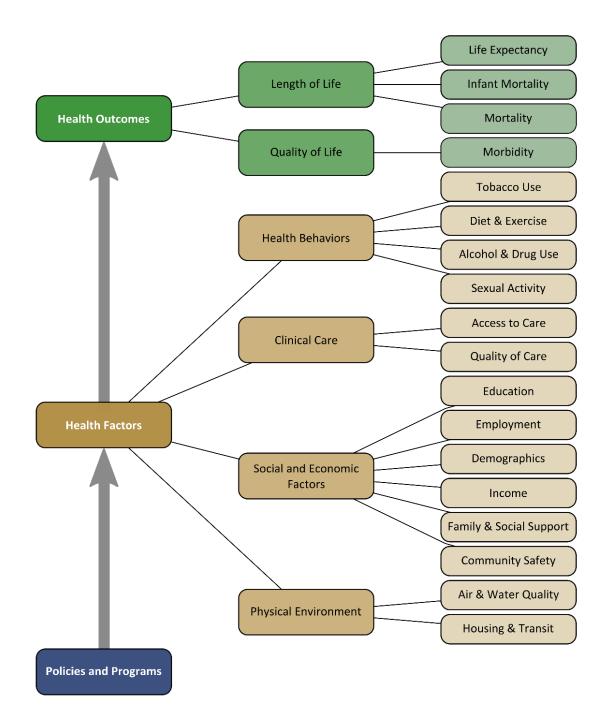


Figure 21: Community Health Assessment Conceptual Model as modified from the County Health Rankings Model, Robert Wood Johnson Foundation, and University of Wisconsin, 2015

# **Process Model**

Figure 22 outlines the data collection and stages of this analysis. The project began by confirming the geographic area agreed to by the partners (Sutter Medical Center, Sacramento; UC Davis Medical Center; Methodist Hospital of Sacramento; Mercy Hospital of Folsom; Mercy San Juan Medical Center; and Mercy General Hospital) for conducting the CHNA. All partners agreed to the service area definition used in this needs assessment, as well as the division of the service area into the four separate sub-regions.

Primary data collection included both key informant and focus-group interviews with community health experts and residents. Secondary data, including the health-factor and health-outcome indicators identified using the conceptual model and the Community Health Vulnerability Index (CHVI) values for each census tract within the county, were used to identify areas or population subgroups within the county experiencing health disparities.

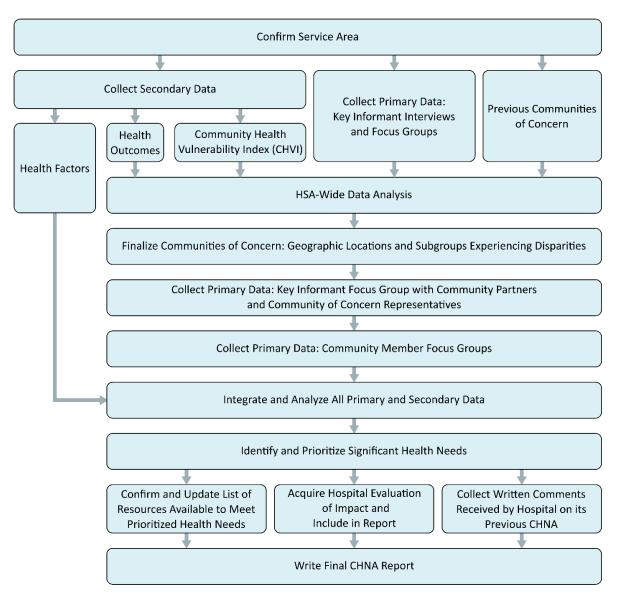


Figure 22: CHNA/CHA process model

Overall primary and secondary data were integrated to identify significant health needs for Sacramento. Significant health needs were then prioritized based on analysis of the primary data. Finally, information was collected regarding the resources available within the community to meet the identified health needs. An evaluation of the impact of the hospital's prior efforts was obtained from hospital representatives and written comments on the previous CHNA were gathered and included in the report.

Greater detail on the collection and processing of the secondary and primary data is given in the next two sections. This is followed by a more detailed description of the methodology utilized during the main analytical stages of the process.

# **Primary Data Collection and Processing**

#### **Primary Data Collection**

Input from the community in Sacramento was collected through two main mechanisms. First, key Informant interviews were conducted with community health experts and area service providers (i.e., members of social-service nonprofit organizations and related health care organizations). These interviews occurred in both one-on-one and in group interview settings. Second, focus groups were conducted with community residents living in identified Communities of Concern or representing communities experiencing health disparities.

All participants were given an informed consent form prior to their participation, which provided information about the project, asked for permission to record the interview, and listed the potential benefits and risks of involvement in the interview. All interview data were collected through note-taking and, in some instances, recording.

#### Key Informant Results

Primary data collection with key informants included two phases. Phase one began by interviewing areawide service providers with knowledge of the Sacramento region, including input from the designated public health department. Data from these area-wide informants, coupled with socio-demographic data, were used to identify additional key informants for the assessment that were included in phase two.

As a part of the interview process, all key informants were asked to identify vulnerable populations. The interviewer asked each participant to verbally explain what vulnerable populations existed in the county. As needed, for a visual aid, key informants were provided a map of the county to directly point to the geographic locations of these vulnerable communities.

Table 22 contains a listing of community health experts, or key informants, who contributed input to the CHNA. The table describes the name of the represented organization, the number of participants, area of expertise and organization, populations served by the organization, and the date of the interview. The instrument used, Key Informant Interview Guide, is displayed as well.

Organization	# Participants	Area of Expertise	Populations Served	Date
Sacramento Steps Forward	5	Community based organization: Housing insecurities and homelessness	Low income; medically underserved; racial or ethnic minorities	6/7/18
Legal Services of Northern California	1	Community based organization: Legal, advocacy, health care access	Low income and minority	6/13/18
WellSpace Health	1	FQHC: Health care services	Low income; medically underserved, racial or ethnic minorities	6/18/18
Mercy San Juan Hospital	9	Acute care hospital: Health care services	All residents of Sacramento County	6/19/18
Mercy General Hospital	6	Acute care hospital: Health care services	All residents of Sacramento County	6/20/18

#### Table 22: Key informant sample for Sacramento County

Organization	# Participants	Area of Expertise	Populations Served	Date
Sacramento Covered	3	Health care outreach and enrollment	All residents of Sacramento County	6/20/18
Mercy Hospital of Folsom	5	Acute care hospital: Health care services	All residents of Sacramento County	6/21/18
Turning Point Community Programs	1	Mental health	All residents of Sacramento County	6/22/18
Sacramento Public Health	1	Public health	All residents of Sacramento County	6/26/18
Sutter Medical Center Sacramento	2	Acute care hospital: Health care services	All residents of Sacramento County	6/26/18
Mutual Assistance Network	1	Community based organization: Social and economic infrastructure	Low income; medically underserved, racial or ethnic minorities	6/27/18
Methodist Hospital of Sacramento	8	Acute care hospital: Health care services	All residents of Sacramento County	6/27/18
South County Services	1	1 Community based organization: Assistance with food, rent, utilities, gas etc. Low income residents in the River Delta and Galt region of Sacramento County		9/11/18
Sacramento Native American Health Center	1	Health care services	Low income; medically underserved, racial or ethnic minorities	10/18/18
Mercy Medical Center	38	Community service providers	All residents of Sacramento County	5/23/18
WellSpace Health	6	Violence intervention service providers	Youth 14–26 violently injured in the Sacramento region	7/6/18
Sacramento School Partners	7	Staff members of area schools and school districts	Students attending Sacramento area schools	7/12/18
Sacramento Economic Development	6	Representing agencies that promote business and community growth	Businesses in the Sacramento area	7/16/18
Resilient Sacramento	8	Community outreach organizations	Youth that have experienced Adverse Childhood Experiences	7/19/18
Anti-Recidivism Coalition	4	Coalition members	Incarcerated and recently incarcerated individuals	7/19/18
Valley Hi	7	Community service provider in Valley Hi area	Residents in the Valley Hi area (S. Sacramento)	7/21/18

## Key Informant Interview Guide

- 1. BACKGROUND
  - b. Tell me about your current role and the organization you work for?

- c. How would you define the community (ies) you serve or live in?
  - i. Consider:
    - 1. Specific geographic areas?
    - 2. Specific populations served?
- 2. HEALTH ISSUES
  - c. What are the biggest health needs in the community?
    - *ii.* INSERT MAP exercise: Please use this map to help our team understand where communities that experience health burdens live?
    - iii. Consider:
      - d. What specific geographic locations struggle with health issues the most?
      - e. What specific groups of community members experience health issues the most?
  - b. What historical/societal influences have occurred since the last assessment (2015-16) that should be taken into consideration around health needs?

#### 3. CHALLENGES/BARRIERS

- d. What are the challenges (barriers) to being healthy for the community?
  - iv. Consider:
    - 5. Health behaviors
    - 6. Social factors
    - 7. Economic factors
    - 8. Clinical care factors
    - 9. Physical (Built) environment

#### 4. SOLUTIONS

- e. What solutions will address the health needs and or challenges mentioned?
  - v. Consider:
    - 6. Health behaviors
    - 7. Social factors
    - 8. Economic factors
    - 9. Clinical care factors
    - 10. Physical (Built) environment
- 5. PRIORITY: Based on what we have discussed so far, what are currently the most important or urgent top 3 health issues or challenges to address in order to improve the health of the community?

#### 6. RESOURCES

- g. What resources exist in the community to help people live healthy lives?
  - vi. Consider:
    - 8. Barriers to accessing these resources.
    - 9. New resources that have been created since 2016
    - 10. New partnerships/projects/funding
- 7. What other people, groups or organizations would you recommend we speak to about the health of the community?
  - vii. Name 3 types of service providers that you would suggest we include in this work?
  - viii. Name 3 types of community members that you would recommend we speak to in this work?
- 8. OPEN: Is there anything else you would like to share with our team about the health of the community?

# Focus Group Results

Focus-group interviews were conducted with community members living in geographic areas of the service area identified as locations or populations experiencing a disparate amount of poor socio-economic conditions and poor health outcomes, or Communities of Concern. Recruitment consisted of referrals from designated service providers representing vulnerable populations, as well as direct outreach to special population groups. The instrument used, Focus Group Interview Guide, is displayed below.

Table 23 contains a listing of community resident groups that contributed input to the CHNA. The table describes the location of the focus group, the date it occurred, the total number of participants, and demographic information for focus group members.

Location	Date	# Participants	Demographic Information
South Sac-Mack Road	8/17/18	15	Community members – Adults
South Sac-Mack Road	8/17/18	13	Community members – Youth
La Familia Counseling Center	9/6/18	6	Spanish speaking community members from South Sacramento and North Highlands
Loa Family Community Development Center	9/14/18	19	Seniors within the Mien community
South County Services	9/19/18	15	Low income Isleton community members
Lao Family Community Development Center	9/20/18	18	Recent refugees to the United States from Afghanistan, Iraq, El Salvador, Russia, Ukraine, Croatia
Sacramento ACT	9/24/28	7	Community members
Sacramento Self Health Housing	9/26/18	8	Formerly homeless community members
Roberts Family Development Center	9/26/18	8	Community members from Del Paso Heights
Mutual Assistance Network	9/26/18	8	Community members from Arden Arcade
Marconi Learning Academy	9/27/18	8	Community members
Natomas Community Center	10/4/18	7	Community members – seniors
Sacramento Native American Health Center	10/22/18	5	Community members – low income, at-risk
Sacramento Food Bank and Family Services	11/2/18	8	Community members – Hispanic, low income
Sacramento LGBT Community Center	11/8/18	9	Community members – LGBTQ

#### Table 23: Focus Group Interview list for Sacramento County

#### Focus Group Interview Guide

1. Let's start by introducing ourselves.

<sup>&</sup>lt;sup>11</sup> Datasheer, L.L.C. (2018, July 16). ZIP Code Database Free. Retrieved from Zip-Codes.com: http://www.Zip-Codes.com

<sup>&</sup>lt;sup>12</sup> U.S. Census Bureau. (2017). *TIGER/Line Shapefile, 2017, 2010 nation, U.S., 2010 Census 5-Digit ZIP Code Tabulation Area (ZCTA5) National.* Retrieved July 16, 2018, from http://www.census.gov/geo/maps-data/data/tiger-line.html

- 2. We would like to hear about the community where you live. Tell us in a few words what you think of as "your community." What it is like to live in your community?
- 3. What do you think that a "healthy environment" is?
- 4. When thinking about your community based on the healthy environment you just described, what are the biggest health needs in your community?
- 5. What issues are coming up lately in the community that may influence health needs?
- 6. What are the challenges or barriers to being healthy in your community?
- 7. What are some solutions that can help solve the barriers and challenges you talked about?
- 8. Based on what we have discussed so far, what are currently the most important or urgent top 3 health issues or challenges to address to improve the health of the community?
- 9. Are these needs that have recently come up or have they been around for a long time?
- 10. What are resources that exist in the community that help your community live healthy lives and address the health issues and inequity we have discussed?
- 11. Are there certain groups or individuals that you think would be helpful to speak with as we go forward with our Community Health Needs Assessment?
- 12. Is there anything else you would like to share with our team about the health of the community?

#### **Primary Data Processing**

Data were analyzed using NVivo 11 qualitative software. Key informants were also asked to write data directly onto a map of Sacramento sub-regions for identification of vulnerable populations in the area. Content analysis included thematic coding to potential health need categories, the identification of special populations experiencing health issues, and the identification of resources. In some instances, data were coded in accordance with the interview question guide. Results were aggregated to inform the determination of prioritized significant health needs.

# **Secondary Data Collection and Processing**

The secondary data used in the analysis can be thought of as falling into four categories. The first three are associated with the various stages outlined in the process model. These include 1) health-outcome indicators, 2) Community Health Vulnerability Index (CHVI) data used to identify areas and population subgroups experiencing disparities, and 3) health-factor and health-outcome indicators used to identify significant health needs. The fourth category of indicators is used to help describe the socio-economic and demographic characteristics in Sacramento.

Mortality data at the ZIP code level from the California Department of Public Health (CDPH) was used to represent health outcomes. U.S. Census Bureau data collected at the tract level was used to create the CHVI. Countywide indicators representing the concepts identified in the conceptual model and collected from multiple data sources were used in the identification of significant health needs. In the fourth category, U.S. Census Bureau data were collected at the state, county, and ZIP code Tabulation Areas (ZCTA) levels and used to describe general socio-economic and demographic characteristics in the area. This section details the sources and processing steps applied to the CDPH health-outcome data; the U.S. Census Bureau data used to create the CHVI; the countywide indicators used to identify significant health needs; and the sources for the socio-economic and demographic variables obtained from the U.S. Census Bureau.

<sup>&</sup>lt;sup>13</sup> Anselin, L. (2003). Rate Maps and Smoothing. Retrieved February 16, 2013, from http://www.dpi.inpe.br/gi

## **CDPH Health-Outcome Data**

Mortality and birth-related data for each ZIP code within the county were collected from the California Department of Public Health (CDPH). The specific indicators used are listed in Table 24. To increase the stability of calculated rates, each of these indicators were collected for the years from 2012 to 2016. The specific processing steps used to derive these rates are described below.

Indicator	ICD10 Codes
Heart Disease Mortality	100-109, 111, 113, 120-151
Malignant Neoplasms (Cancer) Mortality	C00-C97
Cerebrovascular Disease (Stroke) Mortality	160-169
Chronic Lower Respiratory Disease (CLD) Mortality	J40-J47
Alzheimer's Disease Mortality	G30
Unintentional Injuries (Accidents) Mortality	V01-X59, Y85-Y86
Diabetes Mellitus Mortality	E10-E14
Influenza and Pneumonia Mortality	J09-J18
Chronic Liver Disease and Cirrhosis Mortality	K70, K73, K74
Essential Hypertension and Hypertensive Renal Disease Mortality	110, 113, 115
Intentional Self-Harm (Suicide) Mortality	Y03, X60-X84, Y87.0
Nephritis, Nephrotic Syndrome, and Nephrosis (Kidney disease)	N00-N07, N17-N19, N25-N27
Mortality	
Total Births	
Deaths of Those Under 1 Year	

#### Table 24: Mortality and birth-related indicators used in the CHNA/CHA

## **ZIP Code Definitions**

All CDPH indicators used at this stage of the analysis are reported by patient mailing ZIP codes. ZIP codes are defined by the U.S. Postal Service as a single location (such as a P.O. Box), or a set of roads along which addresses are located. The roads that comprise such a ZIP code may not form contiguous areas and do not match the areas used by the U.S. Census Bureau, which is the main source of population and demographic information in the United States. Instead of measuring the population along a collection of roads, the census reports population figures for distinct, largely contiguous areas. To support the analysis of ZIP code data, the U.S. Census Bureau created ZIP code Tabulation Areas (ZCTAs). ZCTAs are created by identifying the dominant ZIP code for addresses in a given census block (the smallest unit of census data available), and then grouping blocks with the same dominant ZIP code into a corresponding ZCTA. The creation of ZCTAs allows us to identify population figures that, in combination with the health-outcome data reported at the ZIP code level, make it possible to calculate rates for each ZCTA. However, the difference in the definition between mailing ZIP codes and ZCTAs has two important implications for analyses of ZIP code level data.

First, ZCTAs are approximate representations of ZIP codes rather than exact matches. While this is not ideal, it is nevertheless the nature of the data being analyzed. Second, not all ZIP codes have corresponding ZCTAs. Some P.O. box ZIP codes or other unique ZIP codes (such as a ZIP code assigned to a single

<sup>&</sup>lt;sup>14</sup> Barsi, E. L., & Roth, R. (2005). *The Community Needs Index. Health Progress, 86*(4), 32-38. Retrieved from https://www.chausa.org/ docs/default-source/health-progress/the-community-need-index-pdf.pdf?sfvrsn=2

<sup>&</sup>lt;sup>15</sup> Census tracts are data reporting regions created by the U.S. Census Bureau that roughly correspond to neighborhoods in urban areas but may be geographically much larger in rural locations.

facility) may not have enough addressees residing in a given census block to ever result in the creation of a corresponding ZCTA. But residents whose mailing addresses are associated with these ZIP codes will still show up in reported health-outcome data. This means that rates cannot be calculated for these ZIP codes individually because there are no matching ZCTA population figures.

To incorporate these patients into the analysis, the point location (latitude and longitude) of all ZIP codes in California<sup>11</sup> were compared to ZCTA boundaries.<sup>12</sup> These unique ZIP codes were then assigned to either the ZCTA in which they fell or, in the case of rural areas that are not completely covered by ZCTAs, the ZCTA closest to them. The CDPH information associated with these P.O. boxes or unique ZIP codes were then added to the ZCTAs to which they were assigned.

For example, 95609 is a P.O. box located in Carmichael, Calif. ZIP code 95609 is not represented by a ZCTA, but it could have reported patient data. Through the process identified above, it was found that 95609 is located within the 95608 ZCTA. Data for both ZIP codes 95609 and 95608 were therefore assigned to ZCTA 95608 and used to calculate rates. All ZIP code level health-outcome variables given in this report are therefore reporting approximate rates for ZCTAs, but for the sake of familiarity of terms they are elsewhere presented as ZIP code rates.

#### **Rate Smoothing**

All CDPH indicators were collected for all ZIP codes in California. To protect privacy, CDPH masked the data for a given indicator if there were 10 or fewer cases reported in the ZIP code. ZIP codes with masked values were treated as having NA values reported, while ZIP codes not included in a given year were assumed to have 0 cases for the associated indicator. As described above, patient records in ZIP codes not represented by ZCTAs were added to those ZCTAs that they fell inside or were closest to.

When consolidating ZIP codes into ZCTAs, if a PO Box ZIP code with an NA value was combined with a non–P.O. box ZIP code with a reported value, then the NA value for the P.O. box ZIP code was converted to a 0. Thus, ZCTA values were recorded as NA only if all ZIP codes contributing values to them had their values masked.

The next step in the analysis process was to calculate rates for each of these indicators. However, rather than calculating raw rates, Empirical Bayes smoothed rates (EBRs) were created for all indicators possible.<sup>13</sup> Smoothed rates are considered preferable to raw rates for two main reasons. First, the small populations of many ZCTAs, particularly those in rural areas, meant that the rates calculated for these areas would be unstable. This problem is sometimes referred to as the small-number problem. Empirical Bayes smoothing seeks to address this issue by adjusting the calculated rate for areas with small populations so that they more closely resemble the mean rate for the entire study area. The amount of this adjustment is greater in areas with smaller populations, and less in areas with larger populations.

Because the EBR were created for all ZCTAs in the state, ZCTAs with small populations that may have unstable high rates had their rates "shrunk" to more closely match the overall indicator rate for ZCTAs in the entire state. This adjustment can be substantial for ZCTAs with very small populations. The difference between raw rates and EBRs in ZCTAs with very large populations, on the other hand, is negligible. In this way, the stable rates in large-population ZIP codes are preserved, and the unstable rates in smaller-population ZIP codes are shrunk to more closely match the state norm. While this may not entirely resolve the small-number problem in all cases, it does make the comparison of the resulting rates more appropriate. Because the rate for each ZCTA is adjusted to some degree by the EBR process, this also has a secondary benefit of better preserving the privacy of patients within the ZCTAs.

EBRs were calculated for each mortality indicator using the total population figure reported for ZCTAs in the 2014 American Community Survey 5-year Estimates table DP05. Data for 2014 were used because

this represented the central year of the 2012–2016 range of years for which CDPH data were collected. To calculate infant mortality rate, the total number of deaths for the population under one-year-old was divided by the total number of births.

ZCTAs with NA values recorded were treated as having a value of 0 when calculating the overall expected rates for a state during the smoothing process but were kept as NA for the individual ZCTA. This meant that smoothed rates could be calculated for indicators, but if a given ZCTA had a value of NA for a given indicator, it retained that NA value after smoothing.

Empirical Bayes smoothing was attempted for every overall indicator but could not be calculated for some. In these cases, raw rates were used instead. These smoothed or raw mortality rates were then multiplied by 100,000 so that the final rates represented deaths per 100,000 people. In the case of infant mortality, the rates were multiplied by 1,000, so the final rate represents infant deaths per 1,000 live births.

## Community Health Vulnerability Index (CHVI)

The CHVI is a health-care-disparity index largely based on the Community Needs Index (CNI) developed by Barsi and Roth.<sup>14</sup> The CHVI uses the same basic set of demographic indicators to address health care disparities as outlined in the CNI, but these indicators are aggregated in a different manner to create the CHVI. For this report, the nine indicators were obtained from the 2016 American Community Survey 5-year Estimate dataset at the census tract<sup>15</sup> level and are contained in Table 25.

Indicator	Description	Source Data Table	Variables Included
Minority	The percentage of the population that is Hispanic or reports at least one race that is not white	B0302	HD01_VD01, HD01_VD03
Limited English	The percentage of the population 5 years or older that speaks English less than "well"	B16004	HD01_DD01, HD01_VD07, HD01_ VD08, HD01_VD12, HD01_VD13, HD01_VD17, HD01_VD18, HD01_ VD22, HD01_VD23, HD01_VD29, HD01_VD30, HD01_VD34, HD01_ VD35, HD01_VD39, HD01_VD40, HD01_VD44, HD01_VD45, HD01_ VD51, HD01_VD52, HD01_VD56, HD01_VD57, HD01_VD61, HD01_ VD62, HD01_VD66, HD01_VD67
Not a High School Graduate	Percentage of population over 25 that are not high school graduates	S1501	HC02_EST_VC17
Unemployed	Unemployment rate among the population 16 or older	S2301	HC04_EST_VC01
Families with Children in Poverty	Percentage of families with children that are in poverty	S1702	HC02_EST_VC02
Elderly Households in Poverty	Percentage of households with householders 65 years or older that are in poverty	B17017	HD01_VD01, HD01_VD08, HD01_ VD14, HD01_VD19, HD01_VD25, HD01_VD30
Single-Female- Headed Households in Poverty	Percentage of single-female- headed households with children that are in poverty	S1702	HC02_EST_VC02

#### Table 25: Indicators used to create the Community Health Vulnerability Index

Indicator	Description	Source Data Table	Variables Included
Renters	Percentage of the population in renter-occupied housing units	B25008	HD01_VD01, HD01_VD03
Uninsured	Percentage of population that is uninsured	S2701	HC05_EST_VC01

Each indicator was scaled using a min-max stretch so that the tract with the maximum value for a given indicator within the study area received a value of 1, the tract with the minimum value for that same indicator within the study area received a 0, and all other tracts received some value between 0 and 1 proportional to their reported values. All scaled indicators were then summed to form the final CHVI. Areas with higher CHVI values therefore represent locations with relatively higher concentrations of the target index populations and are likely experiencing greater health care disparities.

## Significant Health Need Identification Dataset

The third set of secondary data used in the analysis were the health-factor and health-outcome indicators used to identify the significant health needs. The selection of these indicators was guided by the previously identified conceptual model. Table 26 lists these indicators, their sources, the years they were measured, and the health-related characteristics from the conceptual model they are primarily used to represent.

Conc	Conceptual Model Alignment		Indicator	Data Source	Time Period
		Infant mortality	Infant Mortality Rate	CHR*	2010-2016
		Life expectancy	Life Expectancy at Birth	CDPH <sup>+</sup>	2012–2016
			Age-adjusted mortality	CDPH	2012–2016
			Alzheimer's Disease mortality	CDPH	2012–2016
			Child mortality	CHR	2013–2016
			Premature Age-Adjusted mortality	CHR	2014-2016
			Premature death (Years of Potential Life Lost)	CHR	2014-2016
S			Cerebrovascular Disease (Stroke)	CDPH	2012–2016
ome	of life		Chronic Lower Respiratory Disease	CDPH	2012–2016
outc	l of		Diabetes Mellitus	CDPH	2012–2016
Ith o	ength	Mortality	Diseases of the Heart	CDPH	2012–2016
Health outcomes	Ler		Essential Hypertension & Hypertensive Renal Disease	СДРН	2012–2016
			Influenza and Pneumonia	CDPH	2012–2016
			Intentional Self Harm (Suicide)	CDPH	2012–2016
			Liver Disease	CDPH	2012–2016
			Malignant Neoplasms (Cancer)	CDPH	2012–2016
			Nephritis, Nephrotic Syndrome and Nephrosis (Kidney Disease)	CDPH	2012–2016
			Unintentional Injuries (Accidents)	CDPH	2012–2016

Table 26: Health-factor and health-outcome data used in CHNA, including data source and time period in which the data were collected

Cond	Conceptual Model Alignment		Indicator	Data Source	Time Period	
			Breast Cancer Incidence	California Cancer Registry	2010–2014	
			Colorectal Cancer Incidence	California Cancer Registry	2010–2014	
S			Diabetes Prevalence	CHR	2014	
ome	life		Disability	Census	2016	
outo	Quality of life	Morbidity	HIV Prevalence Rate	CHR	2015	
th c	lalit	Morbiany	Low Birth Weight	CHR	2010–2016	
Health outcomes	Ø		Lung Cancer Incidence	California Cancer Registry	2010–2014	
			Prostate Cancer Incidence	California Cancer Registry	2010–2014	
			Poor Mental Health Days	CHR	2016	
			Poor Physical Health Days	CHR	2016	
		Alcohol and drug	Excessive Drinking	CHR	2016	
		use	Drug Overdose Deaths	CDPH	2014–2016	
			Adult Obesity	CHR	2014	
	ior		Physical Inactivity	CHR	2014	
	havi	Diet and exercise	Limited Access to Healthy Foods	CHR	2015	
	Be		Modified Retail Food Environment Index (mRFEI)	Census	2016	
	Health Behavior		Access to Exercise Opportunities	CHR	2010 population/ 2016 facilities	
		Sexual activity	Sexually Transmitted Infections (Chlamydia Rate)	CHR	2015	
			Teen Birth Rate	CHR	2010–2016	
S		Tobacco use	Adult Smoking	CHR	2016	
actors			Health Care Costs	CHR	2015	
- <sup>4</sup>				Health Professional Shortage Area - Dental	HRSA‡	2018
Health			Health Professional Shortage Area - Mental Health		2018	
			Heath Professional Shortage Area - Primary Care	HRSA	2018	
	care	Access to care	Medically Underserved Areas	HRSA	2018	
	cal c		Mammography Screening	CHR	2014	
	Clinical care		Dentists	CHR	2016	
			Mental Health Providers	CHR	2017	
			Psychiatrists	HRSA		
			Specialty Care Providers	HRSA		
			Primary Care Physicians	CHR	2015	
		Quality care	Preventable Hospital Stays (Ambulatory Care Sensitive Conditions)	CHR	2015	

Conc	Conceptual Model Alignment		Indicator	Data Source	Time Period
	Ś	Community safety	Homicide Rate	CHR	2010-2016
	economic/ Demographic factors		Violent Crime Rate	CHR	2012–2014
	ic fa		Motor Vehicle Crash Death Rate	CHR	2010-2016
	aph	Education	Some College (Post-Secondary Education)	CHR	2012–2016
	logr	Education	High School Graduation	CHR	2014–2015
	Dem	Employment	Unemployment	CHR	2016
	lic/ [	Family and social	Children in Single-Parent Households	CHR	2012–2016
	Lou	support	Social Associations	CHR	2015
Health factors	ecol		Children Eligible for Free Lunch	CHR	2015–2016
fac	8	Income	Children in Poverty	CHR	2016
alth	Social &		Median Household Income	CHR	2016
He H			Uninsured	CHR	2015
			Severe Housing Problems	CHR	2010-2014
	Jent	Housing and transit	Households with No Vehicle	Census	2012–2016
	Environment		Access to Public Transit	Census/ GTSF data	2010,2012– 2016,2018
	Physical Er	Air and water	Pollution Burden Score	Cal- EnviroScreen	2017
	Phy	quality	Air Pollution - Particulate Matter	CHR	2012
			Drinking Water Violations	CHR	2016

#### **County Health Rankings Data**

All indicators listed with County Health Rankings (CHR) as their source were obtained from the 2018 County Health Rankings<sup>16</sup> dataset. This was the most common source of data, with 38 associated indicators included in the analysis. Indicators were collected at both the county and state levels. County-level indicators were used to represent the health factors and health outcomes in the service area. State-level indicators were collected to be used as benchmarks for comparison purposes. All variables included in the CHR dataset were obtained from other data providers. The original data providers for each CHR variable are given in Table 27.

# Table 27: County Health Rankings dataset, including Indicators, the time period the data were collected, and the original source of the data

CHR Indicator	Time Period	Original Data Provider
Infant Mortality Rate	2010–2016	CDC WONDER Mortality Data
Child Mortality	2013–2016	CDC WONDER Mortality Data
Premature Age-Adjusted Mortality	2014–2016	CDC WONDER Mortality Data
Premature Death (Years of Potential Life Lost)	2014–2016	National Center for Health Statistics - Mortality Files
Diabetes Prevalence	2014	CDC Diabetes Interactive Atlas

<sup>16</sup> Robert Wood Johnson Foundation. 2018. *County Health Rankings & Roadmaps.* Available online at: http://www.countyhealthrankings.org/. Accessed July 10, 2018.

CHR Indicator	Time Period	Original Data Provider
HIV Prevalence Rate	2015	National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
Low Birth Weight	2010–2016	National Center for Health Statistics - Natality Files
Poor Mental Health Days	2016	Behavioral Risk Factor Surveillance System
Poor Physical Health Days	2016	Behavioral Risk Factor Surveillance System
Excessive Drinking	2016	Behavioral Risk Factor Surveillance System
Adult Obesity	2014	CDC Diabetes Interactive Atlas
Physical Inactivity	2014	CDC Diabetes Interactive Atlas
Limited Access to Healthy Foods	2015	USDA Food Environment Atlas
Access to Exercise Opportunities	2010 population/ 2016 facilities	Business Analyst, Delorme Map Data, ESRI, & U.S. Census Tiger Line Files
Sexually Transmitted Infections (Chlamydia Rate)	2015	National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
Teen Birth Rate	2010–2016	National Center for Health Statistics - Natality Files
Adult Smoking	2016	Behavioral Risk Factor Surveillance System
Health Care Costs	2015	Dartmouth Atlas of Healthcare
Mammography Screening	2014	Dartmouth Atlas of Healthcare
Dentists	2016	Area Health Resource File/National Provider Identification File
Mental Health Providers	2017	CMS, National Provider Identification
Primary Care Physicians	2015	Area Health Resource File/American Medical Association
Preventable Hospital Stays (Ambulatory Care Sensitive Conditions)	2015	Dartmouth Atlas of Healthcare
Homicide Rate	2010–2016	CDC WONDER Mortality Data
Violent Crime Rate	2012–2014	Uniform Crime Reporting - FBI
Motor Vehicle Crash Death Rate	2010–2016	CDC WONDER Mortality Data
Some College (Postsecondary Education)	2012–2016	American Community Survey, 5-Year Estimates
High School Graduation	2014–2015	California Department of Education
Unemployment	2016	Bureau of Labor Statistics Local Area Unemployment Statistics
Children in Single-Parent Households	2012–2016	ACS 5-Year Estimates
Social Associations	2015	County Business Patterns
Children Eligible for Free Lunch	2015–2016	National Center for Education Statistics
Children in Poverty	2016	U.S. Census Bureau Small Area Income and Poverty Estimates
Median Household Income	2016	U.S. Census Bureau Small Area Income and Poverty Estimates
Uninsured	2015	U.S. Census Bureau Small Area Health Insurance Estimates
Severe Housing Problems	2010–2014	HUD Comprehensive Housing Affordability Strategy (CHAS) Data
Air Pollution - Particulate Matter	2012	CDC's National Environmental Public Health Tracking Network
Drinking Water Violations	2016	Safe Drinking Water Information System

## **CDPH Data**

The next most common source of health-outcome and health-factor variables used for health need identification was California Department of Public Health (CDPH). This includes the same by-cause mortality rates as those described previously. But in this case, they were calculated at the county level to represent health conditions in the county and at the state level to be used as comparative benchmarks. County-level rates were smoothed using the same process described previously. State-level rates were not smoothed.

Drug overdose deaths and age-adjusted mortality rates were also obtained from CDPH. These indicators report age-adjusted drug-induced death rates and age-adjusted all-cause mortality rates for counties and the state from 2014 to 2016 as reported in the 2018 County Health Status Profiles.<sup>17</sup>

#### **HRSA** Data

Indicators related to the availability of health care providers were obtained from the Health Resources and Services Administration<sup>18</sup> (HRSA). These included Dental, Mental Health, and Primary Care Health Professional Shortage Areas and Medically Underserved Areas/Populations. They also included the number of specialty care providers and psychiatrists per 100,000 residents, derived from the county-level Area Health Resource Files.

The health professional shortage area and medically underserved area data were not provided at the county level. Rather, they show all areas in the state that were designated as shortage areas. These areas could include a portion of a county or an entire county, or they could span multiple counties. To develop measures at the county level to match the other health-factor and health-outcome indicators used in health need identification, these shortage areas were compared to the boundaries of each county in the state. Counties that were partially or entirely covered by a shortage area were noted.

The HRSA's Area Health Resource Files provide information on physicians and allied health care providers for U.S. counties. This information was used to determine the rate of specialty care providers and the rate of psychiatrists for each county and for the state. For the purposes of this analysis, a specialty care provider was defined as a physician who was not defined by the HRSA as a primary care provider. This was found by subtracting the total number of primary care physicians (both MDs and DOs, primary care, patient care, and nonfederal, excluding hospital residents and those 75 years of age or older) from the total number of physicians (both MDs and DOs, patient care, nonfederal) in 2015. This number was then divided by the 2015 total population given in the 2015 American Community Survey 5-year Estimates table B01003, and then multiplied by 100,000 to give the total number of specialty care physicians per 100,000 residents. The total of specialty care physicians in each county was summed to find the total specialty care physicians in the state, and state rates were calculated following the same approach as used for county rates. This same process was also used to calculate the number of psychiatrists from the Area Health Resource Files. It should be noted that psychiatrists are included in the list of specialty care physicians, so that indicator represents a subset of specialty care providers rather than a separate group.

<sup>&</sup>lt;sup>17</sup> California Department of Public Health. 2018. *County Health Status Profiles* 2018. Available online at: https://www.cdph.ca.gov/ Programs/CHSI/Pages/County-Health-Status-Profiles.aspx. Last accessed October 23, 2018.

<sup>&</sup>lt;sup>18</sup> Health Resources and Services Administration. 2018. Data Downloads, Available online at: https://data.hrsa.gov/data/download. Last accessed June 19 2018 (for county level Area Health Resource Files) and 1 August 2018 (for Health Professional Shortage Area files)

## California Cancer Registry Data

Data obtained from the California Cancer Registry<sup>19</sup> includes age-adjusted incidence rates for colon and rectum, female breast, lung and bronchus, and prostate cancer sites for counties and the state. Reported rates were based on data from 2010 to 2014, and report cases per 100,000. For low-population counties, rates were calculated for a group of counties rather than for individual counties. That group rate was used in this report to represent incidence rates for each individual county in the group.

#### **Census Data**

Data from the U.S. Census Bureau were used to calculate three additional indicators: the percentage of households with no vehicle available, the percentage of the civilian noninstitutionalized population with some disability, and the Modified Retail Food Environment Index (mRFEI). The sources for the indicators used are given in Table 28.

Table 28: Detailed description of data used to calculate percentage of population with disabilities, households without a vehicle, and the mRFEI

Indicator	Source Data Table	Variable	NAICS Code	Employee Size Category	Data Source
Percentage with Disability	S1810	HC03_EST_VC01			2016 American Community
Households with No Vehicle Available	DP04	HC03_VC85			Survey 5-Year Estimates
Large Grocery Stores	BP_2016_00A3	Number of Establishments	445110	10 or More Employees	2016 County Business Patterns
Fruit and Vegetable Markets	BP_2016_00A3	Number of Establishments	445230	All Establishments	
Warehouse Clubs	BP_2016_00A3	Number of Establishments	452910	All Establishments	
Small Grocery Stores	BP_2016_00A3	Number of Establishments	445110	1 to 4 Employees	
Limited-Service Restaurants	BP_2016_00A3	Number of Establishments	722513	All Establishments	
Convenience Stores	BP_2016_00A3	Number of Establishments	445120	All Establishments	

The mRFEI indicator reports the percentage of the total food outlets in a ZCTA that are considered healthy food outlets. The mRFEI indicator was calculated using a modification of the methods described by the National Center for Chronic Disease Prevention and Health Promotion<sup>20</sup> using data obtained from the U.S. Census Bureau's 2016 County Business Pattern datasets.

Healthy food retailers were defined based on North American Industrial Classification Codes (NAICS), and included large grocery stores, fruit and vegetable markets, and warehouse clubs. Food retailers that were considered less healthy included small grocery stores, limited-service restaurants, and convenience stores.

<sup>&</sup>lt;sup>19</sup> California Cancer Registry. 2018. *Age-Adjusted Invasive Cancer Incidence Rates in California*. Available online at: https://www.cancer-rates.info/ca/. Accessed: May 11, 2018.

<sup>&</sup>lt;sup>20</sup> National Center for Chronic Disease Prevention and Health Promotion. (2011). *Census Tract Level State Maps of the Modified Retail Food Environment Index (mRFEI)*. Centers for Disease Control. Retrieved Jan 11, 2016, from http://ftp.cdc.gov/pub/Publications/dnpao/ census-tract-level-state-maps-mrfei\_TAG508.pdf

To calculate the mRFEI, the total number of health food retailers was divided by the total number of healthy and less healthy food retailers, and the result was multiplied by 100 to calculate the final mRFEI value for each county and for the state.

#### CalEnviroScreen Data

CalEnviroScreen<sup>21</sup> is a dataset produced by CalEPA. It includes multiple indicators associated with various forms of pollution for census tracts within the state. These include multiple measures of air and water pollution, pesticides, toxic releases, traffic density, cleanup sites, groundwater threats, hazardous waste, solid waste, and impaired bodies of water. One indicator, pollution burden, combines all of these measures to generate an overall index of pollution for each tract. To generate a county-level pollution-burden measure, the percentage of the population residing in census tracts with pollution-burden scores greater than or equal to the 50<sup>th</sup> percentile was calculated for each county as well as for the state.

## **Google Transit Feed Specification (GTFS) Data**

The final indicator used to identify significant health needs was proximity to public transportation. This indicator reports the percentage of a county's population that lives in a census block located within a quarter mile of a fixed transit stop. Census block data from 2010 (the most recent year available) was used to measure population.

An extensive search was conducted to identify stop locations for transportation agencies in the service area. Many transportation agencies publish their route and stop locations using the standard GTFS data format. Listings for agencies covering the service area were reviewed at TransitFeeds (*https://transitfeeds. com*) and Trillium (*https://trilliumtransit.com/gtfs/our-work/*). These were compared to the list of feeds used by Google Maps (*https://www.google.com/landing/transit/cities/index.html#NorthAmerica*) to try to maximize coverage.

Table 29 notes the agencies for which transit stops could be obtained. It should be noted that while every attempt was made to include as comprehensive a list of data sources as possible, there may be transit stops associated with agencies not included in this list in the county. Caution should therefore be used in interpreting this indicator.

County	Agency
Sacramento County	SacRT, Elk Grove e-Trans, Folsom Stage Line (doesn't include South County
	Transit)

#### Table 29: Transportation agencies used to compile the proximity to public transportation Indicator

#### Descriptive Socio-economic and Demographic Data

The final secondary dataset used in this analysis was comprised of multiple socio-economic and demographic indicators collected at the ZCTA, county, and state levels. These data were not used in an analytical context. Rather, they were used to provide a description of the overall population characteristics within the county. Table 30 lists each of these indicators as well as their sources.

<sup>&</sup>lt;sup>21</sup> CalEPA. 2018. CalEnviroscreen 3.0 Shapefile. Available online at: https://data.ca.gov/dataset/calenviroscreen-30. Last accessed: May 26, 2018.

Indicator	Description	Source Data Table	Variables Included
Population	Total population	DP05	HC01_VC03
Minority	Percentage of the population that is Hispanic or reports at least one race that is not white	B0302	HD01_VD01, HD01_VD03
Median Age	Median age of the population	DP05	HC01_VC23
Median Income	Median household income	S2503	HC01_EST_VC14
Poverty	Percentage of population below the poverty level	S1701	HC03_EST_VC01
Unemployed	Unemployment rate among the population 16 or older	S2301	HC04_EST_VC01
Uninsured	Percentage of population without health insurance	S2701	HC05_EST_VC01
Not a High School Graduate	Percentage of population over 25 that are not high school graduates	S1501	HC02_EST_VC17
High Housing Costs	Percentage of the population for whom total housing costs exceed 30% of income	S2503	HC01_EST_VC33, HC01_ EST_VC37, HC01_EST_ VC41, HC01_EST_VC45, HC01_EST_VC49
Disability	Percentage of civilian noninstitutionalized population with a disability	S1810	HC03_EST_VC01

Table 30: Descriptive socio-e	conomic and domo	aranhic data	descriptions
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# **Detailed Analytical Methodology**

The collected and processed primary and secondary data were integrated in three main analytical stages. In the first stage, secondary health-outcome and health-factor data were combined with primary data collected from key informant interviews providing an overall view of the county to identify Communities of Concern. These Communities of Concern potentially included geographic regions and specific subpopulations bearing disproportionate health burdens. The identified Communities of Concern were then used to focus the remaining interview and focus-group collection efforts on those areas and subpopulations. The resulting data was then combined with secondary health need identification data to identify significant health needs within the service area. Finally, primary data was used to prioritize those identified significant health needs. The specific details for these analytical steps are given in the following three sections.

## **Community of Concern Identification**

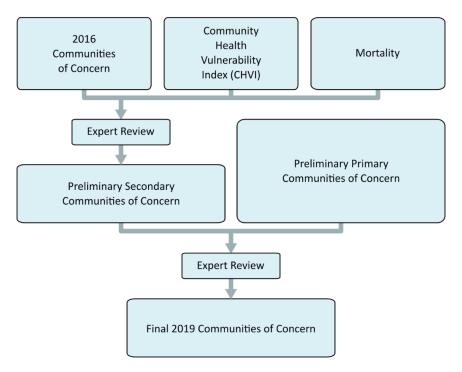


Figure 23: Process followed to identify Communities of Concern

As illustrated in Figure 23, the 2019 Communities of Concern were identified through a process that drew upon both primary and secondary data. Three main secondary data sources were used in this analysis: Communities of Concern identified in the 2016 CHNA; the census tract–level Community Health Vulnerability Index (CHVI); and the CDPH ZCTA-level mortality data.

An evaluation procedure was developed for each of these datasets and applied to each ZCTA within the county. The following secondary data selection criteria were used to identify preliminary Communities of Concern.

#### 2016 Community of Concern

The ZCTA was included in the 2016 CHNA community of concern (or "focus community") list for the hospital service areas of the participating hospitals. This was done to allow greater continuity between the 2016 CHNA round and the current assessment, and it reflects the work of the partners to serve these disadvantaged communities.

## Community Health Vulnerability Index (CHVI)

The ZCTA intersected a census tract whose CHVI value fell within the top 20% of the county. Census tracts with these values represent areas with consistently high concentrations of demographic subgroups identified in the research literature as being more likely to experience health-related disadvantages.

#### <u>Mortality</u>

The review of ZCTAs based on mortality data utilized the ZCTA-level CDPH health-outcome indicators described previously. These indicators were heart disease, cancer, stroke, CLD, Alzheimer's disease, unintentional injuries, diabetes, influenza and pneumonia, chronic liver disease, hypertension, suicide, and kidney disease mortality rates per 100,000 people, and infant mortality rates per 1,000 live births. The number of times each ZCTA's rates for these indicators fell within the top 20% in the county was counted. Those ZCTAs whose counted values exceeded the 80<sup>th</sup> percentile for all of the ZCTAs in the county met the community of concern mortality selection criteria.

## Integration of Secondary Criteria

Any ZCTA that met any of the three selection criteria (2016 community of concern, CHVI, and mortality) was reviewed for inclusion as a 2019 community of concern, with greater weight given to those ZCTAs meeting two or more of the selection criteria. An additional round of expert review was applied to determine if any other ZCTAs not thus far indicated should be included based on some other unanticipated secondary data consideration. This list then became the final preliminary secondary Communities of Concern.

#### Preliminary Primary Communities of Concern

Preliminary primary Communities of Concern were identified by reviewing the geographic locations or population subgroups that were consistently identified by the area-wide primary data sources.

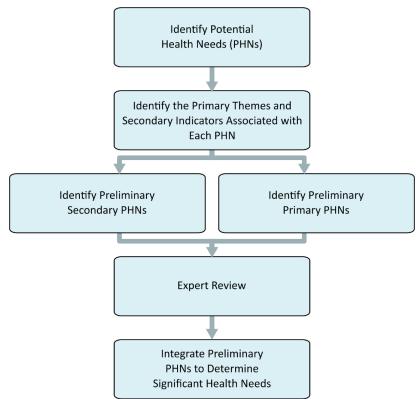
## Integration of Preliminary Primary and Secondary Communities of Concern

Any ZCTA that was identified in either the preliminary primary or secondary community of concern list was considered for inclusion as a 2019 community of concern. An additional round of expert review was then applied to determine if, based on any primary or secondary data consideration, any final adjustments should be made to this list. The resulting set of ZCTAs was then used as the final 2019 Communities of Concern.

## Significant Health Need Identification

The general methods through which significant health needs (SHNs) were identified are shown in Figure 24 and described here in greater detail. The first step in this process was to identify a set of potential health needs (PHNs) from which significant health needs could be selected. This was done by reviewing the health needs identified during the 2016 CHNA among various hospitals throughout northern California and then supplementing this list based on a preliminary analysis of the primary qualitative data collected for the 2019 CHNA. This resulted in a list of 10 PHNs shown in Table 31.





#### Table 31: Potential health needs

2019 Potential Health Needs (PHNs)			
PHN1	Access to Mental/Behavioral/Substance Abuse Services		
PHN2	Access to Quality Primary Care Health Services		
PHN3	Active Living and Healthy Eating		
PHN4	Safe and Violence-Free Environment		
PHN5	Access to Dental Care and Preventive Services		
PHN6	Pollution-Free Living Environment		
PHN7	Access to Basic Needs such as Housing, Jobs, and Food		
PHN8	Access and Functional Needs		
PHN9	Access to Specialty and Extended Care		
PHN10	Injury and Disease Prevention and Management		

The next step in the process was to identify primary themes and secondary indicators associated with each of these health needs as shown in Table 32. Primary theme associations were used to guide coding of the primary data sources to specific PHNs.

Health Need Number	2019 CHI Potential Health Needs	2019 CHI Secondary Indicators	Primary Indicators
PHN1	Access to Mental/ Behavioral/ Substance Abuse Services	<ul> <li>Life Expectancy at Birth</li> <li>Liver Disease Mortality</li> <li>Suicide Mortality</li> <li>Poor Mental Health Days</li> <li>Poor Physical Health Days</li> <li>Drug Overdose Deaths</li> <li>Excessive Drinking</li> <li>Health Professional Shortage Area – Mental Health</li> <li>Mental Health Providers</li> <li>Psychiatrists</li> <li>Social Associations</li> </ul>	<ul> <li>Self-Injury</li> <li>Mental Health and Coping Issues</li> <li>Substance Abuse</li> <li>Smoking</li> <li>Stress</li> <li>Mentally III and Homeless</li> <li>PTSD</li> <li>Access to Psychiatrist</li> <li>Homelessness</li> </ul>

#### Table 32: Primary theme and secondary indicators used to identify significant health needs

Health Need Number	2019 CHI Potential Health Needs	2019 CHI Secondary Indicators	Primary Indicators
PHN2	Access to Quality Primary Care Health Services	<ul> <li>Life Expectancy at Birth</li> <li>Cancer Mortality</li> <li>Child Mortality</li> <li>Chronic Lower Respiratory Disease Mortality</li> <li>Diabetes Mortality</li> <li>Heart Disease Mortality</li> <li>Hypertension Mortality</li> <li>Influenza and Pneumonia Mortality</li> <li>Kidney Disease Mortality</li> <li>Liver Disease Mortality</li> <li>Stroke Mortality</li> <li>Breast Cancer Incidence</li> <li>Colorectal Cancer Incidence</li> <li>Diabetes Prevalence</li> <li>Low Birth Weight</li> <li>Lung Cancer Incidence</li> <li>Prostate Cancer Incidence</li> <li>Health Care Costs</li> <li>Health Professional Shortage Area – Primary Care</li> <li>Medically Underserved Areas</li> <li>Mammography Screening</li> <li>Primary Care Physicians</li> <li>Preventable Hospital Stays</li> <li>Percentage Uninsured</li> </ul>	<ul> <li>Issue of Quality of Care</li> <li>Access to Care</li> <li>Health Insurance</li> <li>Care for Cancer/Cancer Occurrence</li> <li>Indicators in PQI: Diabetes, COPD, CRLD, HTN, HTD, Asthma, Pneumonia</li> </ul>
PHN3	Active Living and Healthy Eating	<ul> <li>Cancer Mortality</li> <li>Diabetes Mortality</li> <li>Heart Disease Mortality</li> <li>Hypertension Mortality</li> <li>Kidney Disease Mortality</li> <li>Stroke Mortality</li> <li>Breast Cancer Incidence</li> <li>Colorectal Cancer Incidence</li> <li>Diabetes Prevalence</li> <li>Prostate Cancer Incidence</li> <li>Limited Access to Healthy Foods</li> <li>mRFEI</li> <li>Access to Exercise Opportunities</li> <li>Physical Inactivity</li> <li>Adult Obesity</li> </ul>	<ul> <li>Food Access/Insecurity</li> <li>Community Gardens</li> <li>Fresh Fruits and Veggies</li> <li>Distance to Grocery Stores</li> <li>Food Swamps</li> <li>Chronic Disease Outcomes Related to Poor Eating</li> <li>Diabetes, HTD, HTN, Stroke, Kidney Issues, Cancer</li> <li>Access to Parks</li> <li>Places to be Active</li> </ul>

Health Need Number	2019 CHI Potential Health Needs	2019 CHI Secondary Indicators	Primary Indicators
PHN4	Safe and Violence-Free Environment	<ul> <li>Life Expectancy at Birth</li> <li>Poor Mental Health Days</li> <li>Homicide Rate</li> <li>Motor Vehicle Crash Death Rate</li> <li>Violent Crime Rate</li> <li>Social Associations</li> </ul>	<ul> <li>Crime Rates</li> <li>Violence in The Community</li> <li>Feeling Unsafe in The Community</li> <li>Substance Abuse-Alcohol and Drugs</li> <li>Access to Safe Parks</li> <li>Pedestrian Safety</li> <li>Safe Streets</li> <li>Safe Places to Be Active</li> </ul>
PHN5	Access to Dental Care and Preventive Services	<ul> <li>Dentists</li> <li>Health Professional Shortage Area – Dental</li> </ul>	<ul> <li>Any Issues Related to Dental Health</li> <li>Access to Dental Care</li> </ul>
PHN6	Pollution- Free Living Environment	<ul> <li>Cancer Mortality</li> <li>Chronic Lower Respiratory Disease Mortality</li> <li>Breast Cancer Incidence</li> <li>Colorectal Cancer Incidence</li> <li>Lung Cancer Incidence</li> <li>Prostate Cancer Incidence</li> <li>Adult Smoking</li> <li>Air Pollution – Particulate Matter</li> <li>Drinking Water Violations</li> <li>Pollution Burden</li> </ul>	<ul> <li>Smoking</li> <li>Unhealthy Air, Water, Housing</li> <li>Health Issues: Asthma, COPD, CLRD, Lung Cancer</li> </ul>
PHN7	Access to Meeting Basic Needs Such as Housing, Jobs, and Food	<ul> <li>Life Expectancy at Birth</li> <li>Infant Mortality</li> <li>Age-Adjusted All-Cause Mortality</li> <li>Child Mortality</li> <li>Premature Age-Adjusted Mortality</li> <li>Premature Death (Years of Potential Life Lost)</li> <li>Low Birth Weight</li> <li>Medically Underserved Areas</li> <li>Health Care Costs</li> <li>High School Graduation</li> <li>Some College (Postsecondary Education)</li> <li>Unemployment</li> <li>Children in Single-Parent Household</li> <li>Social Associations</li> <li>Children Eligible for Free or Reduced Lunch</li> <li>Children in Poverty</li> <li>Median Household Income</li> <li>Uninsured</li> <li>Severe Housing Problems</li> <li>Households with No Vehicle</li> <li>mRFEI</li> <li>Limited Access to Healthy Food</li> </ul>	<ul> <li>Employment and Unemployment</li> <li>Poverty</li> <li>Housing Issues</li> <li>Homelessness</li> <li>Education Access</li> <li>Community Quality of Life</li> <li>Housing Availability</li> <li>Housing Affordability</li> </ul>

Health Need Number	2019 CHI Potential Health Needs	2019 CHI Secondary Indicators	Primary Indicators
PHN8	Access and Functional Needs	<ul> <li>Access to Public Transportation</li> <li>Households with no Vehicle</li> <li>Percentage of Population with a Disability</li> </ul>	<ul> <li>Physical Access Issues</li> <li>Cost of Transportation</li> <li>Ease of Transportation Access</li> <li>No Car</li> <li>Disability</li> </ul>
PHN9	Access to Specialty and Extended Care	<ul> <li>Life Expectancy at Birth</li> <li>Alzheimer's Mortality</li> <li>Cancer Mortality</li> <li>Chronic Lower Respiratory Disease Mortality</li> <li>Diabetes Mortality</li> <li>Heart Disease Mortality</li> <li>Hypertension Mortality</li> <li>Kidney Disease Mortality</li> <li>Liver Disease Mortality</li> <li>Stroke Mortality</li> <li>Diabetes Prevalence</li> <li>Lung Cancer Incidence</li> <li>Psychiatrists</li> <li>Specialty Care Providers</li> <li>Preventable Hospital Stays</li> </ul>	<ul> <li>Seeing a Specialist for Health Conditions</li> <li>Diabetes-Related Specialty Care</li> <li>Specialty Care for HTD, HTN, Stroke, Kidney Diseases</li> </ul>
PHN10	Injury and Disease Prevention and Management	<ul> <li>Infant Mortality</li> <li>Alzheimer's Mortality</li> <li>Child Mortality</li> <li>Chronic Lower Respiratory Disease Mortality</li> <li>Diabetes Mortality</li> <li>Heart Disease Mortality</li> <li>Hypertension Mortality</li> <li>Influenza and Pneumonia Mortality</li> <li>Kidney Disease Mortality</li> <li>Liver Disease Mortality</li> <li>Stroke Mortality</li> <li>Stroke Mortality</li> <li>Suicide Mortality</li> <li>Unintentional Injury Mortality</li> <li>Diabetes Prevalence</li> <li>HIV Prevalence Rate</li> <li>Low Birth Weight</li> <li>Drug Overdose Deaths</li> <li>Excessive Drinking</li> <li>Adult Obesity</li> <li>Physical Inactivity</li> <li>Sexually Transmitted Infections</li> <li>Teen Birth Rate</li> <li>Adult Smoking</li> <li>Motor Vehicle Crash Death Rate</li> </ul>	<ul> <li>Anything Related to Helping Prevent a Preventable Disease or Injury</li> <li>Unintentional Injury</li> <li>Smoking and Alcohol/Drug Abuse</li> <li>Teen Pregnancy</li> <li>HIV/STD</li> <li>TB</li> <li>Influenza and Pneumonia</li> <li>Health Classes</li> <li>Health Promotion Teams and Interventions</li> <li>Need for Health Literacy</li> </ul>

Next, values for the secondary health-factor and health-outcome indicators identified were compared to state benchmarks to determine if a secondary indicator performed poorly within the county. Some indicators were considered problematic if they exceeded the benchmark, others were considered problematic if they were below the benchmark, and the presence of certain other indicators within the county, such as health professional shortage areas, indicated issues. Table 33 lists each secondary indicator and describes the comparison made to the benchmark to determine if it was problematic.

Indicator	Benchmark Comparison Indicating Poor Performan
Years of Potential Life Lost	Higher
Poor Physical Health Days	Higher
Poor Mental Health Days	Higher
Low Birth Weight	Higher
Adult Smokers	Higher
Adult Obesity	Higher
Physical Inactivity	Higher
Access to Exercise	Lower
Excessive Drinking	Higher
STI Chlamydia Rate	Higher
Teen Birth Rate	Higher
Uninsured	Higher
Primary Care Physicians	Lower
Dentists	Lower
Mental Health Providers	Lower
Preventable Hospital Stays	Higher
Mammography Screening	Lower
High School Graduation	Lower
Some College	Lower
Unemployed	Higher
Children in Poverty	Higher
Children with Single Parents	Higher
Social Associations	Lower
Violent Crimes	Higher
Air Particulate Matter	Higher
Drinking Water Violations	Present
Severe Housing Problems	Higher
Premature Age-Adjusted Mortality	Higher
Child Mortality	Higher
Infant Mortality	Higher
Diabetes Prevalence	Higher

Table 33: Benchmark comparisons to show indicator performance CHNA indicators

Indicator	Benchmark Comparison Indicating Poor Performan
HIV Prevalence	Higher
Limited Access to Healthy Food	Higher
Motor Vehicle Crash Deaths	Higher
Health Care Costs	Higher
Median Household Income	Lower
Free or Reduced Lunch	Higher
Homicides	Higher
Cancer Female Breast	Higher
Cancer Colon and Rectum	Higher
Cancer Lung and Bronchus	Higher
Cancer Prostate	Higher
Drug Overdose Deaths	Higher
HPSA Dental Health	Present
HPSA Mental Health	Present
HPSA Primary Care	Present
HPSA Medically Underserved Area	Present
mRFEI	Lower
Housing Units with No Vehicle	Higher
Specialty Care Providers	Lower
Psychiatry Providers	Lower
Cancer Mortality	Higher
Heart Disease Mortality	Higher
Unintentional Injury Mortality	Higher
CLD Mortality	Higher
Stroke Mortality	Higher
Alzheimer's Mortality	Higher
Diabetes Mortality	Higher
Suicide Mortality	Higher
Hypertension Mortality	Higher
Influenza and Pneumonia Mortality	Higher
Kidney Disease Mortality	Higher
Liver Disease Mortality	Higher
Life Expectancy	Lower
Age-Adjusted Mortality	Higher
Pollution Burden	Higher
Public Transit Proximity	Lower
Percentage with Disability	Higher

Once these poorly performing quantitative indicators were identified, they were used to identify preliminary secondary significant health needs. This was done by calculating the percentage of all secondary indicators associated with a given PHN that were identified as performing poorly within the county. While all PHNs represented actual health needs within the county to a greater or lesser extent, a PHN was considered a preliminary secondary health need if the percentage of poorly performing indicators exceeded one of a number of established thresholds: any poorly performing associated secondary indicators; or at least 20%, 25%, 33%, 40%, 50%, 60%, 66%, 75%, or 80% of the associated indicators were found to perform poorly. These thresholds were chosen because they correspond to divisions of the indicators into fifths, quarters, thirds, or halves. A similar set of standards was used to identify the preliminary interview and focus-group health needs: any of the survey respondents mentioned a theme associated with a PHN, or if at least 20%, 25%, 33%, 40%, 50%, 60%, 66%, 75%, or 80% of the respondents mentioned an associated theme.

These sets of criteria (any mention, 20%, 25%, 33%, 40%, 50%, 60%, 66%, 75%, or 80%) were used because we could not anticipate which specific standard would be most meaningful within the context of the county. Having multiple objective decision criteria allows the process to be more easily described but still allows for enough flexibility to respond to evolving conditions in the county. To this end, a final round of expert reviews was used to compare the set selection criteria to find the level at which the criteria converged towards a final set of SHNs. Once the final criteria used to identify the SHN were selected for the primary and secondary analyses, any PHN included in either preliminary health need list was included as a final significant health need for the county.

For this report, A PHN was selected as a preliminary secondary significant health need if one of the following criteria was met: 60% of the associated indicators were identified as performing poorly and the need was identified by 66% or more of the primary sources as performing poorly.

# **Health Need Prioritization**

Once identified for the area, the final set of SHNs was prioritized. To reflect the voice of the community, significant health need prioritization was based solely on primary data. Key informants and focus-group participants were asked to identify the three most significant health needs in their communities. These responses were associated with one or more of the potential health needs. This, along with the responses across the rest of the interviews and focus groups, was used to derive two measures for each significant health need.

First, the total percentage of all primary data sources that mentioned themes associated with a significant health need at any point was calculated. This number was taken to represent how broadly a given significant health need was recognized within the community. Next, the percentage of times a theme associated with a significant health was mentioned as one of the top three health needs in the community was calculated. Since primary data sources were asked to prioritize health needs in this question, this number was taken to represent the intensity of the need.

These two measures were next rescaled so that the SHN with the maximum value for each measure equaled one, the minimum equaled zero, and all other SHNs had values appropriately proportional to the maximum and minimum values. The rescaled values were then summed to create a combined SHN prioritization index. SHNs were ranked in descending order based on this index value so that the SHN with the highest value was identified as the highest-priority health need, the SHN with the second highest value was identified as the second-highest-priority health need, and so on.

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Table 34: Resources Available to Potentially Meet Significant Health Needs

ORGAN	IIZATION	ORGANIZATION INFORMATION		ď	ΟΤΕΝΤΙ	POTENTIAL HEALTH NEED MET	LH NEE	D MET	(X) -		
Name	ZIP Code	Website	<ol> <li>Access to mental/behavioral/ substance abuse services</li> <li>Access to quality primary</li> </ol>	care health services 3. Active living and healthy eating	4. Safe and violent free environment	<ol> <li>5. Access to dental care and preventive services</li> <li>6. Pollution-free living environment</li> </ol>	7. Access to basic needs, such as food, housing, jobs	8. Access and functional needs	3: Access to specific y and extended care	prevention and management	11. System Navigation 12. Cultural Competence
African American Perinatal Health – Sacramento County Public Health	Whole county	www.scph.com							×		×
Alchemist Community Development Corporation	95814	w ww.alchemistcdc.org	×	×							
All Nations Church of God in Christ	95817	www.ancogic.org					×				
ALS Association – Greater Sacramento Chapter	95825	www.websac.alsa.org								×	
Alternatives Pregnancy Center	95825	www.alternativespc.org	~ ×	×					×		
Alzheimer's Association	95815	w ww.alz.org/norcal	×								
American Cancer Society	95815	w ww.cancer.org		×					×	×	
American Heart Association – Sacramento	95811	www.heart.org		×					×	×	
American Lung Association	95814	www.lung.org				×			×	×	
American Red Cross	95815	www.redcross.org	~	×			×				
Another Choice Another Chance	95823	www.acacsac.org	×								
Antioch Progressive Baptist Church	95832	www.antiochprogressivechurch.org					×				

ORGAN	IIZATION	ORGANIZATION INFORMATION			POTE	РОТЕNTIAL НЕАLTH NEED MET (X)	IEALTH	H NEE	D MET	(X)		
Name	ZIP Code	Website	<ol> <li>A. Access to mental/behavioral/ substance abuse services</li> </ol>	۲. Access to quality primary دعاد health services ۲. Active living and healthy	eating 4. Safe and violent free	environment 5. Access to dental care and preventive services	6. Pollution-free living environment	7. Access to basic needs, such as food, housing, jobs	8. Access and functional needs	estended care	fo. Injury and disease prevention and management	11. System Navigation 12. Cultural Competence
Arcade Community Center	95821	www.mutualassistance.org/arcade- community-center	×	^	×						×	
Arcohe Union School District	95638	www.arcohe.net		^	×			×				
Area 4 Agency on Aging	95815	www.agencyonaging4.org			×			×		×	×	
ARTZ Artists for Alzheimer's	95826	www.imstillhere.org/artz/artz-program									×	
Asian Community Center	95831	www.accsv.org	×	~	×			×	×		×	×
Asian Pacific Community Counseling (APCC)	95820	www.apccounseling.org	×									×
	95824											
Asian Resources Inc.	95814	w w w. asianresources. org						$\times$				×
	95610											
Bayanihan Clinic	95827	www.hyhs.ucdmc.ucdavis.edu		×							×	×
Birth and Beyond Home Visitation – WellSpace Health	95660	www.wellspacehealth.org/location/north- highlands-community-health-center-birth- and-beyond	×	×		×		×				×
Bishop Gallegos Maternity Home	95763	www.bgmh.org			×			×	×			
Black Child Legacy Campaign	95833	www.blackchildlegacy.org						×			×	×
Black Infant Health Program – Sacramento County Public Health	Whole county	www.scph.com									×	×
Boys and Girls Clubs of Greater Sacramento	95824	www.bgcsac.org	×	~	×			×				×

12. Cultural Competence  $\times$ 11. System Navigation  $\times$ prevention and management  $\times$  $\times$  $\times$ 10. Injury and disease POTENTIAL HEALTH NEED MET (X) extended care  $\times$  $\times$  $\times$ 9. Access to specialty and 8. Access and functional needs sdol, ipnusing, jobs  $\times$  $\times$  $\times$ Access to basic needs, such environment  $\times$ 6. Pollution-free living preventive services  $\times$ 5. Access to dental care and environment  $\times$ 4. Safe and violent free **Q**nites  $\times$  $\times$  $\times$ 3. Active living and healthy care health services  $\times$  $\times$  $\times$ 2. Access to quality primary substance abuse services  $\times$ 1. Access to mental/behavioral/ www.scd.org/catholic-charities-and-socialwww.capitolhealthnetwork.org concerns/catholic-charities www.cchatsacramento.com www.capcityaidsfund.org www.camprecreation.org www.calyouthconn.org www.sacbreathe.org www.pickpeach.org www.centerusd.org www.sacbhc.org www.scph.com 916-361-5168 Website **ORGANIZATION INFORMATION** ZIP Code 95820 Whole county 95816 95825 95826 95818 95670 95843 95814 95662 95822 95814 **Building Healthy Communities** and Well Being Inc. (partnered California Children's Services **Center for Community Health** - Sacramento County Public **California Youth Connection** Carrington College – Dental **Center Joint Unified School CCHAT Center Sacramento** with Peach Tree Health) **Capitol Health Network Capital City AIDS Fund** Breathe California of **Catholic Charities of** Sacramento Region Name **Camp ReCreation** Sacramento Inc. Hygiene Clinic District Health

ORGAN	ΙΙΖΑΤΙΟΙ	ORGANIZATION INFORMATION			РОТ	ENTIAL	ротеитіаl неаlтн need мет (X)	JAN NEE	D ME1	г (X)			
Name	ZIP Code	Website	<ol> <li>Access to mental/behavioral/ substance abuse services</li> </ol>	Z. Access to quality primary care health services	3. Active living and healthy gnifea	<ul> <li>4. Safe and violent free environment</li> <li>5. Access to dental care and</li> </ul>	preventive services 6. Pollution-free living environment	7. Access to basic needs, such as food, housing, jobs	8. Access and functional needs	9. Access to specialty and extended care	0. Injury and disease prevention and management	noitegiveN metev?	12. Cultural Competence
Central Downtown Food Basket	98811	www.cdfb.og			×			×					
Chest Clinic/Tuberculosis Control – Sacramento County Public Health	Whole county	www.scph.com								×	×		
Child Abuse Prevention Center	95660	w ww.thecapcenter.org				×							
Child and Family Institute (CFI)	95838	www.child-familyinstitute.org	×										
Child Health & Disability Prevention – Sacramento County Public Health	Whole county	www.scph.com		×									
Children's Receiving Home of Sacramento	95821	www.crhkids.org	×	×	×			×					
Citrus Heights Homeless Assistance Resource Team (HART)	95610	www.citrusheightshart.org						×					
City Church of Sacramento	95817	www.citychurchsac.org						×					
Clara's House	95816	www.clarashouse.org		×									
Clinica Tepati (in WellSpace Clinic)	95817	www.clinicatepati.com		×						×	×	×	×
Community Against Sexual Harm (CASH)	95816	www.cashsac.org	×			×							
Community Link (Community Services Planning Council)	95826	www.communitylinkcr.org	×										
Comprehensive Perinatal Services Program – Sacramento County Public Health	Whole county	w ww.scph.com	×		×					×	~	×	

ORGAN	IIZATIO	ORGANIZATION INFORMATION			POTE	ротеитіді неаітн иеер мет (X)	НЕАLТІ	H NEE	DME	т (X)			
Name	ZIP Code	Website	<ol> <li>Access to mental/behavioral/ substance abuse services</li> </ol>	2. Access to quality primary care health services 3. Active living and healthy	3. Active living and healthy eating 4. Safe and violent free	<ul> <li>c) Safe and workin nee</li> <li>e) environment</li> <li>5. Access to dental care and</li> <li>preventive services</li> </ul>	6. Pollution-free living environment	7. Access to basic needs, such as food, housing, jobs	sbəən lənoitənut bnə szəcəA .8	9. Access to specialty and extended care	10. Injury and disease prevention and management	11. System Navigation 12. Cultural Competence	
Cordova Lane Center – FCUSD	95670	www.fcusd.org/domain1993	×					×					
Cordova Recreation and Park District	95670	www.crpd.com	×		×			×					
C.O.R.E. Medical Clinic	95816	www.coremedicalclinic.com	×	×								×	
Cottage Housing Inc.	95811	w ww.cottagehousing.org						×					
Crime Victims Assistance Network (iCAN)	95811	www.ican-foundation.org	×			×							
Crisis Nursery Program – Sac Children's Home	95821	www.kidshome.org/what-we-do/ crisis-nursery-program	×	×		×							
Del Oro Caregiver Resource Center	95610	www.deloro.org	×							×	×		
Dignity Health	95819 95630 95608 95823	www.dignityhealth.org		×	×					×	×	× ×	
Disease Control and Epidemiology – Sacramento County Public Health	Whole county	w ww.scph.com									×		
Drowning Accident Rescue Team	95759	www.dartsac.com									×		
Effie Yeaw Nature Center	95608	www.sacnaturecenter.net			×								
El Hogar Community Services Inc.	95811 95834	w ww.elhogarinc.org	×			×		×					

ORGAN	IZATION	ORGANIZATION INFORMATION			POTEN	РОТЕNTIAL НЕАLTH NEED MET (X)	IEALTH	H NEE	D MET	r (X)			
Name	ZIP Code	Website	<ol> <li>Access to mental/behavioral/ substance abuse services</li> </ol>	Z. Access to quality primary care health services 3. Active living and healthy	eating 4. Safe and violent free	environment 5. Access to dental care and preventive services	6. Pollution-free living environment	7. Access to basic needs, such as food, housing, jobs	sbean lenoitonut bne sceoso A. 8	9. Access to specialty and extended care 10. Injury and disease	tnəməpenem bne noitnəvərq	11. System Navigation 12. Cultural Competence	anu and the second
Elica Health Centers	95825 95816 95820 95818 95660 95838	www.elicahealth.org	×	×		×					×	×	
Elk Grove Unified School District	95624	www.egusd.net	×	×	×			×					
Elverta Joint School District	95626	www.ejesd.net			×								
Eskaton	95608	www.eskaton.org	×	×				×					
Every Smile Counts! – Sacramento County Public Health	Whole county	w.ww.scph.com				×					×		
Everyone Matters Ministries	95747	w ww.everyonemattersministries.com						×					
Fresher Sacramento	95820	www.freshersacramento.com			×			×					
Firehouse Community Center	95838	www.mutualassistance.org/firehouse- community-center			×							×	
First 5 Sacramento Commission	95833	www.first5sacramento.net	×	×	×			×			×		
Folsom Cordova Community Partnership	95670	www.thefccp.org	×	×				×				×	
Food Literacy Center	95817	www.foodliteracycenter.org			×			×					
Foster-CPS Nursing & HEARTS for Kids – Sacramento County Public Health	Whole county	w ww.scph.com		×							×	×	

ORGAN	IIZATIO	ORGANIZATION INFORMATION			РОТ	ENTIA	РОТЕNTIAL НЕАLTH NEED MET (X)	LH NEE	D ME	т (х)			
Name	ZIP Code	Website	1. Access to mental/behavioral/ substance abuse services	<ul> <li>Δ. Access to quality primary</li> <li>care health services</li> </ul>	3. Active living and healthy enting	<ul> <li>4. Safe and violent free environment</li> <li>5. Access to dental care and</li> </ul>	preventive services 6. Pollution-free living environment	7. Access to basic needs, such as food, housing, jobs	sbəən lenoitonut bne szəooA .8	9. Αccess to specialty and extended care	9ceasib bns ynjury and aisease Inewention and management	noitsgiveN mətzy2 .11	12. Cultural Competence
Foster Hope Sacramento	95841	www.fosterhopesac.org						×					
Francis House	95814	www.nextmovesacramento.org/francis- house-center						×			<u></u>		
Fruit Ridge Community Collaborative	95820	www.fruitridgecc.org			×			×					
Galt Joint Union School District	95632	www.galt.k12.ca.us			×								
Gender Health Center	95817	www.thegenderhealthcenter.org	×	×		×		×			×	×	×
Girls on the Run Greater Sacramento	95819	www.gotrsac.org			×								
Greater Sacramento Valley and Nevada Arthritis Foundation	95815	w ww.arthritis.org			×						×		
Golden Rule Services	95823	www.goldenruleservicesacramento.org		×						×	×		
Goodwill – Sacramento Valley & Northern Nevada	95826	www.goodwillsacto.org						×					
Greater Sacramento Urban League	95838	www.gsul.org						×					
Guest House Homeless Clinic	95811	www.elhogarinc.org/guest-house- homelessclinic	×	×									
Harm Reduction Services (HRS)	95817	www.harmreductionservices.org	×	×							×		
Health and Life Organization (HALO Cares) – Sacramento Community Clinic	95823		×	×						×	×		
Health Education Council	95691	www.healthedcouncil.org			×	×							

ORGAN	IIZATION	ORGANIZATION INFORMATION			РОТ	ENTIA	POTENTIAL HEALTH NEED MET	LH NEE	M M	ЕТ (Х)			
Name	ZIP Code	Website	<ol> <li>Access to mental/behavioral/ substance abuse services</li> </ol>	Z. Access to quality primary care health services	۲. Active living and healthy وating	<ul> <li>4. Safe and violent free environment</li> <li>5. Access to dental care and</li> </ul>	6: Access to denier care and preventive services 6: Pollution-free living environment	7. Access to basic needs, such as food, housing, jobs	sbəən lenoitonut bne ssəooA .8	9. Access to specialty and extended care	seasa disease Inevention and management	noitsgiveN mətzy2 .ft	12. Cultural Competence
Health 4 All	95814	www.health4allca.org	×										
Health Rights Hot Line	95814	https://lawyers.justia.com/legalservices/ health-rights-hotline-11068						×				×	
Health Tech Academy – Valley High School	95838	www.vhs.egusd.net/programs/pathways/ health-tech						×					
Helping Hearts Foundation Inc.	95827	www.helping-hearts.org				×		×					
Heritage Oaks Hospital	95841	www.heritageoakshospital.com	×										
HIV/STD Prevention Program HIV/STD Surveillance – Sacramento County Public Health House of Hope Ministry	95828 95660 95816 95825 95811 95814 95814 95814 95814 95823 95823 95823	www.scph.com www.scph.com		×						×	× ×		
Human Services Coordinating Council (HSCC)	95823	www.dcfas.saccounty.net/Admin/Pages/ HSCC/BC-Human-Services-Coordinating- Council-HSCC.aspx						×					
Imani Clinic	95817	www.imaniclinic.org	×	×							~		

ORGAN	IIZATIO	ORGANIZATION INFORMATION		۵.	OTEN	POTENTIAL HEALTH NEED MET	ЕАLTH	NEED	) MET	(X)		
Name	ZIP Code	Website	<ul> <li>Access to mental/behavioral/ substance abuse services</li> <li>Access to quality primary</li> </ul>	cəre health services 3. Active living and healthy	eating 4. Safe and violent free environment	5. Access to dental care and preventive services	6. Pollution-free living environment	7. Access to basic needs, such sdoį, housing, jobs	8. Access and functional needs 9. Access to specialty and	extended care	prevention and management	12. Cultural Competence
Immunization Assistance Program – Sacramento County Public Health	Whole county	w ww.scph.com								×		
Interim HealthCare	95825	www.interimhealthcare.com/sacramentoca/ home	×	×	×			×			×	×
International Rescue Committee	95825	www.rescue.org/united-states/ sacramento-ca			×			×				
Johnston Community Center (also referred to as "Johnson" Community Center)	95815	www.mutualassistance.org/johnson-center	×	×				×		×		
Junior League of Sacramento	95825	www.jlsac.org										
Kaiser Permanente Sacramento Medical Center	95825	www.healthy.kaiserpermanente.org		×					^	×	×	×
Kaiser Permanente South Sacramento Medical Center	95823	www.healthy.kaiserpermanente.org	×	×					~	×	×	×
Lao Family Community Development Center	95823 95821	www.lfcd.org		×	×			×				×
Latino Coalition for a Healthy California	95814	www.lchc.org		×						×		×
Law Enforcement Chaplaincy Sacramento	95821	w ww.sacchaplains.com	×		×							
La Familia Counseling Center Inc	95820	w ww.lafcc.org	×	× ×	×			×		×		×
Lead Poisoning Prevention Program – Sacramento County Public Health	Whole county	w ww.scph.com								×		
Legal Services of Northern California – Health Rights	95814	www.lcnc.net/office/sacramento						×				

ORGAN	IIZATION	ORGANIZATION INFORMATION			РОТІ	ENTIA	POTENTIAL HEALTH NEED MET	TH NEE	Σ	ЕТ (X)			
Name	ZIP Code	Website	<ol> <li>Access to mental/behavioral/ substance abuse services</li> </ol>	Z. Access to quality primary care health services	3. Active living and healthy eating	<ul> <li>4. Safe and violent free environment</li> <li>5. Access to dental care and</li> </ul>	preventive services 6. Pollution-free living environment	Caroninnent 7. Access to basic needs, such as food, housing, jobs	sbəən lenoitonut bne ssəcəA .8	9. Access to specialty and extended care	9seəsib bns yıujnl .Of tnəməgenem bns noitnəvərq	noitsgiveN mətsy2 .ft	12. Cultural Competence
Life Matters	95842	www.wherelifematters.com						×					
Lilliput Children's Services	95610 95820	www.lilliput.org						×					
LINC Housing	95838	w ww.linchousing.org						×					
Loaves and Fishes	95811	w ww.sacloaves.org	×	×		×		×			×		
Lutheran Social Services	95824	www.lssnorcal.org						×					
Mack Road Partnership	95823	w ww.mackroadpartnership.com		×	×	×		×	×				
Mack Road Partnership Community Center	95823	www.mackroadpartnership.com/reimagine- foundation/programs		×	×			×					
MAK- Meningitis Awareness Key to Prevention	95608	www.makinfo.org									×		
McClellan VA Clinic	95652	www.northerncalifornia.va.gov/locations/ mcclellan-outpatient-clinic.asp		×			×			×	×		
Mary House	95811	www.sacloaves.org/maryhouse	×			×		×					
Meadowview Family Resource Center	95822	www.kidshome.org/what-we-do/ family-resource-center	×		×						×		
Meals on Wheels Sacramento	95831	www.mowsac.org						×					
Mental Health America of Northern California	95811	www.norcalmha.org	×										
Mercy Clinic – Loaves and Fishes	95811	w ww.sacloaves.org		×							×	×	$\times$
Mercy General Hospital (Dignity Health)	95819	www.locations.dignityhealth.org/ mercy-general-hospital-sacramento-ca		×	×			×		×	×	×	$\times$

ORGAN	IZATIO	ORGANIZATION INFORMATION		۵.	OTENT	РОТЕNTIAL НЕАLTH NEED MET (X)	LTH NE	ED V	<b>ІЕТ (X</b> )			
Name	ZIP Code	Website	<ol> <li>A. Access to mental/behavioral/ substance abuse services</li> <li>2. Access to quality primary</li> </ol>	care health services care health services 3. Active living and healthy eating	4. Safe and violent free environment	5. Access to dental care and preventive services 6. Pollution-free living	environment 7. Access to basic needs, such as food, housing, jobs	8. Access and functional needs	9. Access to specialty and extended care	Of. Injury and disease prevention and menogenent	noitegiveN mətsy2.ft	12. Cultural Competence
Mercy Housing	95816 95838 95833 95820 95811	www.mercyhousing.org					×					
Mercy San Juan Medical Center (Dignity Health)	95608	www.dignityhealth.org/sacramento/ locations/mercy-san-juan-medical-center	×	× ×					×	×	×	×
Methodist Hospital of Sacramento (Dignity Health)	95823	www.dignityhealth.org/sacramento/ locations/methodist-hospital-of-sacramento		× ×					×	×	×	×
Mexican Consulate General in Sacramento	95834	www.consulmex.sre.gob.mx			×		×					×
Molina Healthcare	95838 95823	www.molinahealthcare.com		×							×	×
Mutual Assistance Network	95838 95821 95815	www.mutualassistance.org	×	×			×			×		×
My Sister's House	95818	www.my-sisters-house.org	×	×	×		×					×
National Alliance on Mental Illness Sacramento (NAMI)	95827	www.namisacramento.org	×								×	
National Multiple Sclerosis Society	95834	w ww.nationalmsociety.org								×		
Natomas Unified School District	95834	www.natomasunified.org	×	×			×					
NCADD Sacramento	95825	www.ncaddsac.org www.ncadd.org	×									

ORGAN	IIZATION	ORGANIZATION INFORMATION		РОЧ	РОТЕNTIAL НЕАLTH NEED MET (X)	L HEAL	TH NE	ED M	ЕТ (Х)			
Name	ZIP Code	Website	<ul> <li>Access to mental/behavioral/ substance abuse services</li> <li>Access to quality primary</li> <li>Case to quality primary</li> </ul>	yntlean bne pnivil avitoð. Britea	<ol> <li>Safe and violent free environment</li> <li>A. Access to dental care and</li> </ol>	preventive services 6. Pollution-free living	environment 7. Access to basic needs, such as food, housing, jobs	8. Access and functional needs	9. Access to specialty and extended care	9seəsib bns yıujnl .Of İnəməgenem bne noiinəvəıq	noitegiveN mətey2 .ft	12. Cultural Competence
Neil Orchard Senior Activities Center	95827	www.crpd.com/parks/neil-orchard-senior- activities-center		×								
New Testament Baptist Church	95660	www.newtestamentbaptchurch.org		×	×		×					
Next Move (SAEH)	95817	www.nextmovesacramento.org	×		×		×					
North Franklin District Business Association	95820	www.franklinblvddistrict.com			×							
Nurse Family Partnership – Sacramento County Public Health	Whole county	www.scph.com							×	×	×	
Oak Park Community Center	95817	www.cityofsacramento.org/ParksandRec/ Community-Centers/OakParkCenter		×								
Oak Park Neighborhood Association	95817	www.oakparkna.com			×							
Oak Park Sol Community Garden	95817	www.oakparksol.org		×								
Obesity Prevention Program – Sacramento County Public Health	Whole county	www.scph.com		×						×		
One Community Health	95811	w ww.onecommunityhealth.com	× ×	×		×						
Opening Doors	95825	www.openingdoorsinc.org	×		×		×					
Oral Health Program – Sacramento County Public Health	Whole county	www.scph.com				×				×		
Orangevale Food Bank	95662	www.orangevalefoodbank.org		×			×					
Pacific Counseling and Trauma Center (Pacific Trauma Specialists)	95630	www.pacifictraumacenter.com	×									×

ORGAN	NIZATION	ORGANIZATION INFORMATION		РО	TENTI	РОТЕИТІАІ НЕАІТН	TH NE	EED M	IET (X)			
Name	ZIP Code	Website	<ul> <li>Y. Access to mental/behavioral/ substance abuse services</li> <li>Z. Access to quality primary</li> </ul>	care health services 3. Active living and healthy ening	4. Safe and violent free environment	5. Access to dental care and preventive services 6. Pollution-free living	environment 7. Access to basic needs, such as food, housing, jobs	8. Access and functional needs	9. Access to specialty and extended care	Of. Injury and disease prevention and menogenent	noitegiveN mətəy2.11	12. Cultural Competence
Paratransit Inc.	95822	www.paratransit.org						×				
Partners in Care of El Dorado County	95603	www.picseniorcare.com					×					
Paul Hom Asian Clinic	95819	w ww.myhs.ucdmc.ucdavis.edu	×						×	×		×
People Reaching Out	95841	www.proyouthandfamilies.org	×									
Pioneer Congregational United Church of Christ	95816	www.pioneerucc.org					×					
Planned Parenthood B Street Health Center	95816	www.plannedparenthood.org	×						×	×	×	×
Planned Parenthood Capitol Plaza Health Center	95814	www.plannedparenthood.org	×						×	×	×	×
Planned Parenthood Fruitridge Health Center	95820	www.plannedparenthood.org	×						×	×	×	×
Planned Parenthood North Highlands Health Center	95660	www.plannedparenthood.org	×						×	×	×	×
Prevent Alcohol and Risk Related Trauma in Youth (P.A.R.T.Y.)	95763	www.partyprogram.com			×					×		
PRIDE Industries	95660 95826 95834	www.prideindustries.com					×					
Project TEACH	95826	www.projectteach.scoe.net			×		×					
Public Health Division – Sacramento County Department of Health Services	95823	www.scph.com	×	×		×				×	×	

ORGAN	IZATION	ORGANIZATION INFORMATION			POTE	ротеитіаl неаlтн need мет (X)	НЕАLTI	H NEE	D MET	(X)		
Rame	ZIP Code	Website	<ol> <li>A. Access to mental/behavioral/ substance abuse services</li> <li>A Access to quality primary</li> </ol>	<ol> <li>Access to quality primary</li> <li>Care health services</li> </ol>	3. Active living and healthy eating 4. Safe and violent free	environment 5. Access to dental care and	preventive services 6. Pollution-free living environment	7. Access to basic needs, such as food, housing, jobs	8. Access and functional needs 9. Access to specialty and	extended care	prevention and management	12. Cultural Competence
Public Health Emergency Preparedness – Sacramento County Public Health	Whole county	www.scph.com								×		
Public Health Laboratory — Sacramento County Public Health	Whole county	www.scph.com								×		
	27617	www.radkids.org				×						
Rebuilding Together	95826	www.rebuildingtogethersacramento.org				×						
Recreate for Health (American River Park Foundation program)	95608	www.arpf.com			×							
River City Food Bank	95816 95821	www.rivercityfoodbank.org			×			×				
River Delta Unified School District	94571	www.riverdelta.org			×							
River Oak Center for Children	95841	www.riveroak.org	×									
River Oak Family Resource Center	95820	www.riveroak.org	×		×					×		
Roberts Family Development Center	95815	www.robertsfdc.org			×			×				
Robla School District	95838	w ww.robla.k12.ca.us		×	×							
Ryan White HIV Care & Treatment – Sacramento County Public Health	Whole county	www.scph.com	×	×					~	×	×	
Sacramento Area Congregations Together (ACT)	95818	www.sacact.org	×					×				

ORGAN	<b>UIZATION</b>	ORGANIZATION INFORMATION			РОТЕ	POTENTIAL HEALTH NEED MET	НЕАЦТН	I NEED	О МЕТ	(X)		
Name	ZIP Code	Website	<ol> <li>Access to mental/behavioral/ substance abuse services</li> </ol>	Z. Access to quality primary care health services 3. Active living and healthy	3. Active living and healthy eating 4. Safe and violent free	environment 5. Access to dental care and preventive services	6. Pollution-free living environment	7. Access to basic needs, such as food, housing, jobs	8. Access and functional needs	extended care	prevention and management	12. Cultural Competence
Sacramento Children's Home	95820	www.kidshome.org	×		×	×		×				
Sacramento Chinese Community Services Center (SCCS)	95814	www.sccsc.org	×		×							×
Sacramento City College – Dental Health Clinic	95822	www.scc.losrios.edu/dentalhealthclinic				×						
Sacramento City Unified School District	95824	www.scusd.com	×	×				×				
Sacramento County Dental Health Program	Whole county	www.dhhs.saccounty.net				×						
Sacramento County Department of Health and Human Services	Whole county	www.dhhs.saccounty.net	×	×	×	×	×			×		
Sacramento County Department of Human Assistance	Whole county	www.dha.saccounty.net						×				
Sacramento Countywide Foster Youth Services	95826	www.scoe.net/fys/Pages/default.aspx						×				
Sacramento Court Appointed Special Advocates	95827	w ww.sacramentocasa.org				×						
Sacramento Covered	95811	www.sacramentocovered.org		×								
Sacramento District Dental Foundation	95825	www.www.sdds.org				×						
Sacramento Employment and Training Agency (SETA)	95815	www.seta.net						×				
Sacramento Food Bank and Family Services	95817 95838	www.sacramentofoodbank.org			×			×				

ORGAN	IZATION	ORGANIZATION INFORMATION			POTEN	РОТЕNTIAL НЕАLTH NEED MET (X)	EALTH		O ME	т (X)			
Name	ZIP Code	Website	<ul> <li>Access to mental/behavioral/</li> <li>Access to mental/behavioral/</li> <li>Substance abuse services</li> </ul>	۲. Access to quality primary دعدe health services 3. Active living and healthy	eating 4. Safe and violent free environment	5. Access to dental care and preventive services	6. Pollution-free living environment	7. Access to basic needs, such as food, housing, jobs	sbəən lenoitonut bne ssəooA.8	9. Access to specialty and extended care	10. Injury and disease prevention and management	11. System Navigation	12. Cultural Competence
Sacramento Habitat for Humanity	95811	www.habitatgreatersac.org						×					
Sacramento Housing Alliance	95814	www.sachousingalliance.org						×					
Sacramento Housing and Redevelopment Agency (SHRA)	95814	www.shra.org						×					
Sacramento Junior Giants	95811	www.sfjg-ssgs.siplay.com			×								
Sacramento Kindness Campaign	95864	www.sackindnesscampaign.org			×			×	×				
Sacramento LGBT Community Center	95811	www.saccenter.org			×			×				×	~
Sacramento Life Center (SLC)	95825	www.saclife.org		×						×	×		
Sacramento Native American Health Center Inc.	95811	www.snahc.org	×	×	× ×					×	×	~	×
Sacramento Regional Coalition to End Homelessness	95833	www.srceh.org						×					
Sacramento Self Help Housing	95818	www.sacselfhelp.org						×					
Sacramento Steps Forward	95833	www.sacramentostepsforward.org						×					
Sacramento Tree Foundation	95815	www.sactree.com					×						
Sacramento Violence Intervention Program (SVIP) (WellSpace Health)	95828	www.wellspacehealth.org/services/ counseling-prevention/sac-violence- intervention-program			×							×	~
Sacramento Women's Health	95825	www.sacwomenshealth.com		×						×	×	××	

ORGAN	IZATIO	ORGANIZATION INFORMATION			POTE	ENTIA	РОТЕNTIAL НЕАLTH NEED MET (X)	TH NE	ED MI	ЕТ (Х)			
Name	ZIP Code	Website	1. Access to mental/behavioral/ substance abuse services 2 Access to quility primary	Z. Access to quality primary care health services 3. Active living and healthy	3. Active living and healthy eating	4. Safe and violent free fromnorivna breest freest freest freest and	<ol> <li>5. Access to dental care and preventive services</li> <li>6. Pollution-free living</li> </ol>	environment 7. Access to basic needs, such as food, housing, jobs	sbəən lənoitonut bnə seəooA .8	9. Access to specialty and extended care	10. Injury and disease prevention and management	noitspivs M mətzy Z . M	12. Cultural Competence
Sacramento Works Job Centers	95817 95610 95670 95823 95838 95842 95820 95820 95824 95827 95828 95828	www.sacramentoworks.org						×					
Safety Center	95827	www.safetycenter.org				×					×		
Saint John's Program for Real Change	95826	www.saintjohnsprogram.org	×					×					
Sam & Bonnie Pannell Community Center	95832	www.cityofsacrametno.org/ParksandRec/ Community-Centers/SamBonniePannellCenter			×								
San Juan Unified School District	95608	www.sanjuan.edu	×		×	×	×	×					
SeniorCare PACE	95823 95818	www.sutterhealth.org/services/senior- geriatric/senior-pace		×	×					×	×		
SETA Head Start	95815	www.headstart.seta.net			×			×					
Sherriff Community Impact Program	95825	www.sacscip.org	×		×	×							
Shiloh Baptist Church	95817	www.shilohbaptistchurch-sacramento.org						×					

ORGAN	IZATION	ORGANIZATION INFORMATION			POTE	POTENTIAL HEALTH NEED MET (X)	IEALTH	H NEEI	O MET	(X)		
Name	ZIP Code	Website	<ol> <li>Access to mental/behavioral/ substance abuse services</li> </ol>	<ol> <li>Access to quality primary</li> <li>Cate health services</li> <li>Active living and healthy</li> </ol>	4. Safe and violent free	environment 5. Access to dental care and preventive services	6. Pollution-free living environment	7. Access to basic needs, such as food, housing, jobs	8. Access and functional needs	extended care	prevention and management	12. Cultural Competence
Shingle Springs Tribal TANF Program	95825	www.shinglespringsrancheria.com/tanf						×				×
Shriners Hospitals for Children –Northern California	95817	www.shrinershospitalsforchildren.org/ sacramento		×					~	×	×	×
Sierra Health Foundation	95833	www.sierrahealth.org	×	×	×	×				×		
Slavic Assistance Center	95825	www.slaviccenter.us						×				×
Smile Keepers – Dental Health Program	Whole county	www.dhs.saccounty.net/PUB/Pages/Dental- Health-Program.aspx				×						
Society for the Blind	95811	www.societyfortheblind.org							^	×		
South County Services	95632	www.southcountyservices.org						×	×			
South Natomas Community Center	95833	www.cityofsacramento.org/ParksandRec/ Community-Centers/SouthNatomasCenter			×							
South Sacramento Interfaith Partnership Food Closet	95822	www.ssipfoodcloset.org						×				
Southeast Asian Assistance Center	95822	www.saacenter.org	×									~
St. Marks United Methodist Church	95864	w ww.stmarksumc.com			^	×		×				
St. Paul Missionary Baptist Church	95820	www.stpaulsac.org			×							
St. Vincent de Paul Sacramento Council	95816	www.svdp-sacramento.org						×				
Stanford Settlement	95833	www.stanfordsettlement.org			×			×	×			
Stanford Youth Solutions	95826	www.youthsolutions.org	×		~	×		~				

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Name	ZIP Code	Website	1. Access to mental/beinavioral/ substance abuse services 2. Access to quality primary	care health services 3. Active living and healthy eating	4. Safe and violent free environment	<ul> <li>5. Access to dental care and preventive services</li> <li>6. Pollution-free living</li> </ul>	environment 7. Access to basic needs, such	sdol, housing, jobs 8. Access and functional needs	9. Access to specialty and extended care	Or. Injury and disease prevention and management	noitspiveN mətzy2 .11	12. Cultural Competence
Stop Stigma Sacramento Speakers Bureau – Sacramento County Public Health	Whole county	www.scph.com								×		
Strategies for Change	95841 95823	w ww.strategies4change.org	×		×		×					
Su Familia-The National Hispanic Family Health Helpline	20036	www.healthyamericas@org/help-line	~	×								×
Summer Night Lights Sacramento – Mack Road Partnership	95823	www.mackroadpartnerships.com/event/ sacramento-summer-night-lights		×	×							
Sunburst Projects	95825	www.sunburstprojects.org	×						×	×		
Sunrise Marketplace	95610	w ww.sunrisemarketplace.com		×								
Sutter Center for Psychiatry	95826	-pu r-p	×								×	×
Sutter Davis Hospital	95616	www.sutterdavis.org	×	×					×	×	×	×
Sutter Medical Center	95616	w ww.suttermedicalcenter.org	×	×					×	×	×	×
Terra Nova Counseling	95628	www.terranovacounseling.org	×									
The Birthing Project Clinic – Center for Community Health and Well Being	95811	w ww.pickpeach.org		×					×		×	×
The Cup With Love Project	95758	w ww.cupwithlove.org										
The Gardens – A Family Care Community Center	95822	www.thegardensfamily.org	×				×			×		
The Gathering Inn	95678	www.thegatheringinn.com					×					

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Name	ZIP Code	Website	1. Access to mental/behavioral/ substance abuse services	۲. Access to quality primary دعاد health services ۲. Active living and healthy ۲. Active living	eating 4. Safe and violent free environment	5. Access to dental care and preventive services	6. Pollution-free living environment	7. Access to basic needs, such as food, housing, jobs	8. Access and functional needs 9. Access to specialty and	extended care	prevention and management M. System Navigation	12. Cultural Competence
The Grace Network	95851	w ww.thegracenetwork.org			×							
The Keaton Raphael Memorial	95661	w ww.childcancer.org								×		
The Mental Health Association	95825	w ww.mhac.org	×									
The Place Within Folsom	95830	www.theplacewithinfolsom.com	×									
The Salvation Army	95814 95670 95817	www.salvationarmyusa.org		×	×			×				
The Salvation Army – Adult Rehabilitation Center	95814	www.sacramentoarc.salvationarmy.org	×									
The SOL Project – Saving Our Legacy, African Americans for Smoke-Free Safe Places	95814	www.thesolproject.com	×									
3 Strands Global	95762	www.3strandsglobalfoundation.org			×							
TLCS (Transitional Living and Community Support) (Transforming Lives, Cultivating Success)	95825	www.tlcssac.org	×	×				×				
Tobacco Education Program – Sacramento County Public Health	Whole county	www.scph.com					×			×		
Triple-R Adult Day Program	95816	www.tripler.org										
Turning Point Community Programs	95827	www.tpcp.org	×					×				
Twin Lakes Food Bank	95630	www.twinlakesfoodbank.sustaininggood.com						×				

ORGAN	IIZATION	ORGANIZATION INFORMATION		РО	TENTI	POTENTIAL HEALTH NEED MET	TH NE	ED	ЕТ (Х)			
Name	ZIP Code	Website	<ul> <li>λ. Access to mental/behavioral/ substance abuse services</li> <li>2. Access to quality primary</li> <li>care health services</li> </ul>	yntleəri bris grivil əvitə. Britə Britani	4. Safe and violent free environment	<ul> <li>5. Access to dental care and preventive services</li> <li>6. Pollution-free living</li> </ul>	environment 7. Access to basic needs, such as food, housing, jobs	8. Access and functional needs	9. Access to specialty and extended care	30. Injury and disease prevention one noitneyend	noitsgivsN mətzy2 .ft	12. Cultural Competence
Twin Rivers Unified School District	95660	www.twinriversusd.org	×	×			×					
U.S. Department of Veterans Affairs – Sacramento Vet Center	95825	www.va.gov/directory/guide/facility. asp?ID=521	×				×					
UC Davis Medical Center	95817	www.ucdmc.ucdavis.edu	× ×						×	×	×	$\times$
United Cerebral Palsy of Sacramento and Northern California	95841	www.ucpsacto.org								×		
United Iu-Mien Community Services	95824	www.unitediumien.org	×		×					×		×
VA Northern California Health Care System	95655	www.northerncalifornia.va.gov	×				×		×	×	×	×
Valley Hi Family Resource Center	95823	www.kidshome.org/what-we-do/family- resource-centers	×									
Visions Unlimited	95823	www.vuinc.org	×									
Vital Records – Sacramento County Public Health	Whole county	www.scph.com								×		
Volunteers of America – Northern California & Northern Nevada	95821	www.voa.org/volunteers-of-america- northern-california-and-northern-nevada					×					
Waking the Village	95816	www.wakingthevillage.org		×	×		×					
WALK Sacramento	95814	www.walksacramento.org		×								
Warmline Family Resource Center	95818	www.warmlinefrc.org								×		
WayUp	95833	www.wayupsacramento.org		×	×		×					
WEAVE	95811	www.weaveinc.org	×		×		×					

	ORGANIZATION INFORMATION			POTEI	<b>VTIAL H</b>	ротентіаl неаlтн неер мет (X)	NEED	MET (	(X		
ZIP Name Code	e Website	<ol> <li>Access to mental/behavioral/ substance abuse services</li> </ol>	۲. Access to quality primary כמר health services 3. Active living and healthy	eating 4. Safe and violent free	environment 5. Access to dental care and preventive services	6. Pollution-free living environment	7. Access to basic needs, such as food, housing, jobs	8. Access and functional needs 9. Access to specialty and	extended care Nu Injury and disease Prevention and management	noitagivaM mətsy2 .ft	12. Cultural Competence
Wellness and Recovery Center         95608           - Consumers Self Help         95823	<ul><li>www.consumersselfhelp.org/wrc-north</li><li>www.consumersselfhelp.org/wrc-sourth-1</li></ul>	×									
Wellness Within 95678	8 www.wellnesswithin.org		^	×					×		
95632 95823 95821 95827 95621 95827 95837 95660 95817 95817 95816 95816 95816 95816 95820 95820	2 11 12 14 11 11 11 11 11 11 11 11 11 11 11 11	~	×	×	×			×	×	×	×
WellSpace Health Residential         95815           Treatment Center         95815	5 www.wellspacehealth.org/services. counseling-prevention/addictions-counseling	×								×	×
Wellspring Women's Center 95817	7 www.wellspringwomen.org	×	^	×						×	×

ORGAN	IIZATION	ORGANIZATION INFORMATION			POTEN	POTENTIAL HEALTH NEED MET (X	IEALTH	I NEED	O ME	г (X)			
Name	ZIP Code	Website	<ol> <li>Access to mental/behavioral/ substance abuse services</li> <li>Access to apuse abuse version</li> </ol>	۲. Access to quality primary دعدe health services 3. Active living and healthy	eating 4. Safe and violent free	environment 5. Access to dental care and preventive services	6. Pollution-free living environment	7. Access to basic needs, such as food, housing, jobs	sbəən lenoitonut bne szəooA. 8	9. Access to specialty and extended care	10. Injury and disease prevention and management	noitagivaN mətzy2.11	12. Cultural Competence
WIC Sacramento	95822 95838 95817 95670 95758 95624	www.dhs.saccounty.net/pri/wic/pages/ women-infants-and-children-home.aspx		~ ×	×						×		
Wind Youth Services	95817	www.windyouth.org	×					×					
Women's Empowerment	95811	www.womens-empowerment.org	×					×					
YMCA of Superior California	95818	www.ymcasuperiorcal.org			×			×					
Yoga Seed Collective	95814	www.theyogaseed.org			×								
YWCA	95811	www.ywcaccc.org/sacramento	×					×			×		



# Limits and Information Gaps

Study limitations included challenges obtaining secondary quantitative data and assuring community representation through primary qualitative data collection. For example, most of the data used in this assessment were not available by race/ethnicity. The timeliness of the data also presented a challenge, as some of the data were collected in different years; however, this is clearly noted in the report to allow for proper comparisons.

As always with primary data collection, gaining access to participants that best represent the populations needed for this assessment was a challenge. Additionally, data collection of health resources in the service area was challenging. Although an effort was made to verify all resources (assets) collected, we recognize that ultimately some resources may not be listed that exist in the service area.

# Appendix A:

# Impact of Actions Taken Since Previously Conducted CHNA (2016)

# UC DAVIS HEALTH COMMUNITY HEALTH NEEDS ASSESSMENT IMPACT OF ACTIONS TAKEN SINCE LAST CHNA

The 2016 Implementation Plan addressed many of the significant health needs identified in the UC Davis Medical Center's Community Health Needs Assessment (CHNA). The following is an overview of the actions taken since the last CHNA.

# I. Access to Behavioral Health Services

The CHNA revealed that more behavioral health services and new integrated care models in the region's safety net were needed. As such, we are focused on building a mental health strategy that targeted specific resources in the community and expanded mental health resources in the county. Key objectives included:

- Increasing utilization of outpatient behavioral health services and programs;
- Increasing education of community members regarding behavioral health issues; and,
- Expanding the education of health care providers regarding behavioral health.

UC Davis Health supported the following programs and activities.

# Bender Court Crisis Program

Bender Court Crisis Program is a six-bed short-term crisis residential program that is operated in partnership with Turning Point Community Programs. Bender Court provides support for adults experiencing a mental health crisis, averting the need for psychiatric hospitalization, and offers a safe, short-term and supportive environment for individuals experiencing mental health challenges with the goal of symptom stabilization. Bender Court services include counseling/therapy, housing assistance, establishing a primary care provider, and connecting clients with benefits. Program outcomes include:

- From 2016–17, 116 individuals were discharged from the program.
- Of those discharged, 81% of the clients showed marked behavioral health improvements (increased MORS Score).
- Overall customer satisfaction the program received an overall satisfaction rate of 89%.

# TLCS Inc. Mental Health Crisis Respite Center

UC Davis Health works with the TLCS Mental Health Crisis Respite Center to help people find respite during times of mental health crisis. While at the Center, the primary goal is to stabilize individuals in crisis while addressing their basic needs for safe environments and social support so they are better positioned to explore crisis with a solution oriented mindsets. Every guest leaves with an individualized resource plan, and TLCS Crisis Respite Staff provide follow-up to ensure that the crisis has been managed. From 2016–2018, TLCS has addressed over 9,000 crisis episodes.

# Interim Care Program (ICP)

A collaborative of the "region's four health care systems and WellSpace Health, the ICP program provides respite-care, case management, and other services for homeless patients discharged from hospitals. Started in 2005, the program offers clients services to help them focus on recovery, and develop plans for their housing and care upon discharge. In addition, since 2016, the ICP program expanded to meet the needs of patients with more complex needs and acute health issues. UC Davis Health provides ongoing financial support for the operations of the ICP program and recently committed financial resources to the long-term sustainability of the ICP program.

As of October 2018, outcomes include:

- 743 total clients were enrolled in the ICP program.
- Over 80% of clients utilize the social services resources and graduate from the program.
- Over 70% of enrolled clients were discharged to some form of housing (permanent supportive or independent housing, friends, family, AOD program, etc.).

### Integrated Behavioral Health Services at Elica Health Centers

To increase access to mental health care in the community, UC Davis Health partnered with Elica Health Centers to develop an integrated behavioral health service within their primary care clinic sites. This is headed by an embedded UC Davis Health psychiatrist who provides behavioral health consultation and clinical services at Elica's clinics. By the end 2018, integrated care services were adapted and integrated into Elica's 11 clinics and over 500 patients have received behavioral health services from a UC Davis psychiatrist.

# Early Psychosis Program (EDAPT and SacEDAPT)

UC Davis Health's Early Psychosis Programs, nationally recognized programs in early psychosis care, offer expertise in state of the art assessments and evidence-based practices for early identification and intervention for psychotic disorders. Eligible patients and their families receive individualized, comprehensive, multidisciplinary treatment that includes medical and pharmacological treatment, case management, individual and group therapy, substance abuse treatment and supported employment/ education. After two years of comprehensive care, patients are transitioned into treatment in community settings. Program outcomes included:

- The program served 352 individuals and families from diverse backgrounds. Seventy percent of the individuals were on Medi-Cal or had no insurance; and,
- Despite diagnoses of psychotic serious mental illnesses, outcomes after the program were much lower than seen in community care. Most notably, rates of full time school or employment are greater than 70%, while in community settings with treatment, this is averages about 20%.

# Sacramento County Behavioral Health

UC Davis Health's Department of Psychiatry and Behavioral Sciences delivers psychiatry services at different Sacramento County-run facilities. On an annual basis, UC Davis Health provided on average the following:

UC Davis Health psychiatrists, psychologists, nurse practitioners, and licensed clinical social workers work full-time or part-time at Sacramento County-operated or funded facilities providing direct behavioral health services, including the Mental Health Treatment Center, Mental Health Urgent Care Clinic, and the SacEDAPT Clinic; and, General psychiatry, child psychiatry, combined internal medicine/psychiatry, and family medicine/ psychiatry residents and fellows rotate through a county facility each year, supporting the need for critical care in the community.

# Triage Navigator Program (TNP)

UC Davis Health participates in the Triage Navigator Program (TNP). The program works to reduce unnecessary incarceration and inpatient psychiatric hospitalizations of individuals experiencing a mental health crisis. Navigators are located in six Sacramento county emergency departments, including UC Davis Health, who work with peer navigators to support after care upon discharge and continue to support participants for up to 60 days after the first face-to-face meeting with clients experiencing a mental health crisis. From 2016–18, TNP received over 6,000 referrals, screened over 2,000 patients, who were referred to a peer navigator. Outcomes of note include:

- In comparing hospitalizations of individuals enrolled in TNP before their screen and after their discharge, there was an average 33.6% reduction over two years in hospitalizations among those linked to an outpatient mental health program.
- Considerable reductions in referrals from emergency departments to the Mental Health Treatment Center-intake Stabilization unit were also observed at an average reduction of 47%.

# Physician residencies in behavioral health

The UC Davis Health Department of Psychiatry and Behavioral Sciences offers extensive educational opportunities for medical students, residents and postdoctoral professionals. Faculty committed to resident education and training, top-notch facilities and opportunities for diverse patient care, research, and academic pursuits make UC Davis an ideal place to train. UC Davis is only one of two programs in the nation to have both family medicine and internal medicine/psychiatric training programs. From 2016–18, UC Davis Health graduated 18 psychiatry residents and 13 double-boarded residents.

# UC Irvine/UC Davis Train New Trainers Primary Care Psychiatry (PCP) Fellowship

This is a year-long clinical education program for primary care-oriented trainees and providers who wish to receive advanced training in primary care psychiatry. From 2016–18, 33 community health providers completed the program. Enrollment by Sacramento area providers is increasing steadily.

# Fostering Secure Placements for Traumatized Children in Transition Project

Working in conjunction with Sacramento County, this five-year project provides assessment services and preventative interventions to children ages 1-5 years old who have entered a new foster placement in the previous 60-90 days. The goals of the intervention are to increase foster care placement stability, reduce trauma-related symptoms in children, and provide referral services, as needed. The six-week intervention is expected to serve over 2,000 children between 2016–2021. In 2017, the project served over 250 children and had the following outcomes:

- Reduced levels of behavior problems 74% of children had clinical levels of behavioral problems pre-intervention and 32% post-intervention;
- Retention rate the retention rate in foster care placement was 93% post-intervention.

# Behavioral Health Center for Excellence Programs

Founded in 2014 and in collaboration with UCLA, the center has expanded its efforts to leverage our clinical, research and educational expertise, partnerships with the Sacramento and surrounding communities, and proximity to stakeholders and policymakers in the Capitol to further enhance our contribution to the mental health and well-being of the people of California. Activities included:

- Since 2016, the center convened two statewide conferences featuring providers from over 30 counties to discuss preventive approaches and disseminate best practices for mental health care.
- Launched in 2016, the center's webinar series, created with input from the community, educates and disseminates information to communities across California. The webinars included evidence-based early intervention model and best practice models for providers in psychotherapeutic use for young adults experiencing their first episode of psychosis. The webinars draw on expertise from national and international leaders in the field. Since its inception, the center has hosted eight webinars.
- The center is contracting with the California Mental Health Commission to conduct a statewide costbenefit analysis and in-depth case study of the SB82-funded triage grants to discover best practices to assist counties in their efforts to sustain these programs in the future and potentially shape a statewide response to mental health crisis intervention in the future.
- The center is training UC Davis junior faculty as investigators in patient-oriented mental health research. The goal of this program stems from the rapidly diminishing pipeline of new clinical researchers by supporting their training in conducting rigorous mentored clinical/patient-oriented research into serious mental illness. From 2016–18, the center trained four junior faculty members.

*Center for Reducing Health Disparities* – the center's mission is to promote the health and well-being of diverse communities by taking a multidisciplinary, collaborative approach to the inequities in health access and quality of care. Since 2016, the center has been working on a six-year statewide prevention and early intervention effort to reduce mental health disparities in underserved communities. The center is providing technical assistance to Latino serving community-based organizations throughout California and developing the Latino Strategic Planning Workgroup that is charged with identifying new service delivery approaches defined by multicultural communities. In Sacramento, the center is working with La Familia, a community-based organization that provides multicultural counseling, outreach, and support services to low-income, at-risk youth and families in the region. The community-defined, evidence pilot project, Cultura de Salud, is a service delivery model focused on working with schools to promote mental health and suicide prevention, conducting home visitations as a strategy to overcome work schedule and transportation issues, and promoting the use of platicas as a strategy for support groups.

# II. Active Living and Healthy Eating

The CHNA found the lack of access to safe places to be physically active and healthy affordable foods in the community in low SES communities. It also found that knowledge on how to make healthier choices and prepare healthier foods is vital for improved population health and needed in the community. As such, we are focused on access to healthy foods and increasing physical activity. Key objectives include:

- Promote availability and access to healthy food choices;
- Increase healthy eating habits; and,
- Increase physical activities among children and their families.

UC Davis Health supported the following programs and activities.

# River City Food Bank

As Sacramento's oldest, continuously serving food bank, River City Food Bank's mission is to alleviate hunger in Sacramento County by providing emergency food and other assistance, offering referrals, and promoting self-sufficiency. UC Davis Health provided financial support for the following programs: BackSnack and the Most Important Meal. The BackSnack program provides children at risk of hunger, on weekends and during the school day, with nutritious snacks and food throughout the year. River City worked with six Sacramento-area schools, and in 2016, distributed over 38,000 pounds of food. Seniors are the fastest-growing demographic group at the River City Food Bank. The Most Important Meal program provides low-income seniors at Park Place Low Income Senior Living with a weekly bag of healthy and nutritious food. In 2016, 36,000 seniors received 40,000 pounds of healthy food items.

# Food Literacy Center: Education for Elementary Students

The Food Literacy Center teaches low-income elementary children cooking and nutrition to improve our health, environment, and economy. Food Literacy Education for Elementary Students serves low-income pre-K-6th grade who are most at risk due to lack of access to healthy food. In the Title 1 schools where they teach, 75-100% of kids are on free or reduced lunch programs. With funding from UC Davis Health, the Food Literacy Education for Elementary Students program served over 650 students in four different after-school programs in the South Sacramento community: Pacific Elementary, Ethel Phillips Elementary, St. Hope Public School (PS7), and Oak Ridge Elementary School.

# Oak Park Farmers Market

The Oak Park Farmers Market features a diverse group of vendors selling locally produced and delicious fruits and vegetables, specialty plants and sprouts, breads, cheese, tamales, fresh flowers, and more. In addition, the market provides a variety of interactive activities each week, including live music from local bands, activities for children (storytelling, face painting, art projects), and information and giveaways from area nonprofits and other organizations. UC Davis Health provides ongoing financial support for the market's general operating budget.

# UC Davis Health Farmers Market

The UC Davis Health Farmers Market was created to provide access to local, fresh fruits and vegetables to patients, staff, students, and neighbors close to the Sacramento campus of UC Davis. In addition, UC Davis Health staff provide wellness information and health-related activities. In addition, to help those from underserved communities, the market accepts Cal-Fresh payment, and vendors donate leftover produce to help supply the student food bank on the UC Davis campus.

# Elmhurst-Med Center Community Garden

In collaboration with the City of Sacramento and Sacramento County, UC Davis Health created a community garden. The Elmhurst-Med Center Community Garden includes 24 plots, an herb garden, and fruit trees. UC Davis Health staff and students utilize some of the plots to grow vegetables and donate the produce to local food banks and other nonprofits, including Ronald McDonald House. Local neighbors also have access to half the plots to grow healthy produce.

# Dietician Outreach and Education in the Community

UC Davis Health participated in a number of activities and events that encouraged and promoted healthy eating habits. From speaking at community events to participating at health fairs, UC Davis Health's nutrition program has provided nutrition education throughout the Sacramento region. Participating at 37 different events, UC Davis Health dieticians have provided education classes and presentations for children with type 1 diabetes, breast cancer and nutrition seminars, bariatric support group meetings, and diet and Parkinson's disease.

# III. Access to High Quality Health Care and Services

The CHNA revealed that while the Affordable Care Act provided needed health insurance coverage, access to primary and specialty providers remains challenging. The CHNA noted that Medi-Cal providers are difficult to find, wait times to see a provider are long, and language barriers persist. In addition, community members noted that coordinated care is important, and having multiple services in one location would be helpful. As such, UC Davis Health focused on patient navigation of the health care delivery system and facilitating referrals to care for underserved communities. Key objectives include:

- Assist with referrals to care;
- Provide increased access to care through community-based efforts; and,
- Increase education of community members regarding access to care.

UC Davis Health supported the following programs and activities:

### Sacramento Covered

A community-based organization focused on improving the overall health of residents in our region, Sacramento Covered works to increase understanding of health care issues among the uninsured, educate residents about their health care options, and help them overcome barriers to coverage. Since 2015, UC Davis Health has partnered with Sacramento Covered to employ a patient navigator in the emergency department to provide onsite assistance to patients prior to discharge to connect/reconnect patients with primary care providers and other services, assist in determining eligibility for patients with no coverage, help with the retention of coverage, and provide assistance with other public benefits and community resources. From 2016–2018, over 3,000 individuals received assistance from the patient navigator at UC Davis Health. In addition, UC Davis Health provides ongoing financial support for Sacramento Covered's operation. Sacramento Covered's team of health access specialists and community outreach workers provide in-person assistance across five counties, 15 neighborhoods, and in 13 different languages.

# Elica Health – Mobile Van

Elica Health, a Federally Qualified Health Center, is a network of ten health center facilities in the Sacramento region that provides services for over 24,000 individuals. Every year, Elica serves over 2,000 patients through their Wellness Outside Walls initiative, via the Street Medicine Practice and Mobile Medicine programs. In 2018, UC Davis Health provided financial support to Elica Health to purchase a mobile health van. UC Davis providers participate as clinical volunteers on the mobile van.

#### Sacramento Physicians' Initiative to Reach out, Innovate and Teach (SPIRIT)

The SPIRIT program meets the health care needs of the community by recruiting and placing physician volunteers to provide free medical services to our region's uninsured. A collaborative partnership of the Sierra Sacramento Valley Medical Society, Kaiser Permanente, Dignity/Mercy Healthcare, Sutter Health, UC Davis Health, and Sacramento

County, SPIRIT coordinates specialty consults and surgical services for uninsured individuals at local hospitals and ambulatory surgery centers. UC Davis provided funding for general operating support for the program.

### Community Health Clinics

Since 2005, UC Davis providers have been providing primary care services to Medi-Cal members and other underserved populations through the network of Federally Qualified Health Centers (FQHCs) in the Sacramento region. From 2016–2018, physicians, nurse practitioners, and residents have been providing direct primary care services at six area FQHCs. In addition, UC Davis physicians provide voluntary clinic time in nephrology, rheumatology, and musculoskeletal disorders at the Sacramento County Health Center.

### Pathways to Health + Home

The City of Sacramento's Whole Person Care pilot program seeks to improve the health, quality of life, and housing stability through an integrated system of care for individuals experiencing or at-risk of experiencing homelessness. By placing Sacramento's most vulnerable and fragile homeless residents at the center of a more coordinated, responsive, and sustainable health and housing system of care, the Pathways program provides a new way forward in addressing and preventing homelessness in Sacramento. UC Davis Health participates on the Advisory, Care Coordination, and Information Technology Committees and began to refer patients to the program in November 2018.

# IV. Disease Prevention, Management and Treatment

The CHNA found numerous chronic disease challenges in the community and the need for enhanced disease prevention and/or management measures to improve population health. This category includes health behaviors that are associated with chronic and communicable disease (e.g., fruit and vegetable consumption, screening), health outcomes that are associated with these diseases or conditions (e.g., overweight and obesity), and associated aspects of the physical environment (e.g., food deserts). To this end, we provided support and/or resources to address disease prevention, management, and treatment for diabetes, cancer, and asthma. Key objectives included:

- Partner with community organizations to promote healthy lifestyles
- Provide educational resources to high-risk populations
- Increase knowledge of community members of cancer, asthma, and diabetes screenings
- Provide resources to patients experiencing cancer-related illnesses

UC Davis Health supported the following programs and activities:

# Local cancer, asthma, and diabetes nonprofit organizations

UC Davis Health awards funding to local nonprofit organizations that provide health education and outreach programs in the Sacramento region. Organizations that received support include, but is not limited to the following:

- American Cancer Association
- American Diabetes Association
- BREATHE California
- De Los Ninos Diabetes Camp

- Kaiser Diabetes Camp
- Cancer Care Network
- Juvenile Diabetes Reseach Foundation
- National Kidney Foundation
- Leukemia and Lymphoma Society
- Triumph Cancer Foundation

### Trained physicians and other health care providers in disease prevention

#### UC Davis Health-HALO Partnership

In 2018, a unique collaboration spearheaded by UC Davis cancer specialists was launched in June to enhance cancer prevention, screening, detection, and specialty oncology care for Asian Americans, Native Hawaiians, and Pacific Islanders in Sacramento. In partnership with Health and Life Organization (HALO), the initiative seeks to identify Asian Americans, Native Hawaiians, and Pacific Islanders ages 11–75 at risk for cancers, particularly those associated with infections, and get them the expert care they need.

#### **Continuing Medical Education**

UC Davis Health's Office of Continuing Medical Education develops and delivers comprehensive and innovative educational activities for all health care professionals. In addition to CME events and courses, the office hosts a regularly scheduled webinar series and provides instructional design and course development services. From 2016–18, the Office of Continuing Medical Education sponsored over 200 conferences, workshops, and online courses throughout California. Topics included Psychiatry for the Primary Care Provider, Electrocardiographic Interpretation: A Basic Course for Practitioners, Neurodevelopmental Disorders, and Primary Care Pain Management.

#### Greater Sacramento Epidemiology Association (GSEA)

GSEA of Northern California, a regional group sponsored by UC Davis Health, convenes quarterly to share epidemiology cases, standardize infection prevention practices at member institutions, share results of regulatory surveys to inform member institutions, and provide education to infectious disease physicians who have not had an opportunity to serve as a Hospital Epidemiologist. Membership is open to all but primary attendees include infectious disease physicians and fellows, infection prevention nurses, epidemiologists and microbiologists, and numerous acute care facilities within the greater Sacramento area.

#### Educational resources to high-risk populations

#### UC Davis Comprehensive Cancer Center

The center is the only National Cancer Institute-designated center serving the Central Valley and inland Northern California. Its specialists provide comprehensive care for more than 10,000 adults and children every year, and access to more than 150 clinical trials at any given time. Initiatives of note include:

Peer Navigator Program – the center's Peer Navigator program provides special support on a one-toone basis, with trained cancer survivors. The program is available to any cancer patient, regardless of where the patient receives treatment. Peer navigators provide educational information on disease and treatment options, as well as resources to help patients and family members, community resources, and emotional support. 422 patients were served from 2016–2018. Pushing Past Cancer – from late diagnoses, infertility, and body image crises to college, career, and family disruptions, young people experience cancer differently than older adults, and many cope with these issues alone. To help this group get the attention and support it needs, the center sponsors free events for all young cancer survivors and patients (ages 15–39) in Northern California, as well as their friends and caregivers. The center sponsored conferences and events that served 268 young cancer survivors. Approximately 40% of those served at UC Davis and the remaining were patients from other facilities across Northern California.

#### Health Management and Education Program for community members

The Health Management and Education Program at UC Davis Health offers over 20 self-management classes and services to UC Davis patients and employees. Classes focus on chronic conditions or wellness, and aim to help empower participants to improve health outcomes. Topics include, but are not limited to, diabetes, chronic pain, heart disease, obesity prevention, stress management, and advanced medical directives. The team of nurses, dieticians, diabetes educators, health educators, pharmacists, and psychologists assist patients to better management their health through lifestyle interventions, building skills related to particular conditions, and reducing risks. From 2016–2018, UC Davis health had nearly 7,000 patient interactions, and conducted 550 classes, 44 comprehensive programs, and 317 clinics throughout the Sacramento region.

### UC Davis Comprehensive Cancer Center and the Clinical Translational Science Center

With NIH support, the centers have conducted a variety of community-based interventions focused on working with Asian American and other underserved populations with respect to mitigating their avoidable risk factors for liver, colorectal, and cervical cancer. These efforts resulted in earlier detection of disease, connections to appropriate care, and arresting disease before it worsened, In the case of virally-induced cancers, the centers promoted vaccinations against hepatitis B and/or HPV. More recently, the centers have extended their collaborations with a number of Federally Qualified Community Health Centers or Look-Alikes and, in particular, the training of their staff in increasing their competencies in cancer prevention and control.

# Cancer clinical trials and research

#### Research on cancer health disparities

In 2018, UC Davis Comprehensive Cancer Center received a grant from the National Cancer Institute for a five-year study to better understand why some ethnic and racial minority groups fare worse than their counterparts when they get cancer. The study seeks to improve cancer survival and reduce health disparities.

#### Sacramento Citywide Oncology Program (SCOPE)

Providing the capabilities necessary to translate emerging medications from the laboratory to the patient, the UC Davis Comprehensive Cancer Center is the only institution in the Sacramento region with the infrastructure necessary to conduct rigorous early-phase clinical trials. To fulfill its mission of reducing mortality from advanced cancer, UC Davis Health launched SCOPE, a community alliance of physicians providing cutting-edge cancer treatments in the region. Along with physicians from Kaiser Permanente, Sierra Hematology Oncology, Sutter Medical Foundation, and patient advocates, the collaborative seeks to improve advanced cancer care and bring novel therapies directly to patients who need them. From 2016–2017, 321 patients have enrolled in phase I clinical trials, exceeding the program's goal of 270.

# V. Safety, Crime, and Violence-Free Communities

The CHNA revealed that safety from violence and crime including violent crime, property crimes, and domestic violence as a priority health need. The CHNA noted community violence is more common in low SES communities, including a higher incidence of childhood adverse experiences from exposure to violence results in trauma and maladaptive behavior in area youth, and elderly abuse. To this end, UC Davis Health provided support and/or resources to address safety, crime, and violence-free communities. Key objectives included:

- Increase the prevention of childhood injuries through community education; and
- Increase the use of safety equipment for children.

UC Davis Health supported the following programs and activities.

#### Trauma Prevention Programs

The UC Davis Trauma Prevention Program supports child and adolescent injury prevention efforts in the Sacramento region. The program offers education on preventing the most common childhood injuries through the proper use of safety equipment and provides car seats, bicycle helmets, life jackets, and safety education for children from underserved families. Activities included:

- Child passenger safety program—the program addresses the transportation safety needs of children and families in the Sacramento region. In collaboration with community partners, the program provides car seat education classes, installation events, and inspection stations for parents and caregivers. Community members participated in multilingual car seat classes that provided comprehensive instruction on how to properly install and use child safety seats. Monthly classes were held in English and Spanish and classes taught in Russian and Hmong were delivered through a number of community partnerships. The program also developed educational materials focused on child passenger safety and California's new car seat law in nine languages. The program conducted over 6,000 car seat classes and distributed over 6,000 car and booster seats between 2016–2018.
- Helmet Safety program—the program focuses on increasing helmet use among children who ride bikes, scooters, skateboards, and skates. Working with 37 school districts, family resource centers, and health clinics throughout Sacramento, the helmet safety program provided educational programs and free helmets to underserved children through our community partner helmet safety centers. The program has assisted 37 schools and agencies establish centers. Over 20,000 students and families received helmet safety education, and over 7,500 helmets were distributed.

- Club Live in 2016 and 2017, the program partnered with the Sacramento County Office of Education (SCOE) and the Safety Center to develop an innovative helmet safety program to help middle school youth develop lifelong traffic safety values and build a foundation for making safe decisions when they become teen drivers. The program provided education and promoted helmet safety leadership among students participating in Club Live chapters at 10 middle schools in Sacramento, and are designed to build leadership skills, opportunities for community engagement, and prevent alcohol and drug abuse among teenagers. UC Davis staff worked with Club Live counselors to facilitate education and support student-led projects that promoted helmet safety among peers.
- Every 15 Minutes—this program targets high school juniors and seniors and focuses on the risks associated with underage drinking. A two-day program for high school juniors and seniors, it challenges them to think about drinking, driving, personal safety, the responsibility of making mature decisions, and the impact of their decisions on family and friends. UC Davis Health has been actively involved since 1997. UC Davis Health provides in-kind support through volunteer nurses, physicians, respiratory therapists, and clinical pastoral services.
- Impact Teen Drivers—in January 2018, UC Davis Health began a new partnership with Impact Teen Drivers focused on California's leading cause of youth injuries – motor vehicle traffic. Injury prevention staff and nurse volunteers provide educational workshops for Sacramento area high school students about safe driving, utilizing the evidence-based curriculum, "What Do You Consider Lethal?"

# UC Davis Children's Hospital: Passenger Safety

UC Davis provides a free car seat to all patients in need, including infant carriers for newborns and replacement seats for pediatric patients involved in motor vehicle collisions. Staff also provides ongoing education to nurses and physicians on current laws, best practices, and hospital resources for child passenger safety. A four-hour child passenger safety overview for nurses is offered annually to update nurses as continuing education.

# University of California Firearm Violence Research Center

Firearm violence is a significant health and social problem in California and across the United States. The lack of basic information on the epidemiology of firearm violence and its prevention has led to widespread misunderstanding of the problem and has impeded prevention efforts. Evidence of the effects of state policies and programs for reducing firearm violence as well as basic information on benefits, risks, and prevalence of firearm ownership in California are also lacking. Established in 2017, the University of California Firearm Violence Research Center (UCFC) at UC Davis Health is the first state-funded center for firearm violence research, founded to address these gaps in knowledge on firearm violence and its prevention.

# Additional Investments that Address Community Health Needs

UC Davis Health is continually working to address health needs that impact the community through a variety of means. Activities include:

#### Provide employee volunteers at local community-based organizations

UC Davis Health participated in a number of activities and events that promote access to behavioral health services, encourage physical fitness and exercise, enhance access to high-quality health care and services, and support safe communities. Employees participate annually in direct service to the community by donating time, goods, and professional services to nonprofit organizations, including local food banks, foster youth programs, schools, shelters for the homeless, and victims of domestic violence.

#### Community Financial Support

UC Davis Health has a formal sponsorship process in place to accept, review, and award funding to local nonprofit organizations that meet the institutions criteria. UC Davis Health has provided direct financial support to over 250 organizations that provide health and social services programs to underserved communities. Sample organizations include River City Food Bank, Women Escaping a Violent Environment, and Ronald McDonald House.



