2022 Community Health Needs Assessment Technical Section

UCDAVIS HEALTH | **MEDICAL CENTER**

2022 Community Health Needs Assessment
Technical Section

Conducted on behalf of

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Table of Contents

List of Tables

List of Figures

2022 CHNA Technical Section

The following section presents a detailed account of data collection, analysis, and results as well as appendices to the community health needs assessment (CHNA) report for Sacramento County. The main report can be found online at https://health.ucdavis.edu/aboutus/community-engagement/index.html.

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 1. This model organizes a population's 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.

Figure 1: Community Health Assessment Conceptual Model as modified from the County Health Rankings Model, Robert Wood Johnson Foundation, and University of Wisconsin, 2015
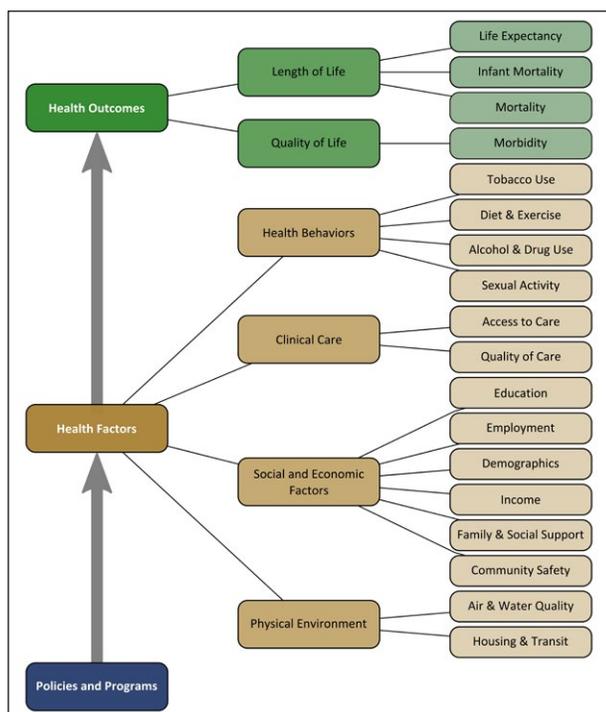
This model was used to guide the selection of secondary indicators in this analysis, as well as to express in general how these upstream health factors lead to the downstream health outcomes. It also suggests that poor health outcomes within the service area can be improved through policies and programs 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, each conceptual model category was reviewed to identify potential indicators that could be used to fully represent the category. The results of this discussion were then used to guide secondary data collection.

Process Model

Figure 2 outlines the data collection and analysis stages of this process. The project began by confirming the service area for Sacramento County for which the CHNA would be conducted. Primary data collection included key informant interviews and focus groups with community health experts and residents, as well as a Community Service Provider (CSP) survey. Initial key informant interviews were used to identify Communities of Concern, which are areas or population subgroups within the county experiencing health disparities.

Overall primary and secondary data were integrated to identify significant health needs (SHNs) for the service area. SHNs 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 any 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 subsequent sections. This is followed by a more detailed description of the methodology utilized during the main analytical stages of the process.

Figure 2: CHNA process model
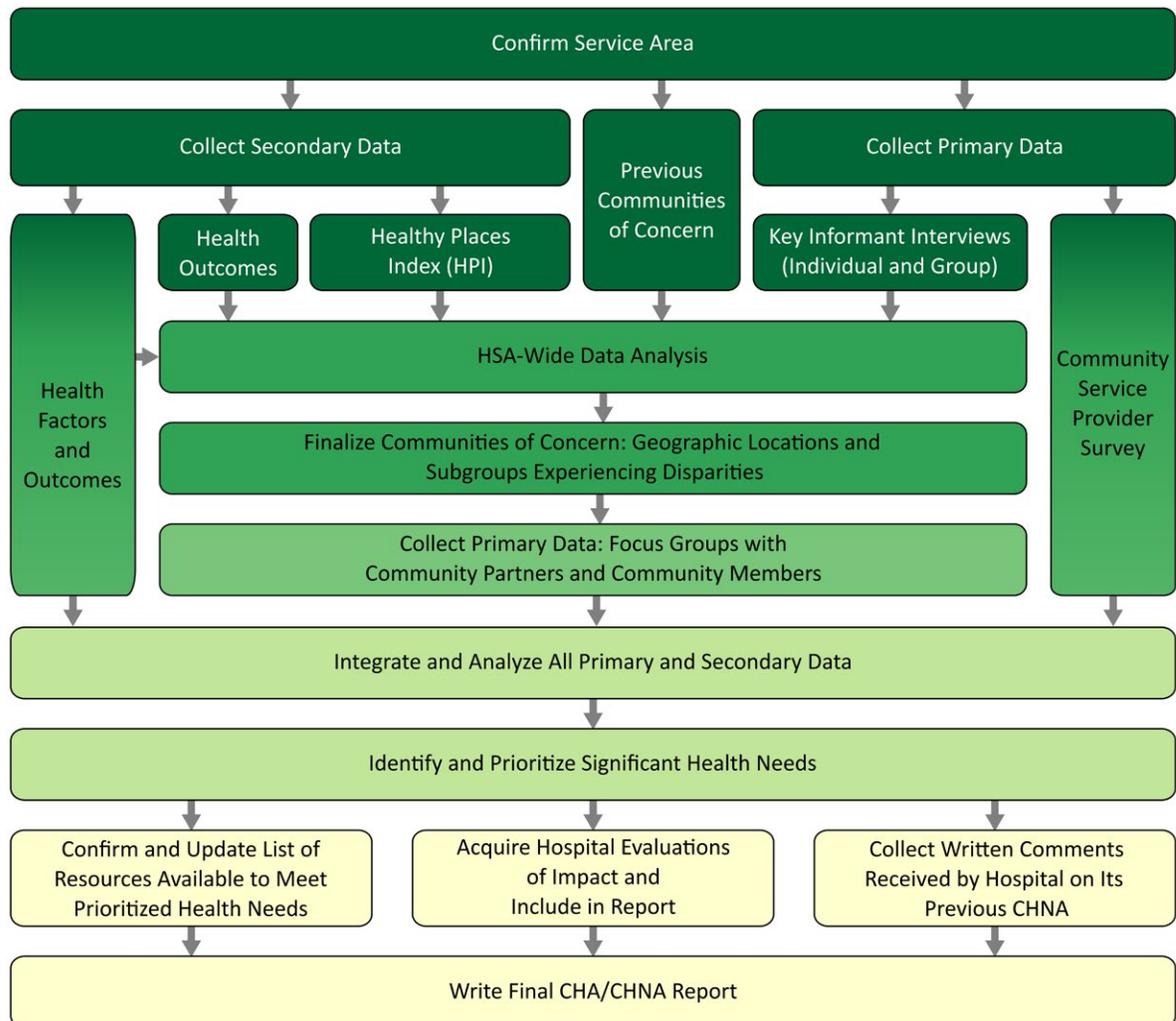
Results of Data Analysis

Compiled 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. Indicator values for Sacramento County were compared to the California state benchmark and are highlighted in Table 1. The associated figures show rates for the county compared to the California state rates.

Length of Life

Table 1: Health need prioritization inputs for Sacramento County

Indicators	Description	Sacramento	California
Early Life			
Infant Mortality	Number of all infant deaths (within 1 year), per 1,000 live births.	4.9	4.2
Child Mortality	Number of deaths among children under age 18 per 100,000 population.	41.5	36
Life Expectancy	Average number of years a person can expect to live.	79.6	81.7
Overall			
Premature Age-Adjusted Mortality	Number of deaths among residents under age 75 per 100,000 population (age-adjusted).	325	268.4
Premature Death	Years of potential life lost before age 75 per 100,000 population (age-adjusted).	6,381.6	5,253.1
Stroke Mortality	Number of deaths due to stroke per 100,000 population.	47	41.2
Chronic Lower Respiratory Disease Mortality	Number of deaths due to chronic lower respiratory disease per 100,000 population.	40.6	34.8
Diabetes Mortality	Number of deaths due to diabetes per 100,000 population.	30.2	24.1
Heart Disease Mortality	Number of deaths due to heart disease per 100,000 population.	171.1	159.5
Hypertension Mortality	Number of deaths due to hypertension per 100,000 population.	17.8	13.8
Cancer, Liver, and Kidney Disease			
Cancer Mortality	Number of deaths due to cancer per 100,000 population.	169.7	152.9
Liver Disease Mortality	Number of deaths due to liver disease per 100,000 population.	13.7	13.9
Kidney Disease Mortality	Number of deaths due to kidney disease per 100,000 population.	3.6	9.7
Intentional and Unintentional Injuries			
Suicide Mortality	Number of deaths due to suicide per 100,000 population.	13.6	11.2
Unintentional Injuries Mortality	Number of deaths due to unintentional injuries per 100,000 population.	43.5	35.7
COVID			
COVID-19 Mortality	Number of deaths due to COVID-19 per 100,000 population.	150.8	185.1
COVID-19 Case Fatality	Percentage of COVID-19 deaths per laboratory-confirmed COVID-19 cases.	1.4%	1.5%
Other			
Alzheimer's Disease Mortality	Number of deaths due to Alzheimer's disease per 100,000 population.	47.3	41.2
Influenza and Pneumonia Mortality	Number of deaths due to influenza and pneumonia per 100,000 population.	16.2	16

Quality of Life

Table 2: County quality of life indicators compared to state benchmarks

Indicators	Description	Sacramento	California
Chronic Disease			
Diabetes Prevalence	Percentage of adults aged 20 and above with diagnosed diabetes.	9.4%	8.8%
Low Birthweight	Percentage of live births with low birthweight (< 2,500 grams).	6.9%	6.9%
HIV Prevalence	Number of people aged 13 years and older living with a diagnosis of human immunodeficiency virus (HIV) infection per 100,000 population.	335.2	395.9
Disability	Percentage of the total civilian noninstitutionalized population with a disability	11.8%	10.6%
Mental Health			
Poor Mental Health Days	Average number of mentally unhealthy days reported in past 30 days (age-adjusted).	4.5	3.7
Frequent Mental Distress	Percentage of adults reporting 14 or more days of poor mental health per month (age-adjusted).	13.3%	11.3%
Poor Physical Health Days	Average number of physically unhealthy days reported in past 30 days (age-adjusted).	4.2	3.9
Frequent Physical Distress	Percentage of adults reporting 14 or more days of poor physical health per month (age-adjusted).	12.6%	11.6%
Poor or Fair Health	Percentage of adults reporting fair or poor health (age-adjusted).	18.3%	17.6%
Cancer			
Colorectal Cancer Prevalence	Colon and rectum cancers per 100,000 population (age-adjusted).	37.8	34.8
Breast Cancer Prevalence	Female in situ breast cancers per 100,000 female population (age-adjusted).	31.8	27.9
Lung Cancer Prevalence	Lung and bronchus cancers per 100,000 population (age-adjusted).	52.1	40.9
Prostate Cancer Prevalence	Prostate cancers per 100,000 male population (age-adjusted).	79.2	91.2
COVID-19			
COVID-19 Cumulative Incidence	Number of laboratory-confirmed COVID-19 cases per 100,000 population.	10,567.2	12,087.6
Other			
Asthma ED Rates	Emergency department visits due to asthma per 10,000 (age-adjusted).	641	422
Asthma ED Rates for Children	Emergency department visits due to asthma among ages 5-17 per 10,000 population ages 5-17 (age-adjusted).	759	601

Health Behavior

Table 3: County health behavior indicators compared to state benchmarks

Indicators	Description	Sacramento	California
Excessive Drinking	Percentage of adults reporting binge or heavy drinking (age-adjusted).	20.4%	18.1%
Drug-Induced Death	Drug-Induced deaths per 100,000 (age-adjusted).	19.4	14.3
Adult Obesity	Percentage of the adult population (ages 20 and older) that reports a body mass index (BMI) greater than or equal to 30 kg/m2.	29.9%	24.3%
Physical Inactivity	Percentage of adults aged 20 and over reporting no leisure-time physical activity.	19.8%	17.7%
Limited Access to Healthy Foods	Percentage of population who are low-income and do not live close to a grocery store.	4.4%	3.3%
Food Environment Index	Index of factors that contribute to a healthy food environment, from 0 (worst) to 10 (best).	8.1	8.8
Access to Exercise Opportunities	Percentage of population with adequate access to locations for physical activity.	97.4%	93.1%
Chlamydia Incidence	Number of newly diagnosed chlamydia cases per 100,000 population.	748.5	585.3
Teen Birth Rate	Number of births per 1,000 female population ages 15-19.	17.4	17.4
Adult Smoking	Percentage of adults who are current smokers (age-adjusted).	14%	11.5%

Clinical Care

Table 4: County clinical care indicators compared to state benchmarks

Indicators	Description	Sacramento	California
Primary Care Shortage Area	Presence of a primary care health professional shortage area within the county.	Yes	n/a
Dental Care Shortage Area	Presence of a dental care health professional shortage area within the county.	No	n/a
Mental Health Care Shortage Area	Presence of a mental health professional shortage area within the county.	Yes	n/a
Medically Underserved Area	Presence of a medically underserved area within the county.	Yes	n/a
Mammography Screening	Percentage of female Medicare enrollees ages 65-74 that received an annual mammography screening.	37%	36%
Dentists	Dentists per 100,000 population.	78.3	87
Mental Health Providers	Mental health providers per 100,000 population.	385.9	373.4
Psychiatry Providers	Psychiatry providers per 100,000 population.	14.5	13.5
Specialty Care Providers	Specialty care providers (non-primary care physicians) per 100,000 population.	222.6	190
Primary Care Providers	Primary care physicians per 100,000 population + other primary care providers per 100,000 population.	155.4	147.3
Preventable Hospitalization	Preventable hospitalizations per 100,000 (age-sex-poverty adjusted)	1,042.8	948.3
COVID-19 Cumulative Full Vaccination Rate	Number of completed COVID-19 vaccinations per 100,000 population.	60,513.9	63,134.6

Socio-Economic and Demographic Factors

Table 5: County socio-economic and demographic factors indicators compared to state benchmarks

Indicators	Description	Sacramento	California
Community Safety			
Homicide Rate	Number of deaths due to homicide per 100,000 population.	5.9	4.8
Firearm Fatalities Rate	Number of deaths due to firearms per 100,000 population.	9.7	7.8
Violent Crime Rate	Number of reported violent crime offenses per 100,000 population.	508.2	420.9
Juvenile Arrest Rate	Felony juvenile arrests per 1,000 juveniles	2	2.1
Motor Vehicle Crash Death	Number of motor vehicle crash deaths per 100,000 population.	10.6	9.5
Education			
Some College	Percentage of adults ages 25-44 with some post-secondary education.	66.9%	65.7%
High School Completion	Percentage of adults ages 25 and over with a high school diploma or equivalent.	87.7%	83.3%

Disconnected Youth	Percentage of teens and young adults ages 16-19 who are neither working nor in school.	8.2%	6.4%
Third Grade Reading Level	Average grade level performance for 3rd graders on English Language Arts standardized tests	2.8	2.9
Third Grade Math Level	Average grade level performance for 3rd graders on math standardized tests	2.7	2.7
Employment			
Unemployment	Percentage of population ages 16 and older unemployed but seeking work.	3.7%	4%
Family and Social Support			
Children in Single-Parent Households	Percentage of children that live in a household headed by single parent.	25.8%	22.5%
Social Associations	Number of membership associations per 10,000 population.	7.3	5.9
Residential Segregation (Non-White/White)	Index of dissimilarity where higher values indicate greater residential segregation between non-White and White county residents.	37.7	38
Income			
Children Eligible for Free Lunch	Percentage of children enrolled in public schools that are eligible for free or reduced price lunch.	59.8%	59.4%
Children in Poverty	Percentage of people under age 18 in poverty.	16%	15.6%
Median Household Income	The income where half of households in a county earn more and half of households earn less.	$71,891	$80,423
Uninsured Population under 64	Percentage of population under age 65 without health insurance.	6.1%	8.3%
Income Inequality	Ratio of household income at the 80th percentile to income at the 20th percentile.	4.7	5.2

Physical Environment

Table 6: County physical environment indicators compared to state benchmarks

Indicators	Description	Sacramento	California
Housing			
Severe Housing Problems	Percentage of households with at least 1 of 4 housing problems: overcrowding, high housing costs, lack of kitchen facilities, or lack of plumbing facilities.	22.1%	26.4%
Severe Housing Cost Burden	Percentage of households that spend 50% or more of their household income on housing.	17.9%	19.7%
Homeownership	Percentage of occupied housing units that are owned.	56.4%	54.8%
Homelessness Rate	Number of homeless individuals per 100,000 population.	361.5	411.2
Transit			
Households with no Vehicle Available	Percentage of occupied housing units that have no vehicles available.	6.6%	7.1%
Long Commute - Driving Alone	Among workers who commute in their car alone, the percentage that commute more than 30 minutes.	39.4%	42.2%
Access to Public Transit	Percentage of population living near a fixed public transportation stop	72.9%	69.6%

Air and Water Quality			
Pollution Burden Percent	Percentage of population living in a census tract with a CalEnviroscreen 3.0 pollution burden score percentile of 50 or greater	24.1%	51.6%
Air Pollution - Particulate Matter	Average daily density of fine particulate matter in micrograms per cubic meter (PM2.5).	8.7	8.1
Drinking Water Violations	Presence of health-related drinking water violations in the county.	Yes	

Primary Data Collection and Processing

Primary Data Collection

Input from the community served 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 healthcare organizations). These interviews occurred in both one-on-one and in group interview settings. Second, focus groups were conducted with community residents that were identified as populations experiencing 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 for 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. First, phase one began by interviewing area-wide service providers with knowledge of the service area, including input from the 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 service area to directly point to the geographic locations of these vulnerable communities. Additional key informant interviews were focused on the geographic locations and/or subgroups identified in the earlier phase.

Table 7 contains a listing of community health experts, or key informants, that contributed input to the CHNA. The table describes the name of the represented organization, the number of participants and area of expertise, the populations served by the organization, and the date of the interview.

Table 7: Key Informant List

Organization	Date	Number of Participants	Area of Expertise	Populations Served
Mercy General Hospital	05/17/2021	6	Acute Care Hospital: Healthcare services	All residents of Sacramento County
La Familia	05/19/2021	2	Behavioral, mental, physical health services; employment and education	Low income; medically underserved, racial or ethnic minorities; immigrants
Methodist Hospital	05/20/2021	7	Acute Care Hospital: Healthcare services	All residents of Sacramento County
Mercy Hospital of Folsom	05/21/2021	4	Acute Care Hospital: Healthcare services	All residents of Sacramento County
Sutter Medical Center Sacramento	05/27/2021	2	Acute Care Hospital: Healthcare services	All residents of Sacramento County
San Juan School Unified District	05/28/2021	1	Education	School-aged children
UC Davis Medical Center	06/01/2021	5	Acute Care Hospital: Healthcare services	All residents of Sacramento County
Mercy San Juan Medical Center	06/01/2021	9	Acute Care Hospital: Healthcare services	All residents of Sacramento County
Sacramento Native American Health Center	06/02/2021	1	FQHC: Healthcare services	Low income; medically underserved, racial or ethnic minorities
Sacramento Covered	06/04/2021	1	Healthcare outreach and enrollment	All residents of Sacramento County
El Dorado Community Health Center	06/07/2021	1	FQHC: Healthcare services	Low income, medically underserved, racial or ethnic minorities
People Reaching Out	06/08/2021	1	Youth development and prevention services	Low income, underserved communities
Slavic Assistance Center	06/10/2021	1	Health promotion, education and training	Low income Slavic immigrants and refugee individuals and families
Elk Grove Food Bank (Pt. Pleasant Methodist Church)	06/10/2021	1	Community based organization; social services	Low income, food insecure; seniors; racial and ethnic minorities
Asian Resource Center, Inc.	06/16/2021	1	Community based organization; education, training, employment assistance;	Immigrant, refugees in Sacramento County
Sacramento County Public Health	06/16/2021	1	Public Health	All residents of Sacramento County
Planned Parenthood	06/18/2021	1	Healthcare services	Low income, non-English speaking; racial or ethnic minorities

WellSpace Health	06/18/2021	1	FQHC: Healthcare services	Low income, medically underserved, racial or ethnic minorities
Sacramento Food Bank & Family Services	06/18/2021	1	Community based organization; social services	Low income, food insecure; immigrants and refugees
Mutual Assistance Center	07/02/2021	1	Community based organization; Social and economic infrastructure	Low income, medically underserved, racial or ethnic minorities
CA Endowment Building Healthy Communities	07/21/2021	13	Initiative addressing health inequities	South Sacramento; low income, racial and ethnic minorities
National Alliance on Mental Illness (NAMI)	08/02/2021	1	Mental health	All residents of Sacramento County
Sacramento Housing Alliance	08/03/2021	1	Housing, affordable housing, rent control	All residents of Sacramento County
Valley Vision	08/03/2021	1	Climate and environmental health	All residents of Sacramento County
Latino Leadership Council	08/03/2021	1	Undocumented/underinsured	Latino residents in South Natomas, Citrus Heights, Antelope
Yolo County Children's Alliance	08/03/2021	1	Child abuse prevention, advocacy	Families with youth in West Sacramento and Woodland
Anti-Recidivism Coalition	08/04/2021	1	Reentry and criminal justice reform	Reentry population in Sacramento County
Sacramento Steps Forward	08/10/2021	1	Homeless population	Residents of Sacramento County experiencing homelessness
World Relief Sacramento	08/11/2021	1	Refugee resettlement	Refugee community in Sacramento County
WEAVE	08/12/2021	1	Domestic violence, human trafficking	All residents of Sacramento County
Hope Cooperative	08/12/2021	1	Mental health, homeless	All residents of Sacramento County
My Sister's House	08/13/2021	1	Domestic violence	All residents of Sacramento County
Sac Breathe	08/13/2021	1	Lung health	All residents of Sacramento County
Sierra Health Foundation	08/13/2021	1	Community health	All residents of Sacramento County
Sacramento LGBT Community Center	08/17/2021	1	LGBTQ Community	LGBTQ Community in Sacramento County
Sacramento Area School Districts	08/17/2021	3	Youth and schools	All residents of Sacramento County
Lao Family Community Development Center	08/18/2021	1	Southeast Asian community (Hmong, Mien, Vietnamese, Cambodian)	Refugee community in Sacramento County
Sacramento ACT	08/24/2021	1	Faith, community advocacy	All residents of Sacramento County

Health Education Council	08/24/2021	1	Health disparities	All residents of Sacramento County
Ethnic Chambers of Commerce	08/25/2021	4	Economic development	All residents of Sacramento County
Cal Voices	08/25/2021	1	Mental health	All residents of Sacramento County
Public Housing Agency	08/25/2021	1	Coalition building, trauma healing	Young men of color in Sacramento County

Key Informant Interview Guide

The following questions served as the interview guide for key informant interviews.

1. BACKGROUND

    a. Please tell me about your current role and the organization you work for?

        i. Probe for:

            1. Public health (division or unit)

            2. Hospital health system

            3. Local non-profit

            4. Community member

    b. How would you define the community (ies) you or your organization serves?

        i. Probe for:

            1. Specific geographic areas?

            2. Specific populations served?

                a. Who? Where? Racial/ethnic make-up, physical environment (urban/ rural, large/small)

2. CHARACTERISTICS OF A HEALTHY COMMUNITY

    a. In your view, what does a healthy community look like?

        i. Probe for:

            1. Social factors

            2. Economic factors

            3. Clinical care

            4. Physical/built environment (food environment, green spaces)

            5. Neighborhood safety

3. HEALTH ISSUES

    a. What would you say are the biggest health needs in the community?

        i. Probe for:

            1. How has the presence of COVID impacted these health needs?

            2. INSERT MAP exercise: Please use the map provided to help our team understand where communities that experience the greatest health disparities live?

        ii. Probe for:

            1. What specific geographic locations struggle with health issues the most?

            2. What specific groups of community members experience health issues the most?

4. CHALLENGES/BARRIERS

 a. Looking through the lens of equity, what are the challenges (barriers or drivers) to being healthy for the community as a whole?

 b. Do these inequities exist among certain population groups?

  i. Probe for:

   1. Health Behaviors (maladaptive, coping)

   2. Social factors (social connections, family connectedness, relationship with law enforcement)

   3. Economic factors (income, access to jobs, affordable housing, affordable food)

   4. Clinical Care factors (access to primary care, secondary care, quality of care)

   5. Physical (Built) environment (safe and healthy housing, walkable communities, safe parks)

5. SOLUTIONS

 a. What solutions are needed to address the health needs and or challenges mentioned?

  i. Probe for:

   1. Policies

   2. Care coordination

   3. Access to care

   4. Environmental change

6. PRIORITY

 a. Which would you say are currently the most important or urgent health issues or challenges to address (at least 3 to 5) in order to improve the health of the community?

7. RESOURCES

 a. What resources exist in the community to help people live healthy lives?

  i. Probe for:

   1. Barriers to accessing these resources.

   2. New resources that have been created since 2016

   3. New partnerships/projects/funding

PARTICIPANT DRIVEN SAMPLING:

- What other people, groups or organizations would you recommend we speak to about the health of the community?
- Name 3 types of service providers that you would suggest we include in this work?
- Name 3 types of community members that you would recommend we speak to in this work?
- 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 or service providers living or working in geographic areas of the service area identified as locations of or populations experiencing a disparate amount of poor socioeconomic conditions and poor health outcomes. Recruitment consisted of referrals from designated service providers representing vulnerable populations, as well as direct outreach to special population groups.

Table 8 contains a listing of community resident groups that contributed input to the CHNA. The table describes the organization hosting the focus group, the date it occurred, the total number of participants, and population represented by focus group members.

Table 8: Focus Group List

Hosting Organization	Date	Number of Participants	Population Represented
Sacramento Covered	08/02/2021	10	Financially insecure, unsheltered, medically underserved
La Familia Counseling Center	08/17/2021	8	Low income and medically underserved; Hispanic, immigrants
Mutual Assistance Network	08/17/2021	4	Financially insecure, immigrants, Hispanic, African American
Folsom Cordova Partnership	08/17/2021	1	Economically challenged individuals and families
WIND Youth Services	08/19/2021	5	Youth experiencing homelessness; LGBTQ, Hispanic, African American
Cancer Support Group (El Dorado Co.)	08/20/2021	4	Seniors; cancer survivors
Asian Resource Center, Inc.	08/24/2021	8	Asian community
Elk Grove HART	08/26/2021	2	Low income, housing insecure
Sacramento LGBT Community Center	08/28/2021	10	LGBTQ community
Opening Doors	08/30/2021	2	Immigrants and refugees; Iraq; Afghanistan; Russian Ukraine
Sutter Medical Center, Sacramento, WellSpace ED Navigators	08/31/2021	3	Low income, people experiencing homeless

Focus Group Interview Guide

The following questions served as the interview guides for focus group interviews.

2022 CHNA Focus Group Interview Protocol

1. Let's start by introducing ourselves. Please tell us your name, the town you live in, and one thing that you are proud of about your community.

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. Are needs more prevalent in a certain geographic area, or within a certain group of the community?

6. How has the presence of COVID impacted these health needs?

7. What are the challenges or barriers to being healthy in your community?

8. What are some solutions that can help solve the barriers and challenges you talked about?

9. 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?

10. Are these needs that have recently come up or have they been around for a long time?

11. 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?

12. Is there anything else you would like to share with our team about the health of the community?

Primary Data Processing

Key informant and focus group data were analyzed using qualitative analytic software. Content analysis included thematic coding to identify potential health need categories, special populations experiencing health issues, and available resources. In some instances, data were coded in accordance to the interview question guide. Results were aggregated to inform the determination of prioritized significant health needs (SHNs).

Community Service Provider Survey

A web-based survey was administered to community service providers (CSPs) who delivered health and social services to residents of the service area. CSPs affiliated with the nonprofit hospitals included in this report served as the initial sampling frame. An email recruitment message was sent to these CSPs detailing the survey's aims and inviting them to participate. A snowball sampling technique was used, encouraging participants to forward the recruitment message to other CSPs in their networks. The survey was designed using Qualtrics, an online survey platform, and was available for approximately two weeks. Individuals completing the survey were given the option to be acknowledged or remain anonymous. Those who indicated a desire to be acknowledged are listed here:

> Bridget Alexander, Janine Bera, Jessica Brown, Kathilynn Carpenter, Sharon Chandler, Sunjung Cho, Kaitlynn DiCicco, Rosa Flores, Terri Galvan, Crystal Harding, Beth Hassett, Josiah Kitonga, Mai Lee, Kelsey Long, Bonnie Rea, Julie Rhoten, Shari Roeseler, Marbella Sala, Genelle Smiht, Dimitrius Stone, Nilda Valmores, and Gina Warren

After providing socio-demographic information including the county they served and their affiliated organization(s), survey respondents were shown a list of 12 potential health needs and asked to identify which were unmet health needs in their community. In order to reduce any confusion or ambiguity that could introduce bias, participants could scroll over each health need for a definition. Respondents were then asked to select which of the needs they identified as unmet in their community were the priority to address (up to three health needs). Upon selection of these priority unmet health needs, respondents were asked about the characteristics of each as it is expressed in their community. Depending upon the specific health need, respondents were shown a list of between 7-12 characteristics and asked to select all that applied. Respondents were also offered the opportunity to provide additional information about the health need in their community if it was not provided as a response option. Finally, a set of questions was asked about how the COVID-19 pandemic impacted the health needs of the community.

When the survey period was over, incomplete and duplicate responses were removed from the dataset and the survey responses were checked for accuracy. Descriptive statistics and frequencies were used to

summarize the health needs. This information was used along with other data sources to both identify and rank SHNs in the community and to describe how the health needs were expressed. Table 9 displays a summary of the survey for Sacramento County.

Table 9: Community Service Provider survey summary results of Sacramento County

Service Provider Survey Snapshot | Sacramento County	
Health Needs	% Reporting
Most Frequently Reported	
Access to Mental/Behavioral Health and Substance-Use Services	96.8
Access to Basic Needs	96.8
A Safe and Violence-Free Environment	83.9
System Navigation	80.6
Top 3/ Priority (Most Frequently Reported Characteristics)	
Access to Mental/Behavioral Health and Substance-Use Services.	77.4
• It's difficult for people to navigate for mental/behavioral healthcare. • There aren't enough services here for those who are homeless and dealing with substance-use issues. • Additional services for those who are homeless and experiencing mental/behavioral health issues are needed. • There aren't enough mental health providers or treatment centers in the area (e.g., psychiatric beds, therapists, support groups). • Substance-use is a problem in the area (e.g., use of opiates and methamphetamine, prescription misuse).	
Access to Basic Needs	74.2
• Lack of affordable housing is a significant issue in the area. • The area needs additional low-income housing options. • Services for homeless residents in the area are insufficient. • It is difficult to find affordable childcare.	
Access to Quality Primary Care Health Services	32.3
• Patients have difficulty obtaining appointments outside of regular business hours. • Wait-times for appointments are excessively long.	

Secondary Data Collection and Processing

The term "secondary data" refers to those quantitative variables used in this analysis that were obtained from third party sources. Secondary data were used to 1) inform the identification of Communities of Concern, 2) support the identification of health needs, and 3) describe the population and illuminate issues of health equity within the service area. This section details the data sources as well as the process for collecting secondary data and preparing them for analysis.

Community of Concern Identification Datasets

Two main secondary data sources were used in the identification of Communities of Concern: California Healthy Places Index (HPI)[1], derived from health factor indicators available at the US Census tract level, and mortality data from the California Department of Public Health (CDPH)[2] health outcome indicators available at the ZIP Code level. The CDPH mortality data reports the number of deaths that occurred in each ZIP Code from 2015-2019 due to each of the causes listed in Table 10.

Table 10: Mortality indicators used in Community of Concern Identification

Cause of Death	ICD 10 Codes
Alzheimer's disease	G30
Malignant neoplasms (cancers)	C00-C97
Chronic lower respiratory disease (CLRD)	J40-J47
Diabetes mellitus	E10-E14
Diseases of heart	I00-I09, I11, I13, I20-I51
Essential hypertension and hypertensive renal disease	I10, I12, I15
Accidents (unintentional injuries)	V01-X59, Y85-Y86
Chronic liver disease and cirrhosis	K70, K73-K74
Nephritis, nephrotic syndrome and nephrosis	N00-N07, N17-N19, N25-N27
Pneumonia and influenza	J09-J18
Cerebrovascular disease (stroke)	I60-I69
Intentional self-harm (suicide)	*U03, X60-X84, Y87.0

While the HPI dataset was used as-is, additional processing was required to prepare the mortality data for analysis. This included two main steps. First, ZIP Codes associated with PO Boxes were merged with the larger ZIP Codes in which they were located. Once this was completed, smoothed mortality rates were calculated for each resulting ZIP Code.

ZIP Code Consolidation

The mortality indicators used here included deaths reported for the ZIP Code at the decedent's place of residence. ZIP Codes are defined by the U.S. Postal Service as a single location (such as a PO 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 (the main source of population and demographic data in the United States) to report population. 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 make it possible to calculate mortality rates for each ZCTA.

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[1] Public Health Alliance of Southern California. 2021. HPI_MasterFile_2021-04-22.zip. Data file. Retrieved 1 May 2021 from https://healthyplacesindex.org/wp-content/uploads/2021/04/HPI_MasterFile_2021-04-22.zip.

[2] State of California, Department of Public Health. 2021. California Comprehensive Master Death File (Static), 2015-2019.

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 PO Box ZIP Codes or other unique ZIP Codes (such as a ZIP Code assigned to a single 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[3] were compared to ZCTA boundaries.[4] 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 PO Boxes or unique ZIP Codes were then added to the ZCTAs to which they were assigned.

Rate Calculation and Smoothing
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.[5] Smoothed rates are considered preferable to raw rates for two main reasons. First, the small population of many ZCTAs 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 2017 American Community Survey 5-year Estimates table B03002. Data for 2017 were used because this represented the central year of the 2015–2019 range of years for which CDPH data were collected. The population data for 2017 were multiplied by five to match the five years of mortality data used to calculate smoothed rates. The smoothed mortality rates were then multiplied by 100,000 so that the final rates represented deaths per 100,000 people.

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[3] Datasheer, L.L.C. 2018. ZIP Code Database Free. Retrieved 16 Jul 2018 from http://www.Zip-Codes.com.
[4] US Census Bureau. 2021. TIGER/Line Shapefile, 2019, 2010 nation, U.S., 2010 Census 5-Digit ZIP Code Tabulation Area (ZCTA5) National. Retrieved 9 Feb 2021 from https://www.census.gov/cgi-bin/geo/shapefiles/index.php.
[5] Anselin, Luc. 2003. Rate Maps and Smoothing. Retrieved 14 Jan 2018 from http://www.dpi.inpe.br/gilberto/tutorials/software/geoda/tutorials/w6_rates_slides.pdf.

Significant Health Need Identification Dataset
The second main set of data used in the CHNA includes the health factor and health outcome indicators used to identify significant health needs (SHNs). The selection of these indicators was guided by the previously identified conceptual model. Table 11 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.

Table 11: Health factor and health outcome indicators used in health need identification

Conceptual Model Alignment			Indicator	Data Source	Time Period
Health Outcomes	Length of Life	Infant Mortality	Infant Mortality	County Health Rankings	2013 - 2019
		Life Expectancy	Child Mortality	County Health Rankings	2016 - 2019
			Life Expectancy	County Health Rankings	2017 - 2019
			Premature Age-Adjusted Mortality	County Health Rankings	2017 - 2019
			Premature Death	County Health Rankings	2017 - 2019
			Stroke Mortality	CDPH California Vital Data (Cal-ViDa)	2015 - 2019
			Chronic Lower Respiratory Disease Mortality	CDPH California Vital Data (Cal-ViDa)	2015 - 2019
			Diabetes Mortality	CDPH California Vital Data (Cal-ViDa)	2015 - 2019
			Heart Disease Mortality	CDPH California Vital Data (Cal-ViDa)	2015 - 2019
			Hypertension Mortality	CDPH California Vital Data (Cal-ViDa)	2015 - 2019
			Cancer Mortality	CDPH California Vital Data (Cal-ViDa)	2015 - 2019
			Liver Disease Mortality	CDPH California Vital Data (Cal-ViDa)	2015 - 2019
			Kidney Disease Mortality	CDPH California Vital Data (Cal-ViDa)	2015 - 2019
			Suicide Mortality	CDPH California Vital Data (Cal-ViDa)	2015 - 2019
			Unintentional Injuries Mortality	CDPH California Vital Data (Cal-ViDa)	2015 - 2019
			COVID-19 Mortality	CDPH COVID-19 Time-Series Metrics by County and State	Collected on 2021-11-17
			COVID-19 Case Fatality	CDPH COVID-19 Time-Series Metrics by County and State	Collected on 2021-11-17
			Alzheimer's Disease Mortality	CDPH California Vital Data (Cal-ViDa)	2015 - 2019
			Influenza and Pneumonia Mortality	CDPH California Vital Data (Cal-ViDa)	2015 - 2019

			Diabetes Prevalence	County Health Rankings	2017
Health Outcomes	Quality of Life	Morbidity	Low Birthweight	County Health Rankings	2013 - 2019
			HIV Prevalence	County Health Rankings	2018
			Disability	2019 American Community Survey 5 year estimate variable S1810_C03_001E	2015 - 2019
			Poor Mental Health Days	County Health Rankings	2018
			Frequent Mental Distress	County Health Rankings	2018
			Poor Physical Health Days	County Health Rankings	2018
			Frequent Physical Distress	County Health Rankings	2018
			Poor or Fair Health	County Health Rankings	2018
			Colorectal Cancer Prevalence	California Cancer Registry	2013 - 2017
			Breast Cancer Prevalence	California Cancer Registry	2013 - 2017
			Lung Cancer Prevalence	California Cancer Registry	2013 - 2017
			Prostate Cancer Prevalence	California Cancer Registry	2013 - 2017
			COVID-19 Cumulative Incidence	CDPH COVID-19 Time-Series Metrics by County and State	Collected on 2021-11-17
			Asthma ED Rates	Tracking California	2018
			Asthma ED Rates for Children	Tracking California	2018
Health Factors	Health Behavior	Alcohol and Drug Use	Excessive Drinking	County Health Rankings	2018
			Drug-Induced Death	CDPH 2021 County Health Status Profiles	2017 - 2019
		Diet and Exercise	Adult Obesity	County Health Rankings	2017
			Physical Inactivity	County Health Rankings	2017
			Limited Access to Healthy Foods	County Health Rankings	2015
			Food Environment Index	County Health Rankings	2015 & 2018
			Access to Exercise Opportunities	County Health Rankings	2010 & 2019
		Sexual Activity	Chlamydia Incidence	County Health Rankings	2018
			Teen Birth Rate	County Health Rankings	2013 - 2019
		Tobacco Use	Adult Smoking	County Health Rankings	2018

			Primary Care Shortage Area	U.S. Heath Resources and Services Administration	2021
Health Factors	Clinical Care	Access to Care	Dental Care Shortage Area	U.S. Heath Resources and Services Administration	2021
			Mental Health Care Shortage Area	U.S. Heath Resources and Services Administration	2021
			Medically Underserved Area	U.S. Heath Resources and Services Administration	2021
			Mammography Screening	County Health Rankings	2018
			Dentists	County Health Rankings	2019
			Mental Health Providers	County Health Rankings	2020
			Psychiatry Providers	County Health Rankings	2020
			Specialty Care Providers	County Health Rankings	2020
			Primary Care Providers	County Health Rankings	2018; 2020
		Quality Care	Preventable Hospitalization	California Office of Statewide Health Planning and Development Prevention Quality Indicators for California	2019
			COVID-19 Cumulative Full Vaccination Rate	CDPH COVID-19 Vaccine Progress Dashboard Data	Collected on 2021-11-17
	Socio-Economic and Demographic Factors	Community Safety	Homicide Rate	County Health Rankings	2013 - 2019
			Firearm Fatalities Rate	County Health Rankings	2015 - 2019
			Violent Crime Rate	County Health Rankings	2014 & 2016
			Juvenile Arrest Rate	Criminal Justice Data: Arrests, OpenJustice, California Department of Justice	2015 - 2019
			Motor Vehicle Crash Death	County Health Rankings	2013 - 2019
		Education	Some College	County Health Rankings	2015 - 2019
			High School Completion	County Health Rankings	2015 - 2019
			Disconnected Youth	County Health Rankings	2015 - 2019
			Third Grade Reading Level	County Health Rankings	2018
			Third Grade Math Level	County Health Rankings	2018
		Employment	Unemployment	County Health Rankings	2019

Health Factors			Children in Single-Parent Households	County Health Rankings	2015 - 2019
		Family and Social Support	Social Associations	County Health Rankings	2018
			Residential Segregation (Non-White/White)	County Health Rankings	2015 - 2019
		Income	Children Eligible for Free Lunch	County Health Rankings	2018 - 2019
			Children in Poverty	County Health Rankings	2019
			Median Household Income	County Health Rankings	2019
			Uninsured Population under 64	County Health Rankings	2018
			Income Inequality	County Health Rankings	2015 - 2019
	Physical Environment	Housing and Transit	Severe Housing Problems	County Health Rankings	2013 - 2017
			Severe Housing Cost Burden	County Health Rankings	2015 - 2019
			Homeownership	County Health Rankings	2015 - 2019
			Homelessness Rate	US Dept. of Housing and Urban Development 2020 Annual Homeless Assessment Report	2020
			Households with no Vehicle Available	2019 American Community Survey 5-year estimate variable DP04_0058PE	2015 - 2019
			Long Commute - Driving Alone	County Health Rankings	2015 - 2019
			Access to Public Transit	OpenMobilityData, Transitland, TransitWiki.org, Santa Ynez Valley Transit; US Census Bureau	2021; 2020
		Air and Water Quality	Pollution Burden Percent	California Office of Environmental Health Hazard Assessment	2018
			Air Pollution - Particulate Matter	County Health Rankings	2016
			Drinking Water Violations	County Health Rankings	2019

The following sections give further details about the sources of these data and any processing applied to prepare them for use in the analysis.

County Health Rankings Data

All indicators listed with County Health Rankings (CHR) as their source were obtained from the 2021 County Health Rankings[6] dataset. This was the most common source of data, with 52 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 served 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 12.

Table 12: Sources and time periods for indicators obtained from County Health Rankings.

CHR Indicator	Time Period	Data Source
Infant Mortality	2013 - 2019	National Center for Health Statistics - Mortality Files
Child Mortality	2016 - 2019	National Center for Health Statistics - Mortality Files
Life Expectancy	2017 - 2019	National Center for Health Statistics - Mortality Files
Premature Age-Adjusted Mortality	2017 - 2019	National Center for Health Statistics - Mortality Files
Premature Death	2017 - 2019	National Center for Health Statistics - Mortality Files
Diabetes Prevalence	2017	United States Diabetes Surveillance System
Low Birthweight	2013 - 2019	National Center for Health Statistics - Natality files
HIV Prevalence	2018	National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
Poor Mental Health Days	2018	Behavioral Risk Factor Surveillance System
Frequent Mental Distress	2018	Behavioral Risk Factor Surveillance System
Poor Physical Health Days	2018	Behavioral Risk Factor Surveillance System
Frequent Physical Distress	2018	Behavioral Risk Factor Surveillance System
Poor or Fair Health	2018	Behavioral Risk Factor Surveillance System
Excessive Drinking	2018	Behavioral Risk Factor Surveillance System
Adult Obesity	2017	United States Diabetes Surveillance System
Physical Inactivity	2017	United States Diabetes Surveillance System
Limited Access to Healthy Foods	2015	USDA Food Environment Atlas
Food Environment Index	2015 & 2018	USDA Food Environment Atlas, Map the Meal Gap from Feeding America
Access to Exercise Opportunities	2010 & 2019	Business Analyst, Delorme map data, ESRI, & US Census Tigerline Files
Chlamydia Incidence	2018	National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
Teen Birth Rate	2013 - 2019	National Center for Health Statistics - Natality files
Adult Smoking	2018	Behavioral Risk Factor Surveillance System
Mammography Screening	2018	Mapping Medicare Disparities Tool
Dentists	2019	Area Health Resource File/National Provider Identification file
Mental Health Providers	2020	CMS, National Provider Identification

[6] University of Wisconsin Population Health Institute, 2021. County Health Rankings State Report 2021. Retrieved 6 May 2021 from https://www.countyhealthrankings.org/app/oregon/2021/downloads and https://www.countryhealthrankings.org/app/california/2021/downloads.

Psychiatry Providers	2020	Area Health Resource File
Specialty Care Providers	2020	Area Health Resource File
Primary Care Providers	2018; 2020	Area Health Resource File/American Medical Association; CMS, National Provider Identification
Homicide Rate	2013 - 2019	National Center for Health Statistics - Mortality Files
Firearm Fatalities Rate	2015 - 2019	National Center for Health Statistics - Mortality Files
Violent Crime Rate	2014 & 2016	Uniform Crime Reporting - FBI
Motor Vehicle Crash Death	2013 - 2019	National Center for Health Statistics - Mortality Files
Some College	2015 - 2019	American Community Survey, 5-year estimates
High School Completion	2015 - 2019	American Community Survey, 5-year estimates
Disconnected Youth	2015 - 2019	American Community Survey, 5-year estimates
Third Grade Reading Level	2018	Stanford Education Data Archive
Third Grade Math Level	2018	Stanford Education Data Archive
Unemployment	2019	Bureau of Labor Statistics
Children in Single-Parent Households	2015 - 2019	American Community Survey, 5-year estimates
Social Associations	2018	County Business Patterns
Residential Segregation (Non-White/White)	2015 - 2019	American Community Survey, 5-year estimates
Children Eligible for Free Lunch	2018 - 2019	National Center for Education Statistics
Children in Poverty	2019	Small Area Income and Poverty Estimates
Median Household Income	2019	Small Area Income and Poverty Estimates
Uninsured Population under 64	2018	Small Area Health Insurance Estimates
Income Inequality	2015 - 2019	American Community Survey, 5-year estimates
Severe Housing Problems	2013 - 2017	Comprehensive Housing Affordability Strategy (CHAS) data
Severe Housing Cost Burden	2015 - 2019	American Community Survey, 5-year estimates
Homeownership	2015 - 2019	American Community Survey, 5-year estimates
Long Commute - Driving Alone	2015 - 2019	American Community Survey, 5-year estimates
Air Pollution - Particulate Matter	2016	Environmental Public Health Tracking Network
Drinking Water Violations	2019	Safe Drinking Water Information System

The provider rates for the primary care physicians and other primary care providers indicators obtained from CHR were summed to create the final primary care provider indicator used in this analysis.

California Department of Public Health

By-Cause Mortality Data
By-cause mortality data were obtained at the county and state level from the CDPH Cal-ViDa[7] online data query system for the years 2015-2019. Empirically bayes smoothed rates (EBRs) were calculated for each mortality indicator using the total county population figure reported in the 2017 American Community Survey 5-year Estimates table B03002. Data for 2017 were used because this represented the central year of the 2015–2019 range of years for which CDPH data were collected. The population data for 2017 were multiplied by five to match the five years of mortality data used to calculate smoothed rates. The smoothed mortality rates were then multiplied by 100,000 so that the final rates represented deaths per 100,000 people.

COVID-19 Data
Data on the cumulative number of cases and deaths[8] and completed vaccinations[9] for COVID-19 were used to calculate mortality, case-fatality, incidence, and vaccination rates. County mortality, incidence, and vaccination rates were calculated by dividing each of the respective values by the total population variable from the 2019 American Community Survey 5-year estimates table B01001, and then multiplying the resulting value by 100,000 to create rates per 100,000. Case-fatality rates were calculated by dividing COVID-19 mortality by the total number of cases, then multiplying by 100, representing the percentage of cases that ended in death.

Drug-Induced Deaths Data
Drug-induced death rates were obtained from Table 19 of the 2021 County Health Status Profiles[10] and report age-adjusted deaths per 100,000.

U.S. Health Resources and Services Administration
Indicators related to the availability of healthcare providers were obtained from the Health Resources and Services Administration[11] (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.

[7] State of California, Department of Public Health. 2021. California Vital Data (Cal-ViDa), Death Query. Retrieved 1 Jun 2021 from https://cal-vida.cdph.ca.gov/.

[8] State of California, Department of Public Health. 2021. Statewide COVID-19 Cases Deaths Tests. Retrieved 17 November 2021 from https://data.chhs.ca.gov/dataset/f333528b-4d38-4814-bebb-12db1f10f535/resource/046cdd2b-31e5-4d34-9ed3-b48cdbc4be7a/download/COVID-19cases_test.csv.

[9] State of California, Department of Public Health. 2021. COVID-19 Vaccine Progress Dashboard Data. Retrieved 24 November 2021 from https://data.chhs.ca.gov/dataset/e283ee5a-cf18-4f20-a92c-ee94a2866ccd/resource/130d7ba2-b6eb-438d-a412-741bde207e1c/download/COVID-19vaccinesbycounty.csv.

[9] State of California, Department of Public Health. 2021. COVID-19 Vaccine Progress Dashboard Data. Retrieved 24 November 2021 from https://data.chhs.ca.gov/dataset/e283ee5a-cf18-4f20-a92c-ee94a2866ccd/resource/130d7ba2-b6eb-438d-a412-741bde207e1c/download/COVID-19vaccinesbycounty.csv.

[10] State of California, Department of Public Health, Vital Records Data and Statistics. 2021. County Health Status Profiles 2021: CHSP 2021 Tables 1-29. Spreadsheet. Retrieved on 21 Jul 2021 from https://www.cdph.ca.gov/Programs/CHSI/CDPH%20Document%20Library/CHSP_2021_Tables_1-29_04.16.2021.xlsx.

[11] US Health Resources & Services Administration. 2021. Area Health Resources Files and Shortage Areas. Retrieved on 3 Feb 2021 from https://data.hrsa.gov/data/download.

Health Professional Shortage Areas

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.

Psychiatry and Specialty Care Providers

The HRSA's Area Health Resource Files provide information on physicians and allied healthcare 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 non-federal, excluding hospital residents and those 75 years of age or older) from the total number of physicians (both MDs and DOs, patient care, non-federal) in 2018. This number was then divided by the 2018 total population given in the 2018 American Community Survey 5-year Estimates table B03002, and then multiplied by 100,000 to give the total number of specialty care physicians per 100,000 residents.

The number 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 per 100,000 for each county and the state using the number of total patient care, non-federal psychiatrists from the Area Health Resource Files. It should be noted that psychiatrists are included in the list of specialty care physicians, so this indicator represents a subset of specialty care providers rather than a separate group.

California Cancer Registry

Data obtained from the California Cancer Registry[12] 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 2013 to 2017, 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.

Tracking California

Data on emergency department visits rates for all ages as well as children aged 5 to 17 were obtained from Tracking California.[13] These data report age-adjusted rates per 10,000. They were multiplied by 100 in this analysis to convert them to rates per 100,000 to make them more comparable to the standard used for other rate indicators.

US Census Bureau

Data from the US Census Bureau were used for two additional indicators: the percentage of households with no vehicles available (table DPO4, variable 0058PE), and the percentage of the civilian non-institutionalized population with some disability (table S1810, variable C03_001E). Values for both of these variables were obtained from the 2019 American Community Survey 5-year Estimates dataset.

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[12] California Cancer Registry. 2021. Age-Adjusted Invasive Cancer Incidence Rates in California. Retrieved on 22 Jan 2021 from https://www.cancer-rates.info/ca/.

[13] Tracking California, Public Health Institute. 2021. Asthma Related Emergency Department & Hospitalization data. Retrieved on 24 Jun 2021 from www.trackingcalifornia.org/asthma/query.

California Office of Environmental Health Hazard Assessment

Data used to calculate the pollution burden percent indicator were obtained from the CalEnviroscreen 3.0[14] dataset produced by the California Office of Environmental Health Hazard Assessment. This indicator reports the percentage of the population within a given county, or within the state as a whole, that live in a US Census tract with a CalEnviroscreen 3.0 Pollution Burden score in the 50th percentile or higher. Data on total population came from Table B03002 from the 2019 American Community Survey 5-year Estimates dataset.

California Department of Health Care Access and Information

Data on preventable hospitalizations were obtained from the California Department of Health Care Access and Information (formerly Office of Statewide Health Planning and Development) Prevention Quality Indicators.[15] These data are reported as risk-adjusted rates per 100,000.

California Department of Justice

Data reporting the total number of juvenile felony arrests was obtained from the California Department of Justice.[16] This indicator reports the rate of felony arrests per 1,000 juveniles under the age of 18. It was calculated by dividing the total number of juvenile felony arrests for each county or state from 2015–2019 by the total population under 18 as reported in Table B01001 in the 2017 American Community Survey 5-year Estimates program. Population data from 2017 were used as this was the central year of the period over which juvenile felony arrest data were obtained. Population figures from 2017 were multiplied by 5 to match the years of arrest data used. Empirical bayes smoothed rates were calculated to increase the reliability of rates calculated for small counties. Finally, juvenile felony arrest rates were also calculated for Black, White, and Hispanic populations following the same manner, but using input population data from 2017 American Community Survey 5-year Estimates Tables B01001H, B01001B, and B01001I respectively.

US Department of Housing and Urban Development

Data from the US Department of Housing and Urban Development's 2020 Annual Homeless Assessment Report[17] were used to calculate homelessness rates for the counties and states. This data reported point-in-time (PIT) homelessness estimates for individual Continuum of Care (CoC) organizations across the state. Each CoC works within a defined geographic area, which could be a group of counties, an individual county, or a portion of a county. The CoC for Sacramento County encompasses the entire county and does not extend beyond its borders.

Population data came from the total population value reported in Table B03002 from the 2019 American Community Survey 5-year Estimates dataset. Derived rates were multiplied by 100,000 to report rates per 100,000.

Proximity to Transit Stops

The proximity to transit stops variable reports the percent of county and state population that lives in a US Census block located within 1/4 mile of a fixed transit stop. Two sets of information were needed in order to

[14] California Office of Environmental Health Hazard Assessment. 2018. CalEnviroScreen 3.0. Retrieved on 22 Jan 2021 from https://oehha.ca.gov/calenviroscreen/maps-data.

[15] Office of Statewide Health Planning and Development. 2021. Prevention Quality Indicators (PQI) for California. Data files for Statewide and County. Retrieved on 12 Mar 2021 from https://oshpd.ca.gov/data-and-reports/healthcare-quality/ahrq-quality-indicators/.

[16] California Department of Justice, OpenJustice. 2021. Criminal Justice Data: Arrests. Retrieved on 17 Jun 2021 from https://data-openjustice.doj.ca.gov/sites/default/files/dataset/2020-07/OnlineArrestData1980-2019.csv.

[17] US Department of Housing and Urban Development. 2021. 2020 Annual Homeless Assessment Report: 2007 - 2020 Point-in-Time Estimates by CoC. Retrieved on 14 Jul 2021 from https://www.huduser.gov/portal/sites/default/files/xls/2007-2020-PIT-Estimates-by-CoC.xlsx.

calculate this indicator: total population at the Census block level, and the location of transit stops. Likely due to delays in data releases stemming from the COVID-19 pandemic, the most recent Census block population data available at the time of the analysis was from the 2010 Decennial Census[18], so this was the data used to represent the distribution of population for this indicator.

Transit stop data were identified first by using tools in the TidyTransit[19] library for the R statistical programming language.[20] This was used to identify transit providers with stops located within 100 miles of the state boundaries. A search for transit stops for these agencies, as well as all other transit agencies in the state, was conducted by reviewing three main online sources: OpenMobilityData[21], Transitland[22], Transitwiki.org[23], and Santa Ynez Valley Transit.[24] Each of these websites list public transit data that have been made public by transit agencies. Transit data from all providers that could be identified were downloaded, and fixed transit stop locations were extracted from them.

The sf[25] library in R was then used to calculate 1/4-mile (402.336 meter) buffers around each of these transit stops, and then to identify which Census blocks fell within these areas. The total population of all tracts within the stops' buffer was then divided by the total population of each county or state to generate the final indicator value.

Detailed Analytical Methodology

The collected and processed primary and secondary data were integrated in three main analytical stages. First, secondary health outcome and health factor data were combined with area-wide key informant interviews to help identify Communities of Concern. These Communities of Concern could potentially include geographic regions as well as specific sub-populations bearing disproportionate health burdens. This information was used to focus the remaining interview and focus-group collection efforts on those areas and subpopulations. Next, the resulting data, along with the results from the Community Service Provider survey, were combined with secondary health need identification data to identify SHNs within the service area. Finally, primary data were used to prioritize those identified SHNs. The specific details for these analytical steps are given in the following three sections.

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[18] US Census Bureau. 2011. Census Blocks with Population and Housing Counts. Retrieved on 7 Jun 2021 from https://www2.census.gov/geo/tiger/TIGER2010BLKPOPHU/.

[19] Flavio Poletti, Daniel Herszenhut, Mark Padgham, Tom Buckley and Danton Noriega-Goodwin. 2021. tidytransit: Read, Validate, Analyze, and Map Files in the General Transit Feed Specification. R package version 1.0.0. https://CRAN.R-project.org/package=tidytransit.

[20] R Core Team (2021). R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. URL https://www.R-project.org/.

[21] OpenMobilityData. 2021. California, USA. Retrieved all feeds listed on 31 May to 1 June 2021 from https://openmobilitydata.org/l/67-california-usa.

[22] Transitland. 2021. Transitland Operators. Retrieved all operators with California locations on 31 May to 1 June 2021 from https://www.transit.land/operators.

[23] Transitwiki.org. 2021. List of publicly-accessible transportation data feeds: dynamic and others. Retrieved on 31 May to 1 June 2021 from https://www.transitwiki.org/TransitWiki/index.php/Publicly-accessible_public_transportation_data#List_of_publicly-accessible_public_transportation_data_feeds:_dynamic_data_and_others.

[24] Santa Ynez Valley Transit. GTFS Files. Retrieved on 1 Jun 2021 from http://www.cityofsolvang.com/DocumentCenter/View/2756/syvt_gtfs_011921.

[25] Pebesma, E., 2018. Simple Features for R: Standardized Support for Spatial Vector Data. The R Journal 10 (1), 439-446, https://doi.org/10.32614/RJ-2018-009.

Community of Concern Identification
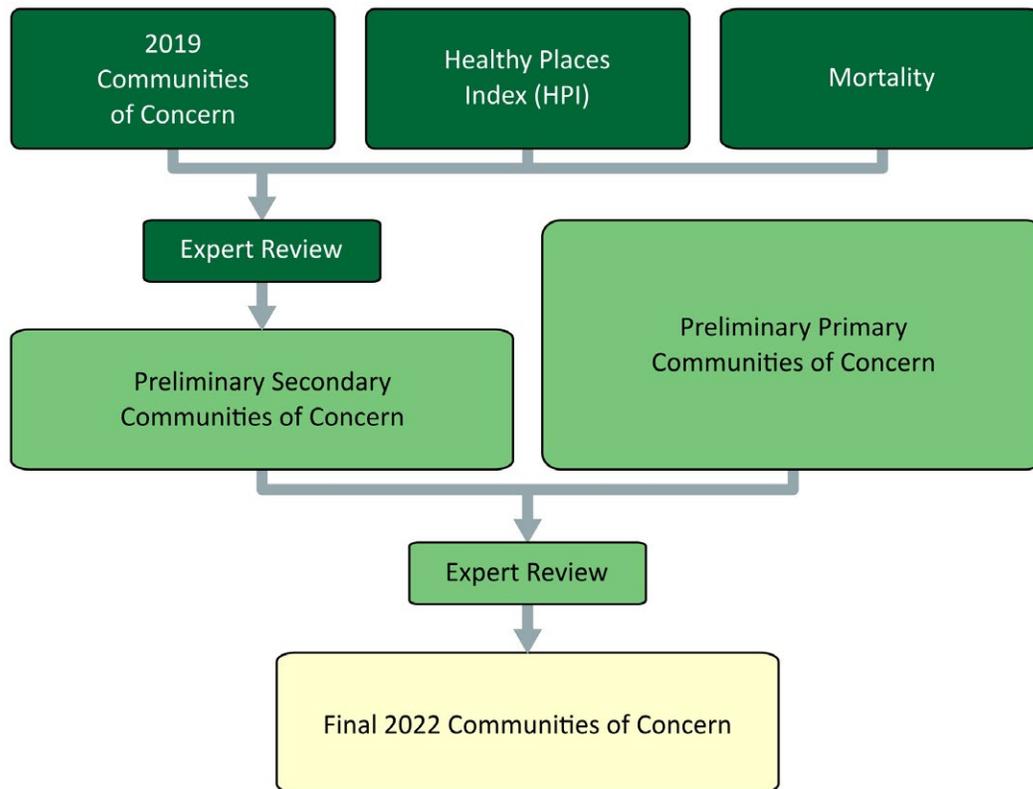
Figure 3: Community of Concern identification process

As illustrated in Figure 3, 2022 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 2019 CHNA; the census tract-level California Healthy Places Index (HPI); and the CDPH ZCTA-level mortality data.

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

2019 Community of Concern
A ZCTA was included if it was included in the 2019 CHNA Community of Concern list for the service. This was done to allow greater continuity between CHNA rounds and reflects the work of the hospital systems' orientation to serve these disadvantaged communities.

Healthy Places Index (HPI)
A ZCTA was included if it intersected a census tract whose HPI value fell within the lowest 20% of those in the service area. These census tracts represent areas with consistently high concentrations of demographic subgroups identified in the research literature as being more likely to experience health-related disadvantages.

CDPH Mortality Data

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. The number of times each ZCTA's rates for these indicators fell within the top 20% in the service area was counted. Those ZCTAs whose counted values exceeded the 80th percentile for all of the ZCTAs in the service area met the Community of Concern mortality selection criteria.

Integration of Secondary Criteria

Any ZCTA that met any of the three selection criteria (2019 Community of Concern, HPI) was reviewed for inclusion as a 2022 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.

Primary Communities of Concern

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 2022 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 2022 Communities of Concern.

Significant Health Need Identification

The general methods through which SHNs were identified are shown in Figure 4 and described here in greater detail. The first step in this process was to identify a set of PHNs from which SHNs could be selected. This was done by reviewing the health needs identified during prior CHNAs among various hospitals throughout Central and Northern California and then supplementing this list based on a preliminary analysis of the primary qualitative data collected for the current CHNA. This resulted the list of PHNs shown in Table 13.
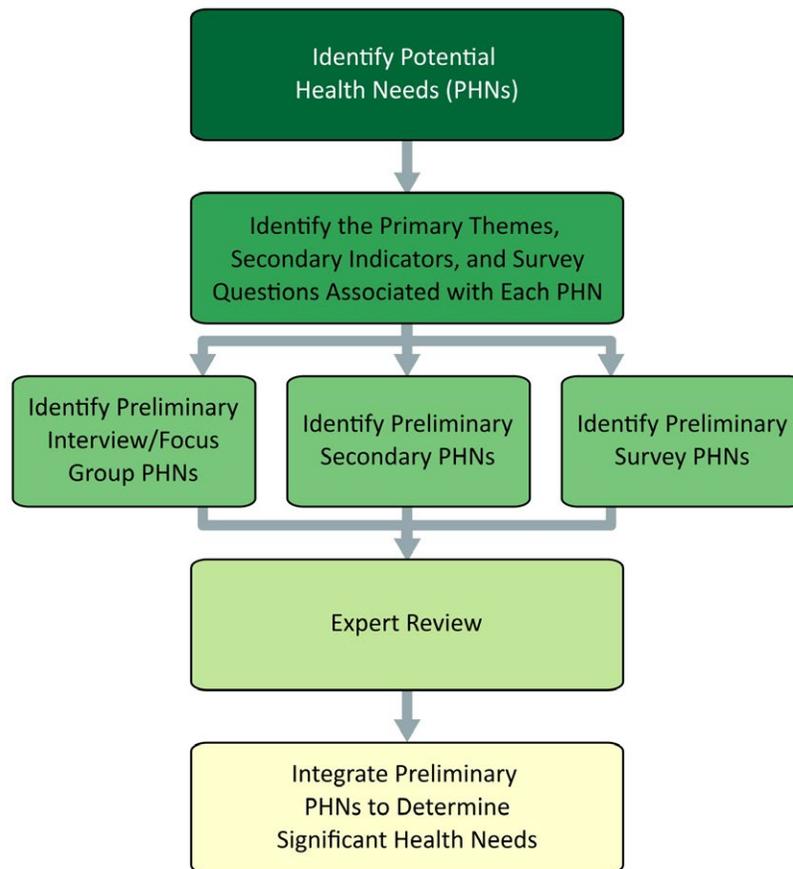
Figure 4: Significant health need identification process

Table 13: 2022 Potential Health Needs

Potential Health Needs (PHNs)	
PHN1	Access to Mental/Behavioral Health and Substance-Use 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	Healthy Physical Environment
PHN7	Access to Basic Needs Such as Housing, Jobs, and Food

PHN8	Access to Functional Needs
PHN9	Access to Specialty and Extended Care
PHN10	Injury and Disease Prevention and Management
PHN11	Increased Community Connections
PHN12	System Navigation

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 14 through Table 25. Primary theme associations were used to guide coding of the primary data sources to specific PHNs.

Access to Mental/Behavioral Health and Substance-Use Services

Table 14: Primary themes and secondary indicators associated with PHN1

Primary Data Themes	Secondary Indicators
▪ There aren't enough mental health providers or treatment centers in the area (e.g., psychiatric beds, therapists, support groups). ▪ The cost for mental/behavioral health treatment is too high. ▪ Treatment options in the area for those with Medi-Cal are limited. ▪ Awareness of mental health issues among community members is low ▪ Additional services specifically for youth are needed (e.g., child psychologists, counselors and therapists in the schools). ▪ The stigma around seeking mental health treatment keeps people out of care. ▪ Additional services for those who are homeless and dealing with mental/behavioral health issues are needed. ▪ The area lacks the infrastructure to support acute mental health crises. ▪ Mental/behavioral health services are available in the area, but people do not know about them. ▪ It's difficult for people to navigate for mental/behavioral healthcare ▪ Substance-use is a problem in the area (e.g., use of opiates and methamphetamine, prescription misuse). ▪ There are too few substance-use treatment services in the area (e.g., detox centers, rehabilitation centers). ▪ Substance-use treatment options for those with Medi-cal are limited. ▪ There aren't enough services here for those who are homeless and dealing with substance-use issues. ▪ The use of nicotine delivery products such as e-cigarettes and tobacco is a problem in the community. ▪ Substance-use is an issue among youth in particular. ▪ There are substance-use treatment services available here, but people do not know about them.	▪ Life Expectancy ▪ Premature Age-Adjusted ▪ Mortality ▪ Premature Death ▪ Liver Disease Mortality ▪ Suicide Mortality ▪ Poor Mental Health Days ▪ Frequent Mental Distress ▪ Poor Physical Health Days ▪ Frequent Physical Distress ▪ Poor or Fair Health ▪ Excessive Drinking ▪ Drug-Induced Death ▪ Adult Smoking ▪ Primary Care Shortage Area ▪ Mental Health Care Shortage Area ▪ Medically Underserved Area ▪ Mental Health Providers ▪ Psychiatry Providers ▪ Firearm Fatalities Rate ▪ Juvenile Arrest Rate ▪ Disconnected Youth ▪ Social Associations ▪ Residential Segregation (Non-White/White) ▪ Income Inequality ▪ Severe Housing Cost Burden ▪ Homelessness Rate

Access to Quality Primary Care Health Services

Table 15: Primary themes and secondary indicators associated with PHN2

Primary Data Themes	Secondary Indicators	
▪ Insurance is unaffordable.	▪ Infant Mortality	▪ Poor Physical Health Days
▪ Wait-times for appointments are excessively long.	▪ Child Mortality	▪ Frequent Physical Distress
▪ Out-of-pocket costs are too high.	▪ Life Expectancy	▪ Poor or Fair Health
▪ There aren't enough primary care service providers in the area.	▪ Premature Age-Adjusted Mortality	▪ Colorectal Cancer Prevalence
	▪ Premature Death	▪ Breast Cancer Prevalence
▪ Patients have difficulty obtaining appointments outside of regular business hours.	▪ Stroke Mortality	▪ Lung Cancer Prevalence
	▪ Chronic Lower Respiratory Disease Mortality	▪ Prostate Cancer Prevalence
▪ Too few providers in the area accept Medi-Cal.	▪ Diabetes Mortality	▪ Asthma ED Rates
	▪ Heart Disease Mortality	▪ Asthma ED Rates for Children
▪ It is difficult to recruit and retain primary care providers in the region.	▪ Hypertension Mortality	▪ Primary Care Shortage Area
	▪ Cancer Mortality	▪ Medically Underserved Area
▪ Specific services are unavailable here (e.g., 24-hour pharmacies, urgent care, telemedicine).	▪ Liver Disease Mortality	▪ Mammography Screening
	▪ Kidney Disease Mortality	▪ Primary Care Providers
	▪ COVID-19 Mortality	▪ Preventable Hospitalization
▪ The quality of care is low (e.g., appointments are rushed, providers lack cultural competence).	▪ COVID-19 Case Fatality	▪ COVID-19 Cumulative Full Vaccination Rate
	▪ Alzheimer's Disease Mortality	▪ Residential Segregation (Non-White/White)
	▪ Influenza and Pneumonia Mortality	
▪ Patients seeking primary care overwhelm local emergency departments.	▪ Diabetes Prevalence	▪ Uninsured Population under 64
	▪ Low Birthweight	▪ Income Inequality
▪ Primary care services are available, but are difficult for many people to navigate.	▪ Poor Mental Health Days	▪ Homelessness Rate
	▪ Frequent Mental Distress	

Active Living and Healthy Eating

Table 16: Primary themes and secondary indicators associated with PHN3

Primary Data Themes	Secondary Indicators
▪ There are food deserts in the area where fresh, unprocessed foods are not available. ▪ Fresh, unprocessed foods are unaffordable. ▪ Food insecurity is an issue here. ▪ Students need healthier food options in schools. ▪ The built environment doesn't support physical activity (e.g., neighborhoods aren't walk-able, roads aren't bike-friendly, or parks are inaccessible). ▪ The community needs nutrition education programs. ▪ Homelessness in parks or other public spaces deters their use. ▪ Recreational opportunities in the area are unaffordable (e.g., gym memberships, recreational activity programming. ▪ There aren't enough recreational opportunities in the area (e.g., organized activities, youth sports leagues). ▪ The food available in local homeless shelters and food banks is not nutritious. ▪ Grocery store option in the area are limited.	▪ Life Expectancy ▪ Premature Age-Adjusted Mortality ▪ Premature Death ▪ Stroke Mortality ▪ Diabetes Mortality ▪ Heart Disease Mortality ▪ Hypertension Mortality ▪ Cancer Mortality ▪ Kidney Disease Mortality ▪ Diabetes Prevalence ▪ Poor Mental Health Days ▪ Frequent Mental Distress ▪ Poor Physical Health Days ▪ Frequent Physical Distress ▪ Poor or Fair Health ▪ Colorectal Cancer Prevalence ▪ Breast Cancer Prevalence ▪ Prostate Cancer Prevalence ▪ Asthma ED Rates ▪ Asthma ED Rates for Children ▪ Adult Obesity ▪ Physical Inactivity ▪ Limited Access to Healthy Foods ▪ Food Environment Index ▪ Access to Exercise Opportunities ▪ Residential Segregation (Non-White/White) ▪ Income Inequality ▪ Severe Housing Cost Burden ▪ Homelessness Rate ▪ Long Commute - Driving Alone ▪ Access to Public Transit

Safe and Violence-Free Environment

Table 17: Primary themes and secondary indicators associated with PHN4

Primary Data Themes	Secondary Indicators	
▪ People feel unsafe because of crime. ▪ There are not enough resources to address domestic violence and sexual assault. ▪ Isolated or poorly-lit streets make pedestrian travel unsafe. ▪ Public parks seem unsafe because of illegal activity taking place. ▪ Youth need more safe places to go after school. ▪ Specific groups in this community are targeted because of characteristics like race/ethnicity or age. ▪ There isn't adequate police protection police protection. ▪ Gang activity is an issue in the area. ▪ Human trafficking is an issue in the area. ▪ The current political environment makes some concerned for their safety.	▪ Life Expectancy ▪ Premature Death ▪ Hypertension Mortality ▪ Poor Mental Health Days ▪ Frequent Mental Distress ▪ Frequent Physical Distress ▪ Poor or Fair Health ▪ Physical Inactivity ▪ Access to Exercise Opportunities ▪ Homicide Rate	▪ Firearm Fatalities Rate ▪ Violent Crime Rate ▪ Juvenile Arrest Rate ▪ Motor Vehicle Crash Death ▪ Disconnected Youth ▪ Social Associations ▪ Income Inequality ▪ Severe Housing Problems ▪ Severe Housing Cost Burden ▪ Homelessness Rate

Access to Dental Care and Preventive Services

Table 18: Primary themes and secondary indicators associated with PHN5

Primary Data Themes	Secondary Indicators
▪ There aren't enough providers in the area who accept Denti-Cal. ▪ The lack of access to dental care here leads to overuse of emergency departments. ▪ Quality dental services for kids are lacking. ▪ It's hard to get an appointment for dental care. ▪ People in the area have to travel to receive dental care. ▪ Dental care here is unaffordable, even if you have insurance.	▪ Frequent Mental Distress ▪ Poor Physical Health Days ▪ Frequent Physical Distress ▪ Poor or Fair Health ▪ Dental Care Shortage Area Dentists ▪ Residential Segregation (Non-White/White) ▪ Income Inequality ▪ Homelessness Rate

Healthy Physical Environment

Table 19: Primary themes and secondary indicators associated with PHN6

Primary Data Themes	Secondary Indicators
• The air quality contributes to high rates of asthma. • Poor water quality is a concern in the area. • Agricultural activity harms the air quality. • Low-income housing is substandard. • Residents' use of tobacco and e-cigarettes harms the air quality. • Industrial activity in the area harms the air quality. • Heavy traffic in the area harms the air quality. • Wildfires in the region harm the air quality.	• Infant Mortality • Life Expectancy • Premature Age-Adjusted Mortality • Premature Death • Chronic Lower Respiratory Disease Mortality • Hypertension Mortality • Cancer Mortality • Frequent Mental Distress • Frequent Physical Distress • Poor or Fair Health • Colorectal Cancer Prevalence • Breast Cancer Prevalence • Lung Cancer Prevalence • Prostate Cancer Prevalence • Asthma ED Rates • Asthma ED Rates for Children • Adult Smoking • Income Inequality • Severe Housing Cost Burden • Homelessness Rate • Long Commute - Driving Alone • Pollution Burden Percent • Air Pollution - Particulate Matter • Drinking Water Violations

Access to Basic Needs Such as Housing, Jobs, and Food

Table 20: Primary themes and secondary indicators associated with PHN7

Primary Data Themes	Secondary Indicators	
- Lack of affordable housing is a significant issue in the area. - The area needs additional low-income housing options. - Poverty in the county is high. - Many people in the area do not make a living wage. - Employment opportunities in the area are limited. - Services for homeless residents in the area are insufficient. - Services are inaccessible for Spanish-speaking and immigrant residents. - Many residents struggle with food insecurity. - It is difficult to find affordable childcare. - Educational attainment in the area is low.	- Infant Mortality - Child Mortality - Life Expectancy - Premature Age-Adjusted Mortality - Premature Death - Hypertension Mortality - COVID-19 Mortality - COVID-19 Case Fatality - Diabetes Prevalence - Low Birthweight - Poor Mental Health Days - Frequent Mental Distress - Poor Physical Health Days - Frequent Physical Distress - Poor or Fair Health - COVID-19 Cumulative Incidence - Asthma ED Rates - Asthma ED Rates for Children - Drug-Induced Death - Adult Obesity - Limited Access to Healthy Foods - Food Environment Index - Medically Underserved Area	- COVID-19 Cumulative Full Vaccination Rate - Some College - High School Completion - Disconnected Youth - Third Grade Reading Level - Third Grade Math Level - Unemployment - Children in Single-Parent Households - Social Associations - Residential Segregation (Non-White/White) - Children Eligible for Free Lunch - Children in Poverty - Median Household Income - Uninsured Population under 64 - Income Inequality - Severe Housing Problems - Severe Housing Cost Burden - Homeownership - Homelessness Rate - Households with no Vehicle Available - Long Commute-Driving Alone

Access to Functional Needs

Table 21: Primary themes and secondary indicators associated with PHN8

Primary Data Themes	Secondary Indicators
▪ Many residents do not have reliable personal transportation. ▪ Medical transport in the area is limited. ▪ Roads and sidewalks in the area are not well-maintained. ▪ The distance between service providers is inconvenient for those using public transportation. ▪ Using public transportation to reach providers can take a very long time. ▪ The cost of public transportation is too high. ▪ Public transportation service routes are limited. ▪ Public transportation schedules are limited. ▪ The geography of the area makes it difficult for those without reliable transportation to get around. ▪ Public transportation is more difficult for some to residents to use (e.g., non-English speakers, seniors, parents with young children). ▪ There aren't enough taxi and ride-share options (e.g.,Uber, Lyft).	▪ Disability ▪ Frequent Mental Distress ▪ Frequent Physical Distress ▪ Poor or Fair Health ▪ Adult Obesity ▪ COVID-19 Cumulative Full Vaccination Rate ▪ Income Inequality ▪ Homelessness Rate ▪ Households with no Vehicle Available ▪ Long Commute-Driving Alone ▪ Access to Public Transit

Access to Specialty and Extended Care

Table 22: Primary themes and secondary indicators associated with PHN9

Primary Data Themes	Secondary Indicators	
▪ Wait-times for specialist appointments are excessively long. ▪ It is difficult to recruit and retain specialists in the area. ▪ Not all specialty care is covered by insurance. ▪ Out-of-pocket costs for specialty and extended care are too high. ▪ People have to travel to reach specialists. ▪ Too few specialty and extended care providers accept Medi-Cal. ▪ The area needs more extended care options for the aging population (e.g. skilled nursing homes, in-home care). ▪ There isn't enough OB/GYN care available. ▪ Additional hospice and palliative care options are needed. ▪ The area lacks a kind of specialist or extended care option not listed here.	▪ Infant Mortality ▪ Life Expectancy ▪ Premature Age-Adjusted Mortality ▪ Premature Death ▪ Stroke Mortality ▪ Chronic Lower Respiratory Disease Mortality ▪ Diabetes Mortality ▪ Heart Disease Mortality ▪ Hypertension Mortality ▪ Cancer Mortality ▪ Liver Disease Mortality ▪ Kidney Disease Mortality ▪ COVID-19 Mortality ▪ COVID-19 Case Fatality ▪ Alzheimer's Disease Mortality	▪ Diabetes Prevalence ▪ Poor Mental Health Days ▪ Frequent Mental Distress ▪ Poor Physical Health Days ▪ Frequent Physical Distress ▪ Poor or Fair Health ▪ Lung Cancer Prevalence ▪ Asthma ED Rates ▪ Asthma ED Rates for Children ▪ Drug-Induced Death ▪ Psychiatry Providers ▪ Specialty Care Providers ▪ Preventable Hospitalization ▪ Residential Segregation (Non-White/White) ▪ Income Inequality ▪ Homelessness Rate

Injury and Disease Prevention and Management

Table 23: Primary themes and secondary indicators associated with PHN10

Primary Data Themes	Secondary Indicators	
▪ There isn't really a focus on prevention around here. ▪ Preventive health services for women are needed (e.g., breast and cervical cancer screening). ▪ There should be a greater focus on chronic disease prevention (e.g. diabetes, heart disease). ▪ Vaccination rates are lower than they need to be. ▪ Health education in the schools needs to be improved. ▪ Additional HIV and STI prevention efforts are needed. ▪ The community needs nutrition education opportunities. ▪ Schools should offer better sexual health education. ▪ Prevention efforts need to be focused on specific populations in the community (e.g. youth, Spanish-speaking residents, the elderly, LGBTQ individuals, immigrants). ▪ Patients need to be better connected to service providers (e.g. case management, patient navigation, or centralized service provision).	▪ Infant Mortality ▪ Child Mortality ▪ Stroke Mortality ▪ Chronic Lower Respiratory Disease Mortality ▪ Diabetes Mortality ▪ Heart Disease Mortality ▪ Hypertension Mortality ▪ Liver Disease Mortality ▪ Kidney Disease Mortality ▪ Suicide Mortality ▪ Unintentional Injuries Mortality ▪ COVID-19 Mortality ▪ COVID-19 Case Fatality ▪ Alzheimer's Disease Mortality ▪ Diabetes Prevalence ▪ Low Birthweight ▪ HIV Prevalence ▪ Poor Mental Health Days ▪ Frequent Mental Distress ▪ Frequent Physical Distress	▪ Poor or Fair Health ▪ COVID-19 Cumulative Incidence ▪ Asthma ED Rates ▪ Asthma ED Rates for Children ▪ Excessive Drinking ▪ Drug-Induced Death ▪ Adult Obesity ▪ Physical Inactivity ▪ Chlamydia Incidence ▪ Teen Birth Rate ▪ Adult Smoking ▪ COVID-19 Cumulative Full Vaccination Rate ▪ Firearm Fatalities Rate ▪ Juvenile Arrest Rate ▪ Motor Vehicle Crash Death ▪ Disconnected Youth ▪ Third Grade Reading Level ▪ Third Grade Math Level ▪ Income Inequality ▪ Homelessness Rate

Increased Community Connections

Table 24: Primary themes and secondary indicators associated with PHN11

Primary Data Themes	Secondary Indicators	
■ Health and social service providers operate in silos; we need cross-sector connection. ■ Building community connections doesn't seem like a focus in the area. ■ Relations between law enforcement and the community need to be improved. ■ The community needs to invest more in the local public schools. ■ There isn't enough funding for social services in the county. ■ People in the community face discrimination from local service providers. ■ City and county leaders need to work together.	■ Infant Mortality ■ Child Mortality ■ Life Expectancy ■ Premature Age-Adjusted Mortality ■ Premature Death ■ Stroke Mortality ■ Diabetes Mortality ■ Heart Disease Mortality ■ Hypertension Mortality ■ Suicide Mortality ■ Unintentional Injuries Mortality ■ Diabetes Prevalence ■ Low Birthweight ■ Poor Mental Health Days ■ Frequent Mental Distress ■ Poor Physical Health Days ■ Frequent Physical Distress ■ Poor or Fair Health ■ Excessive Drinking ■ Drug-Induced Death ■ Physical Inactivity ■ Access to Exercise Opportunities Teen Birth Rate ■ Primary Care Shortage Area ■ Mental Health Care Shortage Area ■ Medically Underserved Area	■ Mental Health Providers ■ Psychiatry Providers ■ Specialty Care Providers ■ Primary Care Providers ■ Preventable Hospitalization ■ COVID-19 Cumulative Full Vaccination Rate ■ Homicide Rate ■ Firearm Fatalities Rate ■ Violent Crime Rate ■ Juvenile Arrest Rate ■ Some College ■ High School Completion ■ Disconnected Youth ■ Unemployment ■ Children in Single-Parent Households ■ Social Associations ■ Residential Segregation (Non-White/White) ■ Income Inequality ■ Homelessness Rate ■ Households with no Vehicle Available ■ Long Commute-Driving Alone ■ Access to Public Transit

System Navigation

Table 25: Primary themes and secondary indicators associated with PHN12

Primary Data Themes	Secondary Indicators
▪ People may not be aware of the services they are eligible for. ▪ It is difficult for people to navigate multiple, different health care systems. ▪ The area needs more navigators to help to get people connected to services. ▪ People have trouble understanding their insurance benefits. ▪ Automated phone systems can be difficult for those who are unfamiliar with the healthcare system. ▪ Dealing with medical and insurance paperwork can be overwhelming. ▪ Medical terminology is confusing. ▪ Some people just don't know where to start in order to access care or benefits.	▪ There are no secondary indicators associated with this PHN.

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 26 lists each secondary indicator and describes the comparison made to the benchmark to determine if it was problematic.

Table 26: Benchmark comparisons to show indicator performance

Indicator	Benchmark Comparison Indicating Poor Performance
Infant Mortality	Higher
Child Mortality	Higher
Life Expectancy	Lower
Premature Age-Adjusted Mortality	Higher
Premature Death	Higher
Stroke Mortality	Higher
Chronic Lower Respiratory Disease Mortality	Higher
Diabetes Mortality	Higher
Heart Disease Mortality	Higher
Hypertension Mortality	Higher
Cancer Mortality	Higher
Liver Disease Mortality	Higher
Kidney Disease Mortality	Higher
Suicide Mortality	Higher
Unintentional Injuries Mortality	Higher

COVID-19 Mortality	Higher
COVID-19 Case Fatality	Higher
Alzheimer's Disease Mortality	Higher
Influenza and Pneumonia Mortality	Higher
Diabetes Prevalence	Higher
Low Birthweight	Higher
HIV Prevalence	Higher
Disability	Higher
Poor Mental Health Days	Higher
Frequent Mental Distress	Higher
Poor Physical Health Days	Higher
Frequent Physical Distress	Higher
Poor or Fair Health	Higher
Colorectal Cancer Prevalence	Higher
Breast Cancer Prevalence	Higher
Lung Cancer Prevalence	Higher
Prostate Cancer Prevalence	Higher
COVID-19 Cumulative Incidence	Higher
Asthma ED Rates	Higher
Asthma ED Rates for Children	Higher
Excessive Drinking	Higher
Drug-Induced Death	Higher
Adult Obesity	Higher
Physical Inactivity	Higher
Limited Access to Healthy Foods	Higher
Food Environment Index	Lower
Access to Exercise Opportunities	Lower
Chlamydia Incidence	Higher
Teen Birth Rate	Higher
Adult Smoking	Higher
Primary Care Shortage Area	Present
Dental Care Shortage Area	Present
Mental Health Care Shortage Area	Present
Medically Underserved Area	Present
Mammography Screening	Lower
Dentists	Lower
Mental Health Providers	Lower
Psychiatry Providers	Lower
Specialty Care Providers	Lower
Primary Care Providers	Lower
Preventable Hospitalization	Higher
COVID-19 Cumulative Full Vaccination Rate	Lower
Homicide Rate	Higher

Firearm Fatalities Rate	Higher
Violent Crime Rate	Higher
Juvenile Arrest Rate	Higher
Motor Vehicle Crash Death	Higher
Some College	Lower
High School Completion	Lower
Disconnected Youth	Higher
Third Grade Reading Level	Lower
Third Grade Math Level	Lower
Unemployment	Higher
Children in Single-Parent Households	Higher
Social Associations	Lower
Residential Segregation (Non-White/White)	Higher
Children Eligible for Free Lunch	Higher
Children in Poverty	Higher
Median Household Income	Lower
Uninsured Population under 64	Higher
Income Inequality	Higher
Severe Housing Problems	Higher
Severe Housing Cost Burden	Higher
Homeownership	Lower
Homelessness Rate	Higher
Households with no Vehicle Available	Higher
Long Commute - Driving Alone	Higher
Access to Public Transit	Lower
Pollution Burden Percent	Higher
Air Pollution - Particulate Matter	Higher
Drinking Water Violations	Present

Once these poorly performing quantitative indicators were identified, they were used to identify preliminary secondary SHNs. This was done by calculating the percentage of all secondary indicators associated with a given PHN that were identified as performing poorly within the service area. While all PHNs represented actual health needs within the service area 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 10%, 20%, 30%, 40%, 50%, 60%, 70%, or 80% of the associated indicators were found to perform poorly. 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 10%, 20%, 30%, 40%, 50%, 60%, 70%, or 80% of the respondents mentioned an associated theme. Finally, similar thresholds (any mention, 10%, 20%, 30%, 40%, 50%, 60%, 70%, or 80%) were also applied to the percent of survey respondents selecting a particular health need as one of the top health needs in the service area.

These sets of criteria (any mention, 10%, 20%, 30%, 40%, 50%, 60%, 70%, or 80%) were used because we could not anticipate which specific standard would be most meaningful within the context of the service area. 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 service area. 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.

For this report, a PHN was selected as a preliminary quantitative SHN if 50% of the associated quantitative indicators were identified as performing poorly, as a preliminary qualitative SHN if it was identified by 50% or more of the primary sources as performing poorly, and as a preliminary survey SHN if it was identified by at least 50% of survey respondents. Finally, a PHN was selected as a SHN if it was included as a preliminary SHN in two of these three categories.

Significant Health Need Prioritization

The final step in the analysis was to prioritize the identified SHNs. To reflect the voice of the community, SHN prioritization was based solely on primary data. Key informants and focus group participants were asked to identify the three top SHNs in their communities. These responses were associated with one or more of the PHNs. This, along with the responses across the rest of the interviews and focus groups, was used to derive two measures for each SHN.

First, the total percentage of all primary data sources that mentioned themes associated with a SHN at any point was calculated. This number was taken to represent how broadly a given SHN was recognized within the community. Next, the percentage of times a theme associated with a SHN 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. Finally, the number of times each health need was selected as one of the top health needs by survey respondents was also included.

These three measures were then 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.

Table 27: Resources potentially available to meet health needs

Name	Primary ZIP Code	Website	Access to Mental/Behavioral Health and Substance-Use Services	Access to Basic Needs Such as Housing, Jobs, and Food	Access to Quality Primary Care Health Services	System Navigation	Injury and Disease Prevention and Management	Health Equity: Equal Access to Opportunities	Active Living and Healthy Eating	Safe and Violence-Free Environment	Increased Community Connections	Access to Specialty and Extended Care	Access to Functional Needs	Access to Dental Care and Preventive Services	Healthy Physical Environment
3 Strands Global	95762	www.3strandsglobalfoundation.org								X	X				
African American Perinatal Health – Sacramento County Public Health	Whole county	dhs.saccounty.net/PUB/Pages/African-American-Perinatal-Health-Program/SP-African-American-Perinatal-Health-Program				X						X			
Agency on Aging Area 4	95815	agencyonaging4.org		X			X			X	X	X			
Alchemist Community Development Corporation	95814	alchemistcdc.org	X		X				X		X				
All Nations Church of God in Christ	95817	www.ancogic.org		X											
ALS Association– Greater Sacramento Chapter	95825	websac.alsa.org				X	X				X				
Alternatives Pregnancy Center	95825	alternativespc.org	X		X							X			
Alzheimer's Association	95815	www.alz.org/norcal	X								X				
American Cancer Society	95815	www.cancer.org/about-us/local/california					X		X		X	X			

Organization	Zip	Website
American Heart Association – Sacramento	95811	www.heart.org/en/affiliates/california/sacramento
American Lung Association - Sacramento	95814	www.lung.org/research/sota/city-rankings/states/california/sacramento
American Red Cross	95815	www.redcross.org/local/california/gold-country/about-us/locations/sierra-delta-chapter
American River Park Foundation program - Health and Recreation	95608	arpf.org/what-we-do/programs/health-recreation/
Another Choice Another Chance	95823	www.acacsac.org
Antioch Progressive Baptist Church	95832	www.antiochprogressivechurch.org
Anti Recidivism Coalition	95816	www.antirecidivism.org/our-programs/
Arcade Community Center	95821	www.mutualassistance.org/arcade-community-center
Arcohe Union School District	95638	www.arcohe.net
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	apccounseling.org
Asian Resources, Inc.	95824 95814 95610	asianresources.org
Bayanihan Clinic	95827	www.bayanihanclinic.com

Organization	Zip	Website										
Big Brothers Big Sisters of the Greater Sacramento Area	95825	bbbs-sac.org					X	X				X
Bike Lab	95630	www.bikelabsac.org/about				X	X	X				
Birth and Beyond Home Visitation—WellSpace Health	95660	www.wellspacehealth.org/location/north-highlands-community-health-center-birth-and-beyond		X						X	X	X
Bishop Gallegos Maternity Home	95763	bgmhsacramento.org			X		X				X	
Black Child Legacy Campaign	95833	blackchildlegacy.org							X		X	
Black Infant Health Program—Sacramento County Public Health	Whole county	dhs.saccounty.net/PUB/Pages/Black-Infant-Health-Program/SP-Black-Infant-Health-Program							X	X		
Boys and Girls Clubs of Greater Sacramento	95824	bgcsac.org				X	X	X			X	X
Breathe California of Sacramento Region	95814	sacbreathe.org	X			X			X	X		
Brother To Brother	95838	www.brother2brothermentoring.org/our-leadership										X
Building Healthy Communities	95820	sacbhc.org				X	X	X				
C.O.R.E. Medical Clinic	95816	www.coremedicalclinic.com								X		X
California Bridge Program	94607	cabridge.org/solution/our-work								X		X

Organization	Location/Zip	Website
California Children's Services – Sacramento County Public Health	Whole county	dhs.saccounty.net/PUB/Pages/California-Childrens-Services/SP-California-Childrens-Services
California Emergency Food Link	95828	www.foodlink.org
California Endowment Building Health Communities	Sacramento County	www.calendow.org
California Health Collaborative-STAAND-Gold County Rural Regional Project	93711	healthcollaborative.org/staand-gold-country-rural-regional-project
California Youth Connection	95814	calyouthconn.org
Camp ReCreation	95662	www.camprecreation.org
Cal Voices	95825	www.calvoices.org
Capital City AIDS Fund	95816	www.capcityaidsfund.org
Capital Star Community Services-Sacramento County	95821	www.starsinc.com/sacramento-county
Carrington College—Dental Hygiene Clinic (916) 361-5168	95826	carrington.edu/location/sacramento-dental-hygiene-clinic
Catholic Charities of Sacramento, Inc.	95818	www.scd.org/catholic-charities-and-social-concerns/catholic-charities
CCHAT Center Sacramento	95670	www.cchatsacramento.com
Center Joint Unified School District	95843	www.centerusd.org

Organization	Zip / Area	Website	C1	C2	C3	C4	C5	C6	C7	C8
Central Downtown Food Basket	98811	www.cdfb.og							X	
Chest Clinic/Tuberculosis Control – Sacramento County Public Health	Whole county	dhs.saccounty.net/PUB/Pages/Communicable-Disease-Control/GI-TB-Control	X				X			
Child Abuse Prevention Center	95660	www.thecapcenter.org		X	X					
Child and Family Institute (CFI)	95838	www.child-familyinstitute.org/home.htm								X
Child Health & Disability Prevention – Sacramento County Public Health	Whole county	dhs.saccounty.net/PUB/CHDP/Pages/CHDP-Home		X				X		
Children's Receiving Home of Sacramento	95821	www.crhkids.org		X	X	X		X	X	X
Christy Cares Outreach	95758	christycaresoutreach.org			X				X	
Citrus Heights Homeless Assistance Resource Team (HART)	95610	citrusheightshart.org					X		X	
City Church of Sacramento	95817	citychurchsac.org		X					X	
City of Sacramento Community Gardens	Sacramento County	www.cityofsacramento.org/ParksandRec/Parks/Specialty-Parks/Community-Gardens	X	X			X	X	X	
Clara's House	95816	www.clarashouse.org		X				X	X	
Clinica Tepati (in WellSpace Clinic)	95817	clinicatepati.com		X			X		X	

Organization	Zip	Website
Community Against Sexual Harm (CASH)	95816	cashsac.org
Community Link (Community Services Planning Council)	95826	communitylinkcr.org
Community Resources Project/WIC	95838	www.communityresourceproject.org/Services/Health/WIC
Comprehensive Perinatal Services Program—Sacramento County Public Health	Whole county	dhs.saccounty.net/PUB/Pages/Comprehensive-Perinatal-Services-Program/SP-Comprehensive-Perinatal-Services-Program
Consumnes Community Services District (CSD)-Elk Grove Parks and Recreation	95624	www.yourcsd.com/170/About
Cordova Lane Center—FCUSD	95670	www.fcusd.org/domain/993
Cordova Recreation and Park District	95670	crpd.com
Cottage Housing, Inc.	95811	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/
Cristo Rey High School	95826	www.crhss.org
Del Oro Caregiver Resource Center	95610	www.deloro.org

Organization	Zip	Website	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11
Del Paso Union Baptist Church	95838	delpasounionbaptistchurch.org											
Dignity Health	95819 95630 95608 95823	www.dignityhealth.org			×	×	×				×	×	×
Disease Control and Epidemiology—Sacramento County Public Health	Whole county	dhs.saccounty.net/PUB/Pages/Epidemiology/SP-Epidemiology.aspx							×				
Drowning Accident Rescue Team	95759	www.dartsac.com							×			×	
Effie Yeaw Nature Center	95608	www.sacnaturecenter.net					×					×	×
El Dorado Community Health Center	95667	www.edcchc.org	×		×		×			×			
El Hogar Community Services Inc	95811 95834	www.elhogarinc.org	×		×						×	×	
Elica Health Centers	95825	www.elicahealth.org	×		×	×			×			×	
Elk Grove City Council	95758	www.elkgrovecity.org/home									×	×	
Elk Grove Fire Department	95624	www.yourcsd.com/968/Fire									×	×	
Elk Grove Food Bank	95624	elkgrovefoodbank.org			×							×	
Elk Grove Food Bank (Point Pleasant United Methodist Church)	95757	elkgrovefoodbank.org/supporters/partner-churches			×						×	×	
Elk Grove Police Department	95758	www.elkgrovepd.org									×		
Elk Grove Unified School District	95624	www.egusd.net	×		×		×				×	×	
Elverta Joint Elementary School District	95626	www.ejesd.net					×						

Table rotated 90°; column headers are blank. Data columns are unlabeled.

Organization	Zip	Website								
Eskaton	Whole County	www.eskaton.org	X		X				X	
EveryOne Matters Ministries	95747	everyonemattersministries.com					X		X	
Firehouse Community Center	95838	www.mutualassistance.org/firehouse-community-center				X			X	
First 5 Sacramento Commission	95833	www.first5sacramento.net	X		X	X	X	X	X	
Folsom Cordova Community Partnership	95670	www.thefccp.org	X				X		X	
Food Literacy Center	95818	www.foodliteracycenter.org			X		X		X	
Foster Hope Sacramento	95841	fosterhopesac.org					X		X	
Francis House	95814	www.nextmovesacramento.org/francis-house-center					X		X	
Fresher Sacramento	95820	www.freshersacramento.com			X	X	X		X	
Fruit Ridge Community Collaborative	95820	www.fruitridgecc.org			X		X			
Galt Joint Union School District	95632	www.galt.k12.ca.us				X				
Gardenland Natomas Neighborhood Association (GNNA)	95835	www.gnna.info			X				X	
Gender Health Center	95817	www.thegenderhealthcenter.org/gender-health-center-2/	X		X	X	X	X	X	
Girls on the Run Greater Sacramento	95819	www.gotrsac.org			X		X		X	
Golden Rule Services	95823	sacgrs.org/			X	X	X		X	X

Organization	Zip	Website
Goodwill—Sacramento Valley and Northern Nevada	95826	www.goodwillsacto.org
Grace City—Formally The Grace Network	95851	gracecitysac.org/
Greater Sacramento Urban League	95838	www.gsul.org
Greater Sacramento Valley and Nevada Arthritis Foundation	95815	www.arthritis.org
Guest House Homeless Clinic	95811	www.elhogarinc.org/guest-house-homelessclinic
Harm Reduction Services (HRS)	95817	hrssac.org
HART Carmichael	95609	carmichaelhart.org
HART Citrus Heights	95610	citrusheightshart.org/resources/navigator
HART Elk Grove	95759	www.elkgrovehart.org
Health and Life Organization (HALO Cares) – Sacramento Community Clinic	95823 95815 95827 95834 95660	halocares.org
Health Education Council	95831	healthedcouncil.org
Health Rights Hotline	95814	lawyers.justia.com/legalservices/health-rights-hotline-11068
Health Tech Academy—Valley High School	95838	vhs.egusd.net/programs/pathways/health-tech

Organization	Zip Code	Website								
Heartland Child and Family Services	95838, 95821	doingwhateverittakes.org	X			X				
Helping Hearts Foundation Inc.	95827	www.helping-hearts.org		X				X		
Heritage Oaks Hospital	95841	heritageoakshospital.com	X							
HIV/STD Prevention Program	95828 95660 95816 95820 95825 95811 95823 95817 95814	dhs.saccounty.net/PUB/SexualHealthPromotionUnit/Pages/GI-HIV-STD-Prevention-Program.aspx		X	X		X			X
HIV/STD Surveillance – Sacramento County Public Health	Whole county	dhs.saccounty.net/PUB/SexualHealthPromotionUnit/Pages/GI-STD-Control.aspx			X		X			
Hope Cooperative (aka TLCS, Inc.)	95825	hopecoop.org/	X	X	X				X	
House of Hope Ministry	95822	houseofhopeministrysacramento.org	X	X				X		
Human Services Coordinating Council (HSCC)	95823	dcfas.saccounty.net/Admin/Pages/HSCC/BC-Human-Services-Coordinating-Council-HSCC.aspx		X			X			
Imani Clinic	95817	www.imaniclinic.org	X		X					
Immunization Assistance Program – Sacramento County Public Health	Whole county	dhs.saccounty.net/PUB/Pages/Immunization-Assistance-Program/Immunization-Assistance-Program-(IAP).aspx					X			
Interim HealthCare	95825	www.interimhealthcare.com/sacramentoca/home	X	X		X		X	X	
International Rescue Committee	95825	www.rescue.org/united-states/sacramento-ca		X				X	X	

Organization	Zip	Website								
Iu-Mien Community Services (IMCS)	95824	www.unitediumien.org	×		×	×		×	×	
Johnston Community Center (also referred to as "Johnson" Community Center)	95815	www.mutualassistance.org/johnson-center	×	×		×	×		×	
Jubilare Evangelistic Ministries (JEM)	95834	jubilare.com						×	×	
Junior League of Sacramento	95825	www.jlsac.org							×	
Kaiser Permanente Sacramento Medical Center	95825	healthy.kaiserpermanente.org/northern-california/facilities/sacramento-medical-center-100330			×	×	×			×
Kaiser Permanente South Sacramento Medical Center	95823	healthy.kaiserpermanente.org/northern-california/facilities/south-sacramento-medical-center-100320	×		×	×	×			×
KidsFirst Auburn	95603	www.kidsfirstnow.org	×	×	×			×	×	
La Familia Counseling Center	95820	lafcc.org	×	×	×	×	×	×	×	
Lao Family Community Development, Inc.	95823	www.lfcd.org		×			×	×	×	
Latino Coalition for a Healthy California	95814	lchc.org			×	×				
Latino Leadership Council	95603	www.latinoleadershipcouncil.org							×	
Law Enforcement Chaplaincy Sacramento	95821	sacchaplains.com	×					×	×	

Organization	Zip	Website
Lead Poisoning Prevention Program—Sacramento County Public Health	Whole county	dhs.saccounty.net/PUB/Pages/Childhood-Illness-Injury-Prevention-Program/LeadPoisoningPrevention/SP-Lead-Poisoning-Prevention.aspx
Legal Services of Northern California—Health Rights	95814	lsnc.net/office/lsnc-health-program
Life Matters	95842	www.lifemattersinc.org/
Lighthouse of Hopeful Hearts	95189	www.lighthouseofhopefulhearts.org
Lilliput Children's Services	95610 95820	www.lilliput.org
LINC Housing	95838	www.linchousing.org
Loaves and Fishes	95811	sacloaves.org
Lutheran Social Services	95824	www.lssnorcal.org
Mack Road Partnership	95823	mackroadpartnership.com
Mack Road Partnership Community Center	95823	mackroadpartnership.com/reimagine-foundation/programs
MAK- Meningitis Awareness Key to Prevention	95608	makinfo.org
Mary House	95811	www.sacfishes.org/programs/maryhouse
McClellan VA Clinic	95652	www.va.gov/find-locations/facility/vha_612GH
Meals on Wheels Sacramento	95831	www.mowsac.org
Mental Health America of California	95811	www.mhac.org
Mercy Clinic—Loaves and Fishes	95811	sacloaves.org/programs-services

Organization	ZIP	Website								
Mercy Foundation	95670	supportmercyfoundation.org/home		X				X		
Mercy General Hospital (Dignity Health)	95819	www.dignityhealth.org/sacramento/locations/mercy-general-hospital		X	X	X	X			X
Mercy Hospital Folsom	95630	www.dignityhealth.org/sacramento/locations/mercy-hospital-of-folsom		X	X	X	X			X
Mercy Housing	95816 95838 95833 95820 95811	www.mercyhousing.org		X						
Mercy San Juan Medical Center (Dignity Health)	95608	www.dignityhealth.org/sacramento/locations/mercy-san-juan-medical-center	X	X	X	X	X			X
Methodist Hospital of Sacramento (Dignity Health)	95823	www.dignityhealth.org/sacramento/locations/methodist-hospital-of-sacramento		X	X	X	X			X
Mexican Consulate General in Sacramento	95834	consulmex.sre.gob.mx	X	X				X		
Molina Healthcare	95838, 95823	www.molinahealthcare.com		X	X					
Mutual Assistance Network	95838, 95821, 95815	www.mutualassistance.org	X		X	X	X		X	
My Sister's House	95818	www.my-sisters-house.org	X	X				X	X	
National Alliance on Mental Illness Sacramento (NAMI)	95827	namisacramento.org	X			X			X	
National Multiple Sclerosis Society	95834	www.nationalmsociety.org					X			
Natomas Crossroads Clinic	95834	www.diabeteslocal.org/resource/natomas-crossroads-clinic	X	X	X					
Natomas Unified School District	95834	natomasunified.org	X	X	X					

Organization	Zip	Website													
NCADD Sacramento	95825	www.ncaddsac.org, www.ncadd.org	X												X
Neighborhood Wellness Foundation	95838	neighborhoodwellness.org	X						X						X
Neil Orchard Senior Activities Center	95827	crpd.com/parks/neil-orchard-senior-activities-center					X		X						
New Testament Baptist Church	95660	www.newtestamentbaptchurch.org		X			X	X	X						
Next Move (SAEH)	95817	www.nextmovesacramento.org		X	X		X	X	X						
North Franklin District Business Association	95820	www.franklinblvddistrict.com/					X	X	X						
Nurse Family Partnership – Sacramento County Public Health	Whole county	dhs.saccounty.net/PUB/Pages/Nurse-Family-Partnership/The-Nurse-Family-Partnership-Program.aspx			X	X				X					
Oak Park Community Center	95817	www.cityofsacramento.org/ParksandRec/Community-Centers/OakParkCenter					X	X	X						
Oak Park Neighborhood Association	95817	www.cityofsacramento.org/economic-development/community-engagement/neighborhood-directory/district5/oak-park-neighborhood-association				X		X							
Oak Park Sol Community Garden	95817	alchemistcdc.org/broadway-sol/					X		X						
Obesity Prevention Program – Sacramento County Public Health	Whole county	dhs.saccounty.net/PUB/Pages/Chronic-Disease-Prevention-Program/Obesity-Prevention-Program.aspx				X	X								
One Community Health	95811, 95825	onecommunityhealth.com	X	X			X		X						X
Opening Doors	95825	www.openingdoorsinc.org	X	X			X	X	X						

Organization	Zip	Website												
Oral Health Program – Sacramento County Public Health	Whole county	dhs.saccounty.net/PUB/OralHealth/Pages/Oral-Health.aspx				X				X				X
Orangevale Food Bank	95662	orangevalefoodbank.org		X				X		X		
Pacific Counseling and Trauma Center (Pacific Trauma Specialists)	95630	www.pacifictraumacenter.com	X						X		X
Paratransit, Inc.	95822	paratransit.org									X
Partners in Care	95603	picseniorcare.com		X						
Paul Hom Asian Clinic	95819	www.paulhomasianclinic.com/			X	X	X		X	X
Peach Tree Health Sacramento	95834	www.pickpeach.org	X		X						X
People Reaching Out (PRO) Youth and Families	95841	proyouthandfamilies.org	X						X
Pioneer Congregational United Church of Christ	95816	pioneerucc.org		X	X				X
Planned Parenthood B Street Health Center	95816	www.plannedparenthood.org/health-center/california/sacramento/95816/b-street-health-center-2200-9013?utm_campaign=b-street-health-center&utm_medium=organic&utm_source=local-listing			X	X	X			X
Planned Parenthood Capitol Plaza Health Center	95814	www.plannedparenthood.org/health-center/california/sacramento/95814/capitol-plaza-health-center-2199-9013?utm_campaign=capitol-plaza-health-center&utm_medium=organic&utm_source=local-listing			X	X	X			X

Organization	Zip/Area	Website
Planned Parenthood Fruitridge Health Center	95820	www.plannedparenthood.org/health-center/california/sacramento/95820/fruitridge-health-center-2198-901302utm_campaign=fruitridge-health-center&utm_medium=organic&utm_source=local-listing
Planned Parenthood North Highlands Health Center	95660	www.plannedparenthood.org/health-center/california/north-highlands/95660/north-highlands-health-center-2201-90130?utm_campaign=north-highlands-health-center&utm_medium=organic&utm_source=local-listing
Prevent Alcohol and Risk Related Trauma in Youth (P.A.R.T.Y.)	95763	partyprogram.com
PRIDE Industries	95660 95826 95834	www.prideindustries.com
Project TEACH	95826	www.scoe.net/divisions/ed_services/project_teach/
Public Health Division – Sacramento County Department of Health and Human Services	Entire county	dhs.saccounty.net/PUB/Pages/PUB-Home.aspx
Public Health Emergency Preparedness – Sacramento County Public Health	Whole county	dhs.saccounty.net/PUB/Emergency-Preparedness/Pages/SP-Emergency-Preparedness.aspx
Public Health Laboratory – Sacramento County Public Health	Whole county	dhs.saccounty.net/PUB/Laboratory/Pages/Laboratory-Home.aspx
radKIDS Childrens's Safety Education	27617	www.radkids.org

Organization	Zip	Website										
Rebuilding Together - Sacramento	95826	rebuildingtogethersacramento.org			X	X						
River City Food Bank	95816 95821	rivercityfoodbank.org			X		X				X	
River Delta Unified School District	94571	www.riverdelta.org			X		X					
River Oak Center for Children	95841	www.riveroak.org			X							X
River Oak Family Resource Center	95820	www.riveroak.org/programs/			X		X	X				X
Roberts Family Development Center	95815	www.robertsfdc.org			X		X				X	
Robla School District	95838	www.robla.k12.ca.us					X			X		
Roseville Unified School District	95661	www.rjuhsd.us				X						
Ryan White HIV Care & Treatment – Sacramento County Public Health	Whole county	dhs.saccounty.net/PUB/SexualHealthPromotionUnit/Pages/RyanWhiteProgram/Ryan-White-Program.aspx		X				X	X	X		X
Sacramento Children's Home - Meadowview Family Resource Centers	95822	www.kidshome.org/what-we-do/family-resource-center			X		X	X				X
Sacramento Area Congregations Together (ACT)	95818	www.sacact.org			X						X	X
Sacramento Children's Home	95820	www.kidshome.org			X	X	X				X	X
Sacramento Chinese Community Services Center (SCCSC)	95814	sccsc.org			X		X					X
Sacramento City College—Dental Health Clinic	95822	scc.losrios.edu/dentalhealthclinic	X									

Organization	Zip Code	Website
Sacramento City Unified School District	95824	www.scusd.edu
Sacramento County Dental Health Program	Whole county	dhs.saccounty.net/PUB/OralHealth/Pages/Oral-Health.aspx
Sacramento County Department of Health and Human Services	Whole county	dhs.saccounty.net/Pages/DHS-Home.aspx
Sacramento County Department of Human Assistance	Whole county	ha.saccounty.net/Pages/default.aspx
Sacramento County Office of Education SCOE: Project TEACH	95826	www.scoe.net/divisions/ed_services/project_teach/about
Sacramento County Women, Infants and Children (WIC)	95822 95838 95820 95670 95624	dhs.saccounty.net/PRI/WIC/Pages/Women-Infants-and-Children-Home.aspx
Sacramento Countywide Foster Youth Services	95826	www.scoe.net/divisions/ed_services/fys
Sacramento Court Appointed Special Advocates (CASA)	95827	sacramentocasa.org
Sacramento Covered	95811	www.sacramentocovered.org
Sacramento District Dental Foundation	95825	www.sdds.org/foundation/
Sacramento Emergency Rental Assistance Program (SERA2)	95825	www.shra.org/about-shra

Organization	Zip	Website									
Sacramento Employment and Training Agency (SETA)	95815	www.seta.net		x							
Sacramento Food Bank and Family Services	95817 95838	www.sacramentofoodbank.org		x				x		x	
Sacramento Habitat for Humanity	95811	habitatgreatersac.org		x						x	
Sacramento Homeless Union	95825	www.sacramentohomelessunion.org	x								
Sacramento Housing Alliance	95814	sachousingalliance.org		x						x	
Sacramento Housing and Redevelopment Agency (SHRA)	95814	www.shra.org		x							
Sacramento Junior Giants	95811	www.cityofsacramento.org/ParksandRec/Youth-Division/Youth-Sports-and-Summer-Programs/JR-Giants						x		x	
Sacramento Kindness Campaign	95864	www.sackindnesscampaign.org		x					x	x	x
Sacramento LGBT Community Center	95811	saccenter.org		x		x			x	x	
Sacramento Life Center (SLC)	95825	saclife.org		x	x		x			x	
Sacramento Native American Health Center, Inc.	95811	www.snahc.org	x		x		x	x	x		
Sacramento Police Foundation	95822	sacpolicefoundation.org/wordpress								x	
Sacramento Regional Coalition to End Homelessness	95833	www.srceh.org		x							

Organization	Zip	Website
Sacramento Self Help Housing	95818	www.sacselfhelp.org
Sacramento Steps Forward	95833	sacramentostepsforward.org
Sacramento Tree Foundation	95815	www.sactree.com
Sacramento County Unified School District	95824	www.scusd.edu
Sacramento Violence Intervention Program (SVIP) (WellSpace Health)	95828	www.wellspacehealth.org/services/behavioral-health-prevention/sac-violence-intervention-program
Sacramento Women's Health	95825	sacwomenshealth.com
Sacramento Works Job Centers	95817 95610 95670 95823 95632 95838 95842 95820 95824 95817 95655 95828	sacramentoworks.org
Safer Alternatives Thru Networking and Education (SANE)	95815	www.cleanneedles.org
Safety Center	95827	safetycenter.org
Saint John's Program for Real Change	95825	saintjohnsprogram.org
Sam & Bonnie Pannell Community Center	95832	www.cityofsacrametno.org/ParksandRec/Community-Centers/SamBonniePannellCenter
San Juan Unified School District	95608	www.sanjuan.edu

Note: This is a large rotated (landscape) resource table. Column category headers are not present on this page; the service/category columns are shown as numbered columns (1 = nearest the website column). "×" indicates a marked cell.

Organization	Zip	Website	1	2	3	4	5	6	7	8	9	10	11
San Juan Unified School District (FACE) Department	95608	www.sanjuan.edu/Page/525											
SeniorCare PACE	95823 95818	www.sutterhealth.org/services/senior-geriatric/senior-pace	×		×		×	×	×	×			
SETA Head Start	95815	headstart.seta.net		×				×		×	×		
Sherriff Community Impact Program	95825	www.sacscip.org	×	×				×	×				
Shifa Community Clinic	95818	www.shifaclinic.org	×	×	×			×					×
Shiloh Baptist Church	95817	www.shilohbaptistchurch-sacramento.org	×		×					×	×		
Shingle Springs Tribal TANF Program	95825	www.shinglespringsrancheria.com/tribal-tanf/	×										
Shriner's Hospital for Children	95817	www.shrinerschildrens.org/locations/northern-california			×	×	×				×		
Sierra Health Foundation	95833	www.sierrahealth.org		×	×		×	×	×	×			
Sierra Vista Hospital	95823	sierravistahospital.com		×									
Slavic Assistance Center	95825	www.slaviccenter.us	×										
Society for the Blind	95811	societyfortheblind.org					×			×	×		
Soil Born Farms	95670	soilborn.org/our-story	×					×	×	×			
South County Services	95632	southcountyservices.net	×									×	
South Natomas Community Center	95833	www.cityofsacramento.org/ParksandRec/Community-Centers/SouthNatomasCenter						×		×			
South Sacramento Interfaith Partnership Food Closet	95822	www.ssipfoodcloset.org	×										

Organization	Zip/Area	Website										
Southeast Asian Assistance Center	95822	teamsclc.org/										X
St. Marks United Methodist Church	95864	stmarksumc.com			X	X					X	
St. Paul Missionary Baptist Church	95820	stpaulsac.org			X		X					
St. Vincent De Paul Good Shepard Catholic Church	95758	gscceg.org			X	X						
St. Vincent de Paul Sacramento Council	95816	www.svdp-sacramento.org			X						X	
Stanford Settlement	95833	www.stanfordsettlement.org	X		X		X				X	
Stanford Sierra Youth and Families	95826	www.ssyaf.org/		X	X	X					X	
Stop Stigma Sacramento Speakers Bureau	Whole county	www.stopstigmasacramento.org						X				X
Su Familia—The National Hispanic Family Health Helpline	20036	www.healthyamericas@org/help-line							X	X		
Sunburst Projects	95825	sunburstprojects.org		X				X				X
Sutter Center for Psychiatry	95826	www.sutterhealth.org/find-location/facility/sutter-center-for-psychiatry							X			X
Sutter Health in Collaboration with WellSpace Health Street Nurse Program	Sacramento County	www.sutterhealth.org/about/street-nurse						X	X		X	
Sutter Medical Center, Sacramento	95616	www.sutterhealth.org/smcs		X					X	X		X
Terra Nova Counseling	95628	www.terranovacounseling.org										X

Organization	Zip	Website											
The Cup With Love Project	95758	www.cupwithlove.org									X		
The Gardens—A Family Care Community Center	95822	thegardensfamily.org	X	X		X				X		
The Keaton Raphael Memorial	95661	childcancer.org				X			X		
The Mental Health Association	95825	www.mhac.org	X							X		
The Place Within Folsom	95830	www.theplacewithinfolsom.com	X									
The Salvation Army	95814 95670 95817	www.salvationarmyusa.org		X	X			X	X		
The Salvation Army – Adult Rehabilitation Center	95814	sacramento.salvationarmy.org/	X							X		
The SOL Project – Saving Our Legacy, African Americans for Smoke-Free Safe Places	95814	www.thesolproject.com	X							X		
Tobacco Education Program – Sacramento County Public Health	Whole county	dhs.saccounty.net/PUB/Pages/Tobacco-Education-Program/SP-Tobacco-Education-Program.aspx				X				
Triple-R Adult Day Centers - City of Sacramento	95816	www.cityofsacramento.org/ParksandRec/Recreation/older-adult-services/Programs/TripleR								X		
Turning Point Community Programs	95827	www.tpcp.org	X	X								
Twin Lakes Food Bank	95630	www.twinlakesfoodbank.org/		X						X		

Organization	Zip	Website
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	health.ucdavis.edu/medicalcenter/
United Cerebral Palsy of Sacramento and Northern California	95841	ucpsacto.org
VA Northern California Health Care System	95655	www.va.gov/northern-california-health-care/
Valley Hi Family Resource Center	95823	valleyhifrc.com/
Visions Unlimited	95823	www.vuinc.org
Vital Records – Sacramento County Public Health	Whole county	dhs.saccounty.net/PUB/Pages/Birth-and-Death-Certificates/Sacramento-County-Vital-Records.aspx
Volunteers of America- Northern California and Northern Nevada	95821	www.voa-ncnn.org/
Waking the Village	95816	www.wakingthevillage.org
WALK Sacramento	95814	www.walksacramento.org
Warmline Family Resource Center	95818	www.warmlinefrc.org
WEAVE	95811	www.weaveinc.org
Wellness and Recovery Center – Consumers Self Help	95608 95823	www.consumersselfhelp.org/wrc-north, www.consumersselfhelp.org/wrc-sourth-1
Wellness Within	95678	www.wellnesswithin.org

Organization	Zip Code(s)	Website	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
WellSpace Health	95632, 95823, 95826, 95841, 95828, 95610, 95621, 95827, 95834, 95817, 95660, 95811, 95820, 95630, 95821, 95814	www.wellspacehealth.org	X	X		X		X	X	X		X
WellSpace Health Residential Treatment Center	95815	www.wellspacehealth.org/services.counseling-prevention/addictions-counseling							X			X
WellSpace Health Interim Care Program (ICP)	95820	www.wellspacehealth.org	X			X			X		X	X
Wellspring Women's Center	95817	www.wellspringwomen.org			X		X		X		X	X
Wind Youth Services	95817	www.windyouth.org			X						X	X
Women's Empowerment	95811	womens-empowerment.org									X	X
World Relief Sacramento	95660	worldrelief.org/sacramento			X				X		X	
YMCA of Superior California	95818	www.ymcasuperiorcal.org			X	X	X				X	
Yoga Seed Collective	95814	theyogaseed.org					X					
YWCA	95811	www.ywcaccc.org/sacramento			X			X			X	X

Limits and Information Gaps

Study limitations for this CHNA included obtaining secondary quantitative data specific to population subgroups, and ensuring community representation through primary data collection. Most quantitative 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 comparison.

Related to primary data collection, gaining access to participants that best represented the populations needed for this assessment was a challenge for the key informant interviews, focus groups and CSP survey. The COVID-19 pandemic made it more difficult to recruit community members to participate in focus groups. Though an effort was made to verify all resources (assets) through a web search, ultimately some resources that exist in the service area may not be listed.

Finally, though this CHNA was conducted with an equity focus, data that point to differences among population subgroups that are more "upstream" focused are not as readily available as those data that detail the resulting health disparities. Having a clearer picture of early-in-life opportunity differences, as experienced by various populations, that result in later-in-life disparities can help direct community health improvement efforts for maximum impact.

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