



# SUTTER LAKESIDE HOSPITAL

2019 Community Health Needs Assessment

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# EXECUTIVE SUMMARY

## 1.1 INTRODUCTION

Hope Rising Lake County — the Lake County, California Collaborative of hospitals, provider groups, community-based organizations and County of Lake Government — is pleased to present its 2019 Community Health Needs Assessment (CHNA). As federally required by the Affordable Care Act, this report provides an overview of the methods and process used to systematically identify and prioritize significant health needs in Lake County, California — Hope Rising Lake County's service area. Hope Rising Lake County partnered with Conduent Healthy Communities Institute (Conduent HCI) to conduct the CHNA.

The goal of this report is to offer a meaningful understanding of the most pressing health needs across Hope Rising Lake County's service area, as well as to guide planning efforts to address those needs. Hope Rising Lake County realizes that there are health inequities and unequal opportunities for health in the county. Special attention has been given to the needs of vulnerable populations, unmet health needs or gaps in services, and input from the communities that have a high burden of poor health factors. The assessment makes an effort to implement a transparent and collaborative approach to understanding the needs and assets in the communities with an intention to render the highest level of accountability to all partners — present and potential. Findings from this report will be used to identify, develop, and target Hope Rising Lake County's strategies for the next three years to provide and connect residents with resources to improve health outcomes and the quality of life of residents in Lake County. Hope Rising Lake County would like to thank all those that contributed to this assessment.

## 1.2 SUMMARY OF FINDINGS

The CHNA findings in this report result from the extensive analysis of primary and secondary data sources; over 204 indicators from national and state data sources were included in the secondary analysis and primary data was collected from community leaders, non-health professionals, community based organizations, community members and populations with unmet health needs and/or populations experiencing health disparities. The main source for the secondary data, or data that has been previously collected by the government and other health agencies to inform health planning, is the Hope Rising Lake County platform, a publicly available data platform. That platform can be found here: <http://www.hoperisinglc.org>

The identified community health needs for Lake County had strong social and economic root causes. The community health needs assessment also describes barriers to experiencing health and wellness in the community and provides information necessary to all levels of stakeholders to build upon each other’s work in a coordinated, collaborative manner.

Through an examination of the primary and secondary data, the following top health needs were identified:

**LAKE COUNTY’S SIGNIFICANT HEALTH NEEDS**

• Access to Health Services	• Mental Health
• Alcoholism	• Poverty
• Drug Use	• Unemployment
• Housing Stability and Homelessness	

**1.3 PRIORITIZED AREAS**

To thrive, everyone in the community needs to be given the opportunity to live a long, healthy life, regardless of his or her background or socioeconomic status. The conditions of the physical environment where people live, learn, work and play present a wide range of health risks and outcomes. Hope Rising Lake County is committed to supporting environments that protect and promote the health and well-being of residents equitably.

In April 2019, stakeholders of the Hope Rising Lake County from 15 organizations completed an online survey to select prioritization criteria and attended an in-person session to prioritize the significant health issues, based on previously selected criteria that contributed to the Hope Rising Lake County’s strategic focus. The significant health topics that offered the broadest platform for collaboration across the county and subpopulations were chosen. The following four encompassing topics were identified as priorities to address:

**LAKE COUNTY’S 2019 CHNA PRIORITIES**

• <b>PRIORITY</b> Address substance/drug abuse within the community
• <b>PRIORITY</b> Increase housing stability and target homelessness
• <b>PRIORITY</b> Provide community outreach and engagement for all high burden and/or disenfranchised communities
• <b>PRIORITY</b> Increase opportunities for cancer prevention and screenings

Specifically, the primary motivation for choosing the priorities mentioned below were the economic burden of cancer on families already struggling with financial burdens; the disruption of good quality of life for all residents due to substance abuse and the loss of academic, social, and health opportunities for addicts; and, the broad opportunities to intervene at multiple levels (policy, community, individual) and settings (schools, faith centers, clinics, worksites) to educate and inform communities about the health issues of the county and the solutions. The priorities were also based upon the capacity and resources of the stakeholders to make decisive impacts and on priorities that would improve quality of life for the entire community.

## SECTION 1 EXECUTIVE SUMMARY

Hope Rising Lake County has established clear priorities based on the results of this CHNA to improve the health status of the residents of Lake County. In collaboration with community stakeholders and residents, Hope Rising Lake County wants to realize the vision of increasing its standing in County Health Rankings and Roadmaps by 2022, by improving the county's current status in terms of its population's health factors (i.e. educational attainment and access to care) and health outcomes (i.e. disease and death). Hope Rising Lake County will develop initiatives to address these priorities, through implementation strategy and community health improvement planning, beginning in 2019.





SECTION 2

# INTRODUCTION

## 2.1 HOPE RISING LAKE COUNTY

Hope Rising Lake County is an Accountable Community for Health Collaborative that was established in 2015. Hope Rising Lake County’s vision is to ensure that Lake County is a healthy place for every person to live, learn, engage and thrive. A formal partnership of fourteen health agencies - health systems, county leaders, non-profit organizations and other relevant organizations of Lake County - the purpose of Hope Rising Lake County is to mobilize and inspire community partnerships and actions that support individual, collective and community health. As the lead organization, Hope Rising Lake County undertakes joint effort, leveraging the resources and influence of the collective to improve the overall health and wellness of Lake County. Hope Rising Lake County serves as a neutral convener to bring together leaders in the county to identify issues, develop innovative solutions, and implement agreed-upon actions with accountability and measurable outcomes. Hope Rising Lake County acts to raise, manage and disburse funds. Additionally, Hope Rising Lake County provides facilitation and project management support to drive the work forward and keep projects on track, ensuring active engagement of stakeholders and a focus on outcomes.

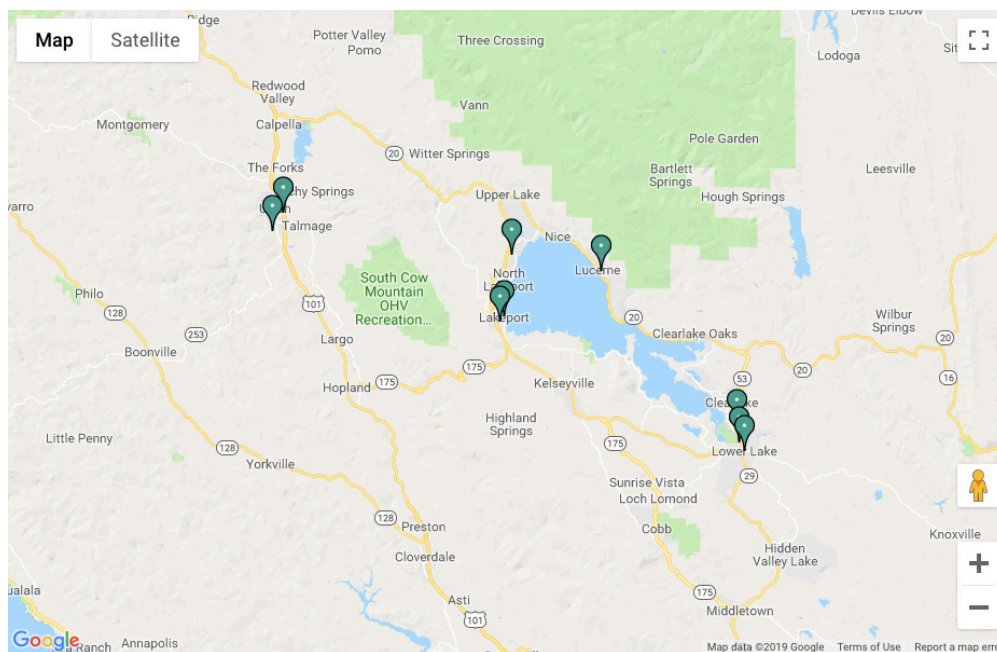
The partner health agencies that constitute Hope Rising Lake County are given below:

### Partnering Organizations in Hope Rising Lake County

- Adventist Health Clear Lake
- County of Lake Board of Supervisors
- Lake County Health Department
- Lake County Office of Education
- Lakeview Health Center
- North Coast Opportunities
- Redwood Community Services
- The Way to Wellville
- County of Lake Behavioral Health
- Department of Social Services
- Mendocino County Health Clinic
- Partnership Health Plan of California
- Sutter Lakeside Hospital
- Woodland Community College

The partner agencies of Hope Rising Lake County have participated in a collaborative community health needs assessment that is documented in this report and will be published every three years or according to Internal Revenue Service (IRS), the Health Resources and Services Administration's (HRSA) Health Center Compliance Manual, Section 330 of the Public Health Service Act, and Public Health Accreditation Board (PHAB) requirements. The Collaborative will work to develop implementation strategies, to be included in each member organization's individual Community Health Improvement Plans (CHIP)/Implementation Strategies (IS), that align with CHNA identified health priorities and focus on achieving health equity. Together, these agencies will support health advocacy, education, prevention, and partnerships that extend the care continuum for medically underserved and vulnerable populations.

**FIGURE 1: LOCATION OF HOPE RISING LAKE COUNTY PARTNER ORGANIZATIONS**



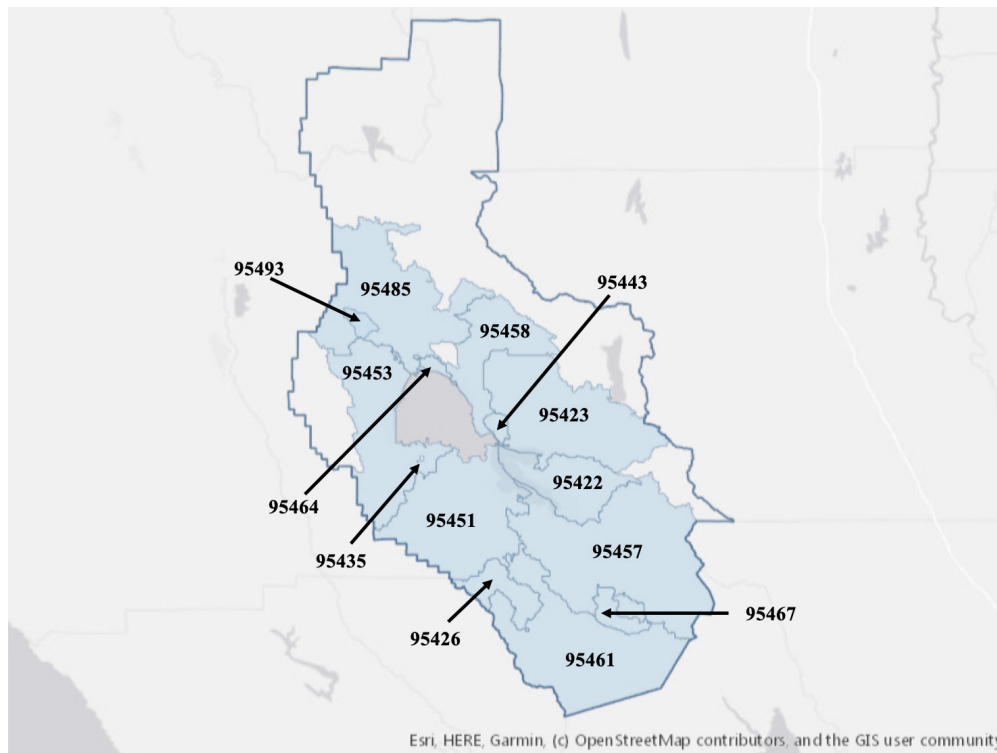
Source: Google Maps, Hope Rising Lake County Website, 2019

## 2.2 SERVICE AREA

With the purpose of jointly addressing health challenges of residents and serving communities with impactful solutions that leverage shared resources and coordinate care, the twelve health agencies that make up the Hope Rising Lake County Collaborative have come together in defining their service area as entire County of Lake. This area includes the following residential ZIP Codes: 95422 (Clearlake), 95423 (Clearlake Oaks), 95426 (Cobb), 95435 (Finley), 95443 (Glenhaven), 95451 (Kelseyville), 95453 (Lakeport), 95457 (Lower Lake), 95458 (Lucerne), 95461 (Middletown), 95464 (Nice), 95467 (Hidden Valley Lake), 95485 (Upper Lake), and 95493 (Witter Springs).



FIGURE 2: ZIP CODE TABULATED AREAS, LAKE COUNTY



Source: Hope Rising Lake County Website, 2019

## 2.3 COLLABORATIVE STRUCTURE

Health Assessments have been conducted by health agencies — hospitals, local health departments, and Federally Qualified Health Centers (FQHCs) — for many years individually to guide their work in communities. The *Patient Protection and Affordable Care Act* (PPACA) requires tax-exempt 501 (c)(3) hospitals to conduct a Community Health Needs Assessment (CHNA) every three years with input from public health experts and community members, and develop and adopt an implementation strategy. At the same time, local health departments that are preparing for the Public Health Accreditation Board (PHAB) process are required to conduct strategic planning, including a Community Health Assessment conducted every five years, and a corresponding Community Health Improvement Plan (CHIP). Section 330 of the Public Health Service Act (42 U.S.C. §254b), the authorizing legislation of the Health Resources & Services Administration’s (HRSA) Health Center Program, requires health centers to perform a similar exercise to demonstrate the need for health services, a shortage of personal health services, and commitment to operate where the greatest number of individuals residing in the service area can be reached. These coinciding requirements of health agencies offer an ideal opportunity for hospitals, health centers and health departments to work together in defining priorities and addressing health challenges within the community they share. That opportunity to align goals and combine resources and efforts is what led to the development of the Hope Rising Lake County, which together commissioned the assessment defined in this report.

## SECTION 2 INTRODUCTION

The Hope Rising Lake County Collaborative is the decision-making entity for the 2019 Community Health Needs Assessment and is chaired by the Executive Director of Hope Rising Lake County. A core group of representatives from the partner organizations mediated on every aspect of the process design and implementation of the CHNA and are as follows:

- Allison Panella - **Hope Rising Lake County**, *Executive Director*
- Dan Peterson - **Sutter Lakeside Hospital**, *Chief Administrative Officer*
- Denise Pomeroy - **Lake County Health Department**, *Director of Health Services*
- Elise Jones - **Lake County Health Department**, *Health Programs Accreditation Coordinator*
- Kate Gitchell - **Hope Rising**, *Project Manager*
- Kim Tangermann - **Mendocino Community Health Clinic**, *Lakeview Health Center Clinic Director*
- Marvin Avilez - **Wellville**, *Chief Operating Officer*
- Russell Perdock - **Adventist Health**, *Director of Community Integration*

Other representatives of the partner organizations that constitute Hope Rising Lake County are given below:

- Lynn Scuri - **Partnership Health Plan**, *Regional Director*
- Marshall Kubota - **Partnership Health Plan**, *Regional Medical Director*
- Nellie Gottlieb - **Hope Rising Safe Rx Lake County**, *AmeriCorps VISTA*
- Paige Hotchkiss - **Sutter Lakeside Hospital**, *Community Benefit Specialist*
- Patty Bruder - **North Coast Opportunities**, *Executive Director*
- Todd Metcalf - **Lake County Behavioral Health**, *Administrator/Director*

### 2.4 DISTRIBUTION OF CHNA REPORT

To meet the requirements of the IRS regulations 501(r) for charitable hospitals, hospitals are required to make the Community Health Needs Assessment (CHNA) and Implementation Strategy (IS) available publicly through print copies and on the internet. Public comment is also solicited and documented. In keeping with these regulations, the two hospitals — Adventist Health Clear Lake and Sutter Lake Hospital — that are members of Hope Rising Lake County Collaborative made available their hospitals' previous CHNA and IS to the public via the following websites:

- Adventist Health Clear Lake 2016 CHNA
  - Adventist Health Clear Lake Implementation Strategy
- Sutter Lake Hospital 2016 CHNA
  - Sutter Lake Implementation Strategy

Each website allows for members of the community to submit comments via e-mail. Paper copies were also made available at the main entrances to the hospital. Community members were invited to read the report and provide comments. No comments or feedback were received on the preceding CHNA at the time this report was written.

## 2.5 PRIORITY HEALTH NEEDS AND IMPACT FROM PRIOR CHNA

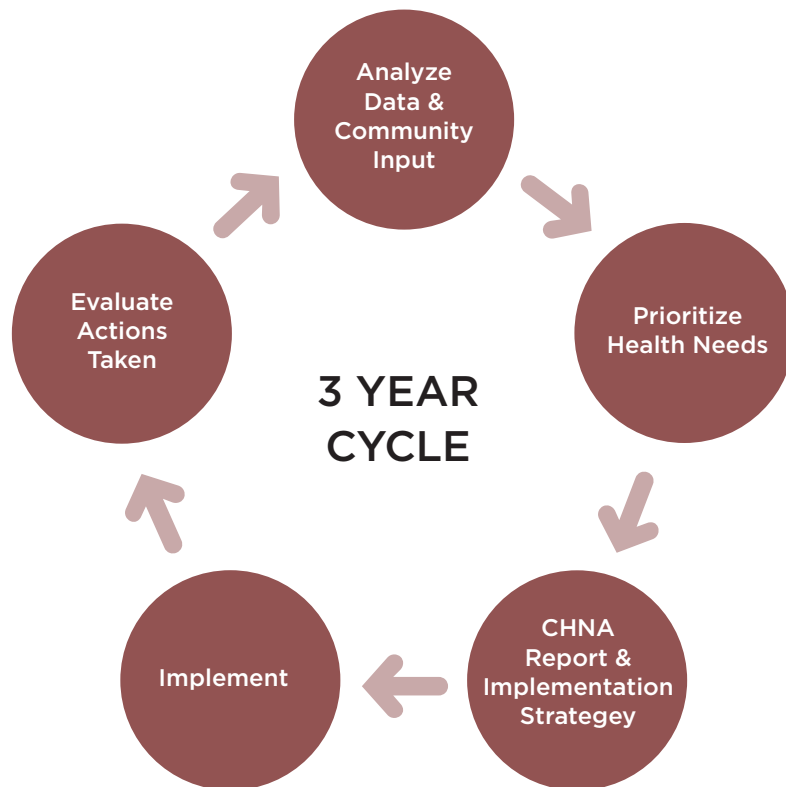
Given below is a synopsis of the priorities that were earmarked for action by the different health agencies that constitute Hope Rising Lake County and recommended strategies.

PAST PRIORITIZED HEALTH TOPICS	RECOMMENDATIONS IN 2016 CHNA
<b>Mental Health</b>	<ul style="list-style-type: none"> <li>• Emotion regulation in schools</li> <li>• Early Intervention counseling in PTSDs (e.g. fires)</li> <li>• Social support to elderly, LGBT, Single parents</li> <li>• Substance abuse and de-addiction services (AA, tobacco cessation, residential treatment)</li> <li>• Promoting volunteerism</li> <li>• Caregiver respite</li> <li>• Home-visitation to ill and isolated</li> <li>• Social media campaign to reduce stigma</li> </ul>
<b>Substance Abuse</b>	<ul style="list-style-type: none"> <li>• School-Based health promotion and substance abuse prevention</li> <li>• After school activities</li> <li>• Safe Rx</li> <li>• Inhibitive policy initiatives and enforcement programs</li> <li>• Outdoor recreation ordinances and tobacco tax</li> <li>• Increased availability of physical activities</li> </ul>
<b>Access to Programs and Services</b>	<ul style="list-style-type: none"> <li>• County-wide resource guide to programs and services</li> <li>• In- and out-county transportation assistance for medical and social services</li> <li>• Recruitment and retention of specialists and non-traditional healthcare providers</li> <li>• Recruitment to medical homes through healthcare navigators</li> <li>• Care coordination</li> <li>• Healthy eating training for vulnerable populations</li> <li>• Alignment of activities between public, behavioral and health systems</li> </ul>
<b>Housing and Homelessness</b>	<ul style="list-style-type: none"> <li>• Year round sheltering</li> <li>• Care coordination and social needs connection for homeless</li> <li>• Housing locator services</li> <li>• Financial and other support</li> <li>• Low demand housing</li> </ul>

All the health topics prioritized in the previous reports coincide with the significant health needs identified in this assessment (detailed below). A detailed table describing the strategies/action steps and indicators of success for each of the preceding priority health topics can be found in Appendix A. Evaluation since Prior CHNA.

### 2.6 EVALUATION OF PROGRESS SINCE PRIOR CHNA

The CHNA process should be viewed as a three-year cycle (Figure 3). An important part of that cycle is revisiting the progress made on priority topics from previous CHNAs. By reviewing the actions taken to address priority areas and evaluating the impact of these actions in the community, an organization can better focus and target its efforts during the next CHNA cycle.



### 2.7 CONSULTANTS

The Hope Rising Lake County Collaborative commissioned Conduent Healthy Communities Institute (Conduent HCI) to conduct its 2019 Community Health Needs Assessment. Conduent HCI works with clients across most states in the U.S. to drive improved community health outcomes by assessing needs, developing focused strategies, identifying appropriate intervention programs, establishing progress monitoring systems, and implementing performance evaluation processes. Working with diverse clients nationwide has contributed to Conduent HCI's national knowledge base of population health solutions. In addition, by engaging directly with clients and communities through the primary data collection process and final workshops, Conduent HCI works on behalf of clients to build trust between and among organizations and their communities.

To learn more about Conduent Healthy Communities Institute, please visit <https://www.conduent.com/community-population-health/>

### 2.8 AUTHORS

Report Authors: Anindita Fahad, MPH, MA; Ahalya Prakash, MPH



## SECTION 3

# METHODOLOGY

Two types of data were used in this assessment: primary and secondary data. Primary data are data that have been collected for the purposes of this community assessment. Primary data were obtained through a community survey, focus groups, and key informant interviews. Secondary data are health indicator data that have already been collected by public sources such as government health departments. Each type of data was analyzed using a unique methodology. Findings were organized by health topics and then synthesized for a comprehensive overview of the health needs in the Hope Rising Lake County Community Health Needs Assessment (CHNA) Collaborative service area.

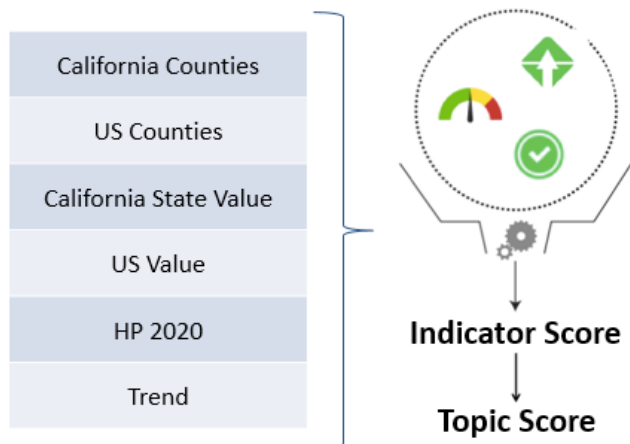
## **3.2 SECONDARY DATA SOURCES & ANALYSIS**

Secondary data used for this assessment were collected and analyzed from Conduent HCI's community indicator database. This database, maintained by researchers and analysts at Conduent HCI, includes over 204 community indicators from at least 21 state and national data sources. Conduent HCI carefully evaluates sources based on the following three criteria: the source has a validated methodology for data collection and analysis; the source has scheduled, regular publication of findings; and the source has data values for small geographic areas or populations.

### **3.2.1 SECONDARY DATA SCORING**

Conduent HCI's Data Scoring Tool® (Figure 4) was used to systematically summarize multiple comparisons in order to rank indicators based on highest need. For each indicator, the community value was compared to a distribution of California and US counties, state and national values, Healthy People 2020, and significant trends were noted. These comparison scores range from 0-3, where 0 indicates the best outcome and 3 the worst. Availability of each type of comparison varies by indicator and is dependent upon the data source, comparability with data collected for other communities, and changes in methodology over time. The comparison scores were summarized for each indicator, and indicators were then grouped into topic areas for a systematic ranking of community health needs. See Appendix C. Secondary Data Methodology for further details on the quantitative data scoring methodology as well as secondary data scoring results.

**FIGURE 4: SUMMARY OF TOPIC SCORING ANALYSIS**



**3.2.2 INDEX OF DISPARITY**

An important part of the CHNA process is to identify health disparities, the needs of vulnerable populations, and unmet health needs or gaps in services. There were several ways in which subpopulation disparities were examined in the Lake County Service Area. For secondary data health indicators, Conduent HCI’s Index of Disparity tool was utilized to see if there were large, negative, and concerning differences in indicator values between each subgroup data value and the overall county value. The Index of Disparity was run for the county, and the indicators with the highest race/ethnicity index value were found, with their associated subgroup with the negative disparity listed below in SECTION 5: Disparities.

**3.2.3 DATA CONSIDERATIONS**

Several limitations of data should be considered when reviewing the findings presented in this report. Although the topics by which data are organized cover a wide range of health and health-related areas, data availability varies by health topic. Some topics contain a robust set of secondary data indicators, while others may have a limited number of indicators or limited subpopulations covered by those specific indicators.

Data scores represent the relative community health need according to the secondary data for each topic and should not be considered to be a comprehensive result on their own. In addition, these scores reflect the secondary data results for the population as a whole, and do not represent the health or socioeconomic need that is much greater for some subpopulations. Moreover, many of the secondary data indicators included in the findings are collected by survey, and though specific methods are used to best represent the population at large, these measures are subject to instability, especially for smaller populations. The Index of Disparity is also limited by data availability, where indicator data varies based on the population groups and service areas being analyzed.

### 3.2.4 RACE/ETHNIC GROUPINGS

The secondary data presented in this report derive from multiple sources, which may present race and ethnicity data using dissimilar nomenclature. For consistency with data sources throughout the report, subpopulation data may use different terms to describe the same or similar groups of community members.

### 3.2.5 ZIP CODES AND ZIP CODE TABULATION AREAS

This report presents both ZIP Code and ZIP Code Tabulation Area (ZCTA) data. ZIP Codes, which were created by the U.S. Postal Service to improve mail delivery service, are not reported in this assessment as they may change, include P.O. boxes or cover large unpopulated areas. This assessment cover ZCTAs or ZIP Code Tabulation Areas which were created by the U.S. Census Bureau and are generalized representations of ZIP Codes that have been assigned to census blocks.

Demographics for this report are sourced from the United States Census Bureau, which presents ZCTA estimates. Tables and figures in the Demographics section of this report reference ZIP Codes in title (for purposes of familiarity) but show values of ZCTAs. Data from other sources are labeled as such.

## **3.3 PRIMARY DATA METHODS & ANALYSIS**

Community input for Hope Rising Lake County's CHNA was collected to expand upon the information gathered from the secondary data. The process was undertaken by Conduent HCI team and Hope Rising Lake County members. Primary data used in this assessment consisted of a community survey in English and Spanish, focus groups and key informant interviews. See Appendix D. Primary Data Methodology for the survey and interview questions.

### 3.3.1 COMMUNITY SURVEY

Since one of the most valuable ways to learn about the health of a community is by reaching out to the different constituents in the community, including residents, Hope Rising Lake County prioritized local participation for this community needs assessment and community health improvement planning cycle. A community health survey was designed and inputs from residents was collected online. This survey consisted of 24 questions related to top health needs in the community, factors which most improve life in a community, and behaviors which have the greatest impact on overall community health besides some personal health and demographic questions. The community survey was distributed online through SurveyMonkey® from January 29th through April 7th of 2019. The survey was made available in both English and Spanish. Paper surveys were also made available and answers to the paper survey were entered into the SurveyMonkey tool.

### 3.3.2 KEY INFORMANT INTERVIEWS

To expand upon the information gathered from the secondary data, key informant interviews were conducted to collect community input. Interviewees who were asked to participate were recognized as having expertise in public health, special knowledge of community health needs and/or represented the broad interest

of the community served by the hospital and health department, and/ or could speak to the needs of medically underserved or vulnerable populations. Eleven Key Informant Interviews with stakeholders and five group discussions with community members were conducted from February 5th through March 5th, 2019.

The key informant interviews were conducted by telephone, each ranging from 30 – 60 minutes in length with stakeholders from a range of sectors such as government, healthcare, Tribal Health, law enforcement and community service organizations. Interviewees who were asked to participate were recognized as having expertise in public health, special knowledge of community health needs and/or represented the broad interest of the community served by the hospital, and/or could speak to the needs of medically underserved or vulnerable populations. Community leaders with specific experience working with priority populations, such as women, children, tribal communities, the disabled, and more were interviewed. During the interviews, questions were asked to learn about the interviewee's background and organization, biggest health needs and barriers of concern in the community, as well as the impact of health issues on vulnerable populations. A list of the questions asked during the interviews can be found in Appendix D. Primary Data Methodology.

Each interview was transcribed by the interviewer and then analyzed qualitatively so as to code the transcripts according to a list of major health and quality of life topics. Interviews were transcribed and analyzed using the qualitative analytic tool, Dedoose . Interview excerpts were coded by relevant topic areas and key health themes. Input from key informants is included in each relevant health need topic area detailed in SECTION 6: Primary Data Collection and SECTION 7: Data Synthesis and Prioritization of this report.

### *Organizations of Key Informant Interview Participants*

- Adventist Health Clear Lake
- Adventist Health Live Well Program, Clear Lake
- First 5 Lake County
- Lake County Behavioral Health, Substance Abuse Program
- Lake County Department of Health Services, Division of Public Health
- Lake County Office of Education, Healthy Start Program
- Lake County Sheriff's Office
- Lake County Tribal Health Consortium
- Lake County Tribal Health Consortium Board of Directors, Big Valley Rancheria, and
- Sutter Lakeside Hospital

### **3.3.3 FOCUS GROUPS AND FOCUS GROUP PROFILES**

Five focus groups, including 31 participants, took place between March 5th and March 21st 2019. The groups were organized and facilitated by the Health Programs Coordinator of the Lake County Health Department. Participants were recruited from zip codes with a high burden according to Conduent HCl's SocioNeeds Index using multiple modes: direct recruitment by partner community based organizations, email invitations, flyers, and social media postings. Each focus group was recorded and the audio recordings were transcribed to capture the verbatim conversation. A list of the questions asked during the focus groups can be found in Appendix D. Primary Data Methodology. The focus group transcripts were analyzed



SECTION 3 **METHODOLOGY**

qualitatively using the qualitative analytic tool, Dedoose<sup>1</sup> by relevant topic areas and key health themes. Input from focus group participants is included in each relevant health need topic area detailed in SECTION 6: Primary Data Collection for Community Input and SECTION 7: Data Synthesis and Prioritization of this report.

<sup>1</sup> Dedoose Version 8.0.35, web application for managing, analyzing, and presenting qualitative and mixed method research data (2018). Los Angeles, CA: SocioCultural Research Consultants, LLC [www.dedoose.com](http://www.dedoose.com)

**TABLE 1: FOCUS GROUP DISCUSSION PROFILE**

NUMBER	GENDER	AGE	RACE/ ETHNICITY	INCOME GROUP (BELOW \$45,000 FOR HOUSEHOLD)	ZIP CODE TABULATED AREA/ CITY	NUMBER OF PARTICIPANTS
Group 1	Male	18-24	White	x	Zip 95422	5
Group 2	Female, Male	25-54	Tribal	x	Zip 95453	11
Group 3	Male	25-54	White	x	Zip 95422	5
Group 4	Female	55-70	White	x	Zip 95458	7
Group 5	Male	55-70	White	x	Zip 95458	3
<b>TOTAL-5</b>						<b>31</b>



# PROFILE OF LAKE COUNTY, CALIFORNIA

Located in north central California, Lake County has a land area of 1,256.46 square miles, about 100 miles long by 50 miles wide, which encompasses 2 cities and 13 census-designated places. The county is predominantly rural and includes Clear Lake, California's largest natural freshwater lake, known as "The Bass Capital of the West". The county economy is based largely on tourism and recreation. Lake County is mostly agricultural, with tourist facilities and some light industry. Major crops include pears, walnuts and wine grapes. Dotted with vineyards and wineries, orchards and farm stands, and small towns, the county is also home to Mt. Konocti, which towers over Clear Lake. Many roads are unpaved, unmarked, and unlit, even within blocks of main streets and schools in Clearlake and Lakeport. In addition, few market and store are available which make transportation a necessity for this population (California Department of Public Health, 2017-2018).

In 2018, Lake County's population had a median age of 45.8 years and a median household income of \$40,446 (United States Census Bureau, 2019). In Lake County, 50.2% of the population are female, 5.7% are below 5 years of age, 20.7% are below 18 years and 22.4% are 65 years and above. Among county residents, 10.7% have veteran status. About 15.3% of the people in Lake County speak a non-English language, and 8.7% are foreign born. The median value of owner occupied houses in Lake County is \$182,000 and the homeownership rate is 65.9%. The percent of households with a computer is 81.3% and with a broadband internet subscription is 70.6% (United States Census Bureau, 2019). According to data from the National Vital Statistics System (NVSS), the life expectancy in Lake County is 74.5 years on an average, 74.2 for White and 80.2 for Hispanic residents (County Health Rankings and Roadmaps, 2015-2017).

## 4.1 DEMOGRAPHIC PROFILE

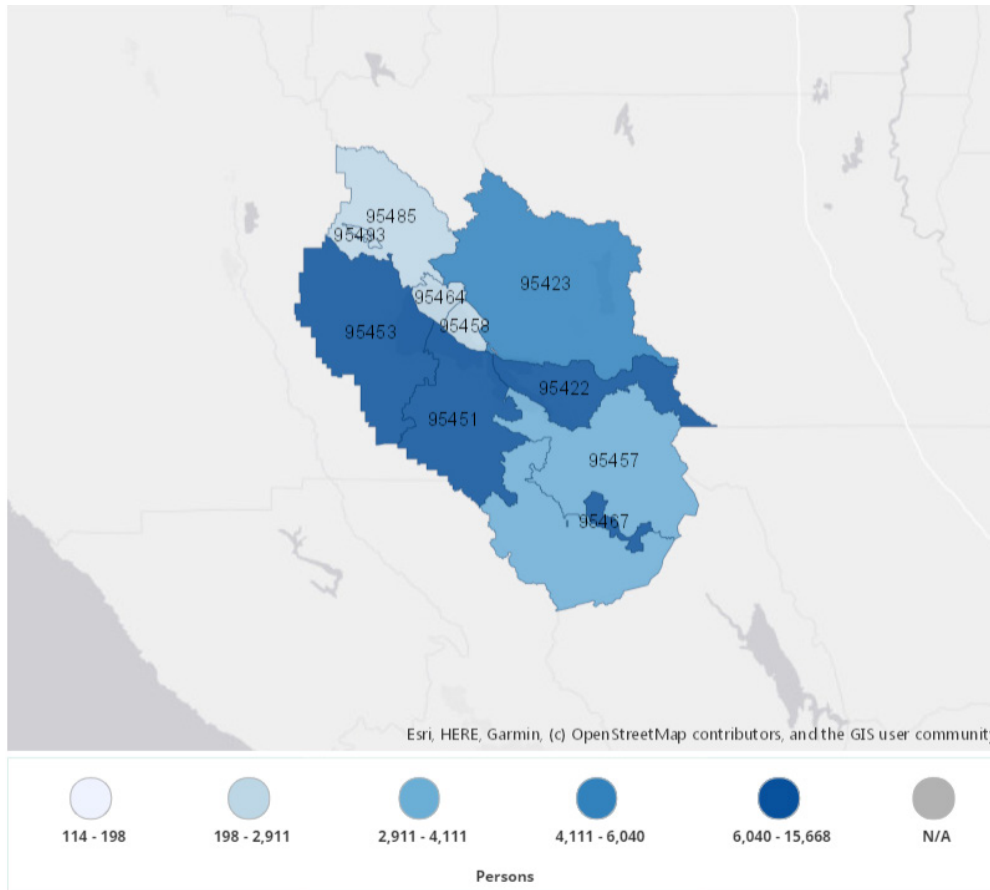
The following section explores the demographic profile of Lake County. Demographics are an integral part of describing the community and its population, and critical to forming further insights into the health needs of the community in order to best plan for improvement. Different race/ethnic, age, and socioeconomic groups may have unique needs and require varied approaches to health improvement efforts.

All demographic estimates are sourced from the U.S. Census Bureau's (a) 2017 population estimates or (b) 2013-2017 American Community Survey, or (c) 2019 Claritas Pop-Facts®, unless otherwise indicated. Please note that demographics and data sourced from Claritas Pop-Facts derive from the Claritas Pop-Facts data set which provides demographics data based on Census and American Community Survey (ACS) data. This data set provides current year (2019) estimates using the 2010 Census and the incorporation of newly available ACS data. Periods of measurement and sources for the data discussed are given in these sections if they are not mentioned elsewhere in the tables and figures enclosed within the report.

4.1.1 **POPULATION**

According to 2019 Claritas Pop-Facts population estimates, Lake County has a population of 64,562 persons. Figure 5 illustrates the population size in Lake County by zip code. The most populated zip codes are 95422 (Clearlake), 95451 (Kelseyville), and 95453 (Lakeport) with population totals of 15,668, 11,277, and 10,876.

**FIGURE 5: POPULATION BY ZIP CODE, 2019**



Source: Claritas Pop-Facts Population Estimates, 2019

Table 2 presents the population estimates in Lake County by year for 2014, 2015, 2016, and 2017. Lake County has had a stable population between 2014 and 2017, with a percent change of 0.2%. This is less than the California and US growth rate of 2.2%.

**TABLE 2: TOTAL POPULATION: PAST FOUR YEARS, 2014-2017**

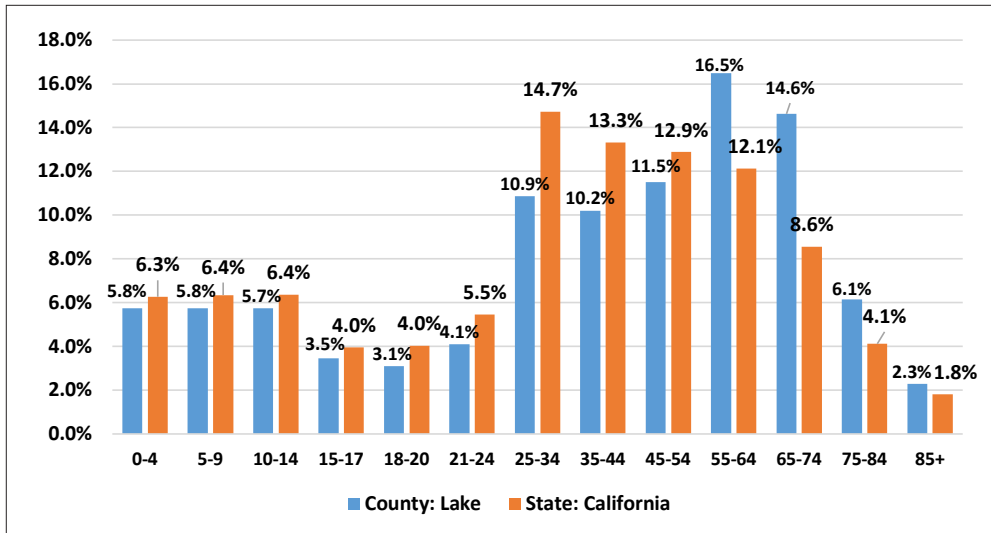
TOTAL POPULATION					
County	2014	2015	2016	2017	Percent Change 2014-2017
Lake County	64,113	64,310	63,950	64,246	0.2%
California	38,701,278	39,032,444	39,296,476	39,536,653	2.2%
United States	318,622,525	321,039,839	323,405,935	325,719,178	2.2%

Source: American Consumer Survey

4.1.2 **AGE**

Distribution of age impacts the healthcare needs of a population. Economic means, work status, and entitlement program eligibility are based on age, which can affect an individual’s ability to access preventive health care services (Figure 6).

**FIGURE 6: POPULATION BY AGE, 2019**

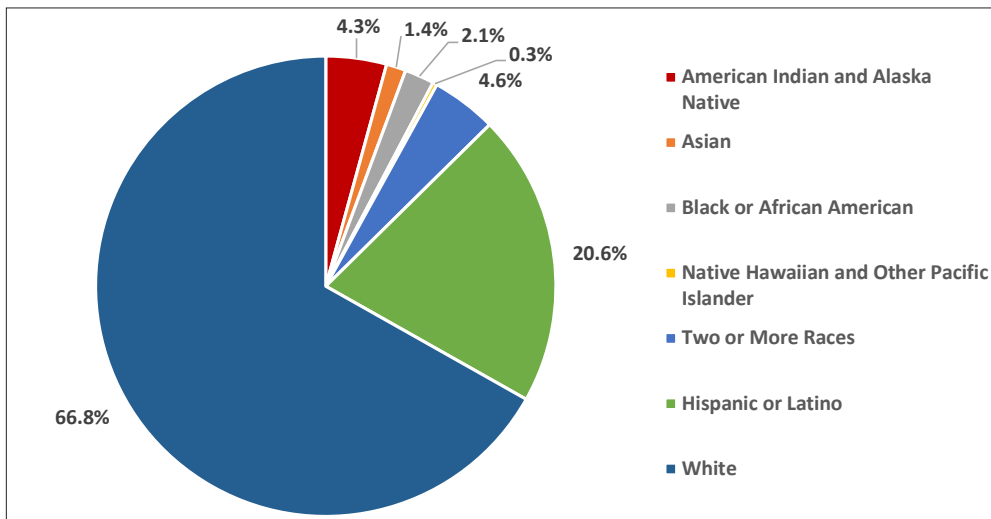


Source: Claritas Pop-Facts Population Estimates, 2019

4.1.3 **RACE/ETHNICITY**

Figure 7 shows the racial and ethnic distribution of Lake County. The majority of the population is comprised of White (Non-Hispanic) individuals, with 66.8% of the population and Hispanics with 20.6% of the population. The Asian population accounts for 1.4% of the population, followed by two or more races with 4.6% of the population, Black or African American with 2.1% of the population, American Indian and Alaska Native with 4.3% of the population, and lastly Native Hawaiian and Other Pacific Islander with 0.3% of the population.

**FIGURE 7: LAKE COUNTY POPULATION BY RACE/ETHNICITY, 2017**



Source: U.S. Census Bureau, 2017

Table 3 presents a closer examination of population trends over a span of four years. Overall, Lake County has experienced a slight decrease in the population from 2010 to 2019 (-0.16%). The share of residents identifying as Hispanic or Latino from 2014 to 2017 increased from 18.8% in 2014 to 20.6% in 2017. The White population experienced a slight decrease, from 69% in 2014 to 66.8% in 2017 with the number of American Indian or Alaskan Native population remaining stable.

**TABLE 3: POPULATION BY RACE/ETHNICITY: PAST FOUR YEARS, 2014-2017**

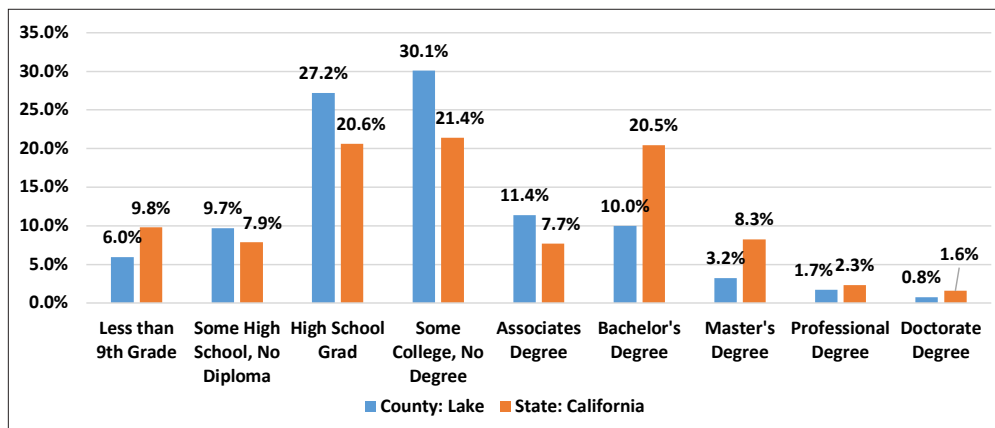
LAKE COUNTY				
	2014	2015	2016	2017
American Indian and Alaska Native	4.1%	4.1%	4.2%	4.3%
Asian	1.3%	1.3%	1.3%	1.4%
Black or African American	2.0%	2.0%	2.0%	2.1%
Native Hawaiian and Other Pacific Islander	0.3%	0.3%	0.3%	0.3%
Two or More Races	4.5%	4.5%	4.5%	4.6%
Hispanic or Latino	18.8%	19.3%	20.0%	20.6%
White	69.0%	68.4%	67.6%	66.8%

Source: U.S Census Bureau, 2014-2017

**4.1.4 EDUCATION**

Educational attainment is one of the key factors that affects the health status of a community. It can influence employment and income, influence health behavior and health seeking, and determine the ease with which a person can access and navigate the health system. Figure 8 displays the educational attainment for population age 25+ in Lake County. Over half of the population in Lake County has a high school degree or some college with no degree. However, high school degree attainment, some college education and associates degree attainment are slightly higher in Lake County compared to the California state values (20.6%, 21.4% and 7.7%). Notably, there is a large difference between the proportion of the population with a bachelor’s degree in Lake County (10%) compared to the California state value (20.5%).

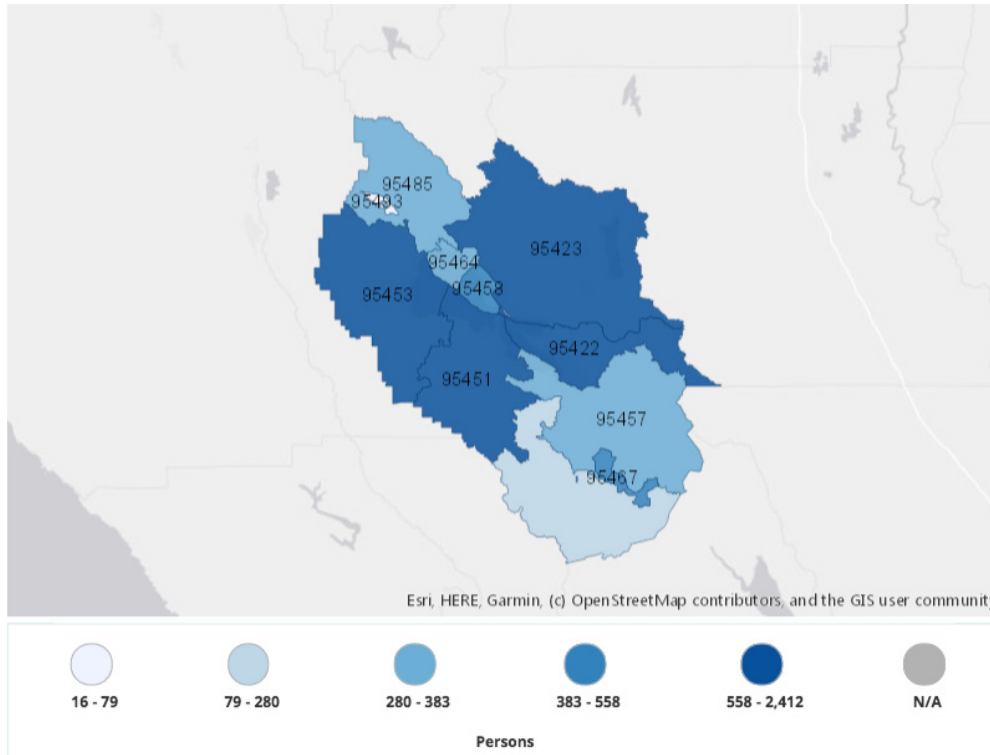
**FIGURE 8: EDUCATIONAL ATTAINMENT FOR 25+, 2019**



Source: Claritas Pop-Facts Population Estimates, 2019

Figure 9 depicts the population age 25+ with less than a high school graduation at the granular level, with darker blue regions indicating a greater percentage of individuals with less than a high school graduation. From this map, the areas with the highest number of individuals without a high school degree are 95422 (2,412), 95453 (1,133), and 95451 (1,008).

**FIGURE 9: POPULATION AGE 25+ WITH LESS THAN HIGH SCHOOL GRADUATION, 2019**



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Source: Claritas Pop-Facts Population Estimates, 2019

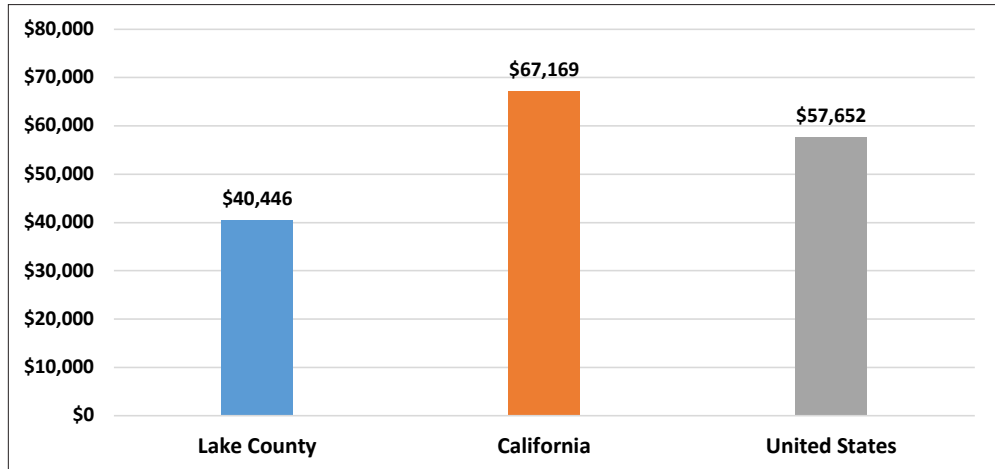
#### 4.1.5 INCOME

Median household income reflects the relative affluence and prosperity of an area. Areas with higher median household incomes are likely to have a greater share of educated residents and lower unemployment rates. The Gini index, which measures income distribution among the residents of a specified geography, indicates the extent to which the distribution of income among individuals or households within a community differs from a perfectly equal distribution. A value of zero indicates perfect equality of income (all households having equal income) and a value of one indicates perfect inequality (one household having all the income). A value of 0.5 indicates an even distribution of incomes. The Gini index for Lake County is 0.4691; the difference of Lake County’s score from an even distribution of incomes points to a very small size population that has higher incomes than the rest of the county residents (United States Census Bureau, 2013-2017). However, as the section below will illustrate, Lake County has low median income than the state and the country.

Figure 10 compares the median household income values for Lake County to the median household income value for California and the United States. The median household income is below the state value and the national value. Lake County has an estimated median household income of approximately \$40,446, which is about

\$27,000 less than the median household income of California and about \$17,000 less than the national value of \$57,652. Approximately 38% of the 12,888 households in Lake County have median household incomes below \$49,999 in 2017 inflation adjusted dollars. Upon examining the median household income in the past 12 months (in 2017 inflation-adjusted dollars) by household size, 1-person households had a median income of \$20,515, 2-person households of \$51,754, 4-person households of \$52,228, and 6-person households had a median household income of \$58,571 (United States Census Bureau, 2019).

**FIGURE 10: MEDIAN HOUSEHOLD INCOME, 2013-2017**

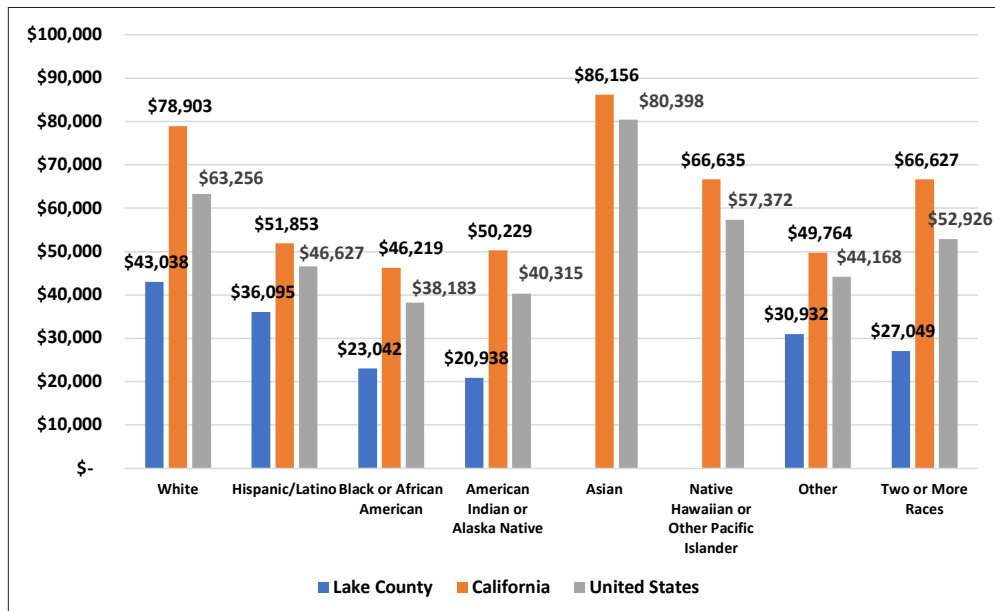


Source: U.S. Census Bureau, 2013-2017

Figure 11 shows the percentage of people living below the poverty level by race and ethnicity. All race/ethnic groups in Lake County have lower median household incomes in comparison to California state values. The median household income for Native American population is less than half the median household income for Native Americans in California. Black/African American population in Lake County earns approximately half what the Black/African American population earn on an average in the state while the White population have a median household income of \$43,038 in Lake County and \$78,903 in California. Hispanic/Latino populations have the smallest difference among all of the race/ethnic groups, with the median household income of \$36,095 in Lake County compared to \$51,853 in California. There is no comparison county data for Asians or Native American or Other Pacific Islanders.



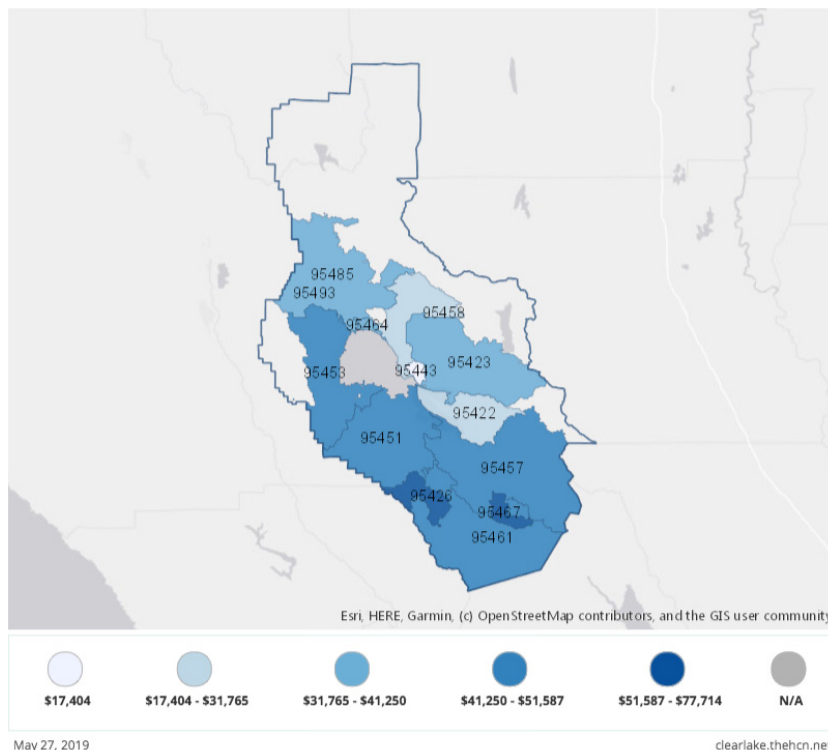
**FIGURE 11: MEDIAN HOUSEHOLD INCOME BY RACE/ETHNICITY, 2013-2017**



Source: Source: U.S Census Bureau, 2013-2017

Looking at Figure 12, the regions with the darker shades of blue indicate zip codes with high median household incomes, while the lighter shades indicate low median household incomes. The zip code with the highest median household income in Lake County is 95426 (\$77,714), while the zip code with the lowest median household income is 95443 (\$17,404).

**FIGURE 12: MEDIAN HOUSEHOLD INCOME BY ZIP CODE, 2013-2017**



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Source: American Community Survey, 2013-2017



In Lake County, single parent families have the lowest median household incomes. Male householders, no wife present with children under 18 years had a median household income of \$19,306 while female households, with no husband and own children under 18 years had a median household income of \$20,403. Household median income for householders above 65 years was \$39,332 while it was \$42,229 and \$44,079 for householders in the age group 45 to 64 years and 25 to 44 years respectively (United States Census Bureau, 2013-2017).

#### 4.1.6 EMPLOYMENT

A high rate of unemployment has personal and societal effects. During periods of unemployment, individuals are likely to feel severe economic strain and mental stress. Unemployment is also related to access to health care, as many individuals receive health insurance through their employer. A high unemployment rate places strain on financial support systems, as unemployed persons qualify for unemployment benefits and food stamp programs.

In Lake County, 48.6% of the population above the age of 16 years is employed, as compared to 63.5% in California and 63% in the United States. Private wage and salary owners make up the largest proportion of the employed (68.3% in Lake County in comparison to 78.2% in California), while Government workers (20.0% in Lake County as compared to 13.5% in the state), self-employed in own businesses (11.4% in the county in comparison to 8.1% in California) and unpaid family workers (.3% in Lake County versus .2% in California) constitute the remaining proportions.

Table 4 lists the industries that employ civilian population 16 years and over in Lake County. Approximately 22.2% of civilians are employed by educational services, and health care and social assistance and 9.2% professional, scientific, and management, and administrative and waste management services. Additionally, 16.1% of civilians are employed by the agriculture (including forestry, fishing and hunting, and mining) and construction sectors together, while 10.3% work in the retail trade and 9.4% in the arts, entertainment, and recreation, and accommodation and food services sector.

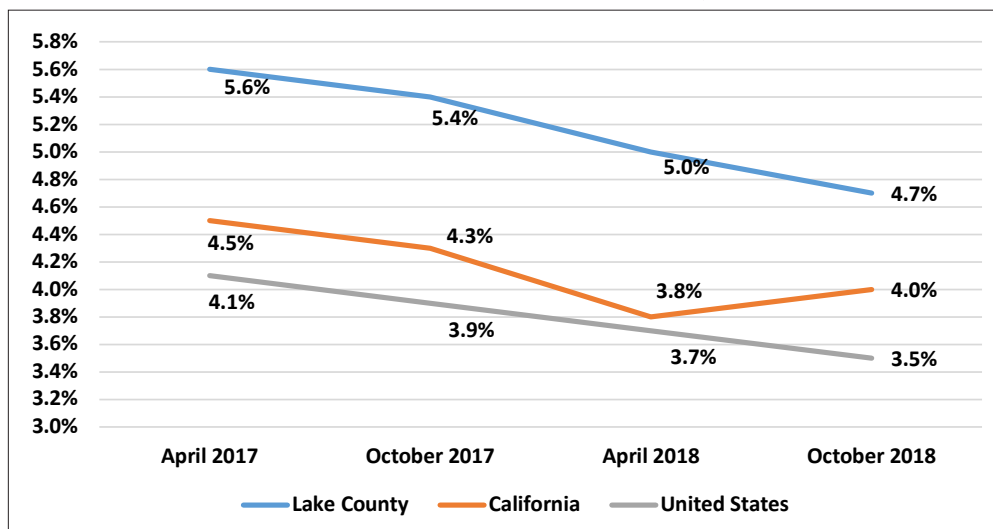
**TABLE 4: INDUSTRY OF WORK FOR THE CIVILIAN EMPLOYED POPULATION 16 YEARS AND OVER**

OCCUPATION	NUMBER	PERCENT
Agriculture, forestry, fishing and hunting, and mining	1,523	6.7%
Construction	2,151	9.4%
Manufacturing	1,132	4.9%
Wholesale trade	425	1.8%
Retail trade	2,353	10.3%
Transportation and warehousing, and utilities	1,210	5.3%
Information	334	1.4%
Finance and insurance, and real estate and rental and leasing	865	3.8%
Professional, scientific, and management, and administrative and waste management services	2,095	9.2%
Educational services, and health care and social assistance	5,501	22.2%
Arts, entertainment, and recreation, and accommodation and food services	2,141	9.4%
Other services, except public administration	1,289	5.6%
Public administration	1,672	7.3%
<b>Total:</b>	<b>22,691</b>	

Source: American Community Survey, 2013-2017

Figure 13 depicts the percent of civilians, 16 years of age and older, who are unemployed as a percent of the civilian labor force. Overall, Lake County's unemployment rate decreased between April 2017 and October 2018. In April 2017, the unemployment rate was 5.6% and it decreased by .9% to 4.7% in October 2018. An examination of the data for youth 16+ not employed shows that the highest percentages are in zip codes 95422 (19.8%), 95457 (18.9%), 95426 (18.37%) and 95458 (17.67%).

**FIGURE 13: UNEMPLOYED WORKERS IN CIVILIAN LABOR FORCE, APRIL 2017–OCTOBER 2018**



Source: U.S. Bureau of Labor Statistics

## 4.2 SOCIAL DETERMINANTS OF HEALTH

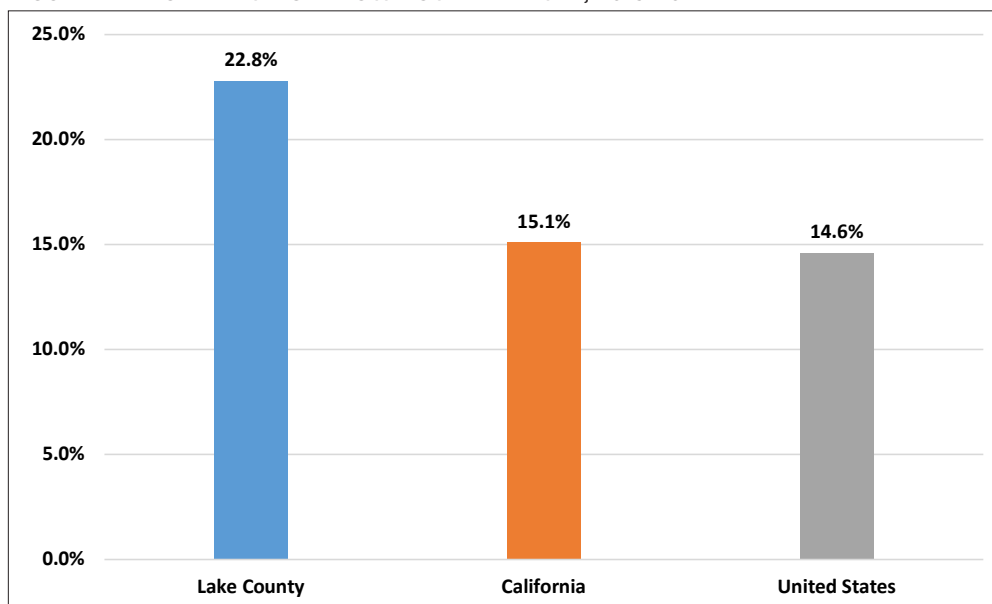
Health conditions are determined by the neighborhoods, schools, communities and workplaces of individuals. Healthy People 2020 defines social determinants of health as conditions in which people are born, grow, live, work, and age that affect a wide range of health outcomes and risks. The social determinants of health partly explain why some people are healthier than others, and generally why some people are not as healthy as they could be. Resources that address the social determinants of health and improve quality of life can have a significant impact on population health outcomes. Examples of these resources include access to education, public safety, affordable housing, availability of healthy foods, and local emergency and health services.

Understanding the different social determinants in a service area can lead to identification of drivers or 'root cause' of health conditions and potential services that work to improve disparities within that community. Programs that address the social determinants such as targeted outreach to people living alone, translation services for people with limited English proficiency, and financial counseling for people living in poverty, can help to improve the overall health of the community. This section explores the social and economic determinants of health in Lake County. These social determinants and other factors help build the context of the service area to allow for better understanding of the results of both primary and secondary data.

**4.2.1 POVERTY**

In 2019, the federal poverty guideline was \$25,750 for a family of four (U.S. Department of Health and Human Services, 2019). Federal assistance programs use the guidelines (or percentage multiples of the guidelines — for instance, 125 percent or 185 percent of the guidelines) in determining eligibility for Head Start, the Supplemental Nutrition Assistance Program (SNAP), the National School Lunch Program, the Low-Income Home Energy Assistance Program, and the Children’s Health Insurance Program.

As shown in Figure 14, Lake County has a higher rate of poverty compared to the state and national poverty rates. Lake County has a poverty rate of 22.8%, while state and national rates of poverty are 15.1% and 14.6% respectively.

**FIGURE 14: PEOPLE LIVING BELOW POVERTY LEVEL, 2013-2017**

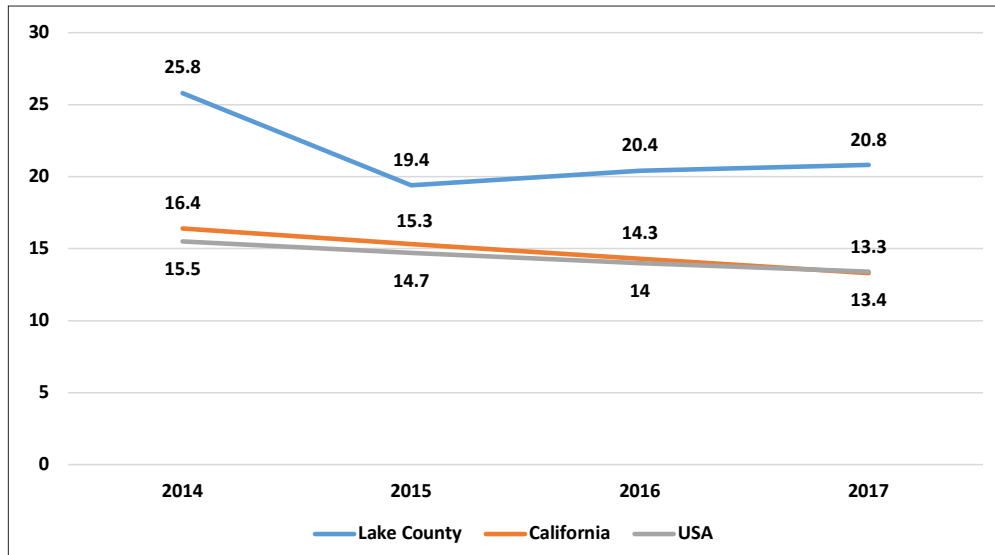
Source: American Community Survey, 2013-2017

United Ways of California has arrived at an estimate of the amount of income required to meet basic needs (the “Real Cost Budget”) for a given household type in a specific community. The Real Cost Measure builds a bare-bones budget that reflects constrained yet reasonable choices for essential expenses: housing, food, transportation, health care, taxes and child care. United Ways estimates that an income of at least \$64,401 was required to meet the basic needs (housing, food, transportation, health care, taxes, and child care) for a family of four, with two adults and two children, in Lake County. This is more than two and a half times the federal poverty level for a family of four. This threshold of affordability is referred to as the Real Cost Measure (RCM). In Lake County, 79% of residents with education levels below high school, 81% of households headed by single females and 32% headed by seniors, 67% of Latino households and 71% of foreign born, non-citizen households are below the RCM. By the same estimates, a family of four (two adults, one infant, one school age child) would need to hold more than three full time, minimum-wage jobs to achieve economic security (United Way of California, 2018).

SECTION 4 **METHODOLOGY**

According to Figure 15, the rate of people living below the federal poverty level in Lake County has a downward trend, similar to the state and national trends. However, the overall percentages of Lake County’s population living below poverty across all four years are higher than the state and national values. In 2014, Lake County had a poverty rate of 25.8%, which dropped in 2015 to 19.4% and has remained stable from 2015 to 2017, with a slight increase in 2017 to 20.8%. In comparison, the poverty rate in California was 13.3% and national value was 13.4% in 2017.

**FIGURE 15: PEOPLE LIVING BELOW POVERTY LEVEL, 2014-2017**

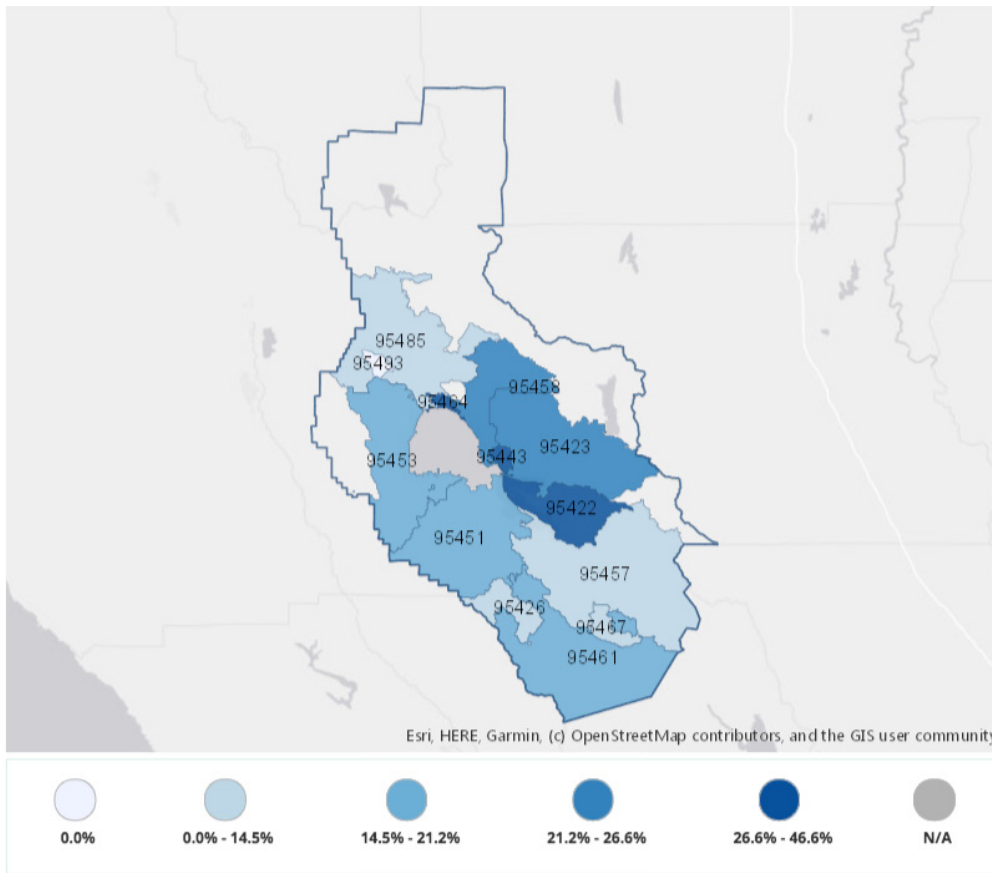


Source: American Community Survey

Figure 16 depicts the percentage of individuals living below poverty broken up by sub-county geographies. The dark blue regions indicate zip codes with the highest levels of poverty in the county while lighter shades represent lower rates of poverty. The Lake County zip code with the largest proportion of its population living below poverty is 95443 (46.6%), followed by 95422 (35.4%) and 95464 (34.5%).



**FIGURE 16: PEOPLE LIVING BELOW POVERTY LEVEL, 2013-2017**



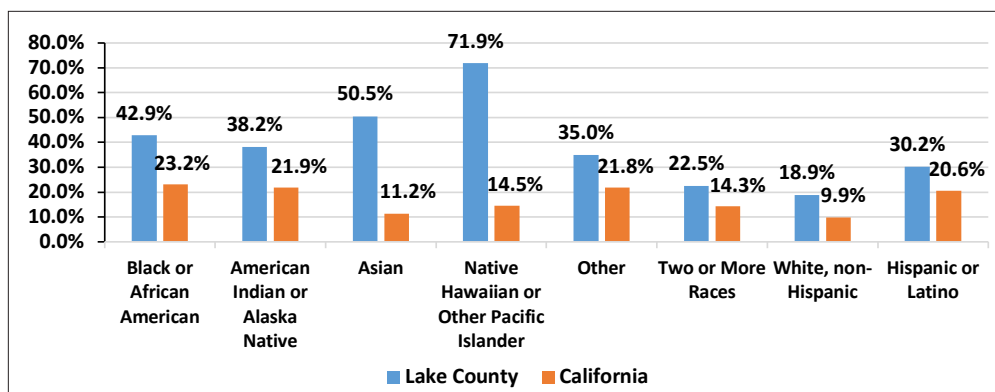
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Source: American Community Survey, 2013-2017

Figure 17 shows the percentage of people living below 100% poverty level by race and ethnicity in comparison to state and national values. The race/ethnicity group with the greatest percentage of its population living in poverty is the Native Hawaiian or Other Pacific Islander population, with 71.9%. A little more than half the Asian population (50.5%), 42.9% of the Black or African American population and 18.9% of White persons live below the 100% poverty level mark in Lake County. All race and ethnicity groups are higher than state levels.

**FIGURE 17: PEOPLE LIVING BELOW POVERTY LEVEL BY RACE/ETHNICITY, 2013-2017**

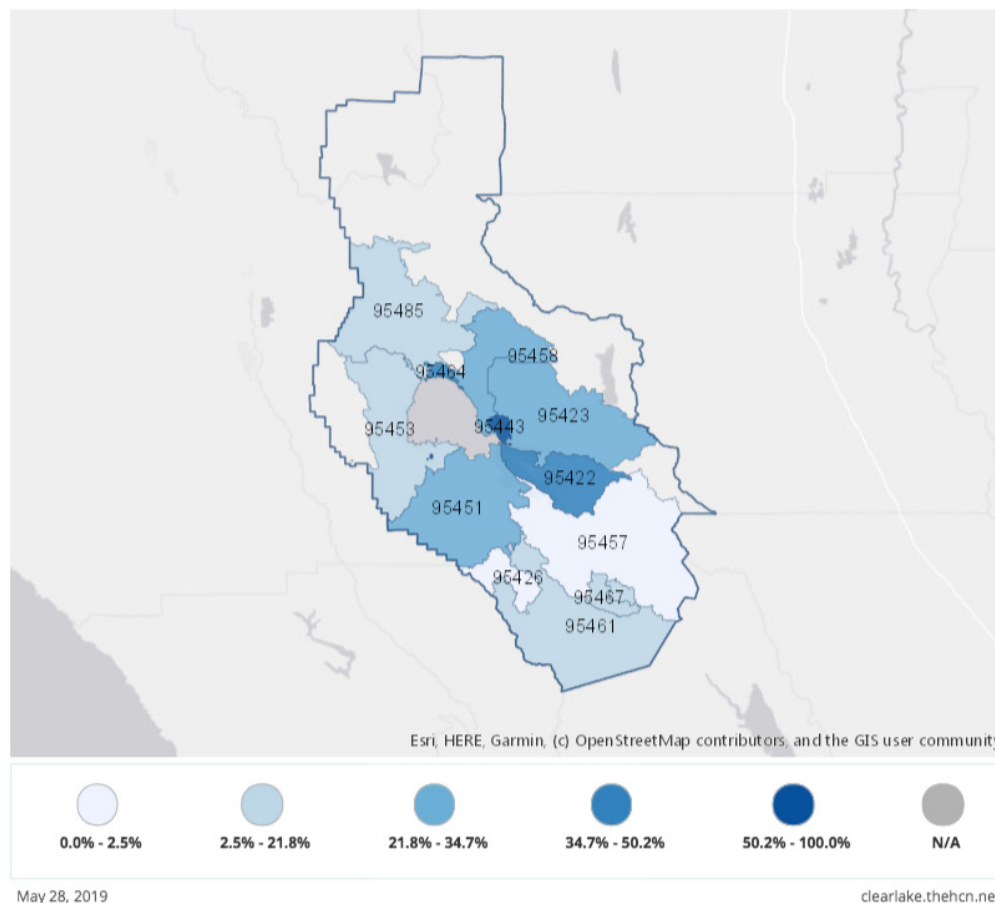


Source: American Community Survey, 2013-2017

SECTION 4 **METHODOLOGY**

According to the American Community Survey, in 2013-2017, 31.6% of children below 18 years in Lake County were living below the 100% federal poverty level. This is higher than the proportion of children living below poverty level in California (20.8%) and the US (20.3%). Examining this by race, American Indian or Alaska Native children and other race/ethnicity had the highest disparity, with 63.1% of American Indian or Alaska Native children living under poverty and 45.1% of children from other race/ethnicities living below poverty. At the granular level, 95443 and 95435 had the greatest percentage of people under the age of 18 living below the 100% federal poverty level (Figure 18).

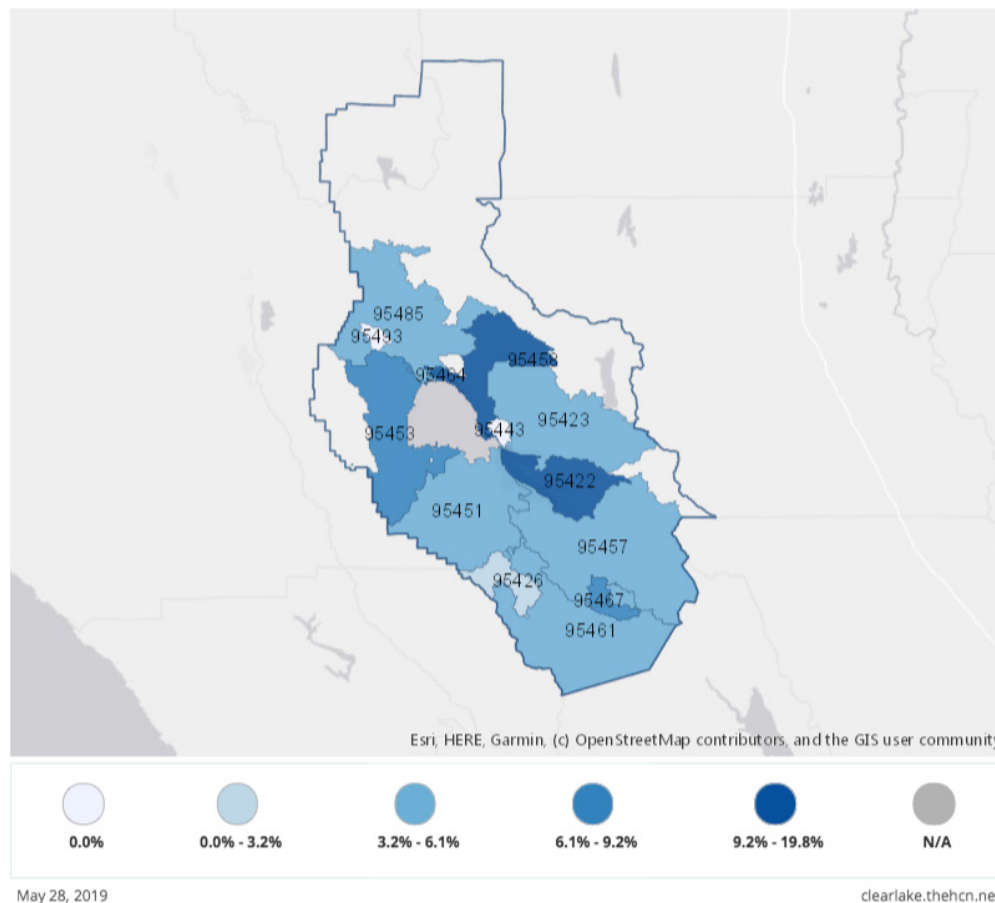
**FIGURE 18: CHILDREN LIVING BELOW POVERTY, 2013-2017**



Source: American Community Survey, 2013-2017

In 2013-2017, 8.6% of individuals aged 65 and over were living below the federal poverty level in Lake County. This is lower than the California value (10.2%) and the US value (9.3%). Examining poverty rates broken up by zip code, the highest proportion of individuals aged 65 and over living below poverty was in 95464 at 19.8% followed by 95422 (13.9%) and 95458 (11.8%).

**FIGURE 19: PEOPLE 65+ LIVING BELOW POVERTY LEVEL, 2013-2017**



Source: American Community Survey, 2013-2017

Among female headed households, 35.9% fell below the 100% poverty line as did 35% of households headed by a person with less than a high school education. Almost a quarter of households where the head was disabled (23.8%) or foreign born (26.0%) were also below the 100% poverty mark.

Low income affects housing stability, food access, healthcare spending, healthcare access, and health status of residents. These disparities, as illustrated within Section 4, correspond with race/ethnicity, languages spoken, foreign-born status and women headed households among other factors. However, as seen from the median household incomes of the county and the higher than state averages of percent living under poverty, the community has lower median household income on an average and fewer financial buffers against factors that contribute to poorer health outcomes in the county.

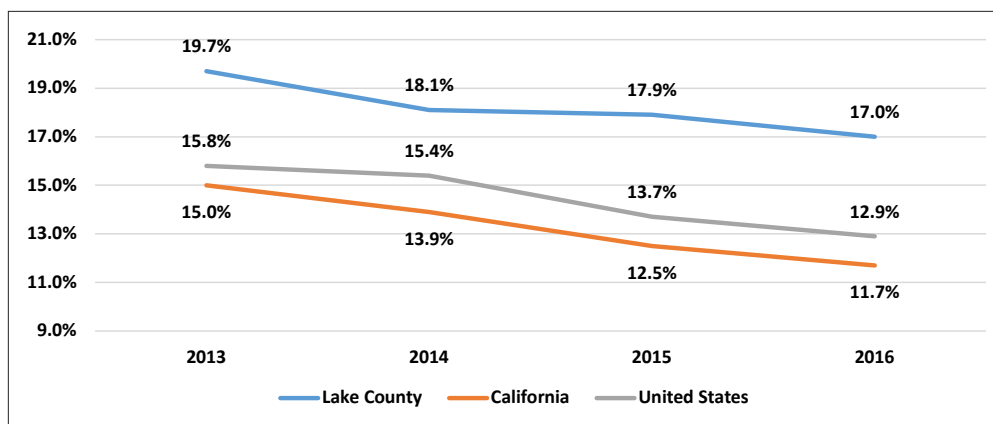
#### 4.2.2 FOOD INSECURITY

Food insecurity is defined as the disruption of food intake or eating patterns because of lack of money and other resources. The U.S. Department of Agriculture (USDA) defines food insecurity as limited or uncertain availability of nutritionally adequate foods or uncertain ability to acquire these foods in socially acceptable ways. Food insecurity, and the resulting hunger, is associated with disability, lack of adequate employment and racial and ethnic disparities. It leads to intake of

nutritionally deficient but high calorie foods that cause obesity, diabetes, heart disease, high blood pressure, and hyperlipidemia. Food assistance programs, such as the National School Lunch Program (NSLP), the Women, Infants, and Children (WIC) program, and the Supplemental Nutrition Assistance Program (SNAP) address food insecurity in vulnerable populations by delivering food benefits.

Figure 20 describes the percent of the population in Lake County that has experienced food insecurity, compared to state and national rates. Overall, there is a downward trend in food insecurity rate across all three geographies. Lake County has higher food insecurity in comparison to the state and the nation. In 2016, Lake County had a food Insecurity rate of 17%, about 4% greater than the state value and 5% greater than the national value. Between 2013 and 2016, the food insecurity rate in Lake County has dropped 2.7%, from 19.7% in 2013 to 17% in 2016.

**FIGURE 20: FOOD INSECURITY RATE, 2013-2016**



Source: Feeding America (2013-2016)

Per the 2013-2017 American Community Survey 5-Year Estimates, 11.4% or 3,007 of all households in Lake County and 53.6% or 5,529 households with children less than 18 years receive food stamps or SNAP benefits. Of the households receiving SNAP benefits, 47.9% had one worker in the 12 months; 73% of these households is White alone, 17.2% are Hispanic or Latino, 4.4% are American Indian and Alaska Native alone, and 3.4% are Black or African American alone.

Children exposed to food insecurity are of particular concern given the implications scarce food resources pose to a child's health and development. Children who are food insecure are more likely to be hospitalized and may be at higher risk for developing chronic diseases such as obesity as a result in lower quality diet, anemia and asthma. In addition, food-insecure children may also be at higher risk for behavioral and social issues including fighting, hyperactivity, anxiety, and bullying. In Lake County, 18% of the children who are food insecure are likely to be ineligible for assistance; this is the percentage of food insecure children in households with incomes above 185% of the federal poverty level who are likely not income-eligible for federal nutrition assistance.

The maximum income level of a family of 4 to qualify for Cal-Fresh is \$4,184 gross monthly income (that is, before taxes) or \$2,092 net monthly income (CAFoodbanks.org, 2019). Paradoxically, earning even marginally more money than the CalFresh eligibility limit disqualifies families from receiving benefits though the marginal income increase will not make healthy food options more affordable. Yet,



the Real Cost Measure (RCM) – which estimates the amount of income required to meet basic needs of food, housing, transportation, healthcare, child care etc. (the “Real Cost Budget”) for a given household type in a specific community – estimates that a family of 4 needs an annual income of \$64,401 per year in Lake County (United Ways of California, 2018). By these estimates, one in 2.5 households in Lake County are below the Real Cost Measure in 2018.

#### 4.2.3 TRANSPORTATION

Public transportation offers mobility, particularly to people without cars. Transportation is interrelated with other social determinants of health such as poverty, social isolation, access to education and racial discrimination. Transit can help bridge the spatial divide between people and jobs, services, and training opportunities. Public transportation also reduces fuel consumption, minimizes air pollution, and relieves traffic congestion.

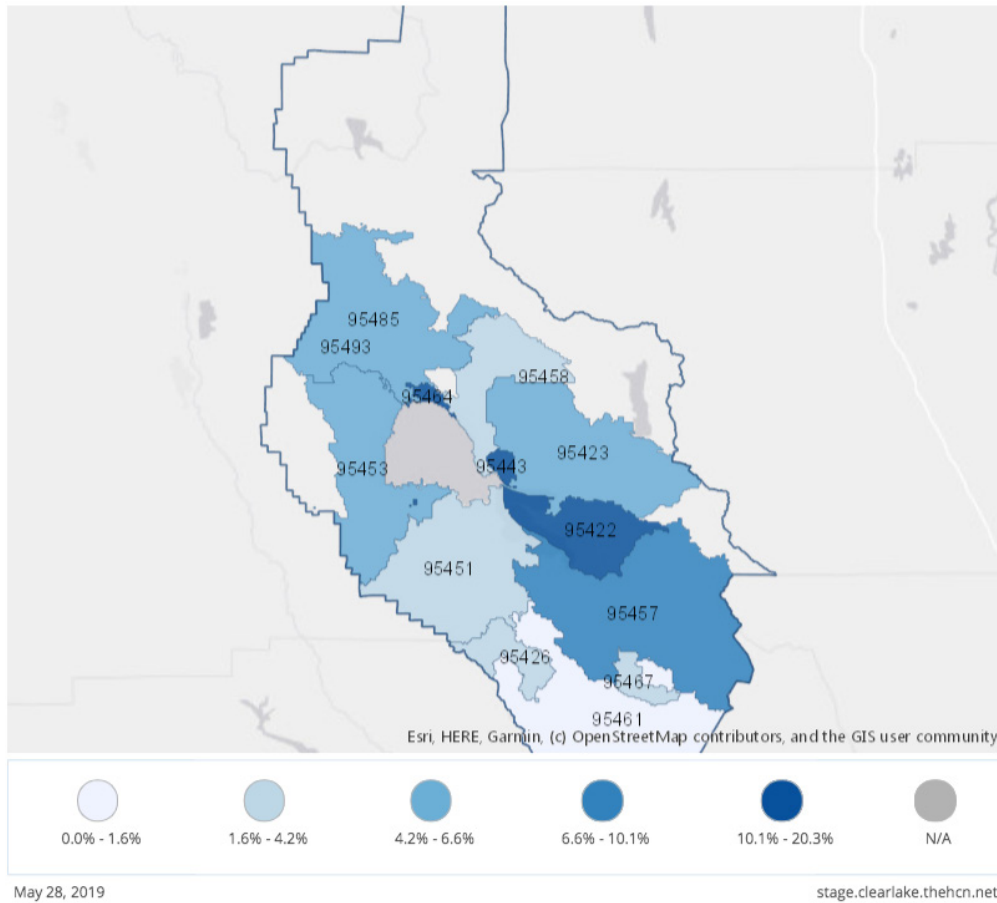
Maintaining private vehicles imposes a burden on the household budget. According to the Real Cost Measure estimates of United Ways, yearly transportation costs for one person in Lake County is \$4,854 while it is \$9,714 for a family with two adults; this constitutes almost 25% of the budget for most households given that the median household income is \$40,446. Lake County has an average of 1.8 vehicles per household.

Among workers 16 years and over for whom poverty status is determined (17,854 persons), 68.4% (12,228) drove to work alone while only 1.08% (194 persons) used public transportation in Lake County and 3.31% (591) walked to work (United States Census Bureau, 2019).

With regards to households without a vehicle, 7.3 % of households in Lake County overall do not have a car. The map (Figure 21) below depicts regions in the county that do not have a vehicle. Areas shaded in dark blue indicate zip codes in the highest quartile, while the regions with light blue shading represent lower quartiles. The zip code with the highest proportion of households without a car is 95435 (20.3%) and 95443 (13.1%), followed by 95464 (12.5%), and 95422 (12.2%). Residents in these locations may be more likely to experience difficulties accessing services in Lake County.



**FIGURE 21: HOUSEHOLDS WITHOUT A VEHICLE, 2013-2017**

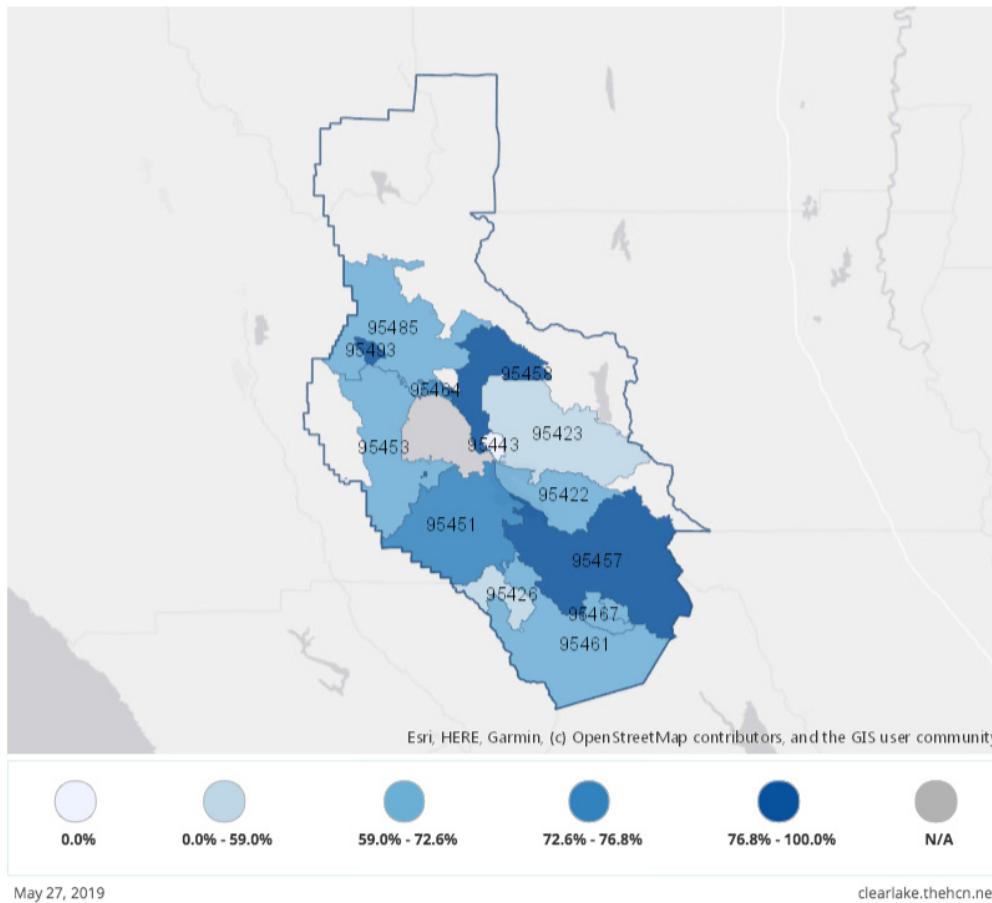


Source: American Community Survey, 2013-2017

Figure 22 shows the percent of workers who drive alone to work by zip code. The darkest shaded regions on the map indicate zip codes with the highest proportion of workers who drive alone to work. Within Lake County, the area with the largest percentage of individuals that drove alone to work is zip code 95435 at 100%. Other regions in the upper quartile are 95457 (82.2%), 95493 (81.8%), and 95458 (81.1%). Driving alone to work can have long lasting impacts on health, affecting aspects such as active living, pollution, and accidents due to vehicle collisions.



**FIGURE 22: WORKERS WHO DRIVE ALONE TO WORK, 2013-2017**

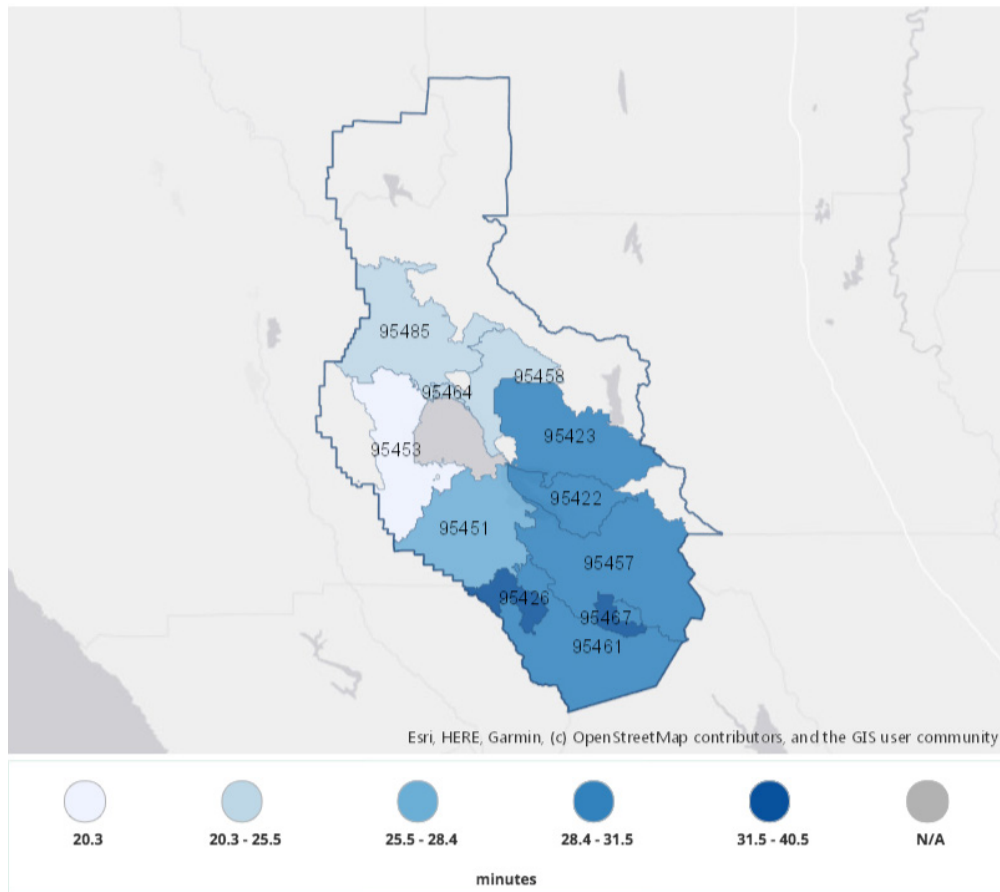


Source: American Community Survey, 2013-2017

The mean travel time to work for the Lake County population is 28.9 minutes. Longer commutes cut into worker’s free time and can contribute to health problems such as anxiety and increased blood pressure. The zip code with the highest proportion of households without a car is 95467 (40.5%) and 95426 (36.5%). The map below (Figure 23) depicts travel time for regions within the county. Areas shaded in dark blue indicate zip codes in the highest quartile, while the regions with light blue shading represent lower quartiles.



**FIGURE 23: MEAN TRAVEL TIME TO WORK, 2013-2017**



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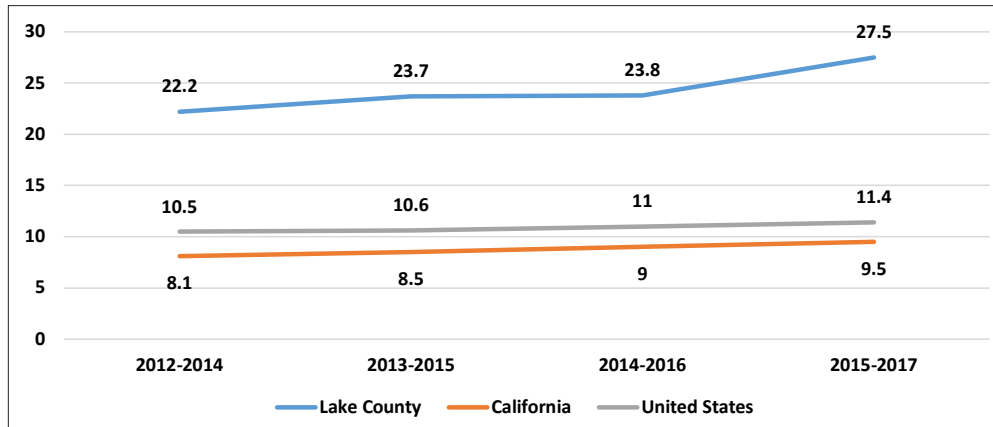
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Source: American Community Survey, 2013-2017

Figure 24 depicts the rate of age-adjusted deaths due to motor vehicle collisions in Lake County. Overall, rates are higher than state and national values, with 27.5 deaths per 100,000 population between 2015 -2017 compared to 9.5 deaths per 100,000 population and 11.4 per 100,000 population for the state and for the nation. Overtime, the death rate due to motor vehicle collisions is rising within Lake County, with an increase from 23.8 deaths due to motor vehicle traffic collision to 27.5 deaths between 2014-2016 and 2015-2017. In children, there are 18.3 motor vehicle injury hospitalizations per 100,000 children (California Department of Public Health, 2017-2018).



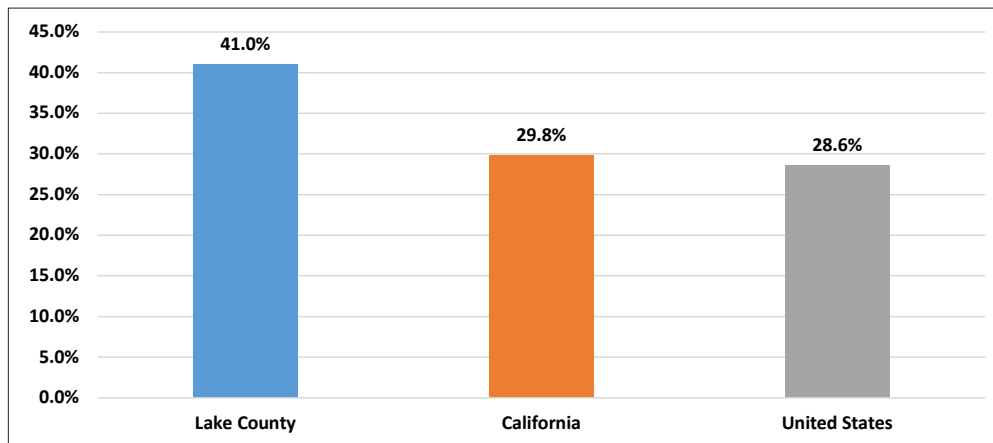
**FIGURE 24: AGE-ADJUSTED DEATH RATE DUE TO MOTOR VEHICLE TRAFFIC COLLISIONS, 2012-2017**



Source: Centers for Disease Control, 2015-2017

Figure 25 depicts the percentage of alcohol impaired driving deaths in Lake County compared to California and the US. Lake County has a higher rate of alcohol impaired driving deaths, with 41% of motor vehicle deaths due to alcohol involvement. This rate is higher than the California rate of 29.8% and the United States rate of 28.6%.

**FIGURE 25: ALCOHOL IMPAIRED DRIVING DEATHS, 2013-2017**



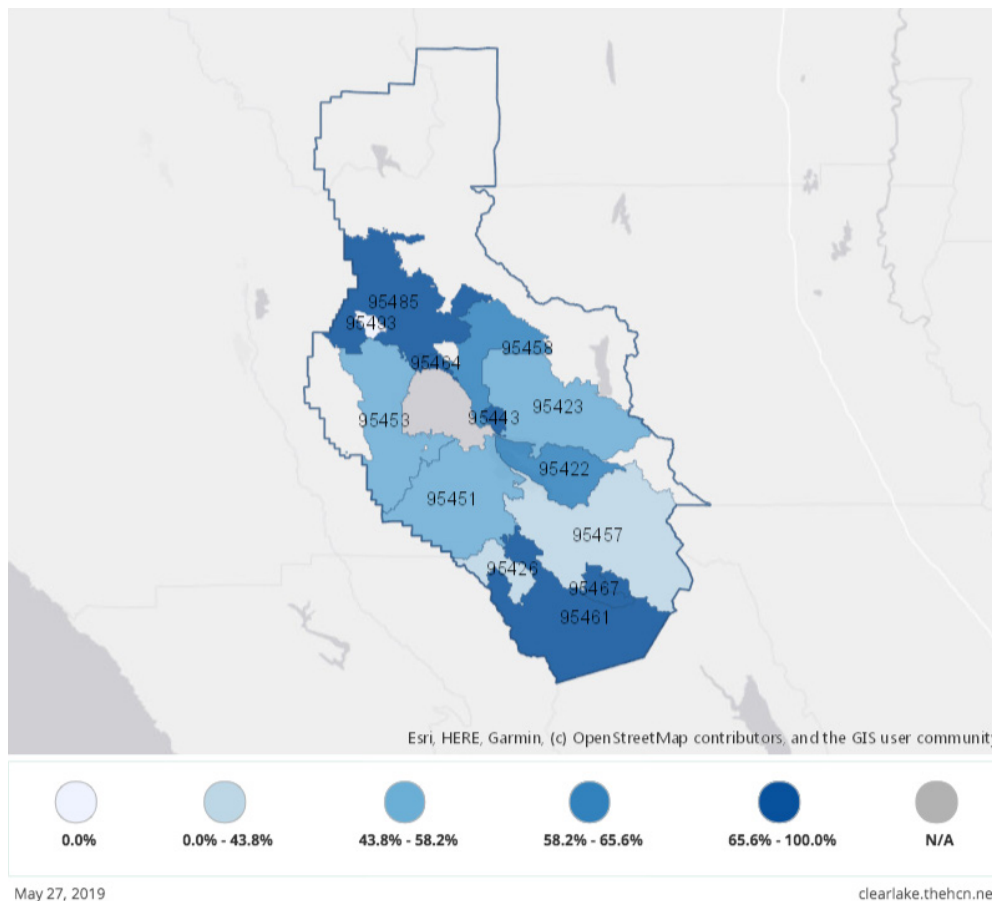
Source: County Health Rankings, 2013-2017

#### 4.2.4 HOUSING

With a limited income, paying a high rent may not leave enough money for other expenses such as food, transportation, and medical. The five year average between 2013-2017 data shows that the median gross rent was \$914 (United States Census Bureau, 2019). Moreover, high rent reduces the proportion of income a household can allocate to savings each month. The Real Cost Measure (RCM) estimates of United Ways for housing are \$9,090 for 2 adults and \$12,168 for a family of four which constitutes more than 30% of the median family income in Lake County.

Figure 26 shows renters spending 30% or more of household income on rent in Lake County. Overall, 62.6% of individuals in Lake County spend 30% or more of their household income on rent. This is greater than the California value of 56.0% and the US value of 50.6%. The percent of 15-24 year old renters in Lake County who spend more than 30% of their income on housing is 74.9%, while this percent in 25-34, 35 to 64 and 65+ years is 58.6%, 63% and 60.3% respectively. Looking at the map below, the largest proportion of individuals in Lake County comes from the zip code 95433 where 100% of the population spends 30% or more of their household income on rent. Additional zip codes that fall in the upper quartile are 95467 (79.9%), 95461 (73.3%), 95485 (72.6%), and 95464 (71.3%).

**FIGURE 26: RENTERS SPENDING 30% OR MORE OF HOUSEHOLD INCOME ON RENT, 2012-2016**



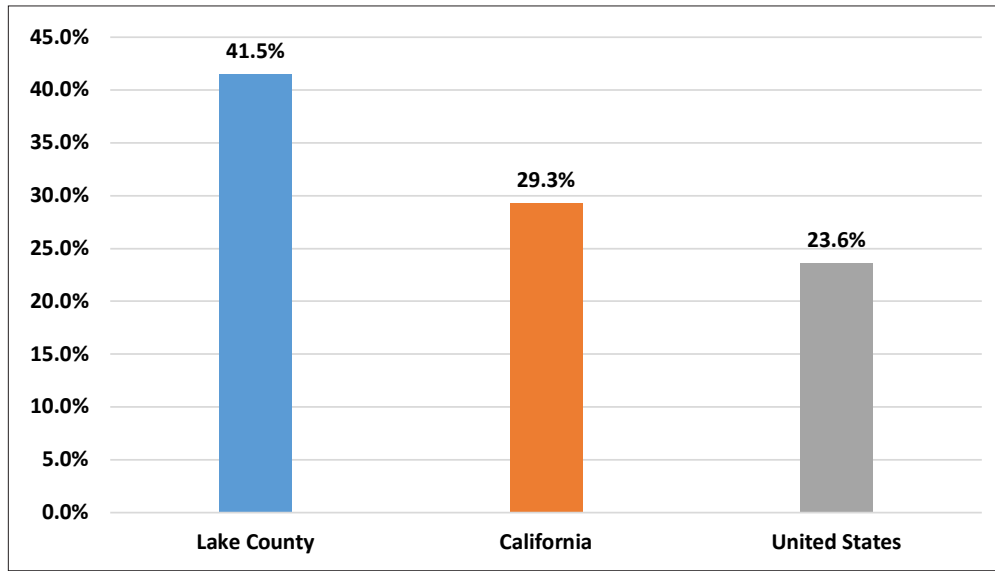
Source: American Community Survey, 2013-2017

#### 4.2.5 ACCESS TO HEALTH

Access to health is the most important factor in determining health outcomes and includes coverage, physical access, health literacy and relationships of trust with physicians (Office of Disease Prevention and Health Promotion, 2019).

In 2017, 41.5% of people had only public health insurance in Lake County (Figure 27). This rate is higher than the California average (29.3%) and the U.S. average (23.6%).

**FIGURE 27: PERSONS WITH PUBLIC HEALTH INSURANCE ONLY, 2017**

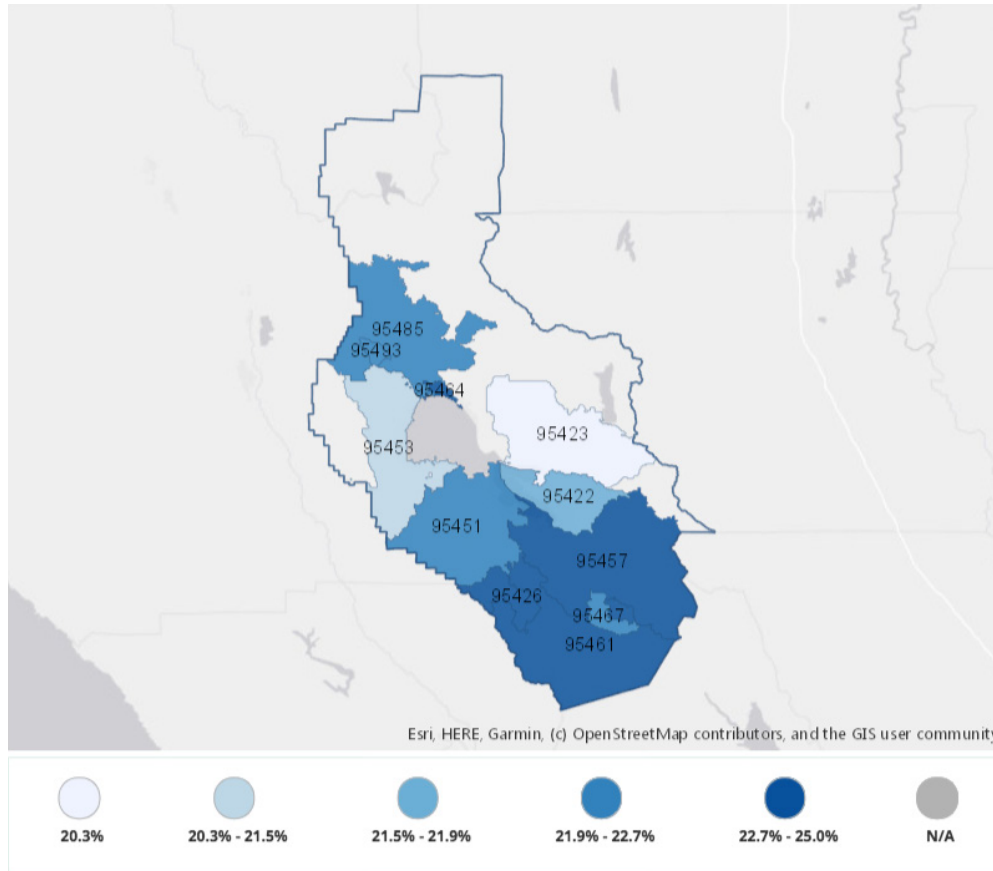


Source: American Community Survey, 2017

With regards to delays or difficulty receiving needed care, 22.2% of adults over the age of 18 in Lake County reported having to delay or not receive care they felt they needed. This is due to a variety of reasons, including cost, availability of services, difficulty with appointments, lack of transportation, inability to access care, and numerous other barriers. Within Lake County, zip code 95426 had the highest percentage of adults who delayed or had difficulty obtaining care, at 25.0% (Figure 28). Zip code 95457 (23.6%), 95461 (23.4%), and 95464 (23.2%) also had high rates for this measure.



**FIGURE 28: ADULTS DELAYED OR HAD DIFFICULTY OBTAINING CARE, 2013-2014**



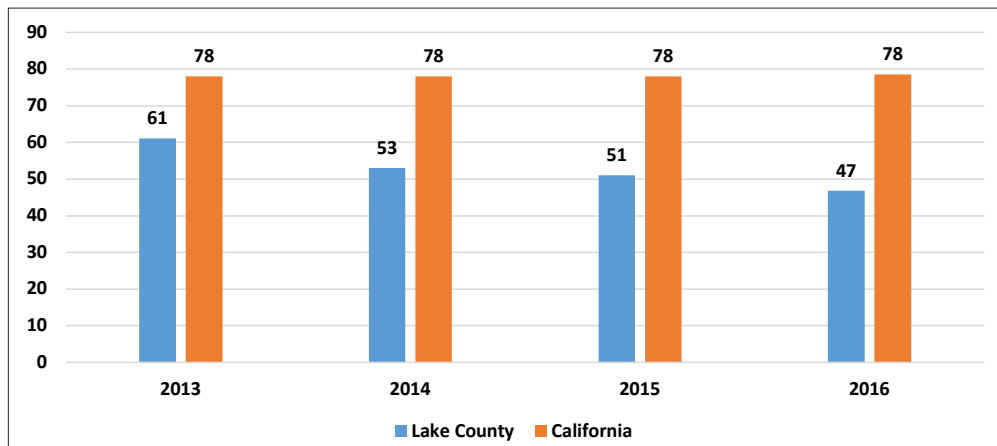
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Source: California Health Interview Survey, 2013-2014

Access to primary care providers increases the likelihood that community members will have routine checkups and screenings. Moreover, those with access to primary care are more likely to know where to go for treatment in acute situations. Communities that lack a sufficient number of primary care providers typically have members who delay necessary care when sick and conditions can become more severe and complicated. Access to primary care shown in Figure 29 describes the primary care provider rate in Lake County compared to the state average. Across all 4 time periods, Lake County has a lower primary care provider rate than California. However, there is a statistically significant downward trend, with 61 providers per 100,000 population in 2013 to 47 providers per 100,000 population in 2016. Other professionals can serve as usual sources of routine, preventive care, including nurse practitioners (NP), physician assistants (PA), and clinical nurse specialists. The ratio of Other Primary Care Providers in Lake County is better (1,311 patients: 1 provider) than the state average (1,770 patients: 1 provider).



**FIGURE 29: PRIMARY CARE PROVIDER RATE, 2013-2016**

Source: County Health Rankings, 2013-2016

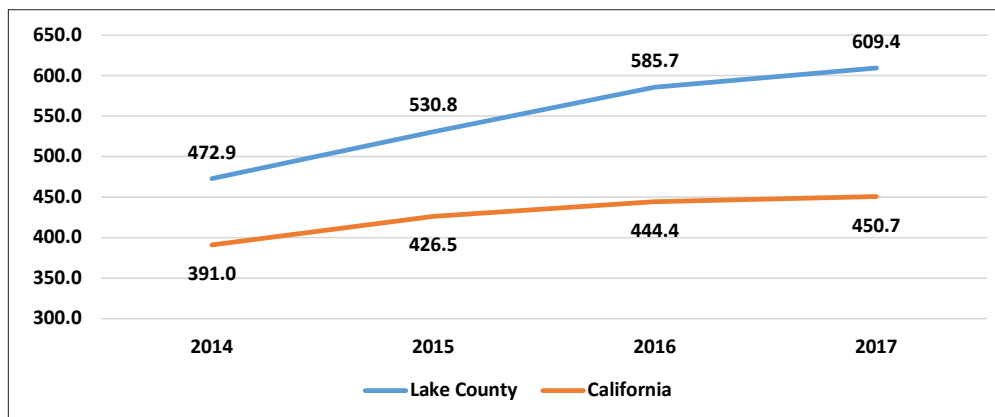
### 4.3 **CRIME AND SAFETY PROFILE**

Violence impacts the health of individuals, families, and communities; safe communities that provide opportunities to be active and eat well support people in making healthy choices. Crime ridden communities increase incidence of childhood trauma, impacting lifelong health. Safe neighborhoods that are free of crime help to create opportunities for healthy eating and active living. Creating these opportunities in all neighborhoods will help to reduce health disparities within Lake County.

Based on data from Uniform Crime Reporting (UCR) Program provided by County Health Rankings, Lake County reported 535 violent crime offenses per 100,000 population between 2014 and 2016. Figure 30 looks at violent crime rate in Lake County compared to the state of California. There is a rising trend of violent crimes, with 472.9 crimes per 100,000 population in 2014, rising to 609.4 violent crimes per 100,000 population in 2017. California has a lower violent crime rate in comparison, however both rates are moving in the upward direction.

The rate of homicides in Lake County was 11 per 100,000 population between 2011 and 2017. In 2017, The California Department of Justice reported 221 violent crimes in Lake County. Of those crimes, 6 were attributed to homicides, 26 were rapes and 180 crimes were due to aggravated assault, which includes the use of weapons, such as firearms (Lake Co. Sheriff's Department, 2017). There is also a rising, significant trend for substantiated child abuse in Lake County. Based on the Child Welfare Dynamic Report System, in 2017, there were 9.9 cases per 1,000 children, which is higher than the California average of 7.5 and the national average of 9.1. This incorporates several types of child abuse, including physical, sexual, and emotional abuse. There are 12.2 children in Foster Care per 1,000 children in Lake County (California Department of Public Health, 2017-2018).

FIGURE 30: VIOLENT CRIME RATE PER 100,000 POPULATION, 2014-2017



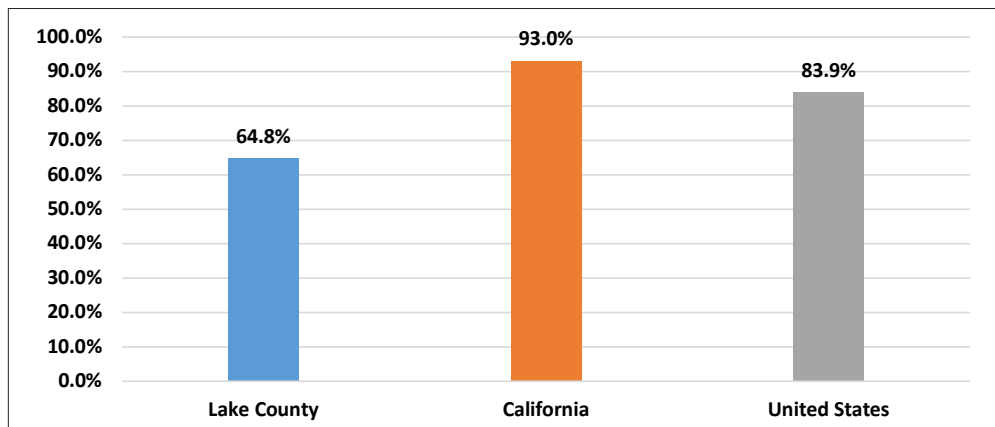
Source: California Department of Justice, 2014-2017

### 4.4 BUILT ENVIRONMENT PROFILE

Communities that are designed to be walkable provide health, social and economic benefits. Safe neighborhoods and workplaces make communities healthier because residents are more likely to walk and bike to work and school to improve their fitness and overall health. Healthy communities are marked with adequate public places to play and be active, access to affordable healthy foods, and streetscapes designed to prevent injury. Proximity to exercise opportunities, such as parks and recreation facilities, has been linked to an increase in physical activity among residents, which is important for enhancing quality of life and improve life expectancy. Moreover, it reduces the risk of cardiovascular disease, diabetes, and some cancers.

Figure 31 depicts the percentage of individuals who live reasonably close to a park or a recreational facility in Lake County compared to the state and national values. In 2015, only 45% percent of Lake County population lived within a half mile of a park (Centers for Disease Control and Prevention, 2015). In 2019, 64.8% of residents in Lake County reported having access to exercise opportunities. This proportion is less than the state and national values of 93% and 83.9%.

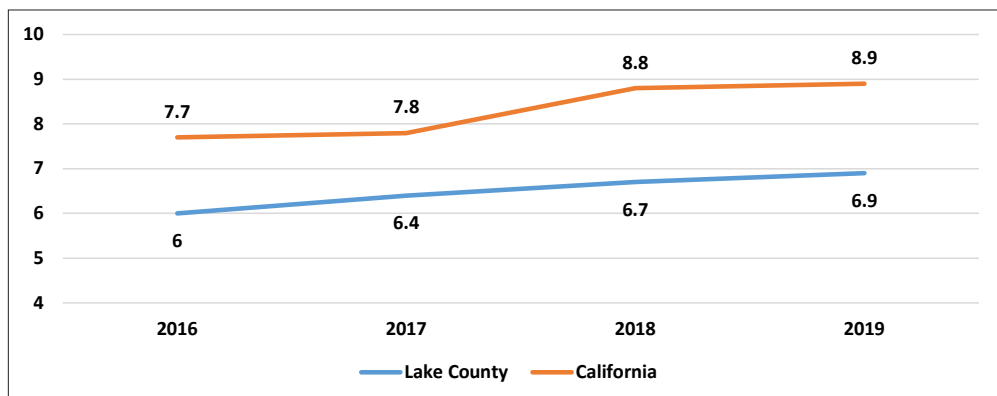
FIGURE 31: ACCESS TO EXERCISE OPPORTUNITIES, 2019



Source: County Health Rankings, 2019

Figure 32 shows the trend over four years of Food Environment Index values in Lake County and California. The Food Environment Index combines two measures of food access - the percentage of the population that is low income and has low access to a grocery store and the percentage of the population that does not have access to a reliable source of food. Index scores range from 0 to 10, with 0 being the worst and 10 being the best. Looking at the graph below, Lake County, overall, has a lower Food Environment Index than the state. However, the Index score trend is rising, with a score of 6 in 2016 and a score of 6.9 in 2019. In comparison, California has a score of 7.7 in 2016 and 8.9 in 2019.

**FIGURE 32: FOOD ENVIRONMENT INDEX, 2016-2019**



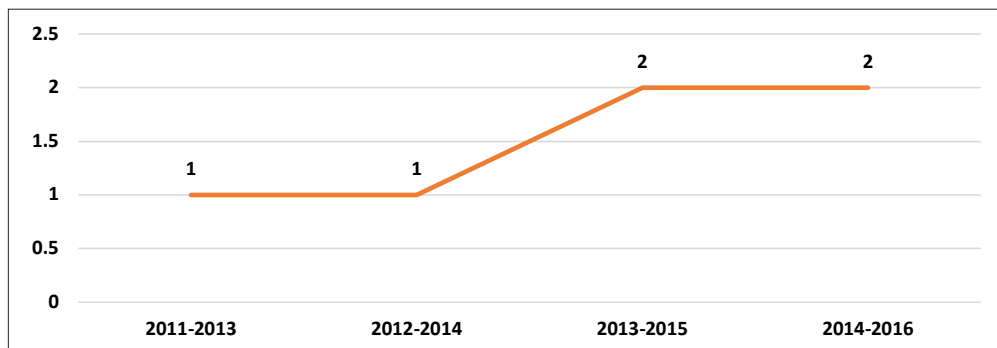
Source: County Health Rankings, 2019

### 4.5 ENVIRONMENTAL PROFILE

Health also requires that all environments, including homes, schools, communities and worksites, have clean air and water and are free from toxins and physical hazards. A healthy environment gives people the opportunity to make healthy choices and decrease their risk for heart disease, cancer, low birth weight and premature deaths and respiratory diseases such as asthma.

Figure 33 shows the trend of particle pollution in Lake County from 2011-2013 to 2014-2016. The Air Quality Index scores on a scale of 1 to 5, with 1 denoted as good air quality and 5 as poor air quality. Overall, the Lake County value is increasing with an upward trend from 1 to 2 between 2012-2014 and 2013-2015.

**FIGURE 33: ANNUAL PARTICLE POLLUTION, 2011-2016**



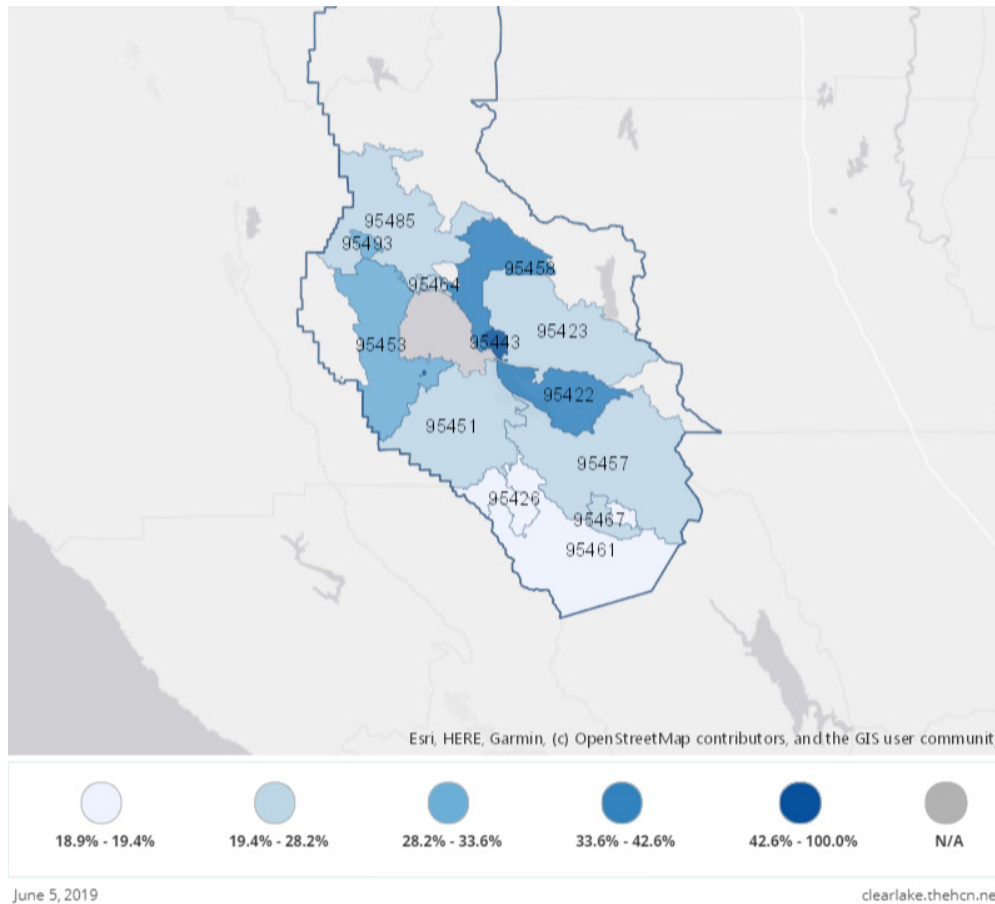
Source: American Lung Association, 2014-2016

Particulate Matter 2.5 levels (very small particles from vehicle tailpipes, tires and brakes, power plants, factories, burning wood, construction dust, and many other sources) above 12.0µg/m<sup>3</sup> are considered dangerous to human health. In 2016, the annual level of PM2.5 in Lake County was 3 µg/m<sup>3</sup> (Centers for Disease Prevention and Control, 2019).

**4.6 SOCIAL PROFILE**

People over age 65 who live alone may be at risk for social isolation, limited access to support, or inadequate assistance in emergency situations. Many older people who live alone are vulnerable due to social isolation, poverty, disabilities, lack of access to care, or inadequate housing. The proportion of the population 65 and over that live alone in Lake County is 30.3%. This is higher than the California value (22.8%) and the US Value (26.2%). By zip code, the region with the highest number of individuals 65 and over living alone is 95435 (100%). 95443 also falls into the upper quartile at 49.5% (Figure 34).

**FIGURE 34: PEOPLE 65+ LIVING ALONE**

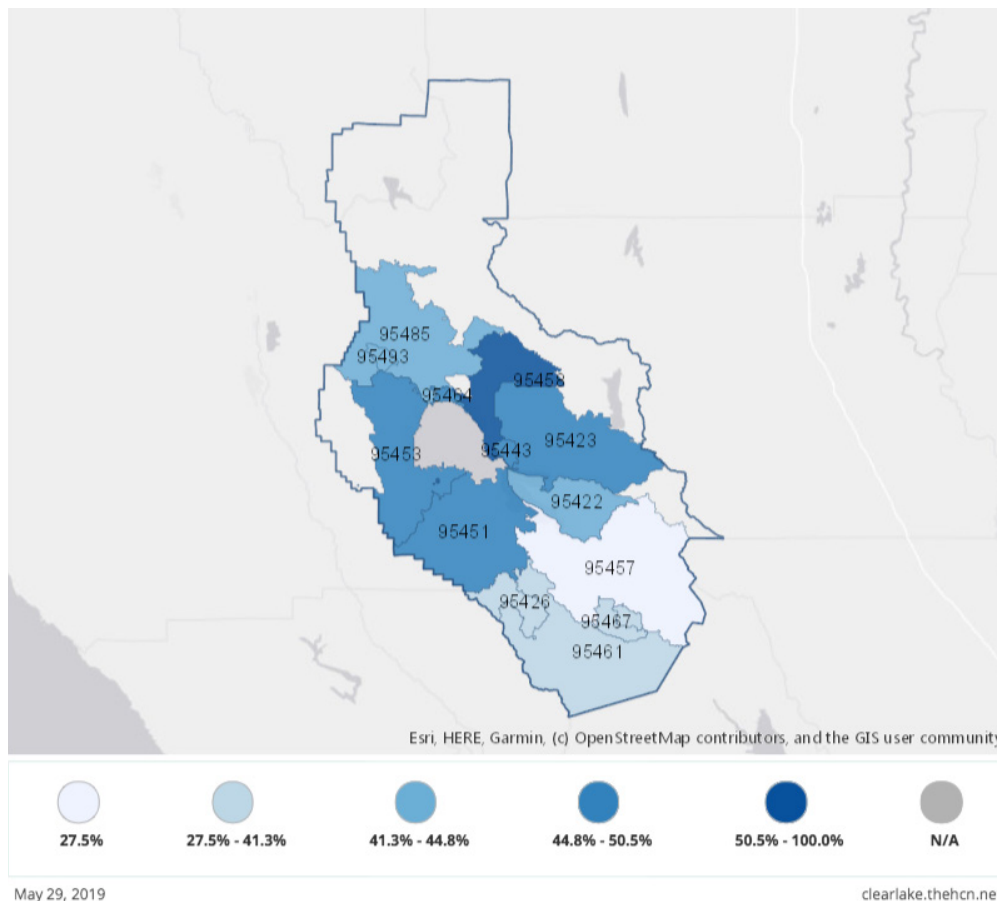


Source: American Community Survey, 2013-2017

SECTION 4 **METHODOLOGY**

In 2013-2017, 45.3% of individuals aged 65 and over were living with a disability in Lake County. This is higher than the California value (35.6%) and the US value (35.5 %). Examining poverty rates broken up by zip code, the highest proportion of individuals aged 65 and over with a disability was in 95435 at 100%. 95458 also falls in the upper quartile at 55.6% (Figure 35).

**FIGURE 35: ADULTS 65+ WITH DISABILITY**

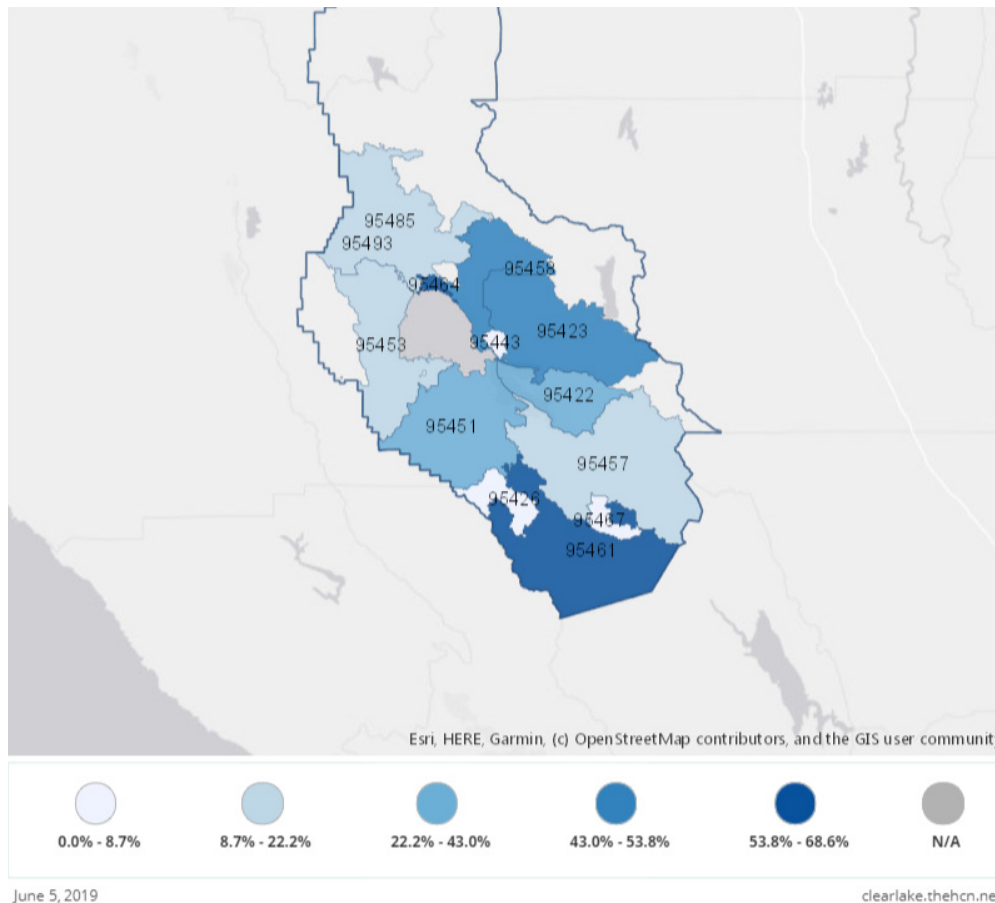


Source: American Community Survey, 2013-2017

In 2013-2016, according to the California Health Interview Survey, 49.1% of adults were living with a disability in Lake County. This is higher than the California value (29.7%) and the US value (20.6%). The trend steadily rose from 2013 to 2015, up to 53.4% with a small drop in 2016.

People with a disability are more likely to live in poverty, as compared to the rest of the population. Without adequate income, individuals with disabilities may not be able to afford necessary expenses, such as rent or mortgage, utility bills, medical and dental care, and food. The percent of the population living in poverty with a disability in Lake County was 37.1 which is greater than the California value 25.5 and US value 27.1. By zip code, the region with the greatest proportion of the population living in poverty with a disability is 95464 at 68.6%. Closely after is 95461 at 65.7% (Figure 36).

**FIGURE 36: PERSONS WITH DISABILITY LIVING IN POVERTY, 2013-2017**



Source: American Community Survey, 2013-2017

### **4.7 CLINICAL PROFILE: HOSPITALIZATION AND EMERGENCY ROOM UTILIZATION RATES**

Collected through the California Office of Statewide Health Planning and Development, the tables below identify Hospitalization and Emergency Room (ER) Utilization rates for 2013-2015 in Lake County. Table 5 shows the preventable emergency room visits and hospitalizations for clinical outcomes which are potentially preventable diseases through access to high-quality outpatient care. The table provides the Lake County value as well as the zip code with the highest ER visit rate or hospitalization rate for each indicator. Age-Adjusted ER Rate (ER visit per 10,000 population) due to Mental Health (202.7), Urinary Tract Infections (167.7), Dental Problems (154.4), Adolescent Suicide and Intentional Self-inflicted Injury (91.3), COPD (78.7) and Pediatric Asthma (72.5) are the highest for Lake County.

Table 5 displays the total number of hospitalization and emergency room utilization indicators by zip code. Based on the tables below, Clearlake (95422) is the most heavily impacted, with 17 indicators displaying high rates in this zip code. The topics include indicators related to mental health, substance abuse, heart disease, and respiratory diseases. Following 95422 is Clearlake Oaks (95423) and Upper Lake (95485) with 5 indicators each.

**TABLE 5: HOSPITALIZATION AND EMERGENCY ROOM UTILIZATION INDICATORS BY ZIP CODE, CALIFORNIA OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT, 2013-2015**

<b>HOSPITALIZATION AND EMERGENCY ROOM UTILIZATION INDICATORS BY ZIP CODE</b>				
<b>Health Indicator</b>	<b>Units</b>	<b>Lake County Value</b>	<b>Zip Code</b>	<b>Value</b>
Age-Adjusted ER Rate due to Mental Health	ER visits/ 10,000 population 18+ years	202.7	95422	316.3
Age-Adjusted ER Rate due to Urinary Tract Infections	ER visits/ 10,000 population 18+ years	167.7	95423	236.5
Age-Adjusted ER Rate due to Dental Problems	ER visits/ 10,000 population	154.4	95458	232.1
Age-Adjusted ER Rate due to Adolescent Suicide and Intentional Self-inflicted Injury	ER visits/ 10,000 population aged 12-17	91.3	95422	157.9
Age-Adjusted ER Rate due to COPD	ER visits/ 10,000 population 18+ years	78.7	95422	136.7
Age-Adjusted ER Rate due to Pediatric Asthma	ER visits/ 10,000 population under 18 years	72.5	95464	147.8
Age-Adjusted ER Rate due to Community Acquired Pneumonia	ER visits/ 10,000 population 18+ years	69.8	95422	115.1
Age-Adjusted ER Rate due to Pediatric Mental Health	ER visits/ 10,000 population under 18 years	69.4	95423	164.8
Age-Adjusted ER Rate due to Asthma	ER visits/ 10,000 population	66.9	95422	104.3
Age-Adjusted Hospitalization Rate due to Mental Health	hospitalizations/ 10,000 population 18+ years	66	95458	110.8
Age-Adjusted ER Rate due to Adult Asthma	ER visits/ 10,000 population 18+ years	65	95422	109.4
Age-Adjusted ER Rate due to Alcohol Use	ER visits/ 10,000 population 18+ years	56.6	95464	97.5
Age-Adjusted ER Rate due to Suicide and Intentional Self-inflicted Injury	ER visits/ 10,000 population 18+ years	52.6	95422	87.3
Age-Adjusted ER Rate due to Diabetes	ER visits/ 10,000 population 18+ years	51.3	95485	111.6
Age-Adjusted ER Rate due to Substance Use	ER visits/ 10,000 population 18+ years	41.2	95422	64.4
Age-Adjusted ER Rate due to Dehydration	ER visits/ 10,000 population 18+ years	39.6	95422	61.2
Age-Adjusted ER Rate due to Heart Failure	ER visits/ 10,000 population 18+ years	34	95422	52
Age-Adjusted Hospitalization Rate due to Heart Failure	hospitalizations/ 10,000 population 18+ years	31.8	95458	49.9
Age-Adjusted Hospitalization Rate due to Pediatric Mental Health	hospitalizations/ 10,000 population under 18 years	31.1	95423	130.7
Age-Adjusted Hospitalization Rate due to Community Acquired Pneumonia	hospitalizations/ 10,000 population 18+ years	30.6	95422	49.8
Age-Adjusted ER Rate due to Hypertension	ER visits/ 10,000 population 18+ years	29.8	95457	42.9
Age-Adjusted Hospitalization Rate due to Diabetes	hospitalizations/ 10,000 population 18+ years	29.4	95485	73.1

SECTION 4 **METHODOLOGY**

Health Indicator	Units	Lake County Value	Zip Code	Value
Age-Adjusted Hospitalization Rate due to Adolescent Suicide and Intentional Self-inflicted Injury	hospitalizations/ 10,000 population aged 12-17	22.1	N/A	N/A
Age-Adjusted Hospitalization Rate due to COPD	hospitalizations/ 10,000 population 18+ years	20.1	95422	34.3
Age-Adjusted ER Rate due to Long-Term Complications of Diabetes	ER visits/ 10,000 population 18+ years	18.6	95485	39.9
Age-Adjusted Hospitalization Rate due to Suicide and Intentional Self-inflicted Injury	hospitalizations/ 10,000 population 18+ years	17.3	95423	40.6
Age-Adjusted Hospitalization Rate due to Short-Term Complications of Diabetes	hospitalizations/ 10,000 population 18+ years	16	95485	46.7
Age-Adjusted Hospitalization Rate due to Alcohol Use	hospitalizations/ 10,000 population 18+ years	13.4	95426	29
Age-Adjusted Hospitalization Rate due to Dehydration	hospitalizations/ 10,000 population 18+ years	13	95422	20.6
Age-Adjusted Hospitalization Rate due to Urinary Tract Infections	hospitalizations/ 10,000 population 18+ years	12.9	95422	18.7
Age-Adjusted Hospitalization Rate due to Long-Term Complications of Diabetes	hospitalizations/ 10,000 population 18+ years	12.3	95485	26.5
Age-Adjusted ER Rate due to Short-Term Complications of Diabetes	ER visits/ 10,000 population 18+ years	10.2	N/A	N/A
Age-Adjusted ER Rate due to Immunization-Preventable Pneumonia and Influenza	ER visits/ 10,000 population 18+ years	9.6	95453	11.3
Age-Adjusted Hospitalization Rate due to Substance Use	hospitalizations/ 10,000 population 18+ years	9.5	95422	15.1
Age-Adjusted Hospitalization Rate due to Adult Asthma	hospitalizations/ 10,000 population 18+ years	9.1	95457	50.5
Age-Adjusted Hospitalization Rate due to Asthma	hospitalizations/ 10,000 population	8.5	95457	39.2
Age-Adjusted ER Rate due to Uncontrolled Diabetes	ER visits/ 10,000 population 18+ years	6.3	95423	13.6
Age-Adjusted Hospitalization Rate due to Hepatitis	hospitalizations/ 10,000 population 18+ years	4	N/A	N/A
Age-Adjusted ER Rate due to Hepatitis	ER visits/ 10,000 population 18+ years	2.7	N/A	N/A
Age-Adjusted Hospitalization Rate due to Hypertension	hospitalizations/ 10,000 population 18+ years	2.4	95422	4.6
Age-Adjusted Hospitalization Rate due to Immunization-Preventable Pneumonia and Influenza	hospitalizations/ 10,000 population 18+ years	1.4	N/A	N/A
Age-Adjusted Hospitalization Rate due to Uncontrolled Diabetes	hospitalizations/ 10,000 population 18+ years	0.8	N/A	N/A
Age-Adjusted Hospitalization Rate due to Pediatric Asthma	hospitalizations/ 10,000 population under 18 years	6.9	95422	12.9

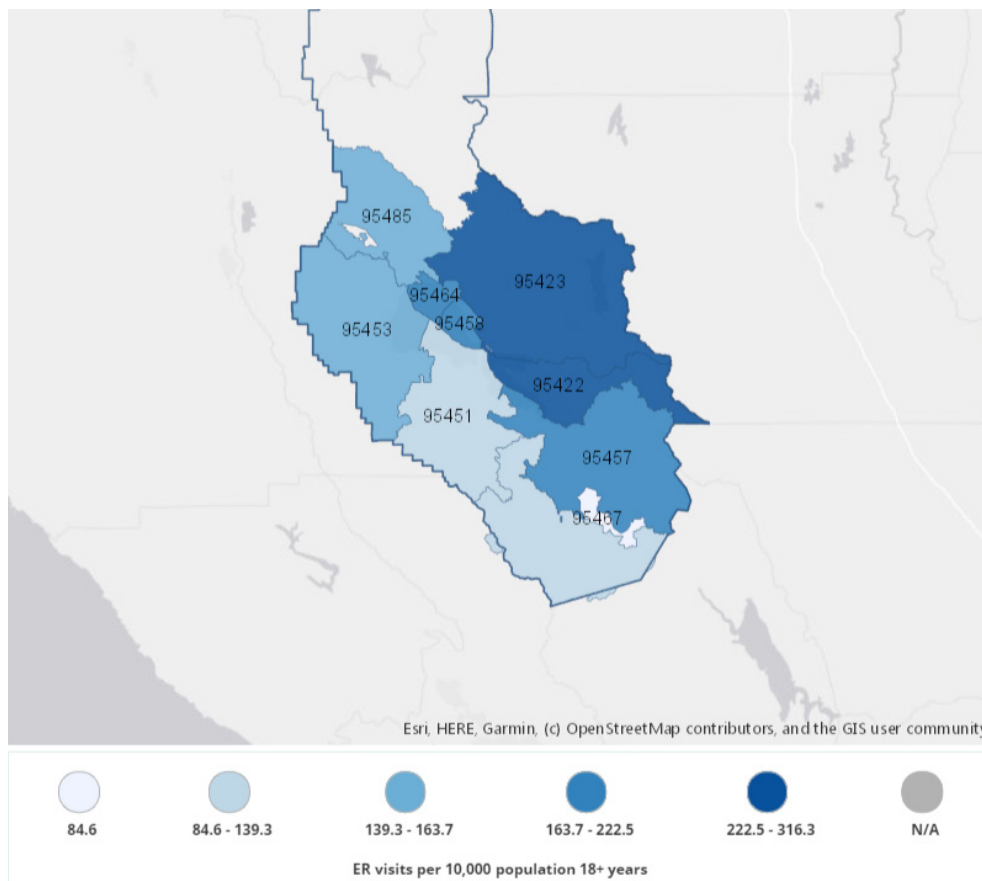


**TABLE 6: NUMBER OF HOSPITALIZATION INDICATORS BY ZIP CODE WITH HIGHEST RATE, CALIFORNIA OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT, 2013-2015**

ZIP CODE	HOSPITALIZATION INDICATOR COUNT
95426	1
95453	1
95464	2
95458	3
95457	3
95485	5
95423	5
95422	17

Figure 37 shows the Age-Adjusted ER Rate due to Mental Health in Lake County, by zip code. The overall rate in Lake County is 202.7 ER visits per 10,000 population. In comparison, 95422 has the highest rate in Lake County with 316.3 ER visits due to Mental Health per 10,000 population. This indicator had the highest county and zip code rates among all the hospitalization indicators and it had one of the greatest differences — of 113.6 ER visits per 10,000 population — between the overall county value and the highest zip code value. Other zip codes in the upper quartile include 95423 (268.9 ER visits per 10,000 population).

**FIGURE 37: AGE-ADJUSTED ER RATE DUE TO MENTAL HEALTH, 2013-2015**



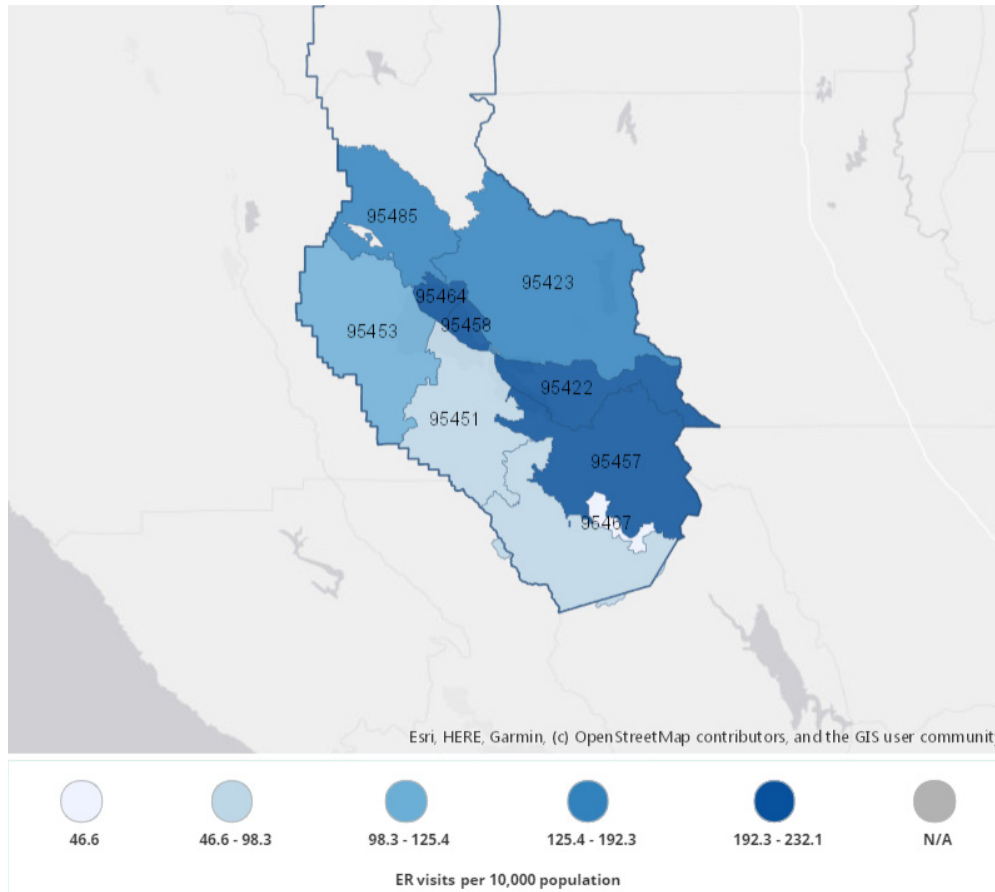
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Source: California Office of Statewide Health Planning and Development, 2013-2015

Figure 38 shows the Age-Adjusted ER Rate due to Dental Problems in Lake County, by zip code. The overall rate in Lake County is 154.4 ER visits per 10,000 population. In comparison, 95458 has the highest rate in Lake County with 232.1 ER visits due to Dental Problems per 10,000 population. This indicator had one of the largest differences between the overall county value and the highest zip code value of 77.7 ER visits per 10,000 population. Other zip codes in the upper quartile include 93033 (31.7 ER visits per 10,000 population) and 93036 (27.8 ER visits per 10,000 population).

**FIGURE 38: AGE-ADJUSTED ER RATE DUE TO DENTAL PROBLEMS, 2013-2015**



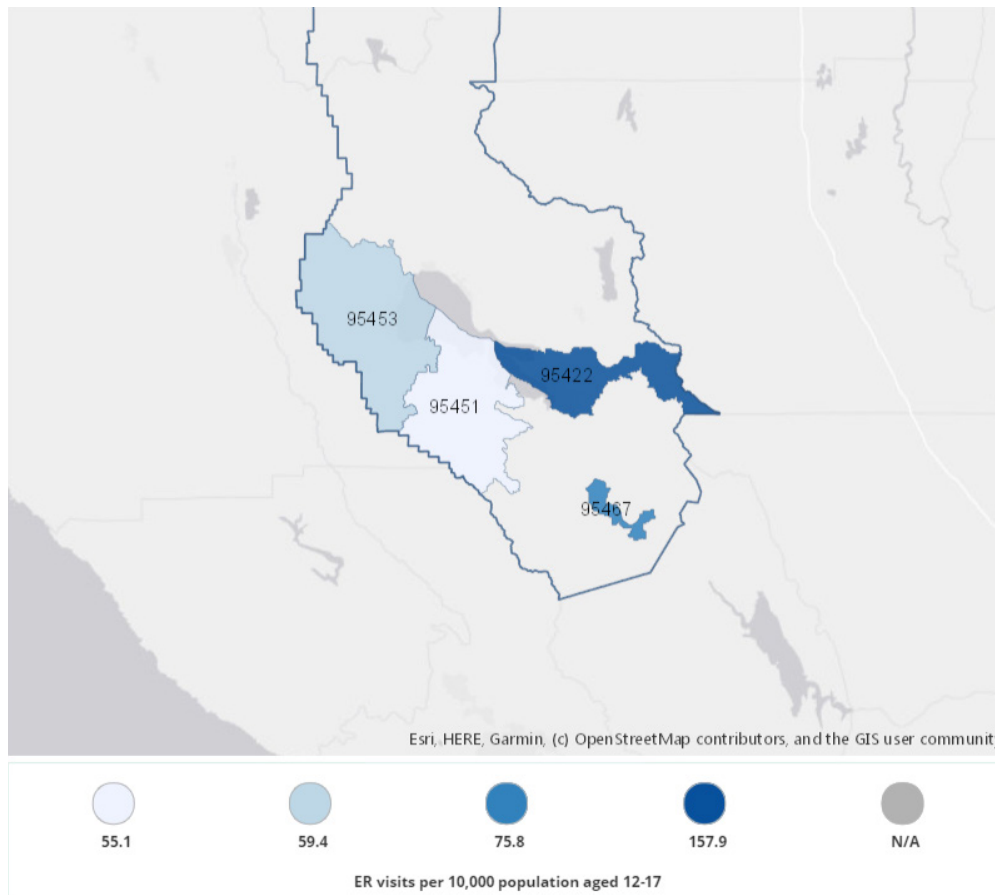
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Source: California Office of Statewide Health Planning and Development, 2013-2015

Figure 39 shows the Age-Adjusted ER Rate due to Adolescent Suicide and Intentional Self-Inflicted Injury in Lake County, by zip code. The overall rate in Lake County is 91.37 ER visits per 10,000 population in the age group 12-17 years. In comparison, 95422 has the highest rate in Lake County with 157.9 ER visits. This indicator had the highest county and zip code rates among all the hospitalization indicators and it had one of the largest differences between the overall county value and the highest zip code value which is 66.6 ER visits per 10,000 population. Other zip codes in the second quartile include 95467 (75.8 ER visits).

**FIGURE 39: AGE-ADJUSTED ER RATE DUE TO ADOLESCENT SUICIDE AND INTENTIONAL SELF-INFLICTED INJURY, 2013-2015**



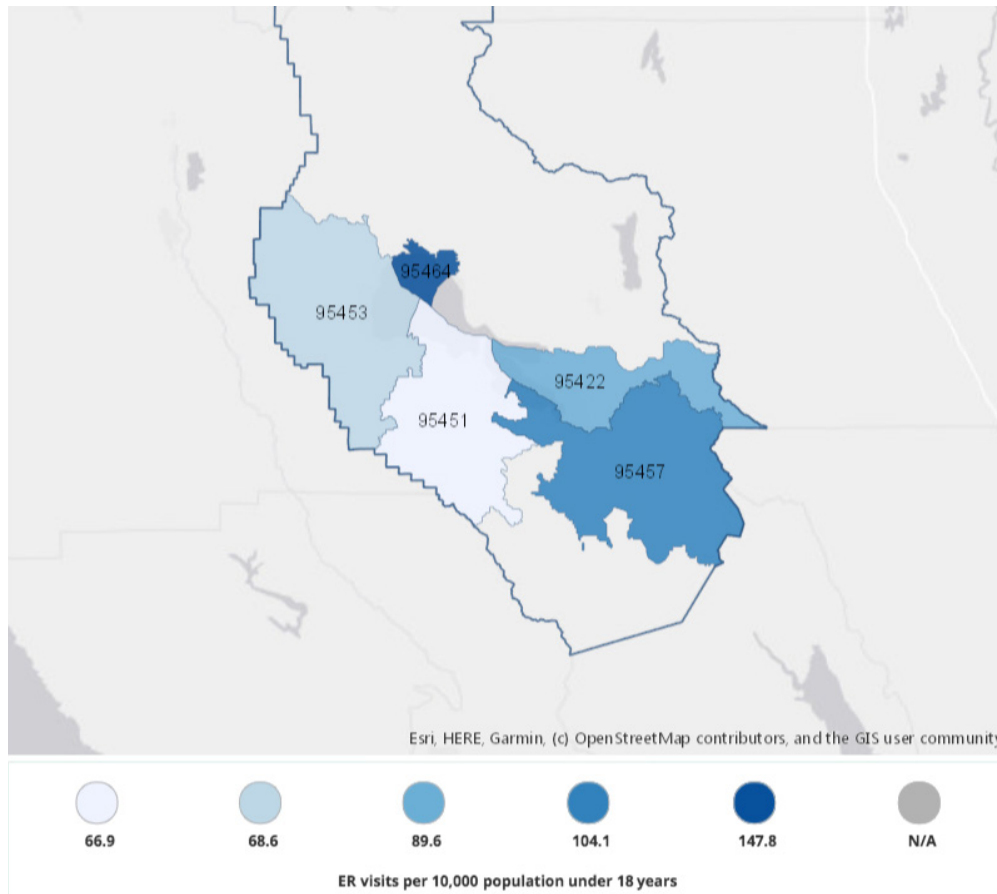
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Source: California Office of Statewide Health Planning and Development, 2013-2015

Figure 40 depicts age-adjusted ER rates due to Pediatric Asthma. Reducing exposure to poor housing conditions, traffic pollution, secondhand smoke and other factors impacting air quality can help prevent asthma and asthma attacks. Asthma is a manageable chronic disease for most with proper education, household allergen mitigation and self-management of treatment through inhalers. The overall county value for this indicator is 72.5 ER visits per 10,000 population. The region with the highest ER rate due to asthma is 95464, with a rate of 147.8 ER visits per 10,000 population. Zip codes in the upper quartile also include 93022, (26.7 ER visits per 10,000 population) and 93030 (25.1 ER visits per 10,000 population). In comparison to other indicators, ER rates due to Adult Asthma has the greatest disparity between the overall county value and the highest zip code value. This is indicative of strong disparities in prevalence related to race, access to treatment and mitigation techniques.

**FIGURE 40: AGE-ADJUSTED ER RATE DUE TO PEDIATRIC ASTHMA, 2013-2015**



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Source: California Office of Statewide Health Planning and Development, 2013-2015

## 4.8 HEALTH PROFILE

Life expectancy is a measure of population’s longevity and overall health. Americans born today can expect to live 78.6 years (Kochanek, Murphy, Xu, & Tejada-Vera, 2016); Californians live on an average for 81.5 years. Lake County residents born today can expect to live 74.5 years, 4.1 fewer years than the United States average and 7 fewer years than the state average. The life expectancy in Lake County is the lowest in the state. The life expectancy for Hispanics in Lake County is 80.2 and for Whites is 74.2 years. Life Expectancy takes into account the number of deaths in a given time period and the average number of people at risk of dying during that period, allowing a comparison of data across counties with different population sizes (County Health Rankings and Roadmaps, 2015-2017).

Mortality trends help to drive public health priorities. The 10 leading causes of age-adjusted death in Lake County from 2015-2017 were coronary heart disease, accidents (unintentional injuries), chronic lower respiratory disease, lung cancer, drug induced deaths, cerebrovascular disease chronic liver disease and cirrhosis, Alzheimer’s disease, colorectal cancer, and female breast cancer.

Table 7 & Figure 41 compares the leading causes of death in Lake County to those in California and in the United States. It also compares the most recent data to the previous count.

SECTION 4 **METHODOLOGY**

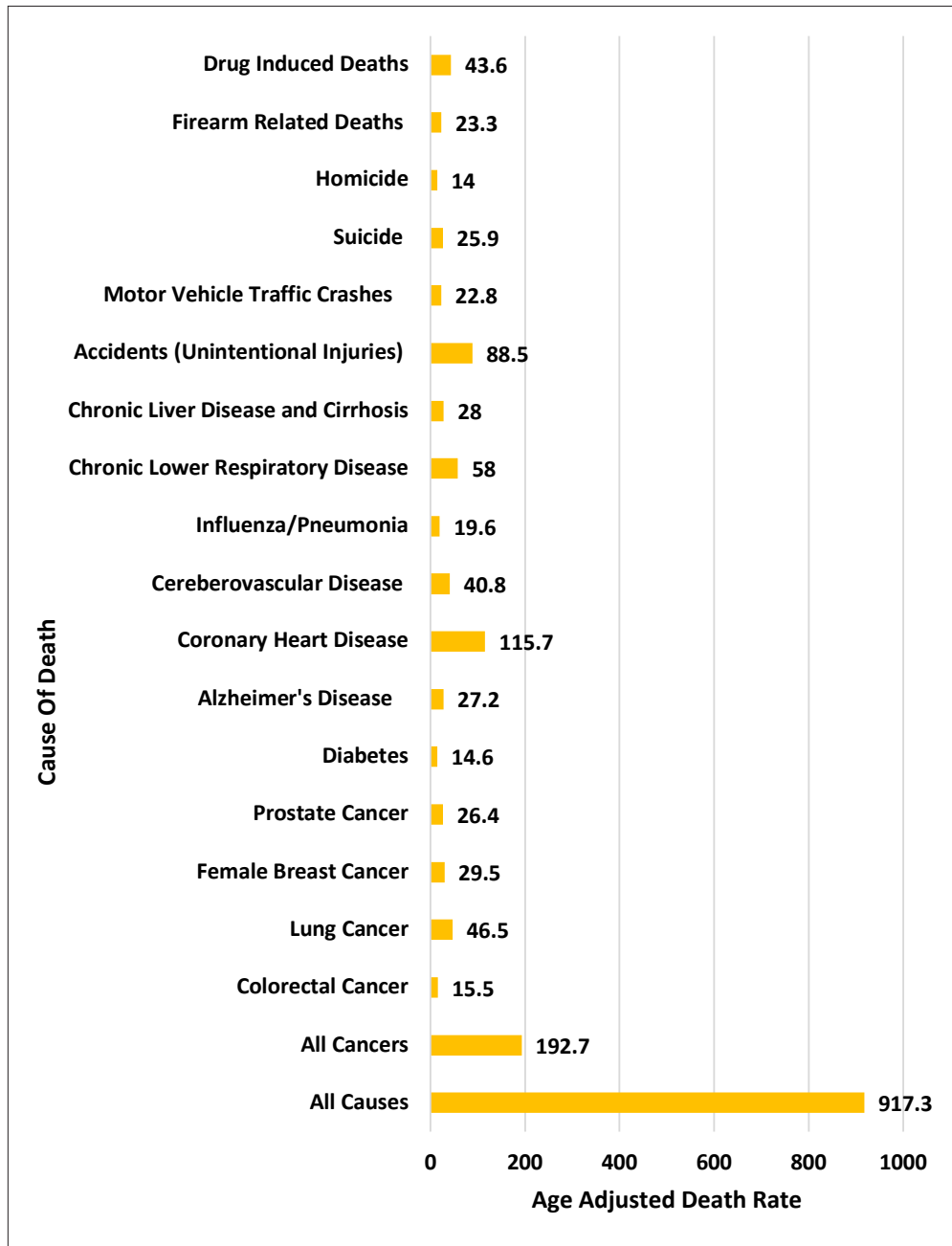
Cancer (combined) is the leading cause of death in both Lake County and California, but heart disease is the leading individual cause of death in the county. Per the National Center for Health Statistics, deaths due to heart disease have been declining since 1985, while deaths due to cancer have been on the rise; cancer is already the leading cause of death in 22 states in America including California. As the population is living longer, more people will be diagnosed with cancer; this is driving some of the shift in the mortality statistics. In Lake County, accidental death due to unintentional injuries is the 3rd leading cause of death. Chronic Liver Disease and Cirrhosis and colorectal cancer at the only two causes of death that have increased over the previous measuring period.

**TABLE 7: CAUSE OF DEATHS, LAKE COUNTY, 2014-2016**

RANK ORDER	HEALTH STATUS INDICATOR	AGE ADJUSTED DEATH RATE	2014-2016 DEATHS (AVERAGE)	CRUDE DEATH RATE	NATIONAL OBJECTIVE	AGE ADJUSTED CALIFORNIA CURRENT	COUNTY DEATH RATE PREVIOUS
58	All Causes	917.3	843.3	1,293.90	-	608.5	938.4
57	All Cancers	192.7	190.7	292.5	161.4	140.2	195.1
50	Coronary Heart Disease	115.7	109.7	168.3	103.4	89.1	131.6
57	Accidents (Unintentional Injuries)	88.5	65.3	100.2	36.4	30.3	86.8
52	Chronic Lower Respiratory Disease	58	59.7	91.5	a	32.1	71
55	Lung Cancer	46.5	47.7	73.1	45.5	28.9	53.1
58	Drug Induced Deaths	43.6	30.3	46.5	11.3	12.2	41.3
42	Cerebrovascular Disease	40.8	38.7	59.3	34.8	35.3	48.4
57	Chronic Liver Disease and Cirrhosis	28	24	36.8	8.2	12.2	21.5
23	Alzheimer's Disease	27.2	26.7	40.9	a	34.2	30.4
53	Colorectal Cancer	15.5 *	15.7	24.0 *	14.5	12.8	15
56	Female Breast Cancer	29.5 *	14	43.0 *	20.7	19.1	19.9 *
50	Prostate Cancer	26.4 *	12	36.8 *	21.8	19.6	23.2 *
15	Diabetes	14.6 *	14.7	22.5 *	b	20.7	18.6 *
54	Influenza/ Pneumonia	19.6 *	19	29.2 *	a	14.3	20.9 *
54	Motor Vehicle Traffic Crashes	22.8 *	15	23.0 *	12.4	8.8	25.8
53	Suicide	25.9 *	18.7	28.6 *	10.2	10.4	25.7 *
55	Homicide	14.0 *	8.3	12.8 *	5.5	5	9.4 *
54	Firearm Related Deaths	23.3 *	15.7	24.0 *	9.3	7.6	15.3 *

Source: California Department of Public Health; \*some of the rates presented are deemed unreliable based on fewer than 20 data elements

FIGURE 41: AGE-ADJUSTED DEATH RATE, LAKE COUNTY



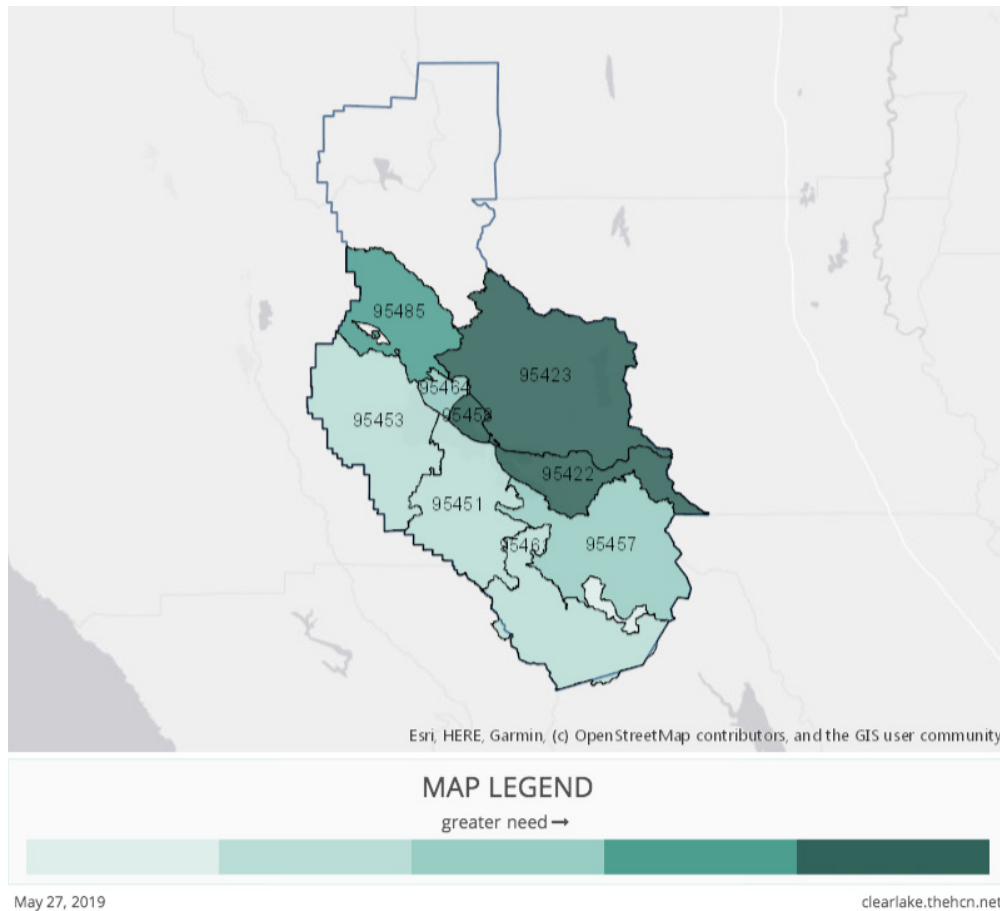
## SECTION 5

# DISPARITIES

### 5.1 SOCIONEEDS INDEX®

All communities can be described by various social and economic factors that are well known to be strong determinants of health outcomes, as discussed previously. Healthy Communities Institute developed the SocioNeeds Index® to easily compare multiple socioeconomic factors across geographies. This index incorporates estimates for six different social and economic determinants of health — income, poverty, unemployment, occupation, educational attainment, and linguistic barriers — that are associated with poor health outcomes including preventable hospitalizations and premature death. Within Lake County, zip codes are ranked based on their index value to identify the relative levels of need. Those geographic areas with the highest values (from 0-100) are estimated to have the highest socioeconomic need which can be correlated with preventable hospitalizations and premature death (Conduent HCI, 2019). Figure 42 shows that Clearlake (95422), Lucerne (95458), and Clearlake Oaks (95423) are the areas within the county that have the highest socioeconomic needs.



**FIGURE 42: SOCIONEEDS INDEX, LAKE COUNTY, 2019**

Source: Conduent Healthy Communities Institute, 2019

## 5.2 INDEX OF DISPARITY

Critical components in assessing the needs of a community are identifying barriers and disparities in health care. Additionally, the identification of barriers and disparities will help inform and focus strategies for addressing the prioritized health needs for Lake County. Healthy Communities Institute developed the Index of Disparity, a tool used to summarize disparities across groups within a population across all indicators.

The tables below identify secondary data health indicators with racial or ethnic disparities in Lake County. Table 8 lists the indicators with the greatest, statistically significant race/ethnicity disparities and highlights the groups that were impacted.

Table 9 displays the number of significant health indicators for each race/ethnic group. Black and African American populations are most negatively impacted in Lake County, with disparities in 14 indicators. This is followed by the American Indian / Alaska Native, which has disparities in 10 indicators, and the Hispanic/Latino population, with disparities in 7 indicators.

Upon further examination, the Black and African American population is predominately affected in topics related to poverty, diabetes, asthma, heart disease and nutrition. Among the significant health indicators, Age-Adjusted ER Rate due



to Adult Asthma has the highest disparity in Black or African American individuals, with 207.6 ER visits per 10,000 population. This is in comparison to the Lake County rate of 65 ER visits per 10,000 population. The American Indian or Alaska Native population is affected in topic areas such as poverty, diabetes, asthma, heart disease. Among the significant health indicators, Age-Adjusted ER rate due to Adult Asthma had the greatest disparity, with 65.9 ER visits per 10,000 population in the American Indian or Alaska Native Population. This is compared to the overall Lake County value of 65 ER visits per 10,000 population. The Hispanic or Latino population is affected in topic areas such as poverty, diabetes, asthma and nutrition. This population had the greatest disparity in the health indicator Adult Fast Food Consumption. 82.7% of Hispanic or Latino teens reported eating fast food in Lake County, compared to the overall county value of 48.5%.

**TABLE 8: INDICATORS WITH SIGNIFICANT RACE/ETHNIC DISPARITIES, 2013-2015**

SUBGROUP WITH MOST DISPARITIES	
Health Indicator	Groups with Disparities
Families Living Below Poverty Level	Black, Asian, American Indian or Alaska Native, Native Hawaiian or Pacific Islander, Multiple Races, Other Race, Hispanic or Latino
People Living Below Poverty Level	Black, Asian, American Indian or Alaska Native, Native Hawaiian or Pacific Islander, Other Race, Hispanic or Latino
Substantiated Child Abuse Rate	Black, American Indian or Alaska Native, Asian or Pacific Islander
Adults with Diabetes	Hispanic or Latino
Age-Adjusted ER Rate due to Long-Term Complications of Diabetes	Black, American Indian / Alaska Native, Hispanic / Latino
Age-Adjusted Hospitalization Rate due to Diabetes	Black, White, American Indian / Alaska Native
Age-Adjusted Hospitalization Rate due to Long-Term Complications of Diabetes	Black, American Indian / Alaska Native
Age-Adjusted Hospitalization Rate due to Asthma	Black, Hispanic / Latino
Age-Adjusted ER Rate due to Asthma	Black, White, American Indian / Alaska Native, Asian / Pacific Islander
Age-Adjusted ER Rate due to Adult Asthma	Black, White, American Indian / Alaska Native
Age-Adjusted Hospitalization Rate due to Adult Asthma	Black, Hispanic / Latino
Adult Fast Food Consumption	Black, Multiple Races, Hispanic / Latino
Adults Who Are Obese	Black
Age-Adjusted ER Rate due to Heart Failure	Black, American Indian / Alaska Native
Age-Adjusted ER Rate due to Hypertension	Black, American Indian / Alaska Native
Adults Who Ever Thought Seriously About Committing Suicide	White, Multiple Races

SECTION 5 **DISPARITIES**

**TABLE 9: COUNT OF DISPARITIES PER POPULATION SUBGROUP, 2013-2015**

SUBGROUP WITH MOST DISPARITIES	
Race/Ethnicity Group	Health Indicator Count
Black	14
American Indian / Alaska Native	10
Hispanic / Latino	7
White	4
Native Hawaiian / Pacific Islander	2
Multiple Races	3
Other Races	2
Asian	2



# PRIMARY DATA COLLECTION FOR COMMUNITY INPUT



## 6.1 COMMUNITY SURVEY

The source of all the figures included in this section is the Lake County Community Health Assessment Survey (2019), designed by Conduent HCI and disseminated by the partner members of the Hope Rising Lake County Community Health Needs Assessment Collaborative. A total of 708 responses were collected. The sample size met the conditions of 95% confidence interval and had a margin of error of 3.7%. This was a convenience sample, which means results may be vulnerable to selection bias. The results are generalizable to the population of Lake County.

According to key findings of the community input survey conducted, drug abuse was a county-wide health priority reported by populations across gender, age, and income groups. Mental health, alcohol misuse, and housing were pervasive in their impact and remained important priorities as well. Almost 56% of survey participants reported being sad or worried or finding day to day life difficult and were unable to function. Approximately one third of participants said lack of specialists prevented them from seeking healthcare. Costs of care and unavailability of appointments were also barriers. Connections to organizations that provide social needs and social support was a high demand from hospitals. Easy-to-follow instructions and having staff that could communicate in their language were areas of suggested improvements. Support and rehabilitation services for people who were re-entering communities after de-addiction, prison, or mental health treatment was the most needed service in the county. Almost 83% stated programs that provided job training to young people were very important; 73% stated programs for youth like Big Brothers, Big Sisters were strongly needed.

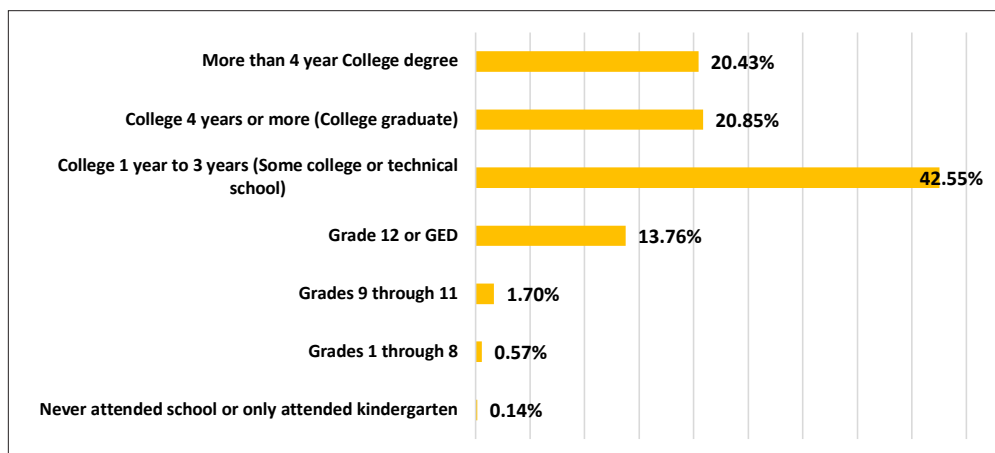
### Profile of Survey Participants

Of the total survey participants, 98.8% (696) spoke in English at home and 8.1% (57) were Spanish speakers. Survey participants were more likely to be female than male (78.4% female versus 20.4% male), have annual household incomes above \$50,000 (59.5%) and have 1-3 years of education (42.5%). The bulk of the survey participants were of White/Caucasian (79.6%) while the remainder were of Hispanic or Latino, American Indian or Alaskan Native, and Black or African American race/ethnicity (10.8%, 2.2%, and 0.57% respectively). The survey was able to reach most of the age-groups equally. Four different age groups (25-34, 35-44, 45-54, and 55-64) had nearly 20% representation in this survey with the highest group being 55-64 year olds at 22.2%. This is in keeping with the age profile of the community which has an older median age than the state average. The two age groups — 18-24 year olds (4%) and 75+ year olds (2.4%) — constituted the rest of the participants. Regarding regular healthcare, 73.3% of the survey participants have a regular physician; 12.26%

do not receive routine healthcare or use urgent care or Emergency Rooms (ER). Most of the participants have insurance coverage; 93.9% pay for health care with their insurance, 19.7% have Medi-Cal or Medicare and 6.61% pay with cash or other methods.

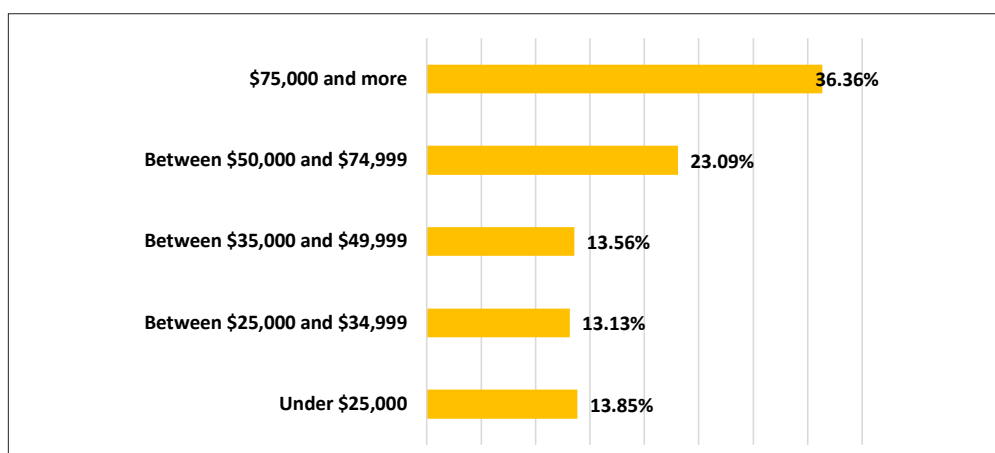
Figure 43 below shows the breakdown of survey participants by education attainment. Over 80% of the participants had achieved an education level higher than 1-3 years at college. The most had attended some college or technical school in the past (42.6%), followed by graduation with a college degree (at 20.9%), or an advanced degree (at 20.4%). The remaining participants included those who only had a high school diploma or GED (at 13.8%), and those who had less than a high school education, which was less than 3%.

FIGURE 43: EDUCATION ATTAINMENT OF SURVEY PARTICIPANTS



Nearly 60% of participants had total household income levels of greater than \$50,000 (Figure 44). Those earning \$75,000 or more had the greatest representation in this survey (36.4%), followed by those earning between \$50,000 and \$74,999 (23.1%). The following three income groups (those earning under \$25,000, those earning between \$25,000 and \$34,999, and those earning between \$35,000 and \$49,999) each represented roughly 13% of all survey participants.

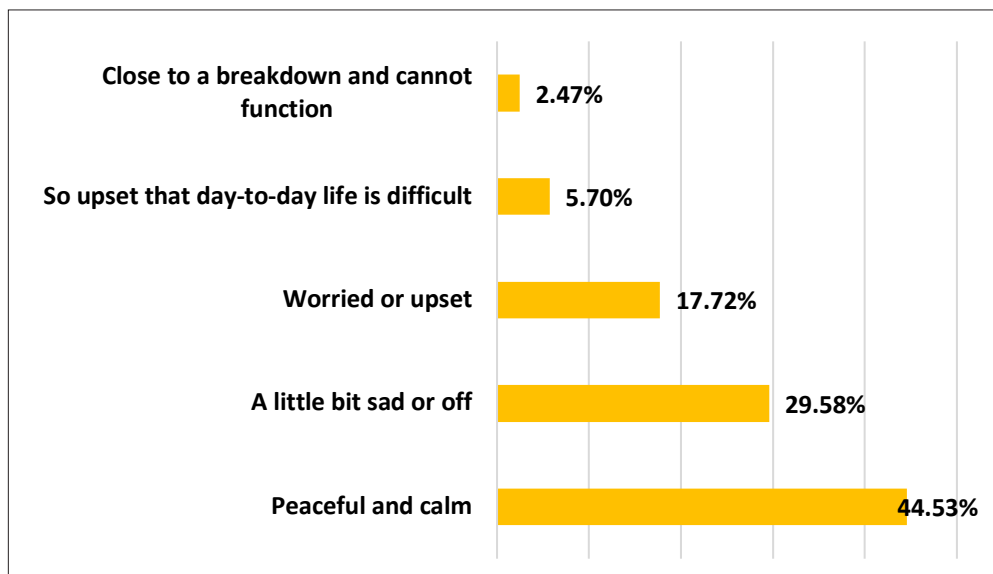
FIGURE 44: TOTAL HOUSEHOLD INCOME OF SURVEY PARTICIPANTS



The survey participants were asked to self-report on their physical and mental health. Perception of personal health is indicative of the quality of life in the community. About 75% of survey participants stated their physical health as either good (at 34.1%), very good (at 31%), or excellent (at 11.8%) in the past 30 days. Only 6% of participants stated their health to be poor, while 17.2% stated their health to be fair in the past 30 days.

However, the percentage of participants that reported poor mental health was higher (55.47%) than those that reported no mental health problems. Nearly 45% of survey participants felt mostly peaceful or calm in the past 30 days, encompassing the largest proportion of survey participants. However, 30% of participants mostly felt a little bit sad or off, while 17.7% of survey participants felt mostly worried or upset in the past 30 days. Approximately 2.5% of survey participants felt close to a breakdown or could not function in the past 30 days (Figure 45).

FIGURE 45: MENTAL HEALTH OF SURVEY PARTICIPANTS IN LAST 30 DAYS



### Key Findings

To understand the priority the survey participants placed on health in comparison to other issues that govern their life, they were asked what they worried about in the past 12 months. Nearly half of survey participants selected cost of utilities at 46.9%. In addition, roughly a third of survey participants selected the following issues as those that worried them in the past 12 months — cost of health care (35.6%), illegal and prescription drugs in the community (33.7%), and crime/violence (30.9%). Moreover, nearly a quarter survey participants also selected housing (27.4%) and employment availability (23.3%) as worrisome issues. Only 2.2% of survey participants selected lack of assistance with completing daily activities as an issue that worried them in the past 12 months.

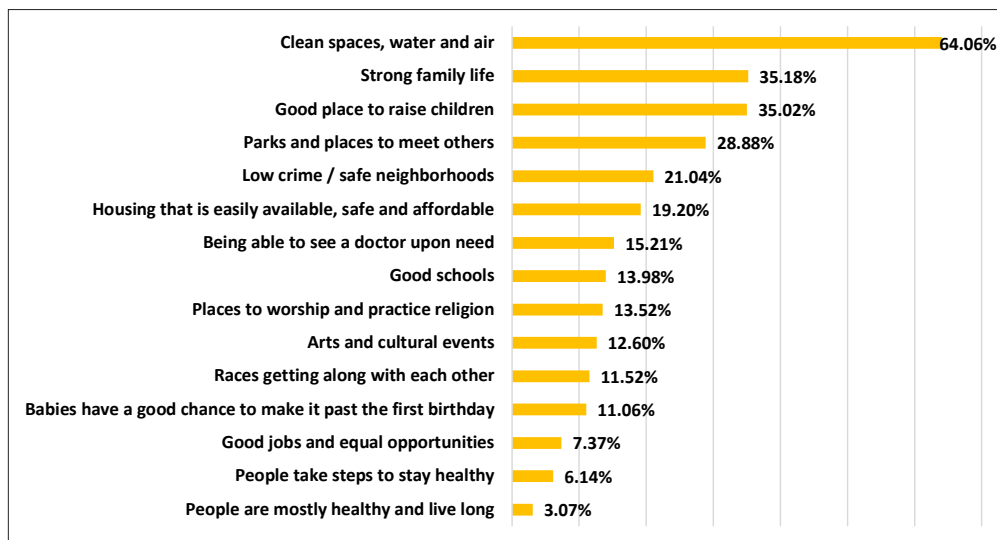
When asked to select three services that were needed more in Lake County, support for people re-entering communities after addiction, prison or mental health treatment was selected the most, by 43.9% of survey participants. The next three services that were selected by roughly a third of survey participants included job training or employment camps (36.2%), housing aid (35.7%), and crises and

counseling centers (33.9%). Survey participants also selected from several given examples of free resources as those that were needed in Lake County; these included free classes that teach people how to manage diseases (19.2%), free community exercise classes (18.4%), and free screenings and vaccinations (11.8%). Services of need that were selected the least by survey participants included programs to help stop smoking (8.4%) and meal assistance (8.2%).

Survey participants were asked to choose the three most important factors that make Lake County a good place to live. Figure 46 below show the top responses. Clean spaces, water and air received the most selections (at 64.1%), followed by a strong family life and being a good place to raise children (at roughly 35% each). Two other issues that were selected frequently by survey participants were parks and places to meet others (28.9%) and low crime/ safe neighborhoods (at 21%).

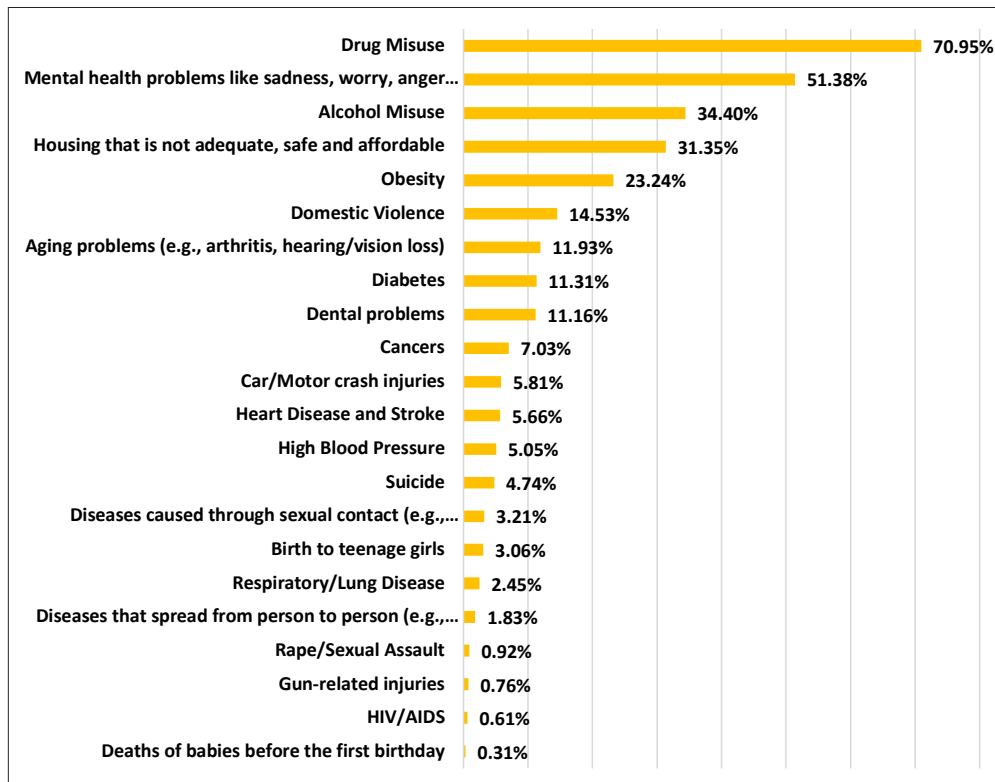
Issues that were clearly not salient features of the county were selected by only 10-16% of survey participants including being able to see a doctor upon need, good schools, places to worship and practice religion, arts and cultural events, races getting along with each other, and babies having a good chance to make it past their first birthday. Notably, the two issues that received the fewest selections were directly health-related - people take steps to stay healthy (at 6.1%) and life expectancy in Lake County, which is people are mostly healthy and live long (at 3.1%).

**FIGURE 46: THE FACTORS THAT MAKE LAKE COUNTY A GOOD COMMUNITY ACCORDING TO SURVEY PARTICIPANTS**



Survey participants were asked to choose the three most important health problems facing residents in Lake County (Figure 47). By far, drug misuse was selected the most participants (71%). Mental health was chosen by nearly half of the survey participants, while alcohol misuse and inadequate housing were selected by nearly a third of survey participants at 34% and 31%. Other issues that were selected frequently included — obesity (23.2%) and domestic violence (14.5%). Aging, diabetes, and dental problems were each selected by roughly 11% of survey participants. Conversely, less than 1% of survey participants selected rape/ sexual assault, gun-related injuries, HIV/ AIDS, or deaths of babies before their first birthday as the most important health problems in Lake County.

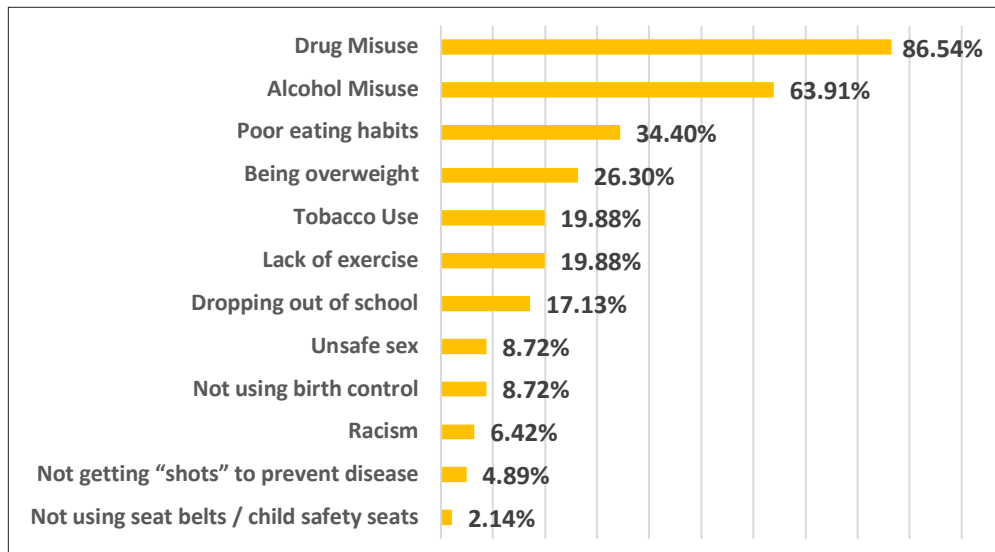
FIGURE 47: MOST IMPORTANT HEALTH PROBLEMS IN LAKE COUNTY ACCORDING TO SURVEY PARTICIPANTS



Participants were asked to select the three most important risky behaviors that have the greatest impact on the overall health of Lake County (Figure 48). Like in the previous question, drug misuse was selected by the vast majority of survey participants (86.5%), followed by alcohol misuse (63.9%). The next three issues receiving the most selections were obesity-related and included poor eating habits (34.4%), being overweight (26.3%), and lack of exercise (19.9%). Tobacco use was reported by 19.9% survey participants along with dropping out of school (17.1%). Conversely, less than 7% of survey participants selected racism, not getting shots to prevent disease, or not using seat belts as the most important risky behaviors in Lake County.

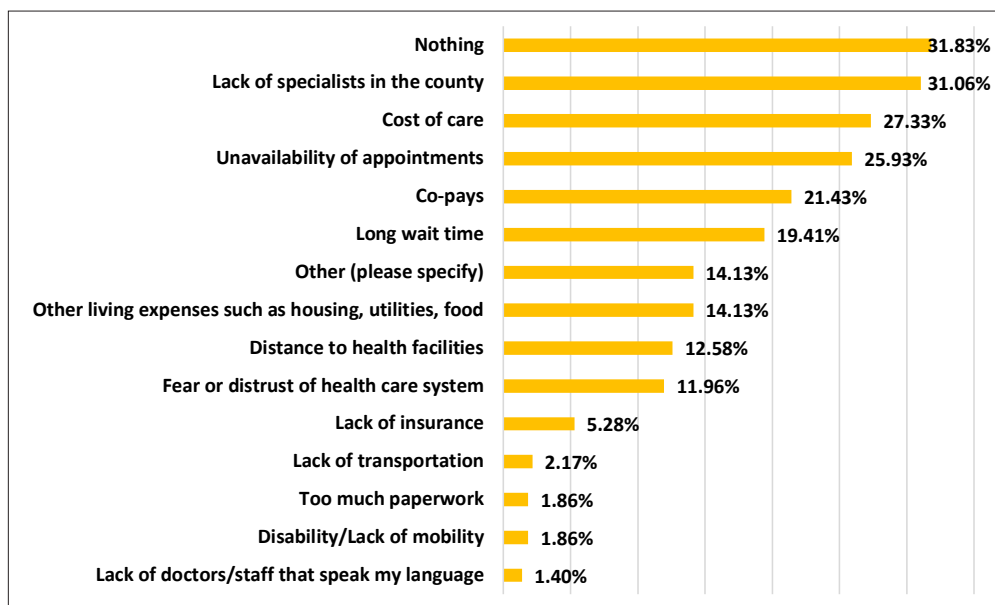


FIGURE 48: IMPORTANT RISKY BEHAVIORS THAT IMPACT HEALTH IN THE COUNTY ACCORDING TO SURVEY PARTICIPANTS



Survey participants were asked about their barriers to seeking health care (Figure 49). "Nothing" was selected most frequently by 31.8% but a lack of specialists in the county (31.1%) was selected by almost the same percentage. Other reasons that received selections from greater than 20% of survey participants were cost of care (27.3%), appointment unavailability (25.9%), and co-pays (21.4%). Long wait times (19.4%) and having a fear or distrust of the health care system (12%) were the other important barriers to healthcare reported by survey participants. Issues that received the fewest responses were— lack of transportation (at 2.2%), disability (at 1.9%), too much paperwork (at 1.9%), and lack of doctors/staff who speak in their language (at 1.4%).

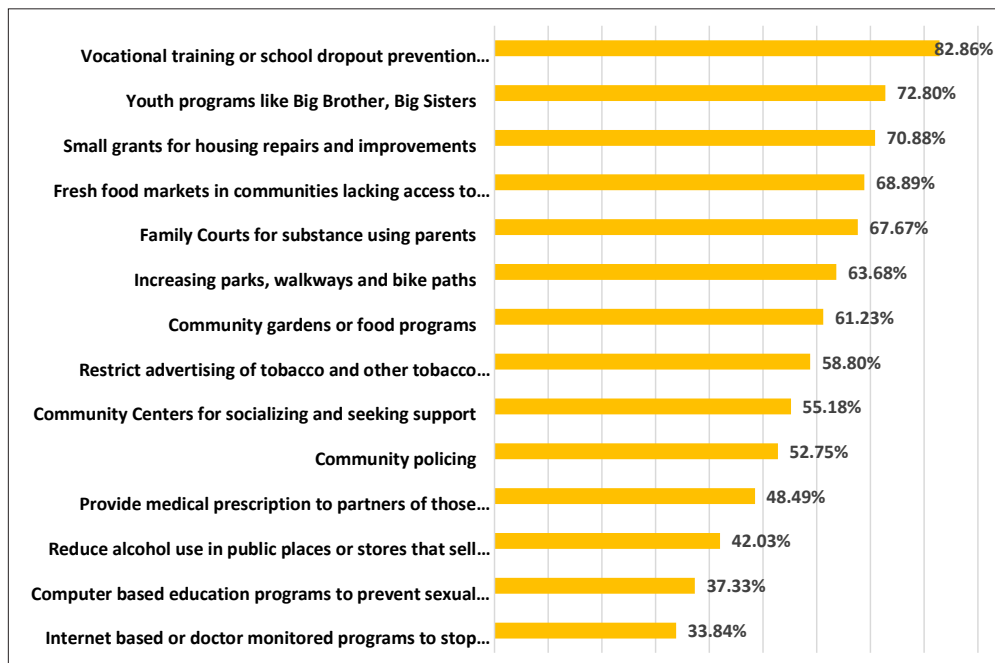
FIGURE 49: REASONS FOR NOT SEEKING HEALTHCARE ACCORDING TO SURVEY PARTICIPANTS





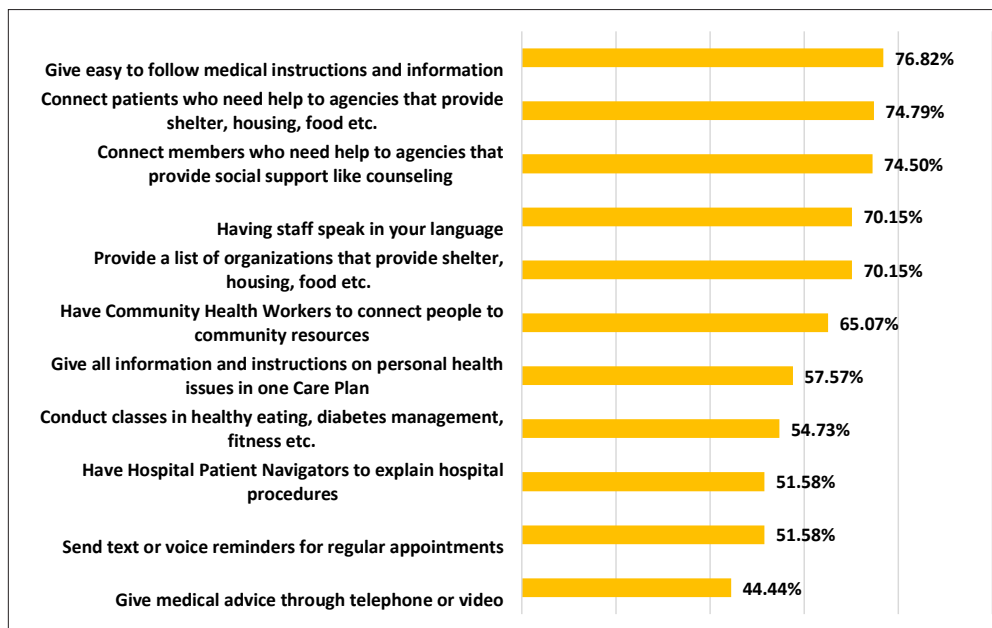
Survey participants were asked to rate the importance of programs that could tackle some of the health challenges of Lake County. Of all the programs, vocational training or dropout prevention programs for high risk students was ‘very important’ (82.9%), followed by youth programs like Big Brothers, Big Sisters (72.8%). Several programs were rated as ‘very important’ by 60-71% survey participants including—small grants for housing repairs (70.9%), fresh food markets (68.9%), family courts for substance using parents (67.7%), increasing parks, walkways and bike paths (63.7%), and community gardens or food programs (61.2%). Programs that were seen as ‘very important’ by the least percent were computer based education programs to prevent diseases passed through sexual contact (37.3%) and Internet based or doctor monitored programs to stop smoking with medicines or counseling (33.8%).

**FIGURE 50: ‘VERY IMPORTANT’ PROGRAMS NEEDED TO ADDRESS CURRENT HEALTH CHALLENGES ACCORDING TO SURVEY PARTICIPANTS**



Survey participants were asked to rate the many strategies or activities that local hospitals could implement to improve their quality of service to people of Lake County (Figure 51). After weighting the scores, the following three strategies had the highest weighted scores of 1.7 — giving easy to follow instructions and information, connecting patients who need help to agencies that provide shelter, housing, and food, and connecting members who need help to agencies that provide social support like counseling. The issues receiving the lowest weighted scores of 1.2 were having hospital patient navigators to explain hospital procedures, and giving medical advice through telephone or video.

FIGURE 51: 'VERY IMPORTANT' SERVICES THAT AREA HOSPITALS COULD DELIVER TO IMPROVE ACCORDING TO SURVEY PARTICIPANTS



## 6.2 KEY INFORMANT AND FOCUS GROUP DISCUSSION FINDINGS

One of the key objectives of this assessment was to engage the community, including vulnerable populations, physicians, and other service providers to share their perceptions on health needs for Lake County residents. Key informant interviews and focus group discussions helped to develop a deeper understanding for the reasons behind the health data seen in the previous sections. It served also to identify the high priorities for Lake County stakeholders. In the case of the key informants, the interviews touched upon many issues that were specific to their area of work, especially with vulnerable populations, whereas the focus group discussions with community members focused on age, race and/or gender issues related to accessing healthcare and barriers to access. Any findings, arising from the interviews and group discussion that pertain to prioritized health needs are discussed in SECTION 7: Data Synthesis and Prioritization.

Though Lake County was known widely to rank at the bottom of state county health rankings, key informants and community members expressed the sentiment that the county was changing for the better. The county was acknowledged to be close-knit, with a sense of pride and resilience that had seen the community through multiple fires and other natural disasters. One of the positive forces of change in recent times was the increased awareness of the county's poor health status and the increased attention by agencies like Wellville that brought fresh perspectives and resources to the county. Most people were hopeful that with new leadership and cross-sectional collaboration among agencies, the county outcomes were going to improve in the near future.

Among all key informants and group discussion members that issue that was high concern, cross-cutting and with the widest reaching implications was Barriers to Healthcare. It is discussed below in detail.

## 6.2.1 BARRIERS TO UTILIZING HEALTH CARE

Focus group participants and key informants reported many instances of county residents being unable to access healthcare in a timely manner, get the full range of services that they needed within the county, and get quality service which included an understanding of their cultural beliefs. Barriers mentioned by the participants are discussed below:

**Lack of Specialists and Appointments**

By far, the barrier to access that was mentioned with the highest frequency and the greatest intensity by all participants was the lack of specialists in the county. Because the county has fewer number of specialists and other providers, the long wait time for appointments either dissuaded patients from following up, forced them to access emergency rooms in case of acute health needs, or had them travel out of the county. To quote a focus group participant:

All these factors caused emotional and financial distress for patients and their families. The unavailability of providers and lack of timely care was mentioned by focus group participants and key informants as an issue that affected all county residents equally; it had less to do with income or coverage related disparities and more to do with the dearth of physicians. The lack of nephrologists and psychiatrists in the county was mentioned repeatedly and felt most acutely.

**Quality of Care**

Low face time with the doctor per patient, on top of prolonged wait times, had an effect of adding to patient dissatisfaction with the quality of care being received. Even when an appointment was made, the time spent by physicians on delivering care was not perceived to be sufficient, leaving the patient feeling as if they had not been heard and had passed through a revolving door at the physician office. Providers had their own compulsions because of the press of patients that they had to see to meet the demand.

**Lack of Services**

The capacity of the health care system in Lake County to provide services for all the needs of the county was cited to be insufficient; this was most true for dialysis and mental health related services. While acknowledging an improvement over the past few years, gaps in services and a lack of coordination between providers was still reported.

**“We can’t get referrals for anything but the big cities”**

—Older Woman group participant

**“You need three months to get into the clinic because it’s so back-logged”**

—Physician

**“There are wealthy people that need mental health and indigent people who need mental help here and they both have problems accessing it”**

—Hospital Physician

**“Quality of it is challenging once you get in the door because of the (few) number of providers”**

—Hospital Physician

**“If you want a specialist, the county is not there yet”**

—Older Woman group participant

**“You reach out for services and they don’t send you help. I know people are calling but no one is calling back, so it’s hard”**

—Tribal Member

### Transportation

Travel in Lake County was acknowledged by all to be challenging because of the terrain, the road conditions, and the Lake in the middle dividing the county into disconnected areas. Lake County Transit offers service on 6 routes within the county, but due to the distances and the frequency of service, transportation was one of the greatest challenges reported by County residents.

Given that most healthcare providers were located near Clearlake or Lakeport, this made physical access to healthcare providers difficult for residents of zip codes that were further away. The distance was felt acutely by certain minority communities and by the elderly and disabled as it was compounded by factors such as not having reliable personal vehicles or an ability to drive long distances. Often families are able to access gas funds but don't have a vehicle. Many participants mentioned that the low frequency of public transportation modes as well as lack of ride-share services (like Uber or Lyft) in the county were additional barriers. Local transportation in Lake County were reported to be underfunded and fluctuate in availability. Access to primary care was not mentioned as much in this regard as specialty care was.

**“We keep bad things out, but don't get a lot of good things in because of the inaccessibility to Clear Lake”**

—Hospital Physician

**“When people have no transportation and they need to go two counties over for an appointment, they stay undiagnosed”**

—Tribal Council Member

### Cost of Healthcare

There were several ways in which health coverage and accessing healthcare imposed financial stress on community members. While most participants had health coverage, either private or public, the high cost of health was felt through co-pays for procedures and treatments, cost of medication, cost of travel to provider, not having paid leave and loss of pay due to the time it took to be seen by a physician. This was especially true for those populations that were indigent or vulnerable and that had the least ability to absorb the financial burden.

The implications of not accessing care regularly due to cost of care — that there was a likelihood of poor health status or being diagnosed later — were known to group participants but not feared. There was a degree of optimism that whatever was in store would still be treatable at a later stage.

**“People are not making enough money to be able to use their health-care insurance”**

—Practice Manager

### Limited Clinic Hours

A common refrain among group discussion participants was that they wanted clinic to have extended hours of service beyond normal office hours.

The assessment revealed that there had been instances of hospital systems and providers offering extended clinic hours in Lake County, only to close them again because of under-utilization. This does not imply that the practice was unsuccessful; rather that it was likely abandoned before the extended hours became known widely to the patient population.

**“We need a facility to offer services that is going to be open after hours and on weekends for families”**

—County Government Official

### Lack of Urgent Care Facilities and Trauma Care

One of the service gaps in the county was the absence of urgent care facilities and trauma care. As a result any treatment outside minor injuries, for accidents or major injuries, required patients to be flown by helicopter service to other counties. Similarly, the lack of urgent care meant that when county residents required ambulatory care for minor illnesses that needed immediate treatment but were not able to get a same-day appointment from their regular physician or needed care after hours, they were forced to go to the emergency room of hospitals.

### Lack of Information regarding Coverage

Both low literacy and low health literacy were stated as barriers in the utilization of health benefits by county residents. Key informants reported that though the Medicaid expansion had resulted in the enrollment of many hitherto uninsured individuals in the county, there was no education of enrollees that had ensued, leaving them unaware and unable to use the benefits conferred to them. This resulted in clients losing out on free preventive care such as annual check-ups, screenings and vaccinations. Further, undocumented immigrant children became eligible for Medi-Cal in 2016, but this was not a widely known provision.

### Lack of Culturally Sensitivity

According to minority leaders and community members, Lake County's cultural diversity has gone unrecognized or been ignored by healthcare. Western medicine practices were said to be at odds sometimes with traditional medicines, beliefs and practices of minorities like Native tribes and immigrants from south of the border. Unless these differences are taken into account, these interviewees claimed that healthcare did not have a good chance of positively affecting health outcomes for these groups. Physicians were reported to perceive minorities as unhealthy and/or unable to follow medical instructions without understanding that these populations were governed by generations-old traditions. For instance, tribal community stated having fried bread as a staple and Hispanics subsist on rice and beans. They found it difficult to change their food habits even upon receiving a diagnosis of diabetes. Having physicians display cognizance of the patients' cultural beliefs before giving treatment was felt to be a necessary first step in influencing patient behavior.

### Lack of Culturally Competent Care

Another aspect of diversity was the language in which healthcare was delivered; language provided significant challenges to providers as well as patients. According to a Hispanic key informant, language was a major barrier to accessing healthcare because the patients did not feel as though they were heard or understood in their interactions with doctors that did not speak their language.

“New inductees into Medi-Cal have no knowledge that they are covered or of coverage”

—Practice Manager

“Because elders in the tribe did not want to go on insulin, they waited until it got worse, then went on insulin and died because they waited too long. So now people think that insulin and death are connected”

—Tribal Member

“Doctors have to do a lot of one on one work to gain trust of the people and then take small steps to help with diabetes and obesity. Can't just do everything at once”

—Hispanic Consortium Member

“Because we have had a lot of doctors coming in, it might just be that they are not 'bought-in' to our community. When doctors can speak their language, patients feel safe”

—Hispanic Consortium Member

### Lack of Insurance

Some of the most indigent populations in the county were reported to be the undocumented immigrants that worked as agricultural workers and other low paying professions in the county. California has coverage for pregnant women and children who are undocumented but had no provision to cover men or elderly till very recently. Many undocumented workers in Lake County, who might otherwise have qualified for Medi-Cal based on their income, were thus ineligible for health insurance due to immigration status. Among undocumented workers there is also the fear of utilizing government services or enrolling for coverage for fear of deportation. Difficulty navigating enrollment processes and procedures was an additional barrier.

Another large group of people that was cited as not being covered by health insurance in Lake County were young adults whose parents were unemployed, on public assistance or had no coverage themselves. While these young adults were eligible to purchase coverage, they did not either qualify for federal Affordable Care Act (ACA) subsidies to bring down the cost of their premiums or could not afford the cost of deductibles. Cost is the biggest barrier cited by health providers to this group obtaining coverage. Other factors that were reported to contribute for lack of coverage were the high rate of unemployment in this age group, employment in low paying jobs, inter-generational poverty and a family tradition of reliance on public assistance.

### Lack of Health Plan Options

Individuals covered by health insurance in Lake County reported dissatisfaction with their coverage. One of the problems was lack of options offered by employer so that competitive rates could not be obtained and premiums were claimed to be higher than other counties. Another associated problem was the lack of in-network providers in the county so that members were forced to travel to neighboring counties for regular care.

### Misclassification of Disease

Due to the lack of services and specialty care in the county, focus groups and key informants reported a force-fitting of diagnoses that sometimes took place and that resulted in inaccurate treatment. Not receiving the right treatment for the right diagnosis prolonged the condition and suffering of the patient as well as their caregivers or family. For instance, there were reports of patients that were kept in prison for drug abuse for days where the root cause for the drug abuse was reported to be mental health problems.

“They need to stop looking at people like anybody who is an immigrant is costing us something. We need sliding fee scale for them”

—Hispanic Consortium Member

“Our insurance does not allow us to see any dentists in the area so we have to travel to outside the county to get preventive care. Even people who are highly motivated to get care are discouraged because we have to leave the county to access the care”

—Government Service Provider

“Any mental health issues — they say it is methamphetamine abuse related”

—Tribal Member

“The new partnership between the sheriff and mental health department means they do not put someone who is affected by mental health, and acting out, in prison but they bring them to the hospital and sit there for hours waiting to be evaluated, clogging up the ED”

—Hospital Physician

## 6.2.2 CHALLENGES FACED BY HEALTHCARE AND GOVERNMENT SERVICE PROVIDERS

While patients experience problems accessing healthcare, at the other end of the spectrum are physicians that face barriers delivering optimal healthcare. Many of the barriers reported by physicians relate to regulatory compulsions and profitability, whereas the factors affecting government service providers were political and administrative in nature.

### Recruitment of Specialists

Because of the geographical isolation of Lake County, rural classification and lack of regional economic development, county health providers were quoted as being unable to attract and retain physicians. Multiple study participants said that doctors, especially specialists, had the options of working in other counties and earning substantially more and that usually the only professionals who chose to live long-term in the area were those with root in the community such as family ties or near retirement age. Per a hospital affiliated physician, it was not just a matter of recruitment but also of providing space according to state regulations and investing in growing their practice that were constraints.

“We’ve got to grow our own (physicians and other providers. You’ve got to forgive loans, or make sure their salaries are going to be above what they are being paid in the big cities”

—Hospital Physician

### Low Revenue of Rural Hospitals

According to hospital based physicians, medical services at the hospitals were constrained due to the fact that rural hospitals have workforce shortages, low patient volumes and low profitability to be able to host a complete range of services. The low population density especially did not justify specialty healthcare with adequate returns.

Though rural hospitals often had to find innovative methods of giving care — like tele-health — to overcome their multiple challenges, the physicians were not reimbursed at the same rate as seeing a patient in their office despite spending the same amount of time. The area hospitals were thus challenged to provide quality of care to its populations and dependent on mission based values of the health system to keep them solvent. The new rules for reimbursement for tele-health was seen as a welcome change in delivery of quality of care.

“We lose money on almost everything that we do. We really have to pick and choose what we are able to support”

—Hospital Physician

“Our populations are not big enough to support a specialist in many areas. It’s been dwindling. A nephrologist will need at least 25 dialysis patients to make money but we don’t have enough”

—Hospital Physician

### Lack of Care Coordination

According to the key informants interviewed, most of who worked in senior, decision making capacities within organizations that service the population of Lake County, some of the problems — like poverty, substance abuse, mental health or lack of stable housing — were too big for any one organization to make an impact. They acknowledged that problems would alleviate only if addressed from different directions and with joint efforts of many organizations. The key informants also said that more care coordination was needed between health agencies across county to prevent patients from falling through the cracks and getting lost in the system, especially the homeless, mentally ill and substance users. This would require more deliberate cooperation from all organizations involved in the care of such individuals, as well as formal systems of tracking and monitoring.

Among health centers within the county, coordination had improved but key informants stated there was a lot of scope for more collaboration. For instance, Tribal Health was grant funded by Substance Abuse and Mental Health Services Administration (SAMSHA) to conduct mental health activities for youth. They would like to open these programs to all in the county, but stated that there was no mechanisms of collaboration that allowed them to do this.

### Underfunding or Lack of Funding

Among the government employees interviewed, the lack of committed funding for needed programs, services, and for positions was a huge concern. In Lake County, grants were stated to be short termed resulting in lack of trust in such programs and services. Further, salaries were not competitive to attract or retain talent leading to unfilled positions and loss of institutional knowledge. This was stated to have resulted in a large turnover in County Government staff, especially in behavioral health.

#### 6.2.3 RECOMMENDATIONS BASED ON KEY INFORMANT INTERVIEWS AND FOCUS GROUP DISCUSSIONS

The interviews and group discussions served to generate some key suggestions for Lake County and Hope Rising Lake County Collaborative.

- More collaboration that generates county-wide accessibility of services; less ‘siloes’ especially between tribal and other health care centers

*“We need relationships between organizations that will last. Ongoing increased collaboration, not just person to person relationships”*

—Tribal Council Member

*“It is important to find out what is being duplicated”* —Non-Profit Leader

- Increase ease of working with Government with emphasis on responsiveness, transparency and accountability; address perceptions of ‘Old Boy Network’

*“We want to see support from those who are in authority positions”*

—Community Member

- Work co-jointly to attract more funding for much needed services and programs given high need and inter-connectedness of issues

*“We need more grant funding. We have the numbers (outcomes)”*

—Health Program Manager

*“There are agencies that come out here and do the survey and then that is the last time we ever hear of them. They take our worst case scenario data and then they get funding and we get left out”* —Tribal Members

- Develop a central database/resource for all programs, facilities and services to facilitate care coordination

**“I think what’s happened is that different groups have tried to do the best that they can with the patients that they serve”**

—Government Program Manager

**“We have discovered that collaboration is the key for us to improving these issues”**

—Non-Profit Leader

**“We need a referral system, an increased capacity for continuum of care across the closed loop referral system”**

—Government Program Manager



## SECTION 6 PRIMARY DATA COLLECTION FOR COMMUNITY INPUT

- Pursue policies/programs that invite representation from all communities for equitable decision making

*“They (the government) are making decisions for us without having us at the table”* —Tribal Council Member

- Need for a Backbone Organization that leads a Collaborative of inclusive, multi-sectoral organizations with formal partnerships and infrastructure, including roles and responsibilities and greater stakeholder engagement

*“People don’t want to get together because no one is bringing them together. We need leadership”* —Government Program Manager

*“We need to string the schools, hospitals, NGOs, senior centers, churches that will coming together (with Hope Rising Lake County)”* —Hospital Physician

- Expand Collaborative to include Education and Chamber of Commerce/Local Businesses, possibly faith-based communities and tap their areas of expertise
- Have rigorous performance management of care coordination and case management activities of Collaborative; continuous quality improvement through evaluation and monitoring



# DATA SYNTHESIS AND PRIORITIZATION



## 7.1 DATA SYNTHESIS

Data synthesis is a method that pools data obtained from various sources and combines results to obtain a clear answer to the overall effect of the combined sources. For this project, primary and secondary data were collected, analyzed, and synthesized. Given that all forms of data have strengths and limitations the findings from the primary data and the secondary data were compared and studied separately and then together, to gain a comprehensive understanding of the significant health needs for Lake County.

As a first step, secondary data, key informant interviews and community survey were treated as three separate sources of data. In primary data, topic areas demonstrating strong evidence of need were the health needs discussed with greatest intensity and frequency during key informant interviews and focus groups, as well as the highest ranked health needs and quality of life conditions in the community survey. The analysis of key informant interviews occurred using the qualitative software: Dedoose<sup>1</sup>. For the community survey, Conduent HCI performed a descriptive statistical analysis to identify top health needs. Overall, each method produced individual results that represent the community input in this report. These results have been described in SECTION 6: Primary Data Collection for Community Input.

Secondary data were analyzed using Conduent HCI's data scoring which identified health areas of need based on the values of indicators for each topic area to yield a list of priorities (see Appendix C. Secondary Data Methodology for a detailed explanation). The data scoring process of Conduent HCI categorized over 204 indicators for Lake County under 29 topic scores. Comparison scores range from 0-3, where 0 indicates the best outcome and 3 the worst. Data scoring then ranks and lists the health needs as determined by the highest weighted data scoring results from across the entire county Service Area. The health needs that rise to the top using data scoring from the secondary data are those which demonstrate strong evidence of need for the entire county Service Area.

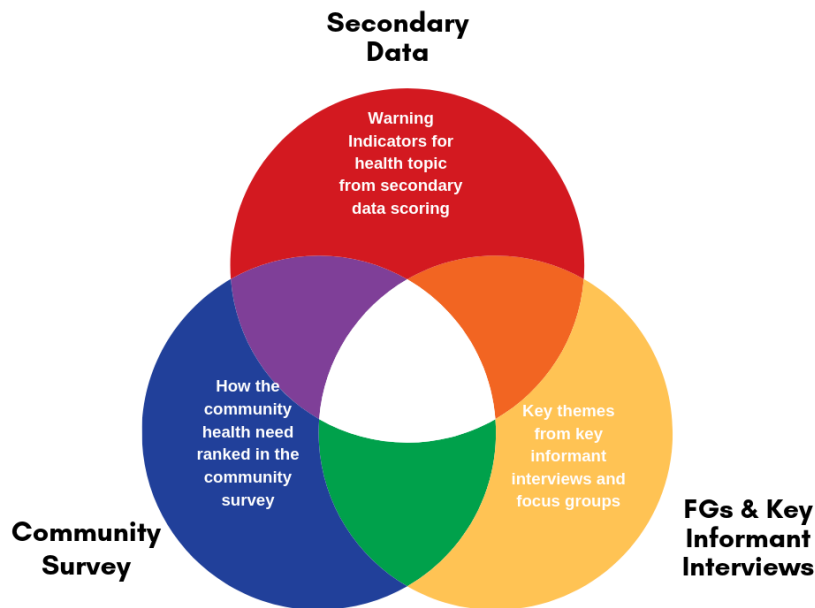
Table 10 displays the data scores for Health and Quality of Life Topics for Lake County.

TABLE 10: RANKED HEALTH AND QUALITY OF LIFE TOPICS

HEALTH AND QUALITY OF LIFE TOPICS	SCORE
Prevention & Safety	2.47
Social Environment	2.27
Economy	2.15
Public Safety	2.14
Mortality Data	2.12
Oral Health	2.09
Education	1.94
Mental Health & Mental Disorders	1.94
Medicine, Drugs, & Medical Technology	1.92
Substance Abuse	1.91
Teen & Adolescent Health	1.91
Respiratory Diseases	1.90
Women's Health	1.89
Other Conditions	1.88
Environmental & Occupational Health	1.84
Wellness & Lifestyle	1.82
Cancer	1.79
Access to Health Services	1.79
Transportation	1.71
Diabetes	1.69
Immunizations & Infectious Diseases	1.64
Exercise, Nutrition, & Weight	1.61
Men's Health	1.58
Children's Health	1.51
Maternal, Fetal & Infant Health	1.51
Environment	1.47
Heart Disease & Stroke	1.43
Older Adults & Aging	1.32
Other Chronic Diseases	0.80

As a second step, the high needs from each source of data were then put through the data synthesis process to identify the significant community health needs in the Lake County Service Area. The data synthesis process conducted by Conduent HCI is illustrated in Figure 52.

FIGURE 52: VISUAL OF DATA SYNTHESIS APPROACH

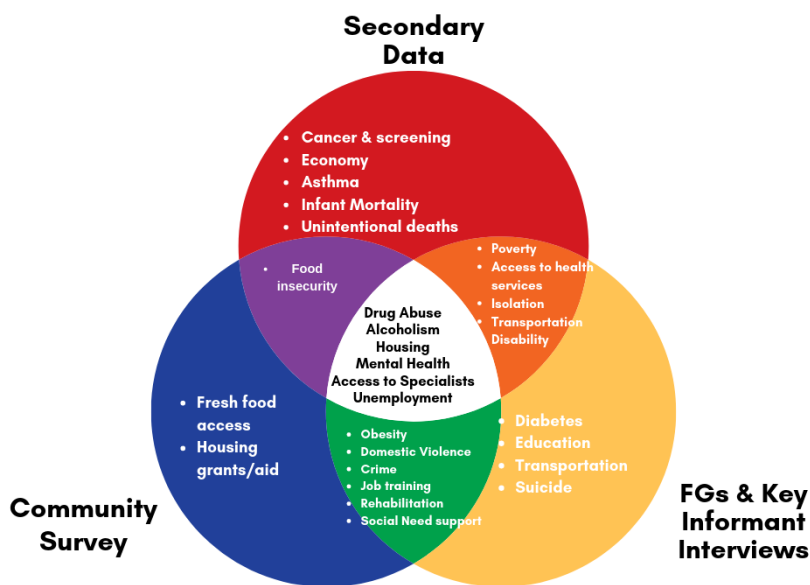


The results of the three sources of data were consolidated using a triangulated approach, shown in Figures 53 and 54. This consolidated input, shown in the area where all three circles intersect in the middle of the figure, lead to the list of significant health needs, given below.

FIGURE 54: LIST OF SIGNIFICANT HEALTH NEEDS

- LAKE COUNTY'S SIGNIFICANT HEALTH NEEDS
- Access to Health Services
  - Alcoholism
  - Drug Use
  - Housing Stability and Homelessness
  - Mental Health
  - Poverty
  - Unemployment

FIGURE 53: DATA SYNTHESIS RESULTS



## 7.2 PRIORITIZED SIGNIFICANT HEALTH NEEDS

Prioritization of significant needs is a necessary step that must be carried out systematically to identify top priority health problems that can be tackled when time and resources are limited. A two-step process for prioritization of significant needs was followed; it is explained in detail in SECTION 7: Data Synthesis and Prioritization.

An online survey taken by 15 of Hope Rising Lake County's core stakeholders in April 2019 led to the finalization of criteria that would be used to prioritize health problems. These criteria were:

- Availability and commitment from leadership in the involved organizations
- Expertise and resources within the county to address this health problem
- Opportunities for partnerships that will allow leveraging of shared resources
- Opportunities to address the health problem before it gets exacerbated
- Alignment of problem with your organization's strengths, priorities, mission

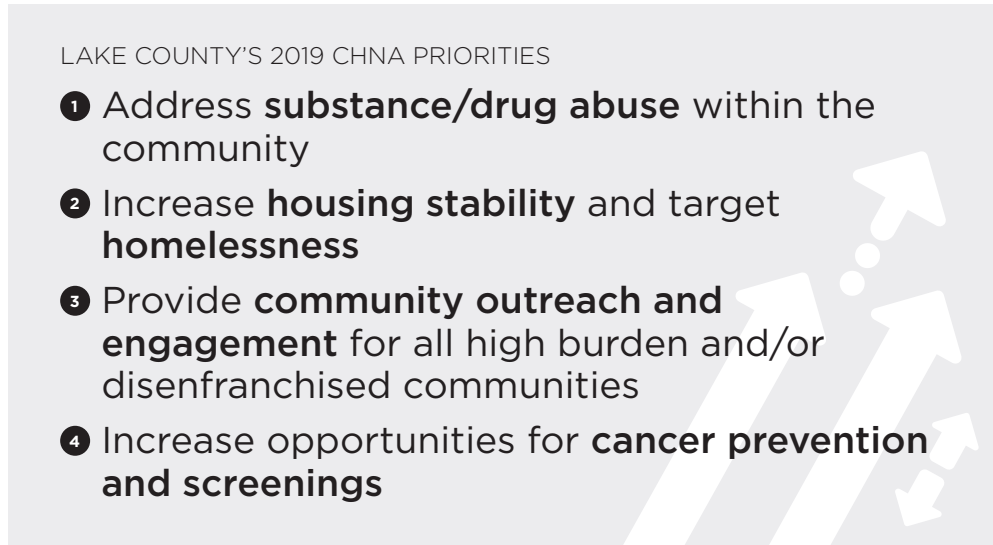
On April 19th, 2019 the stakeholders convened at Clear Lake to review and discuss the results of Conduent HCI's primary and secondary data analysis leading to the preliminary top six significant health needs shown in Figures 53 and 54. The following is the list of participants in the in-person prioritization exercise conducted:

- Allison Panella - **Hope Rising Lake County**, *Executive Director*
- Ana Santana - **Lake County Office of Education Head Start**, *Program Director*
- Brad Chatten - *Activist and Community Leader*
- Brock Falkenberg - **Lake County Office of Education**, *Superintendent of Schools*
- Carla Ritz - **First 5 Lake**, *Executive Director*
- Dan Peterson - **Sutter Lakeside Hospital**, *Chief Administrative Officer*
- Elise Jones - **Lake County Health Department**, *Health Programs Accreditation Coordinator*
- Erin Gustafson - **County of Lake**, *Public Health Officer*
- Gina Lyle - Griffin - **Lake County Tobacco Education Program**, *Project Director*
- Kate Gitchell - **Hope Rising**, *Project Manager*
- Kim Tangemann - **Mendocino Community Health Clinic**, *Lakeview Health Center Clinic Director*
- Lisa Morrow - **Lake Family Resource Center**, *Executive Director*
- Nellie Gottlieb - **Hope Rising Safe Rx Lake County**, *AmeriCorps VISTA*
- Paige Hotchkiss - **Sutter Lakeside Hospital**, *Community Benefit Specialist*
- Patty Bruder - **North Coast Opportunities**, *Executive Director*
- Russell Perdock - **Adventist Health**, *Director of Community Integration*
- Todd Metcalf- **Lake County Behavioral Health**, *Administrator/Director*

From there, participants utilized a prioritization toolkit (Appendix E. Prioritization Process) to examine how well each of the six significant health needs met the criteria set forth by Hope Rising Lake County stakeholders. They scored each need for each criteria on a scale from 1-3 with 1 meaning it did not meet the criteria to 3 meaning it strongly meets the criteria. Completion of the prioritization toolkit in Appendix E. allowed participants to arrive at numerical scores for each health need that correlated to how well each health need met the criteria for prioritization. Participants then ranked the top six health needs according to their topic scores, with the highest scoring health needs receiving the highest priority ranking.

Participants were encouraged to use their own knowledge of their community while scoring. After completing their individual ranking of the ten health needs, participants' rankings were manually collated, resulting in an aggregate ranking of the health topics. The aggregate ranking can be seen below. After reviewing the below results, participants engaged in a group discussion to narrow the most pressing health needs down to four health needs to consider for subsequent implementation planning. The four top health priorities, presented in no particular order and with equal weightage, chosen by Hope Rising Lake County are:

FIGURE 55: PRIORITIZED HEALTH NEEDS



These four health topics will be broken down in further detail below in order to understand how these become a high priority health need for Hope Rising Lake County.

### 7.2.1 SUBSTANCE ABUSE AND TOBACCO ADDICTION

Substance abuse refers to the harmful or hazardous use of psychoactive substances, including alcohol and illicit drugs. Psychoactive substance use can lead to dependence after repeated substance use and that typically include a strong desire to take the drug, difficulties in controlling its use, persisting in its use despite harmful consequences, a higher priority given to drug use than to other activities and obligations, increased tolerance, and sometimes a physical withdrawal state (World Health Organization, 2019).

Among all the topics of significant need that were yielded by data scoring, Substance Abuse was the 6th highest scoring topic with a score of 1.91, where 0 indicated the best and 3 indicated the worst outcomes in the county in comparison to other counties in the state. Table 11 includes all the indicators that were taken into account to yield the topic scores for Drug Abuse (including prescription drugs), Alcoholism and Tobacco Abuse. As shown in Table 11 indicators related to Substance Abuse (scores in red) have scores between 2 and 3, meaning that these warning indicators reflect poor rankings and outcomes for the county.

TABLE 11: TOPIC SCORE FOR SUBSTANCE ABUSE

SCORE	SUBSTANCE ABUSE	UNITS	LAKE COUNTY	CA	MEASUREMENT PERIOD
2.61	Alcohol-Impaired Driving Deaths	<i>percent</i>	39.7	29.4	2012-2016
2.61	Death Rate due to Drug Poisoning	<i>deaths/ 100,000 population</i>	44.1	11.8	2014-2016
2.33	Age-Adjusted ED Visit Rate due to Heroin Overdose	<i>Rate per 100,000 residents</i>	28	9.9	2017
2.28	Age-Adjusted Death Rate due to Drug Use	<i>deaths/ 100,000 population</i>	43.6	12.2	2014-2016
2.17	Adults who Smoke	<i>percent</i>	27	11	2016-2017
2.11	Age-Adjusted Death Rate due to Heroin Overdose	<i>deaths/ 100,000 population</i>	2.9	1.4	2017
2.11	Age-Adjusted ED Visit Rate due to All Drug Overdose	<i>Rate per 100,000 residents</i>	339	117.3	2017
2.11	Teens who have Used Alcohol	<i>percent</i>	46.2	33.4	2009
2.00	Age-Adjusted Death Rate due to Synthetic Opioid Overdose (excluding Methadone)	<i>Rate per 100,000 residents</i>	6	1.1	2017
2.00	Age-Adjusted ER Rate due to Alcohol Use	<i>ER visits/ 10,000 population 18+ years</i>	56.6	44.2	2013-2015
2.00	Age-Adjusted ER Rate due to Substance Use	<i>ER visits/ 10,000 population 18+ years</i>	41.2	18.6	2013-2015
2.00	Age-Adjusted Hospitalization Rate due to Alcohol Use	<i>hospitalizations/ 10,000 population 18+ years</i>	13.4	11.7	2013-2015
2.00	Age-Adjusted Hospitalization Rate due to All Drug Overdose	<i>Rate per 100,000 residents</i>	126.1	49.7	2016
2.00	Age-Adjusted Hospitalization Rate due to Heroin Overdose	<i>Rate per 100,000 residents</i>	3.5	1.6	2014
2.00	Age-Adjusted Hospitalization Rate due to Opioid Overdose (excluding Heroin)	<i>Rate per 100,000 residents</i>	18.6	8.5	2016
2.00	Age-Adjusted Hospitalization Rate due to Substance Use	<i>hospitalizations/ 10,000 population 18+ years</i>	9.5	6.1	2013-2015
2.00	Age-Adjusted Long Acting or Extended Release Opioid Prescription Rate to Opioid Naive Residents	<i>per 100,000 population</i>	2.6	1.4	2017
1.89	Age-Adjusted Death Rate due to All Opioid Overdose	<i>Rate per 100,000 residents</i>	15.2	4.5	2017
1.89	Age-Adjusted Death Rate due to Prescription Opioid Overdose	<i>Rate per 100,000 residents</i>	12.3	3.2	2017
1.89	Age-Adjusted ED Visit Rate due to Opioid Overdose (excluding Heroin)	<i>Rate per 100,000 residents</i>	20.8	10.3	2017
1.83	Consumer Expenditures: Tobacco	<i>percent</i>	0.7	0.4	2018
1.64	Opioid Prescription Patients	<i>percent</i>	6		43313
1.64	Opioid Prescription Rate	<i>prescriptions per 10,000 population</i>	754.7		43313
1.33	Consumer Expenditures: Alcoholic Beverages	<i>percent</i>	0.9	1.1	2018
0.89	Adults who Binge Drink: Year	0	26	32.6	2014
0.39	Liquor Store Density	0	6.2	10.1	2015

The table above shows that opioid prescription rates and alcohol abuse in adults were stable or improving. Opioid usage data from Partnership Health Plan shows positive downward trends on several fronts with opioid prescriptions (California Department of Health, 2017-2018). This was also corroborated by many of the health providers who were interviewed.

However, all other types of substance abuse were increasing in Lake County. Unfortunately, some female adults who engage in alcohol and drug use do so during their pregnancies. Besides the secondary data in table 13, other data of the Public Health Department show that for every 1,000 hospitalizations of pregnant women, 104.0 were diagnosed to have substance abuse. Additionally, there were 1,586.9 substance abuse hospitalization per 100,000 in persons aged 15-24 (California Department of Public Health, 2017-2018). Drug-induced deaths accounted for the 6th leading cause of premature death in Lake County. Lake County has the highest rate of drug-induced deaths in the state; between 2014 -2016, 30 deaths occurred in Lake County from drug overdose.

Teen alcohol abuse was a warning indicator for Lake County, with a score of 2.11. While more recent data is not available for Lake County, in 2009 46.2% of teens self-reported using alcohol while the percent was 33.4% in the state. Alcohol is the most widely used substance among the nation's young people and binge drinking, in particular, has been linked to risky health behaviors (e.g., unprotected sex, smoking), injuries, motor vehicle accidents, impaired cognitive functioning, poor academic performance, physical violence, and suicide attempts. Drinking during adolescence increases the likelihood of alcoholism in adulthood, and long-term health consequences of consumption including liver disease, cancer, and cardiovascular disease (Substance Abuse and Mental Health Services Administration, 2015). Not surprisingly, the Age-Adjusted ER Rate due to Adolescent Suicide and Intentional Self-inflicted Injury in Lake County in 2013-2015 was 91.3 ER visits/ 10,000 population aged 12-17, in comparison to the state which had a rate of 46.3 ER visits/ 10,000 population aged 12-17.

Primary data also highlighted substance abuse as the most important health challenge in the county. Drug and alcohol abuse were identified as the most important health problem in by 70.9% and 34.3% community survey participants respectively. Drug use (86.5%), alcohol abuse (64%) and tobacco addiction (20%) were also identified as the most important risky behaviors affecting Lake County.

Drug Abuse (including prescription drugs), Alcoholism and Tobacco (including other tobacco products such as snuff, snus, and vapes) among adults and adolescents were identified as the foremost topics of concern for community members and key informants alike. While tobacco addiction was mentioned as an important issue by key informants, drug abuse was the most frequently mentioned health challenge in the county by all community members and key informants interviewed. Drug addiction was stated to affect White communities more while alcoholism was seen more in American Indian tribes and Hispanics, according to the physicians interviewed for this assessment.

Per key informants and focus group participants, there are a lack of providers and treatment facilities in Lake County to be able to deal with the substance abuse issues. Clients in need of rehabilitation often need to be sent outside of the county for services which presents a barrier to receive the care. Key informants at another hospital stated that hospitals had worked hard to win the battle with opioid prescription drug abuse but they were seeing a diversion to heroin and other street drugs (methamphetamine, black tar heroin, benzodiazepines, marijuana, opioids,



and fentanyl) and were losing the battle despite never having worked as hard to combat the problem. Moreover, with the battle having moved into the community, the physicians felt that they had less control on prevention of the problem.

In the words of focus group participants, Lake County had a ‘cycle’ of poverty, drugs and hopelessness. Drug abuse was said to run in families, with children learning from observing their parents. In their experience, in a majority of cases, poor mental health accompanied drug abuse making their management a challenge for the community and the families.

Tobacco Addiction is also a health need that Hope Rising Lake County has prioritized. Table 13 shows that 27% of Lake County residents smoke as compared to 11% of Californians. This despite the recent passage of a bill that increased tax by \$2 per pack besides an equivalent tax on other tobacco products like e-cigarettes (American Cancer Society, 2017). Tobacco has been implicated in almost one-third of all cancers, besides respiratory diseases (e.g. asthma, chronic obstructive pulmonary disorder), heart disease, stroke, and peripheral vascular disease (narrowing of the blood vessels outside your heart) among others. The healthcare costs of tobacco are higher than the costs of alcohol, illicit and prescription drugs (Figure 56). Thus, while drug abuse was a more visible problem in Lake County and one that impacted quality of life more widely, tobacco addiction was a problem with longer drawn and higher costs of healthcare.

“I’ve seen them do drugs. They need something to keep them occupied which is going to make your life much better. Or they are getting lined up in the E.R. getting an evaluation for suicide. That happens a lot”

—Women’s Focus Group Participant

“It’s definitely something bigger than each of the individual organizations. Hospitals are not incentivized to do things globally”

—Hospital Physician

FIGURE 56: NATIONAL COSTS OF SUBSTANCE ABUSE

SUBSTANCE	HEALTH CARE	OVERALL	YEAR ESTIMATE BASED ON
Tobacco	\$168 billion	\$300 billion	2010
Alcohol	\$27 billion	\$249 billion	2010
Illicit Drugs	\$11 billion	\$193 billion	2007
Prescription Opioids	\$26 billion	\$78.5 billion	2013

Source: National Institute of Drug Abuse

The Lake County Tobacco Education Program (LCTEP) is an education and policy-passed program that utilizes social norm change strategies to develop smoke-free policies. Hope Rising Lake County members have an interest in investing more efforts on this topic, especially with the surge in vaping and smokeless tobacco products in the recent years, among teens and young adults. Studies elsewhere have shown satisfactory returns on investment for tobacco control programs. Providing preventive services, such as tobacco cessation, and cancer screenings in the clinical setting is also crucial to preventing cancer and detecting it early. Analyses of these recommended services find that many are cost-effective and cost-saving. A 2012 analysis of the comprehensive tobacco cessation benefit provided to Massachusetts Medicaid enrollees showed that for every \$1 spent on the benefit, the state gained \$3.12 in medical cost savings.

Lake County had some behavioral, chemical, system and policy interventions in place at the time of this assessment. For instance, Comprehensive Perinatal Services Program (CPSP) services were being provided to incarcerated females in Lake County by Jail Medical – California Forensic Medical Group. Arresting law enforcement officers screened all females for pregnancy and if found to be pregnant, they were then taken to local emergency room for medical clearance

(California Department of Public Health, 2017-2018). Local Sheriff's Department officials had received training to administer Naloxone (Narcan). Medication-assisted treatment (MAT) is also offered by Lake County rural health clinics, combining behavioral therapy and medications to treat substance use disorders. Finally, SafeRx — a collaborative partnership that focuses on prevention, treatment and recovery — has had significant success in the county.

Hope Rising Lake County also has open to it many possible policy interventions for teen substance abuse. These include prioritizing screening and early identification of risk factors correlated with substance use, especially among middle school youth; screening for mental health issues; developing comprehensive policies that promote school and community connectedness among youth and help them develop the knowledge, skills, and motivation to avoid substance use; and, promoting youth-focused, mass media counter-marketing strategies to combat tobacco and alcohol advertising and reducing youth exposure at the points-of-sale (Lucille Packard Foundation for Children's Health , 2016-2017).

Thus, given the size of substance and tobacco abuse in Lake County, Hope Rising Lake County and its partners have chosen to seize the opportunity to expand evidence-based interventions like policies which influence the levels and patterns of substance use and related harm and interventions at the health care system level. Additionally, education, treatment, prevention for all substance abuse but with special emphasis on teen alcohol abuse will be undertaken.

### 7.2.2 HOMELESSNESS AND HOUSING STABILITY

Affordable housing and housing stability are important drivers of positive health outcomes. Stable housing is associated with economic stability and quality of life. The primary and secondary data showed that housing was a high priority for Lake County. Section 4.2.4 Housing provides data on housing for Lake County, including the cost of renting. The topic of Housing and Homelessness had a score of 2.28 through data scoring, where a score of 0 reflects the best outcomes and a score of 3 reflects the worst outcomes.

In the community survey conducted, 27.4% participants stated that they had been worried about housing in the past 12 months; 70.88% said they would prefer to see programs in the county that made small grants for repairs and improvements. Approximately 14% survey participants said that costs for housing, food etc. prevented them from seeking healthcare while more than 70% said hospitals should make available resources for social needs such as food and housing. This issue impact quality of life in the community; focus group participants said they felt unsafe and feared the rise in crime and substance abuse in the community was related to homelessness. A consensus, however, was that the community needed to take care of the homeless through temporary shelters and rehabilitation.

California has the highest number of chronically homelessness in the country. Between 2013 and 2017, California has seen 13.3% change in total homelessness (United States Department of Housing and Urban Development, 2017). Per the Homeless Management Information System data of the United States Department of Housing and Urban Development, the one-year estimate of sheltered homeless, between October 2016 and September 2017, was 150,630 households. In Lake County, much like California, housing stability as well as homelessness are both problems. Lake County (27.3%) and the state of California (27.9%) have comparable

percentages of people that report severe housing problems (see Appendix C. Lake County Data Scoring Results)

Costs of housing was one of the primary reasons quoted by key informants for the county’s inability to attract talent. According to one physician interviewed, offering free housing to young professionals could be the solution to many problems in the community

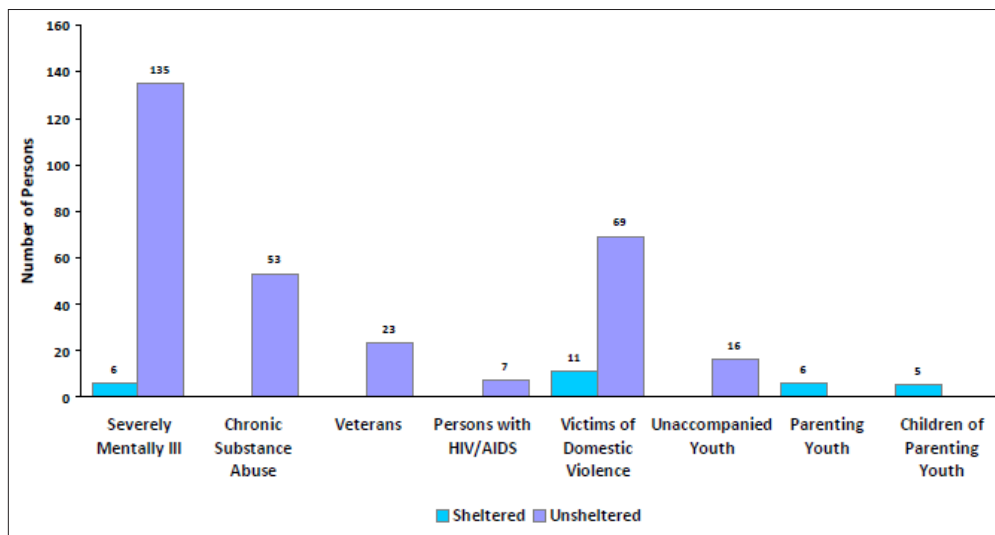
Median gross rent in Lake County was \$914 in 2013-2017, and the county had 159 building permits in 2017 (United States Census Bureau, 2018). Yet there was a shortage of housing and an unaffordability due to low median income. There have been as many as 10 major fires in Lake County from 2012. Just in 2018, 3 fires scorched over 93,000 acres combined and destroyed buildings and other housing structures. With the fires, according to interviewees, rents increased and housing become even more unaffordable. The numbers of homeless have increased in the county correspondingly.

Based on information provided to HUD by Continuums of Care (CoCs) (United States Department of Housing and Urban Development, 2017), Lake County had 54 beds in emergency shelters and 13 beds in transitional housing (figure not provided). The point-in-time estimate for the county shows that of 331 homeless persons, only 28 were sheltered but 303 were unsheltered (meaning ‘living in a place not meant for human habitation, such as cars, parks, sidewalks, abandoned buildings; on the street’) (Figure 57). More recent point-in-time data collected in 2019 by Hope Rising and its partners places the number of homeless people in the county at 408; of these, 26 were sheltered while 382 were unsheltered (Conduent Healthy Communities Institute, 2019).

Figure 57 provides a profile of the homeless in the county. As also seen in the figure, homeless persons lack healthcare and have many barriers to accessing healthcare, including an array of medical and mental health issues. The report recommends that homeless individuals may need specialized services or focused outreach, since these groups may experience less access to mental health services overall, whether through the perception that they can’t afford it, or because of the stigma associated with those two statuses.

“I would have young nursing students on the premises with old people. Give them housing, fund their education and have that whole generation be compensated for caring for older people”  
—Hospital Physician

FIGURE 57: 2017 POINT IN TIME COUNT SUMMARIZED BY SUB-POPULATION



Source: Continuum of Care Data for CA-529, Lake County, 2017

With value based care gaining momentum, there is an increased recognition of the great returns on investments that housing stability and reduction in homelessness bring to hospitals and health agencies. While the estimates on the actual Returns on Investment are a function of additional case management and other treatment costs and vary from \$2,249 per person per month to a savings of \$1.57 for every \$1 spent (The Commonwealth Fund, 2019), there is strong evidence that supportive housing to homeless individuals with a medical need like a chronic condition or behavioral health problem reduces Emergency Department visits, admissions, and inpatient days and results in large decreases in health care costs.

Hope Rising Lake County Collaborative prioritized housing stability and homelessness after the last CHNA conducted. They have made progress and deployed their combined resources in launching and sustaining the following initiatives.

- The Healthy Clearlake Collaborative
- Restoration House Respite Beds
- Project Restoration
- Hope Rising Lake County Center for Transformation
- Warming shelters
- Tully House

Housing stability and homelessness has been adopted as a priority by Hope Rising so that they can build upon their labors and continue to make gains in addressing this issue.

### 7.2.3 COMMUNITY OUTREACH AND EDUCATION

One of the goals of Healthy People 2020 is to Increase the quality, availability, and effectiveness of educational and community-based programs designed to prevent disease and injury, improve health, and enhance quality of life. In a community, health status and related health behaviors are determined by influences at multiple levels: personal, organizational/institutional, environmental, and policy. Dynamic interactions between these personal, social and environmental factors work to determine an individual's health as well as the different points of intervention for organizations working in health promotion.

Though community outreach and education were not significant health needs that emerged from either secondary or primary data, there was a strong preference among Hope Rising Lake County partners for increasing health education and promotion efforts for various issues that ailed the county. While health outcomes are dependent on a well-functioning medical system, it was widely acknowledged by all the key informants interviewed that health began in the community and it was important to increase healthy behaviors at an early age. The Hope Rising Lake County partners realize that by intervening in schools through community programs, they could stem harmful behaviors of county residents in the formative years. Some of the issues that Hope Rising Lake County partners expressed an interest in addressing through schools were substance abuse, tobacco use, e-cigarettes, vaping, mental health, physical activity, diet and nutrition, sexually transmitted disease, completing school education, crime and violence. These health issues were also mentioned by community members during primary input.

“We need to shed our hubris and realize that it is the job of the school system (to educate young people) and we should partner with them to help them”

—Hospital Physician

“The young people lack of knowledge around family history. The diet of young kids, what is healthier to eat — it's very generational. Education is key because some of these diseases are preventable and reversible if we can empower them with knowledge”

—Practice Manager

“We have to be proactive and not reactive — raise people who will not have a heavy footprint on the entire health system”

—Hospital Physician

In fact, one very strong theme that the key informant interviews and focus group discussions yielded was the need for the community of Lake County to invest in education and life-skills training.

The community survey also revealed a community wide interest in developing opportunities for young county residents to break the cycle of poverty, drugs and hopelessness. In the survey, 82.8% of participants said it was very important to develop programs for youth like vocational training or dropout prevention programs for high-risk students, while 72.7% felt youth programs like Big Brothers, Big Sisters were needed to address the health challenges in Lake County. When asked to select three kinds of services that are needed more in Lake County, job training was mentioned by 36.2% of participants. The community members and key informants were also unanimous in stating that the best investment the county could make was in the children and youth.

One of the possible interventions available to Hope Rising Lake County is the Whole School, Whole Community, Whole Child (WSCC) model which expands on the 8 elements of the U.S. Centers for Disease Control and Prevention's (CDC) Coordinated School Health (CSH) approach and is combined with the whole child framework.

While the schools were a setting where future educational strategies were planned by Hope Rising Lake County, another setting where education was to be provided to target social needs was the community at-large. Health care leaders and health providers have long recognized the connection between unmet essential resource needs — e.g. food, housing and transportation — and the health of their patients. Studies have indicated that more than 50% of health outcomes are attributable to social and environmental factors — and the behaviors linked to them — that patients face outside of the practice or hospital. When patients lack resources like food or stable housing, it has a compounding and prolonging effect on the health conditions that they suffer from. An essential first step to addressing social needs is to uniformly screen all patients at all care points (e.g. clinics, free screenings, behavioral facilities, hospitals) for their social needs. Lake County is a designated Accountable Health Community. The Accountable Health Communities Model is an innovative payment and service delivery model to reduce Medicare, Medicaid, and Children's Health Insurance Program expenditures while maintaining or enhancing the quality of beneficiaries' care. The Centers for Medicare & Medicaid Services (CMS) Center for Medicare and Medicaid Innovation (CMMI) have made the Accountable Health Communities (AHC) Health-Related Social Needs (HRSN) Screening Tool to use in the AHC Model. This screening tool can be used consistently in all Lake County care points.

A second step is to connect patients to social needs resources and service within the community such as food pantries, temporary shelter, or heating and cooling assistance through a closed loop referral system. The survey found that over 70% of participants stated it was very important to them to have area hospitals improve their quality of service by providing the following: connections to services that provide shelter, housing, food support (74.7%); connections to agencies that provide social support like counselling (74.5%); and, providing a list of all the organizations that give support for housing, shelter, food (70.1%). Social needs came up in a focus group where some current and prior government employees stated that their task of helping beneficiaries would be made easier if there was a central county wide database of community resources that was updated regularly and to which referrals or appointments could be made for clients.

"We need to structure a rich life for the kids so they have something to do other than to follow in the footsteps of their parents who are on drugs"

—Men's Focus Group Participant

"It's a lack of mentorship and lack of leadership. Their parents are on drugs so these kids raise themselves"

—Men's Focus Group Participant

"The more educated the youth are — that is how you break the cycle of drugs and poverty. They need hope to go on"

—Hospital Physician

"If we don't take care of them now, they will not be there for us when we need them"

—Older Women's Focus Group Participant

"Why don't we know about these resources, why is there not a simple way of getting that out, why is there not a single place where this information rests?"

—Older Women's Focus Group Participant

While Hope Rising Lake County had previously explored the cost of installing a community resource database like 2-1-1, the partners expressed an interest in finding and engaging other cost-effective options like Aunt Bertha, CharityTracker, CrossTx, Healthify, NowPow, One Degree, Pieces Iris, TAVConnect (TAVHealth), and Unite U. Additionally, the data platform of Conduent HCI is also available to display community resources. With these resource based platforms, Hope Rising Lake County partners would be in a position to offer integrated social needs screening across care points in addition to case management and care coordination between health and service providers.

A third aspect of the proposed community outreach and education was to provide health promotional materials that speak to the concerns of target communities education and assistance in multiple languages. Communicating across language barriers is a challenge for clinicians and health systems. Federal law requires linguistic services for patients with limited English proficiency (LEP). In addition, health care organizations that receive federal funds in the form of public insurance payments (Medicaid or Medicare) must provide services in a language that a patient with LEP can understand. The Joint Commission, the main hospital accreditation body in the US, requires that hospitals collect and record patients' preferred languages for discussing health care and have included in their standards the use of qualified medical interpreters for patients whose preferred language is not English. According to the 2013-2017 American Community Survey, approximately 2,000 people in the county have limited English proficiency. However, the need for language access for patients with limited English proficiency was a strong need expressed by Hispanic key informants because language was deemed essential in establishing relationships of trust with the physician and patient satisfaction.

Some resources available to Hope Rising Lake County to meet this objective are National Network of Libraries of Medicine's Consumer Health Information in Many Languages Resources and Health Reach. Thus, with this objective of improving health and wellness while addressing influences at all levels (e.g. personal, societal, environmental and policy) and in a variety of community settings (e.g. school, worksite, clinics, hospitals, and community), Hope Rising Lake County has chosen to prioritize Community Outreach and Education.

“Prevention is not great up here. There are educational programs but they don't meet the general criteria of the people that live in the county”

—Hispanic Council Member



### 7.2.4 CANCER

According to the Centers for Disease Prevention and Control, chronic diseases like cancer are defined broadly as conditions that last 1 year or more and require ongoing medical attention or limit activities of daily living or both. Chronic diseases such as cancer and diabetes are the leading causes of death and disability in the United States and leading drivers of the nation's \$3.3 trillion annual health care costs. Preventing chronic diseases, or managing symptoms when prevention is not possible, can reduce these costs. Chronic diseases like cancer are a factor of old age, meaning the chance of having these conditions increases with age. This has implications for Lake County which has a higher than average median age in comparison to the state and is one of the primary reasons for this topic being prioritized by Hope Rising Lake County. According to the National Cancer Institute, as the population ages, cancer prevalence and the absolute number of people treated for cancer will increase even if cancer incidence rates remain constant or decrease somewhat. Costs are also likely to increase as new, more advanced, and more expensive treatments are adopted as standards of care.

Lake County has the 18th highest rate of invasive cancer cases in the state. Between 2012 and 2016, the population at risk for cancer in the county was 320,379. In Lake County, California from 2012-2016, there were 2,054 new cases of cancer. For every 100,000 people, 410.97 cancer cases were reported. The rate of new invasive cancers is higher for males (448.8 per 100,000 males) than females (419.4 per 100,000 females). The rate of all new cancers is highest in Whites (433.7 per 100,000 people), followed by Blacks (352.6), American Indians/Alaskan Natives (332.2), Asians/Pacific Islanders (313.5) and Hispanics (318.0) (Centers for Disease Control and Prevention, 2012-2016).

Cancer was also the highest cause of mortality in Lake County, as seen in Section 4.8 Health Profile. Over 2012-2016, there were 945 people who died of cancer in the county. For every 100,000 people in Lake County, California, 192.7 per died of cancer compared to 140.2 for the state, conferring the rank of 57th to the county out of 58 counties in the state. The county also was ranked near bottom in the state for deaths by cancers of sites which have gold-standard screening tests that are covered free or at low cost by private and public health plans. Lake County ranked 53rd in deaths by colorectal cancer, 55th in lung cancer deaths, 56th in female breast cancer deaths, and 50th in prostate cancer deaths. The rate of cancer deaths is higher for males (222.5 per 100,000 males) than females (168.4 per 100,000 females). The rate of all new cancers is highest in Blacks (268.9 per 100,000 people), followed by Whites (194.7), American Indians/Alaskan Natives (152.5), and Hispanics (126.7) (Centers for Disease Control and Prevention, 2012-2016) in Lake County. Conduent HCI's Index of Disparity reports no disparities related to cancer.

While gathering community input, cancer was stated as a high concern by interviewed physicians but was not a topic of concern for community members who participated in the group discussions. It was also a low priority for survey participants, less than 10% of whom mentioned it was a health concern for the county.

Data scoring yielded the topic with a score of 1.79 (Table 10), where 0 indicates the best outcome and 3 the worst. However, there are many indicators which constituted the topic score with scores in the 2 to 3 range, indicating that Lake County performs poorly in comparison to other California counties on these measures (Table 12).

TABLE 12: INDICATOR SCORES FOR CANCER

SCORE	CANCER	UNITS	LAKE COUNTY	CA	U.S.	MEASUREMENT PERIOD
2.61	Mammography Screening: Medicare Population	<i>percent</i>	50.6	59.5	63.2	2015
2.50	Age-Adjusted Death Rate due to Breast Cancer	<i>deaths/ 100,000 females</i>	29.5	19.1		2014-2016
2.44	Lung and Bronchus Cancer Incidence Rate	<i>cases/ 100,000 population</i>	73.9	43.3	60.2	2011-2015
2.44	Oral Cavity and Pharynx Cancer Incidence Rate	<i>cases/ 100,000 population</i>	14.2	10.3	11.6	2011-2015
2.28	Age-Adjusted Death Rate due to Prostate Cancer	<i>deaths/ 100,000 males</i>	23.4	19.7	19.5	2011-2015
2.17	Age-Adjusted Death Rate due to Colorectal Cancer	<i>deaths/ 100,000 population</i>	14.8	13.3	14.5	2011-2015
2.06	Age-Adjusted Death Rate due to Cancer	<i>deaths/ 100,000 population</i>	192.7	140.2		2014-2016
1.94	Age-Adjusted Death Rate due to Lung Cancer	<i>deaths/ 100,000 population</i>	46.5	28.9		2014-2016
1.72	Colorectal Cancer Incidence Rate	<i>cases/ 100,000 population</i>	41.8	36.2	39.2	2011-2015
0.56	Cancer: Medicare Population	0	6.2	7.5	7.8	2015
0.39	Breast Cancer Incidence Rate	0	101.8	121.5	124.7	2011-2015
0.39	Prostate Cancer Incidence Rate	0	80.5	101.2	109	2011-2015

In Lake County, 6.2% of the Medicare population had cancer in 2015 as compared to 7.6% in the state (Table 11) which is lower than both the state and national rates. However, the female breast cancer screening rates for the Medicare population was much lower than the state and country rate. While the screening data for other cancers and populations is not available, timely screening has the potential to save lives and healthcare costs for treatment.

Breast cancer is the most commonly occurring cancer in women nationwide. In Lake County, California from 2012-2016, there were 252 new cases of female breast cancer. For every 100,000 women, 107 female breast cancer cases were reported. Over those years, there were 64 women who died of Female Breast Cancer. For every 100,000 women in Lake County, 27 died of female breast cancer (Centers for Disease Control and Prevention, 2012-2016). The rate of new breast cancers is highest among White women (109.3 per 100,000 females) in Lake County, followed by Hispanic women (81.3). Five-year survival rates are 99% for localized stage, 86% for regional stage cancer, and 28% for cancers with distal spread (American Cancer Society, California Department of Public Health, California Cancer Registry, 2015).

In Lake County, from 2012-2016, there were 73 new cases of oral cavity and pharynx cancer. For every 100,000 people, 15 oral cavity and pharynx cancer cases were reported. Over those years, there were 22 people who died of oral cavity and pharynx cancer. For every 100,000 people in Lake County, 5 died of oral cavity and pharynx cancer. The oral cavity includes the lip, tongue, floor of the mouth, gingiva, buccal surface (mucosa), hard palate, and oropharynx. Primary risk factors for cancers of the oral cavity and pharynx include tobacco use, frequent alcohol consumption, and infection with human papillomavirus (HPV). The majority of oropharyngeal cancers (64%) are not diagnosed early, but instead at regional (45%)



and remote (19%) stages (Surveillance Research Program, National Cancer Institute, 2015). The five year survival rate is 84% when diagnosed at a localized stage, 63% at a regional stage, and 38% at a distant stage (American Cancer Society, California Department of Public Health, California Cancer Registry, 2015).

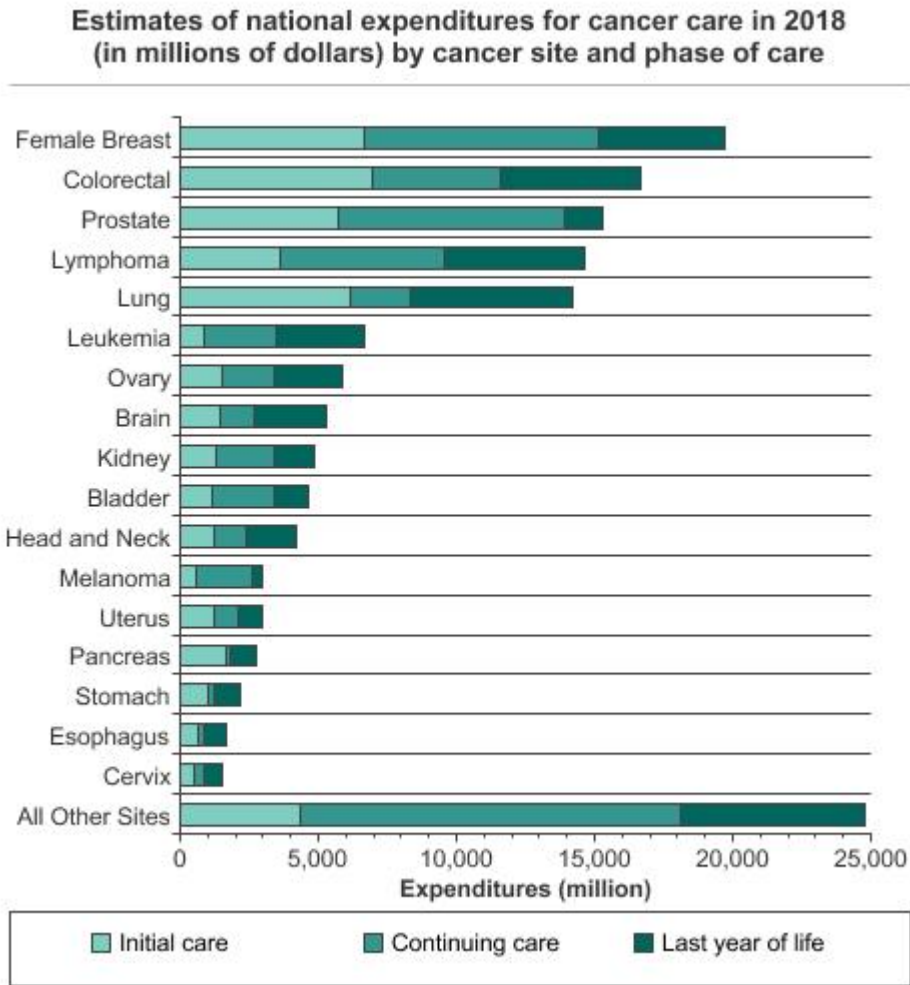
In Lake County, California from 2012-2016, there were 171 new cases of colon and rectum cancer in 2012-2016. For every 100,000 people, 36 colon and rectum cancer cases were reported. Over those years, there were 69 people who died of colon and rectum cancer. For every 100,000 people in Lake County 14 died of colon and rectum cancer (Centers for Disease Control and Prevention, 2012-2016). Colorectal cancer screening offers opportunities for both prevention and early detection. When detected at a localized stage, the five year survival rate for colorectal cancer is 92%, compared to 13% when diagnosed after it has metastasized. While the county data are not available, in California, 57.5%-59.2% of colorectal cancers were diagnosed at an advanced stage in 2013 (UC Davis - Institute for Population Health Improvement, 2016).

Per a report published in 2016 that mapped trends, the percent of female breast cancer cases, melanoma cases, and oropharyngeal cancer cases diagnosed at an advanced stage by county (1988-2013) showed an increasing trend. In contrast, the percent of colorectal cancer cases and prostate cancer cases diagnosed at advanced stage had a decreasing trend (UC Davis - Institute for Population Health Improvement, 2016).

The National Cancer Institute has developed national estimates based on cancer prevalence estimates modeled to 2018 and the costs of care which came from the period 2008-2010 depending on the cancer site. National expenditures were largest for female breast, colorectal, prostate, lymphoma, and lung cancers, reflecting prevalence of disease, treatment patterns, and costs for different types of care as shown in Figure 58.



FIGURE 58: ESTIMATED NATIONAL COSTS FOR CANCER CARE IN 2018



Source: Mariotto AB, Yabroff KR, Shao Y, Feuer EJ, Brown ML. *J National Cancer Institute* 2011;103(2): 117-28

As shown in Table 13, the costs for the latter stages of cancer care are much more than for the initial phase. From 2010 to 2020, Mariotto et al. projected a 27% increase in medical costs based solely upon the increasing aging US population.



**TABLE 13: NATIONAL ANNUALIZED MEAN NET COSTS OF CARE BY AGE, GENDER AND PHASE OF CARE (PER PATIENT). COSTS IN 2010 US DOLLARS**

AGE 65+					
Sex	Site	Initial	Continuing	Last Year of Life	
				Cancer Death	Other Cause
Female	Breast	23,078	2,207	62,856	748
Female	Colorectal	51,327	3,159	84,519	14,641
Female	Lung	60,533	8,130	92,524	18,897
Female	Melanoma	5,047	915	56,784	252
Male	Colorectal	51,812	4,595	85,671	15,068
Male	Head/Neck	39,179	4,001	83,662	9,269
Male	Lung	60,885	7,591	95,318	25,008
Male	Melanoma	5,437	1,951	62,436	546
Male	Prostate	19,710	3,201	62,242	5,370

Source: National Cancer Institute

The high cost of cancer care is paid not only by employers, insurance companies, and taxpayer-funded public programs like Medicare and Medicaid, but by cancer patients and their families. Despite having insurance, the out-of-pocket costs of cancer prove to be prohibitive for patients. Preventing cancer in the first place or detecting it early is the best way to reduce many costs associated with cancer treatment which could include patient out-of-pocket costs, health care payer costs, and indirect costs, according to the American Cancer Society Cancer Action Network (ACS CAN).

A report by ACS CAN titled ‘The Costs of Cancer – Addressing Patient Costs’ (2017) states that an investment of \$10 per person per year in community-based programs to increase physical activity, improve nutrition, and prevent tobacco use could save states and communities more than \$16 billion annually within five years. This is a return of \$5.60 for every \$1 invested. This makes a strong business case for reducing cancer cases and deaths with prevention (including screening) and control (including early detection) measures implemented in the community.

### 7.3 NON-PRIORITIZED SIGNIFICANT NEEDS

These significant health needs emerged from a review of the primary and secondary data. However, Hope Rising Lake County did not elect to focus on these topics in their Implementation Strategy.

#### 7.3.1 ACCESS TO HEALTH SERVICES

Access to health services means “the timely use of personal health services to achieve the best health outcomes.” It requires 3 distinct steps: gaining entry into the health care system (usually through insurance coverage); accessing a location where needed health care services are provided (geographic availability); and, finding a health care provider whom the patient trusts and can communicate with (personal relationship) (Office of Disease Prevention and Health Promotion, 2019).

In the County Health Rankings and Roadmaps listing, Lake County is ranked 58 out of all California Counties in Health Outcomes. Some of the factors that contributed to this ranking are premature death, number of primary care physicians, utilization of free or low-cost preventive screening and vaccinations, and quality of life indicators in the community.

Access to Health was a significant health need that emerged from all the three sources of data collected in this project. In the community survey fielded in Lake County, a very small number of survey participants agreed with the statements that people in Lake County are mostly healthy and have long lives (3.0%) and take steps to stay healthy (6.1%). One area of improvement for the county that emerged was to increase the ability of residents to access healthcare upon need; in the survey, only 15.2% noted they were able to see doctors when need arose.

When asked to rate their own physical health, 23.16% rated it as fair or poor. Self-rated mental health was rated more negatively — 47.3% were sad or worried and 8.17% were finding day to day life difficult and were unable to function. The community survey revealed that behaviors related to accessing healthcare was impeded by multiple factors — lack of specialists (31.6%), costs of care (27.3%), unavailability of appointments (approximately 26%), co-pays (21.43%) and long wait times (19.4%). Cost of healthcare was stated to be a worry in the past 12 months by 35.6% of those surveyed. Finally over 70% of participants reported that it was very important to them to have area hospitals improve their quality of service by providing the following: easy to follow medical instructions and information (76.8%); connections to services that provide shelter, housing, food support (74.7%); connections to agencies that provide social support like counselling (74.5%); having staff speak in their language (71.6%); and, providing a list of all the organizations that give support for housing, shelter, food (70.1%).

As discussed in Section 6.2, interviews with key informants and group discussions revealed that Lake County had many barriers to optimal access to healthcare. These included among others: lack of specialists and appointments, low quality of care, lack of full range of medical services, transportation, cost of healthcare and coverage, limited clinic hours, and lack of cultural competency.

Data scoring led to a topic data score of 1.79 for Access to Health Services (Table 10) which is above the midpoint of the range, where 0 indicates the best outcome and 3 the worst. However, the topic score of Access to Health Services encompassed warning indicators that had higher scores. Table 14 highlights the issue of access in the percent of adults in Lake County that delayed or had difficulty obtaining care. Some of these indicators have been discussed in Section 4.2.5 Access to Health.



TABLE 14: INDICATORS SCORES FOR ACCESS TO HEALTH SERVICES

SCORE	ACCESS TO HEALTH SERVICES	UNITS	LAKE COUNTY	CA	U.S.	MEASUREMENT PERIOD
2.28	People Delayed or had Difficulty Obtaining Care	<i>percent</i>	15.5	10.7		2015-2016
2.17	Consumer Expenditures: Medical Services	<i>percent</i>	2	1.8	1.7	2018
2.17	Consumer Expenditures: Prescription and Non-Prescription Drugs	<i>percent</i>	1.2	0.8	1	2018
2.11	Adults Needing and Receiving Behavioral Health Care Services	<i>percent</i>	52.5	60.5		2015-2016
2.11	Primary Care Provider Rate	<i>providers/100,000 population</i>	51.1	78.1	75.5	2015
2.00	Consumer Expenditures: Medical Supplies	<i>percent</i>	0.3	0.3	0.3	2018
1.83	Dentist Rate	<i>dentists/100,000 population</i>	45.2	82.4	67.4	2016
1.67	Adults Delayed or had Difficulty Obtaining Care	<i>percent</i>	22.2	21.2		2013-2014
1.50	People with a Usual Source of Health Care	<i>percent</i>	91	87.3		2013
1.42	Adults with Health Insurance: 18-64	<i>percent</i>	89.5	89.6		2016
1.14	Children with Health Insurance	0	98.2	96.9	95	2017
1.06	Non-Physician Primary Care Provider Rate	0	71.7	52.2	81.2	2017

The warning indicators (scores above 2) on consumer expenditure in Table 14 indicate the burden imposed by consumer expenditure on health on Lake County residents. Medical costs in the United States are extremely high, so people without health insurance may not be able to afford medical treatment or prescription drugs. They are also less likely to get routine checkups and screenings, so if they do become ill they will not seek treatment until the condition is more advanced and therefore more difficult and costly to treat. Many small businesses are unable to offer health insurance to employees due to rising health insurance premiums. Cost of healthcare is one reason for disparities in access to services. Let's Get Healthy California reports that the average annual family out-of-pocket spending in California, over time, for White families on premiums, co-pays, deductibles and co-insurance for services and prescription drugs was \$3,955 for Whites, \$3,456 for Asians, \$1,969 for Hispanics and \$1,946 for Blacks in 2017. In Lake County, the Real Cost Measure of United Ways Health estimates that the yearly expenses on healthcare for one person is \$2,136, for two-persons is \$4,266 and for a four person household is \$8,526 in 2016.

Care costs are an important indicator of a health system's efficiency and affordability, and these costs must be balanced against the quality of health care provided in order to improve the efficiency of health care delivery. While research has shown that too little or too much spending leads to inferior or substandard health care outcomes, it is unknown what the ideal amount of spending on patients should be. The price-adjusted total Medicare reimbursements per enrollee (Parts A

and B) in 2016 for Lake County was \$9,445.67, whereas the range for the state was from \$7,118.16 to \$12,498.05 (Dartmouth Atlas Project, 2016). According to County Health Rankings data, in 2016 the rate of preventable hospital stays for ambulatory-care sensitive conditions per 100,000 Medicare enrollees is higher for Lake County; it is 3,782 preventable hospital stays per 100,000 Medicare enrollees as compared to 3,507 for California.

One of the possible reasons for people delaying or not utilizing regular care is likely that they lacked coverage by insurance. The Healthy People 2020 national health target is to increase the proportion of people with health insurance to 100%. According to the 2013-2017 American Community Survey, of the civilian non-institutionalized population in Lake County, 88.2% have health insurance coverage but 11.8% of this population have no health insurance coverage. The figure for persons under 65 years that have no health coverage in the county is 9.2% (United States Census Bureau, 2019). Further, 15.5% of the population below 138 percent of the poverty threshold that potentially should have been eligible for health insurance under Medicaid expansion have no insurance and an additional 12% between 138 to 399 percent of the poverty threshold are uninsured. Among the uninsured are 5.3% of disabled persons in Lake County (United States Census Bureau, 2013-2017).

Of those that are covered, 46.0% have private health insurance and 54.5% have public health insurance (United States Census Bureau, 2019). Public health insurance plans are plans that are in some way provided by the government. These plans are available to low-income individuals or families, the elderly, and other individuals that qualify for special groups. This includes the federal programs of Medicare, Medicaid, and Veteran Affairs Health Care (provided through Department of Veterans Affairs); the Children's Health Insurance Program (CHIP); and California State Health Plans. Further, undocumented immigrant children became eligible for Medi-Cal in 2016. Despite the provision of these plans, 3.7% children under 6 years and 8.0% children between 6 and 18 years in Lake County are not insured; in California, the rates of coverage for children under 6 years is 2.4% and for children between 6 and 18 years is 8.9%. The provisions of Medicaid through Medi-Cal and the Children's Health Insurance Program (CHIP) — which extend health coverage to children in poor families with modest incomes too high to qualify for Medicaid - could potentially cover these children indicating that enrollment efforts may need to be targeted to reach such families.

Pregnant women qualify with incomes up to 213 percent of FPL and the state has just begun to offer coverage to some undocumented young adults. According to the most recent data, 69.8% of women in Lake County delivering a baby received prenatal care beginning in the first trimester of their pregnancy indicating more than 30% did not. This data also indicates that 22.1% of women ages 18-64 are without health insurance (California Department of Health, 2017-2018). This would indicate an opportunity to increase coverage rates among Lake County residents and a need to promote the open enrollment period among residents, simultaneously addressing any fears regarding the same.

One area clearly affecting access to health in Lake County is the provider to patient ratio. As seen earlier in section 4.2.5, the provider rate in Lake County is much lower than California. In 2016, there were only 30 primary care physicians in the county. The ratio of population to primary care physicians is 2,140 residents per one physician; in the same period, it was 1,274 residents per primary care physician in California and 1,326 residents per physician in the United States (County Health Rankings and Roadmaps, 2016).

The entire county of Lake is designated as Health Professional Shortage Area (HPSAs) by Health Resources & Services Administration (HRSA) as having shortages of primary care, dental care, or mental health providers. Currently, there are 37 Health Professional Shortage Areas (HPSA) and 1 Medically Underserved Areas/Populations (MUA/P) in Lake County (Health Resource & Services Administration, 2019). Of the 37 HPSA, 16 are for Primary Care, 10 for Dental Health and 11 for Mental Health.

HRSA makes grants to organizations and individuals to improve and expand health care services for underserved people, focusing on the following program areas: Primary Health Care/Health Centers, Ryan White HIV/AIDS Program, Health Workforce Development, School-based Scholarship and Loan Programs, Health Professions Training Grants to Support Institutions, Maternal and Child Health, Rural Health, Healthcare Systems, and Opioid Crisis Response. HRSA's workforce programs improve the health of underserved and vulnerable populations by strengthening the health workforce and connecting skilled professionals to communities in need. The Bureau of Health Workforce (BHW) supports the health care workforce across the training continuum from training to service and expands the primary care workforce of clinicians who provide health care in high-need areas nationwide, including urban, rural, and frontier locations. Health professions programs support a wide array of fields including medicine, nursing, behavioral health, dentistry, public health, and others (Health Resources & Services Administration, 2018).

In 2018, Lake County had received \$0 for special initiatives and other programs from HRSA (HRSA Data Warehouse, 2019). Lake County is also eligible for Rural Health Grants by HRSA. HRSA's Rural Health program helps build health care capacity and improve health outcomes for the estimated 62 million Americans who live in rural communities. This assessment and the Conduent HCI data platform seeks to provide the common ground for Lake County stakeholders to leverage shared capacities and resources to avail of grant opportunities in bringing workforce development to Lake County.

### 7.3.2 MENTAL HEALTH

Mental health and mental disorders had a data score of 1.94, where 0 reflects the best outcomes and 3 reflects the worst outcomes for the county. Mental health was a high priority among community survey participants; as mentioned earlier, 47.3% of those surveyed said they had been sad or worried in the last 30 days and 8.17% were finding day to day life difficult and were unable to function. In response to the kinds of service need gaps in Lake County, 44% said support for people re-entering community after addiction, prison, and mental health treatment was lacking and needed improvement. In fact, 51.3% of survey participants mentioned that mental health was the top priority in Lake County.

The key informants and focus groups also prioritized mental health due to the fact that the community faced many stressors and lacked providers that could either diagnose or treat mental health issues. Table 15 shows that depression and suicide were high for the county in comparison to the state for all life stages — pediatric, adolescent and adults. A further analysis of secondary data shows that 11.5% of adults self-reported having serious psychological stress. According to the same data source, 52.5% of Lake County adults needed or were receiving behavioral health care services (California Health Interview Survey, 2015-2016).

SECTION 7 DATA SYNTHESIS AND PRIORITIZATION

Yet the common refrain was that all mental health needs in the county were not being met currently. The county has 11 designated Mental Health Professional Shortage Areas, evidence of the high need in the county (Health Resources & Services Administration, 2019). With the high drug use rate, the incidence of mental health was stated to be rising.

TABLE 15: INDICATOR SCORES FOR MENTAL HEALTH AND MENTAL DISORDERS

SCORE	MENTAL HEALTH & MENTAL DISORDERS	UNITS	LAKE COUNTY	CA	MEASUREMENT PERIOD
2.28	Depression: Medicare Population	<i>percent</i>	16.8	14.3	2015
2.11	Adults Needing and Receiving Behavioral Health Care Services	<i>percent</i>	52.5	60.5	2015-2016
2.11	Adults Who Ever Thought Seriously About Committing Suicide	<i>percent</i>	16.3	10.4	2016-2017
2.11	Adults with Likely Serious Psychological Distress	<i>percent</i>	11.5	8.9	2015-2017
2.00	Age-Adjusted ER Rate due to Adolescent Suicide and Intentional Self-inflicted Injury	<i>ER visits/ 10,000 population aged 12-17</i>	91.3	46.3	2013-2015
2.00	Age-Adjusted ER Rate due to Mental Health	<i>ER visits/ 10,000 population 18+ years</i>	202.7	93.4	2013-2015
2.00	Age-Adjusted ER Rate due to Pediatric Mental Health	<i>ER visits/ 10,000 population under 18 years</i>	69.4	30.4	2013-2015
2.00	Age-Adjusted ER Rate due to Suicide and Intentional Self-inflicted Injury	<i>ER visits/ 10,000 population 18+ years</i>	52.6	21.7	2013-2015
2.00	Age-Adjusted Hospitalization Rate due to Adolescent Suicide and Intentional Self-inflicted Injury	<i>hospitalizations/ 10,000 population aged 12-17</i>	22.1	13.9	2013-2015
2.00	Age-Adjusted Hospitalization Rate due to Mental Health	<i>hospitalizations/ 10,000 population 18+ years</i>	66	51.3	2013-2015
2.00	Age-Adjusted Hospitalization Rate due to Pediatric Mental Health	<i>hospitalizations/ 10,000 population under 18 years</i>	31.1	26.5	2013-2015
2.00	Age-Adjusted Hospitalization Rate due to Suicide and Intentional Self-inflicted Injury	<i>hospitalizations/ 10,000 population 18+ years</i>	17.3	10.7	2013-2015
0.61	Alzheimer’s Disease or Dementia: Medicare Population	0	7	9.3	2015

Mental Health was a topic that had been prioritized by Hope Rising Lake County partners in 2016. Since then, several initiatives had been launched as given below:

- Restoration House Respite Bed
- Project Restoration
- LiveWell

Since these activities were ongoing, Hope Rising Lake County partners chose not to focus on mental health in this iteration of the CHNA and focus its energies on the significant needs outlined above.



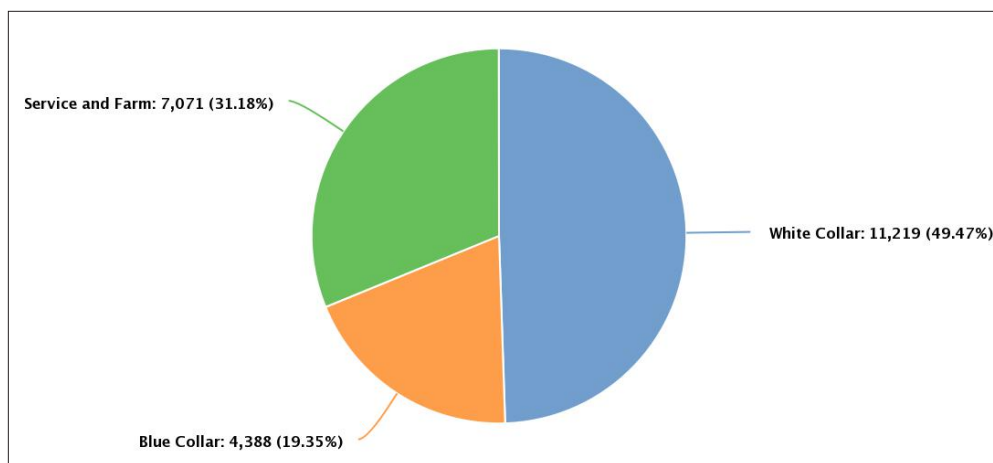
## 7.3.3 POVERTY AND UNEMPLOYMENT

Data scoring yielded high scores of 2.44 and 2.15 for unemployment and poverty respectively. Poverty and unemployment are associated closely and are being discussed here jointly. Households with incomes below the poverty line face many challenges. They find it difficult to meet their living expenses and to make health a priority. In the United States, good health is closely linked to having a job that provides employer sponsored health insurance. Prolonged unemployment increases the likelihood that individuals will earn lower wages or face more periods of unemployment throughout their lives.

The unemployment rate in 2013-2017 for Lake County residents 16+ years was very high at 11.2%; in California and nationally, that rate was 7.7% and 6.6% respectively. In Lake County 12.2% males and 7.1% females in the 16+ age group were unemployed during the same period. Among races in the county, the unemployment rate ranged from 18.6% in Black or African Americans, 12.2% in American Indian and Alaska Natives, 11.6% in Hispanics or Latinos to 10.4% in Whites (United States Census Bureau, 2013-2017). In Lake County, 8.1% of youth were neither in school nor working. Youth who are not in school and are not employed face both short- and long-term barriers to career success. Young people who lack financial stability may be forced to postpone major life decisions such as purchasing a home or starting a family. The most recent U.S. Bureau of Labor Statistics places the unemployment rate among workers in the labor force at 5.2% in April 2019; the same rates for California and the U.S. were 3.9% and 3.3% respectively. More importantly, the Mann-Kendall Test for Statistical Significance which is used by Conduent HCI to evaluate trends over 4 to 10 periods of time shows the Lake County unemployment value increasing significantly (Conduent Healthy Communities Institute, 2019).

Moreover, being employed does not necessarily mean that families are able to meet their basic living expenses, including health costs. As seen in the figure below, 31.8% of the population in the county were employed in the service sector and agriculture and another 19.3% were blue collar workers. Additionally, in Lake County, 28.2% of households are asset limited, income constrained, employed (ALICE) comprising households with income above the Federal Poverty Level but below the basic cost of living. Poverty and unemployment has been previously discussed in Sections 4.1.6 Employment and 4.2.1 Poverty.

**FIGURE 59: EMPLOYED CIVILIANS 16+ BY OCCUPATION GROUP**

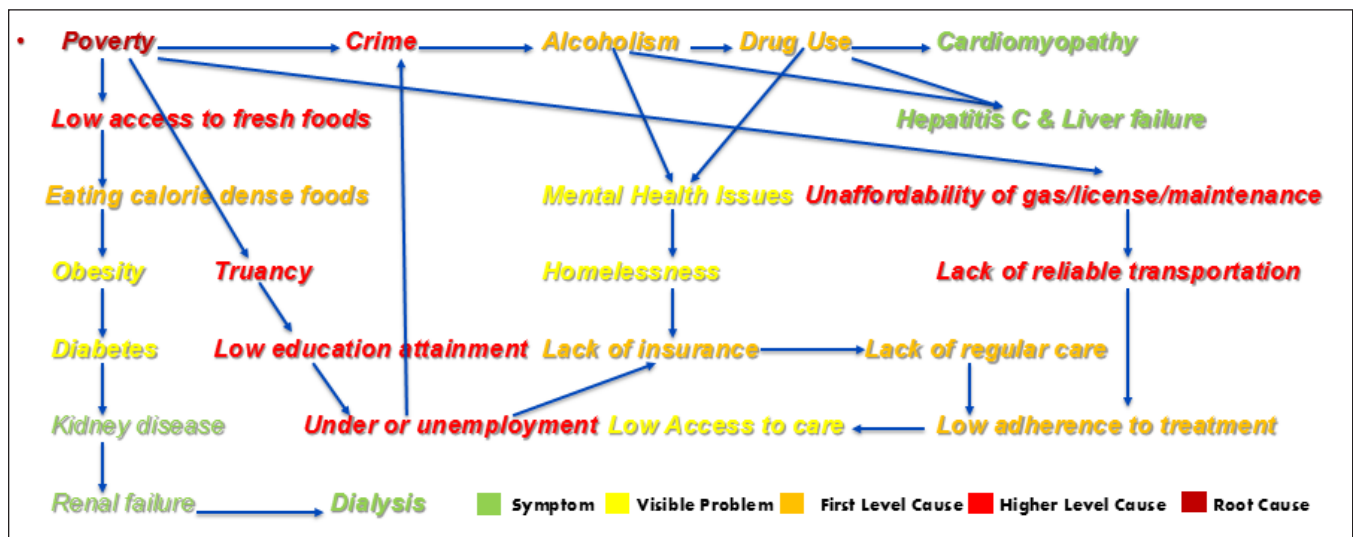


Source: Claritas Pop-Facts Population Estimate, 2019

During the key informants and focus group discussions, inter-generational poverty was repeated over and over for Lake County residents. The county had traditionally been a catchment area for retirees and others that wanted a lackadaisical lifestyle. The number of people with disability and subsisting on public assistance was also stated to be quite high, facts that are corroborated in Section 4.6 Social Profile.

During the focus groups and key informant interviews, an attempt was made to arrive at the root causes of the high priority health needs of Lake County. A post-hoc analysis pieced together the responses collected throughout the community input to arrive at the root cause for substance abuse (as shown in Figure 60). The analysis revealed the root cause to be poverty. The figure below display some of the links between poverty and diseases through the mediation of other social and economic factors.

FIGURE 60: ROOT CAUSE ANALYSIS OF HEALTH CHALLENGES IN LAKE COUNTY



While poverty and unemployment are economic indicators outside the purview of health agencies and their implementation strategies, it is possible for hospitals, health plans and local government to mitigate the health consequences of poverty and its impact. One of the suggestions put forth by key informants was to expand the Hope Rising Lake County Collaborative to include Department of Education, faith communities, the Chamber of Commerce as well as Local Businesses to address the health challenge from all angles and with combined focus. Additionally, economic prospects for youth can be improved by increasing high school graduation rates, increasing access to post-secondary education, and providing career counseling services to students as well as youth who have either completed or dropped out of school. Hope Rising Lake County partners will target these strategies through the umbrella priority of community outreach and education that has been prioritized.

## 7.4 COMMUNITY RESOURCES TO ADDRESS PRIORITY HEALTH ISSUES

Hope Rising Lake County has partnered with Conduent HCI and other Lake County organizations to connect residents to health information, social services, and health resources through their comprehensive resource database. This resource inventory is available publicly to all constituents of Lake County. The community resources are searchable by topic area such as housing, food, income and expenses, transportation, education or by target population such as children and family, youth, and seniors. Therefore, Hope Rising Lake County has made a direct link to all of the resources available through its website through the resource library instead of publishing a list of resources that becomes outdated. The resource library will be seamlessly updated by Conduent HCI at regular intervals. A list of other Lake County organizations, generated by asking survey participants to name those that they have interacted with recently and have relations of trust with, can also be accessed through the Appendix F. Community Resources in this report.

Additionally, Lake County has multiple Collaboratives and/or Coalitions such as Health Leadership Network, Lake County Health Coalition, Tribal Health Continuous Quality Improvement Committee (Home Visitation Program), Breastfeeding Coalition, Safe RX Opioid Task Force, Partnership HealthPlan – Public Health Committee, Oral Health Access Council, MCAH Advisory Board, Mother-Wise Program, Suicide Prevention Task Force, Healthy Start Collaborative, Children's Council, Lake County First 5 Commission, and Child Health and Disability (CHAD) (California Department of Public Health, 2017-2018).

## 7.5 CONCLUSION

The preceding community needs assessment (CHNA) describes barriers to health faced by the community, throwing into focus its priority health issues and providing information necessary to all levels of stakeholders to build upon each other's work and work in a coordinated, collaborative manner. Hope Rising Lake County's Community Health Needs Assessment Collaborative has established clear priorities based on the results of this assessment to improve health outcomes for the residents of Lake County. In collaboration with community stakeholders and residents, Hope Rising Lake County hopes to realize its vision of improving its ranking in the County Health Rankings and Roadmaps list by 2022.

## APPENDIX A. EVALUATION SINCE PRIOR CHNA

### ADVENTIST HEALTH HOSPITAL CLEARLAKE

SIGNIFICANT HEALTH NEED IDENTIFIED IN PRECEDING CHNA	PLANNED ACTIVITIES TO ADDRESS HEALTH NEEDS IDENTIFIED IN PRECEDING IMPLEMENTATION STRATEGY	WAS ACTIVITY IMPLEMENTED (YES/NO)	RESULTS, IMPACT & DATA SOURCES
Healthy Behaviors	Living Nicotine Free with Live Well	Yes	Number of Community Members Served: 19
	Live Well	Yes	Number of Community Members Served: 2653
	Point of Care Sepsis Protocol	Yes	Number of Community Members Served: 950
	Lake County Loves Babies	Yes	Projected Number of Community Members to be Served: 180
Clinical Care	Safe Rx	Yes	Number of Community Members Served: 2113
	Project Restoration	Yes	Number of Community Members Served: 13
	Restoration House Respite Bed	Yes	Number of Community Members Served: 6
	Live Well Intensive	Yes	Number of Community Members Served: 80
	Sepsis Protocol	Yes	Number of Community Members Served: 950
	Capitated Member Communication Strategy	Yes	Projected Number of Community Members Served: 7,500
	Paramedic Home Visit Program	Yes	Projected Number of Community Members Served: 50
	Senior VIP Strategy	Yes	Projected Number of Community Members Served: 1,500
Social and Economic Factors	Hope Rising Lake County Task Force	Yes	Number of Community Members Served: 65000
	The Healthy Clearlake Collaborative	Yes	Number of Community Members Served: 500
	Safe Rx	Yes	Number of Community Members Served: 15,000
	Project Restoration	Yes	Number of Community Members Served: 40
	Hope Rising Lake County Center for Transformation	Yes	Projected Number of Community Members to be Served: 400
Physical Environment	Project Restoration/ Restoration House	Yes	Number of Community Members Served: 13
	Nutritional Services	Yes	Number of Community Members Served: 2500
	Hope Rising Lake County Center for Transformation	No	Projected Number of Community Members to be Served: 200

## SUTTER LAKESIDE HOSPITAL

SIGNIFICANT HEALTH NEEDS IDENTIFIED IN PRECEDING CHNA	PLANNED ACTIVITIES TO ADDRESS HEALTH NEEDS IDENTIFIED IN PRECEDING IMPLEMENTATION STRATEGY	WAS ACTIVITY IMPLEMENTED (YES/NO)	RESULTS, IMPACT & DATA SOURCES
Access to Healthcare Services	Breast Cancer Navigation	Yes	2016: 154 women served 2017: 103 women served 2018: 306 women served
Access to Healthcare Services	Way to Wellville	Yes	Formation of Hope Rising Lake County
Access to Healthcare Services	Heroes of Health and Safety Fair	Yes	2016: 1994 attendees, 96 diabetes education given, 100 blood pressure screenings, 100 oral cancer screenings, 121 dental educations, 150 A1C screenings, 470 flu vaccines administered, 100 health screenings 2017: 2500 attendees, 400 flu vaccines, 150 diabetes screenings, 43 HIV screenings 2018: 2500 attendees, 450 stroke educations, 50 medication educations, 61 HIV screenings, 550 dental educations, 425 flu vaccines given
Community Health Education	Stroke Community Education Outreach	Yes	350 persons served in 2016. In 2018, 5 persons were served. Currently holding stroke education booths at approximately 5 events per year.
Community Health Education	Wellness and Stroke Support Group	Yes, but discontinued	Offered support group once per month with average attendance of about 2, so we discontinued it.
Community Health Education	Wellness Classes Taught by Physical Therapy	Yes	Offering classes 3 days/week, 45 minutes long. Roughly 450 patients served.
Community Health Education	SLH Childbirth Education Series	Yes	4-part Childbirth education series offered for free every other month.
Alcohol and drug abuse prevention services	Reducing Emergency Department Over Utilization by Addressing Needs of the Community		Implemented a variety of processes which led to improvements in hospital readmission rates, thereby reducing unnecessary ED visits. 2017-2018 readmission rates for Sutter Lakeside were some of the lowest in all of Sutter Health, and ranked very high in the state and nationally.
Alcohol and drug abuse prevention services	Hope Rising Lake County	Yes	Formed Hope Rising Lake County
Alcohol and drug abuse prevention services	Hope Rising Safe RX Lake County	Yes	Impacted approximately 15,000 individuals; see county data below

APPENDIX A. **EVALUATION SINCE PRIOR CHNA**

SIGNIFICANT HEALTH NEED IDENTIFIED IN PRECEDING CHNA	ADDITIONAL ACTIVITIES IMPLEMENTED	RESULTS, IMPACT & DATA SOURCES
Access to Healthcare Services	Implementation of Tele-psychiatry service in ED and clinics	In 2018: 112 in ED, 36 inpatient consultations, 188 outpatient clinic visits
Access to Healthcare Services	Smart Start Baby Bundle — access to personal health resources	Provided 141 bundles in 2016 and 347 bundles of safe sleep supplies and materials in 2017
Access to Healthcare Services	<p>Added numerous additional inpatient services in order to improve access to inpatient care here in the county.</p> <ul style="list-style-type: none"> <li>· Infectious Disease consultation contract</li> <li>· 24x7 eICU consultation contract</li> <li>· Tele-nephrology</li> <li>· Tele-gastroenterology</li> <li>· Tele-neonatology</li> </ul>	Improved admission rate from ED visits from 5.5% to 7.5% in 2018. This means the hospital was able to provide inpatient services right here in Lake County to significantly more patients over the past few years as a better service to our community
Community Health Education	Smart Start Baby Bundle — Safe Sleep Education	Provided safe sleep education to approximately 600 residents since July 2017.
Community Health Education	Diabetes Education Program	Have held free monthly classes for over 2 years.
Community Health Education	Town Hall/Open House series	(Imaging, Cardiology, Orthopedics, PT/ST, Primary Care)

## APPENDIX B. SOCIAL DETERMINANTS OF HEALTH: A GUIDING FRAMEWORK FOR THE COMMUNITY HEALTH NEEDS ASSESSMENT

The Hope Rising Lake County Community health needs assessment process was based upon an established public health framework of Social Determinants of Health (SDOH) that will guide goal setting for all stakeholders engaged in the task of building healthy communities in the county.

According to Healthy People 2020, “Social determinants of health are conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks. Conditions (e.g., social, economic, and physical) in these various environments and settings (e.g., school, church, workplace, and neighborhood) have been referred to as ‘place.’ In addition to the more material attributes of ‘place,’ the patterns of social engagement and sense of security and well-being are also affected by where people live. Resources that enhance quality of life can have a significant influence on population health outcomes. Examples of these resources include safe and affordable housing, access to education, public safety, availability of healthy foods, local emergency/health services, and environments free of life-threatening toxins.” (Office of Disease Prevention and Health Promotion, 2019)

FIGURE 61: HEALTHY PEOPLE 2020 APPROACH TO SOCIAL DETERMINANTS OF HEALTH



Adapted from: Healthy People 2020

Source: SIM MDDHS State Innovation Model

**APPENDIX B. SOCIAL DETERMINANTS OF HEALTH: A GUIDING FRAMEWORK FOR THE COMMUNITY HEALTH NEEDS ASSESSMENT**

A “place-based” organizing framework (Figure 61), reflecting five (5) key areas of social determinants of health (SDOH), was developed by Healthy People 2020.

These five key areas (determinants) include:

- Economic Stability
- Education
- Social and Community Context
- Health and Health Care
- Neighborhood and Built Environment

Each of these five determinant areas reflects a number of key issues that make up the underlying factors in the arena of SDOH (Office of Disease Prevention and Health Promotion, 2019).

**TABLE 16: KEY AREAS OF SOCIAL DETERMINANTS OF HEALTH**

ECONOMIC STABILITY	EDUCATION	SOCIAL AND COMMUNITY CONTEXT	HEALTH AND HEALTH CARE	NEIGHBORHOOD AND BUILT ENVIRONMENT
<ul style="list-style-type: none"> <li>• Employment</li> <li>• Food Insecurity</li> <li>• Housing Instability</li> <li>• Poverty</li> </ul>	<ul style="list-style-type: none"> <li>• Early Childhood Education and Development</li> <li>• Enrollment in Higher Education</li> <li>• High School Graduation</li> <li>• Language and Literacy</li> </ul>	<ul style="list-style-type: none"> <li>• Civic Participation</li> <li>• Discrimination</li> <li>• Incarceration</li> <li>• Social Cohesion</li> </ul>	<ul style="list-style-type: none"> <li>• Access to Health Care</li> <li>• Access to Primary Care</li> <li>• Health Literacy</li> </ul>	<ul style="list-style-type: none"> <li>• Access to Foods that Support Healthy Eating Patterns</li> <li>• Crime and Violence</li> <li>• Environmental Conditions</li> <li>• Quality of Housing</li> </ul>

This assessment provides community health practitioners with the opportunity to engage a wide variety of stakeholders, including community members, to achieve the objectives set forth, using the SDOH framework as a guide for program planning and policy adoption to promote community health and prevent disease. Social Determinants of Health create a strategic framework that delivers equity within the broader aim of targeting health promotion and disease prevention issues. With this assessment, Hope Rising Lake County aims to identify and address population health disparities categorized by race/ethnicity, socioeconomic status, gender, age, disability status, sexual orientation and geographic location. Most importantly, this framework allows for tracking of upstream, data-driven outcomes to monitor progress and focus proposed population health interventions for a healthier Lake County.



## APPENDIX C. SECONDARY DATA METHODOLOGY

### SECONDARY DATA SOURCES

The main source for the secondary data, or data that have been previously collected, is the community indicator database maintained by Conduent Healthy Communities Institute. The following is a list of both local and national sources used in Hope Rising Lake County's Community Health Needs Assessment.

1. American Community Survey
2. National Center for Education Statistics
3. County Health Rankings
4. The Dartmouth Atlas of Health Care
5. California Department of Public Health
6. Centers for Medicare & Medicaid Services
7. National Cancer Institute
8. U.S. Bureau of Labor Statistics
9. California Opioid Overdose Surveillance Dashboard
10. California Department of Justice
11. California Health Interview Survey
12. Feeding America
13. Claritas Consumer Buying Power
14. Child Welfare Dynamic Report System
15. California Department of Public Health, STD Control Branch
16. California Department of Education
17. Institute for Health Metrics and Evaluation
18. California Office of Statewide Health Planning and Development
19. California Secretary of State
20. U.S. Department of Agriculture - Food Environment Atlas
21. Controlled Substance Utilization Review and Evaluation System
22. National Environmental Public Health Tracking Network
23. California Department of Public Health, Immunization Branch
24. Lucile Packard Foundation for Children's Health
25. Small Area Health Insurance Estimates
26. American Lung Association
27. California State Highway Patrol
28. U.S. Census — County Business Patterns

**SECONDARY DATA SCORING**

For each indicator, Hope Rising Lake County’s service area is assigned a score based on its comparison to other communities, whether health targets have been met, and the trend of the indicator value over time. These comparison scores range from 0-3, where 0 indicates the best outcome and 3 the worst. Availability of each type of comparison varies by indicator and is dependent upon the data source, comparability with data collected for other communities, and changes in methodology over time.

Indicators are categorized into topic areas and each topic area receives a score. Indicators may be categorized in more than one topic area. Topic scores are determined by the comparisons of all indicators within the topic.

**COMPARISON TO A DISTRIBUTION OF COUNTY VALUES: WITHIN STATE AND NATION**

For ease of interpretation and analysis, indicator data on the Community Dashboard is visually represented as a green-yellow-red gauge showing how the community is faring against a distribution of counties in the state or the United States. A distribution is created by taking all county values within the state or nation, ordering them from low to high, and dividing them into three groups (green, yellow, red) based on their order. Indicators with the poorest comparisons (“in the red”) scored high, whereas indicators with good comparisons (“in the green”) scored low.

**COMPARISON TO VALUES: STATE, NATIONAL, AND TARGETS**

Each county is compared to the state value, the national value, and target values. Target values include the nation-wide Healthy People 2020 (HP2020) goals. Healthy People 2020 goals are national objectives for improving the health of the nation set by the Department of Health and Human Services’ (DHHS) Healthy People Initiative. For all value comparisons, the scoring depends on whether the county value is better or worse than the comparison value, as well as how close the county value is to the target value.

**TREND OVER TIME**

The Mann-Kendall statistical test for trend was used to assess whether the county value is increasing over time or decreasing over time, and whether the trend is statistically significant. The trend comparison uses the four most recent comparable values for the county, and statistical significance is determined at the 90% confidence level. For each indicator with values available for four time periods, scoring was determined by direction of the trend and statistical significance.

### MISSING VALUES

Indicator scores are calculated using the comparison scores, availability of which depends on the data source. If the comparison type is possible for an adequate proportion of indicators on the community dashboard, it will be included in the indicator score. After exclusion of comparison types with inadequate availability, all missing comparisons are substituted with a neutral score for the purposes of calculating the indicator's weighted average. When information is unknown due to lack of comparable data, the neutral value assumes that the missing comparison score is neither good nor bad.

### INDICATOR SCORING

Indicator scores are calculated as a weighted average of all included comparison scores. If none of the included comparison types are possible for an indicator, no score is calculated and the indicator is excluded from the data scoring results.

### TOPIC SCORING

Indicator scores are averaged by topic area to calculate topic scores. Each indicator may be included in up to three topic areas if appropriate. Resulting scores range from 0-3, where a higher score indicates a greater level of need as evidenced by the data. A topic score is only calculated if it includes at least three indicators.

The health and quality of life topic areas are described and defined as follows:

TOPIC AREA	DESCRIPTION & DEFINITION
Access to Health Services	Indicators of or directly related to the availability and ease of access to adequate health services, including primary care, specialty care, oral health care, and mental health care
Children's Health	Indicators of or directly related to children's physical or mental health
Diabetes	Indicators of or directly related to the incidence, prevalence, mortality, screening, treatment, or management of diabetes
Disabilities	Indicators of or directly related to the population affected by disabilities
Economy	Indicators of or directly related to economic factors affecting of an individual's health and quality of life, including income and poverty
Education	Indicators of or directly related to education, specifically educational attainment, proficiency, and educational institutions
Environment	Indicators of or directly related to the surroundings or conditions in which individuals live and operate, including the natural environment and man-made effects on environmental conditions
Environmental & Occupational Health	Indicators of or directly related to the health effects of the physical environment, including those related to one's occupation
Exercise, Nutrition, & Weight	Indicators of or directly related to physical activity and diet behaviors or measures of healthy weight
Heart Disease & Stroke	Indicators of or directly related to cardiovascular health
Immunizations & Infectious Diseases	Indicators of or directly related to vaccinations, influenza & pneumonia, HIV/AIDS, STDs, TB, etc.
Maternal, Fetal & Infant Health	Indicators of or directly related to the health of a mother or child before, during, and after pregnancy
Mental Health & Mental Disorders	Indicators of or directly related to access to mental health care, prevalence of mental illness, and general mental health status
Older Adults & Aging	Indicators of or directly related to health issues specific or especially pertinent to Older Adults (usually age 65+)
Oral Health	Indicators of or directly related to access to oral health care, prevalence of oral diseases, and general oral health status
Prevention & Safety	Indicators of or directly related to injury prevention
Respiratory Diseases	Indicators of or directly related to any disease affecting the respiratory system, including asthma, COPD, lung cancer, and tuberculosis
Social Environment	Indicators of or directly related to the immediate physical and social settings in which people live, including culture, institutions, and interpersonal interactions
Substance Abuse	Indicators of or directly related to alcohol abuse, tobacco use, illegal substance use, and abuse of prescription drugs
Teen & Adolescent Health	Indicators of or directly related to health behaviors and outcomes of adolescents (usually ages 12-17 or grades 7-12)
Transportation	Indicators of or directly related to transportation and its effects on health and quality of life, notably with regards to access to care, commuting, and availability of needed services.

**LAKE COUNTY DATA SCORING RESULTS**

The following tables list each indicator by topic area for Hope Rising Lake County’s service area. Secondary data for this report are up to date as of March 13th, 2019.

SCORE	ACCESS TO HEALTH SERVICES	UNITS	LAKE COUNTY	HP2020	CA	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	SOURCE
2.28	People Delayed or had Difficulty Obtaining Care	percent	15.5	4.2	10.7		2015-2016	N/A	23
2.17	Consumer Expenditures: Medical Services	percent	2		1.8	1.7	2018	N/A	27
2.17	Consumer Expenditures: Prescription and Non-Prescription Drugs	percent	1.2		0.8	1	2018	N/A	27
2.11	Adults Needing and Receiving Behavioral Health Care Services	percent	52.5		60.5		2015-2016	N/A	23
2.11	Primary Care Provider Rate	providers/ 100,000 population	51.1		78.1	75.5	2015	N/A	27
2.00	Consumer Expenditures: Medical Supplies	percent	0.3		0.3	0.3	2018	N/A	27
1.83	Dentist Rate	dentists/ 100,000 population	45.2		82.4	67.4	2016	N/A	27
1.67	Adults Delayed or had Difficulty Obtaining Care	percent	22.2		21.2		2013-2014	N/A	23
1.50	People with a Usual Source of Health Care	percent	91	95	87.3		2013	N/A	23
1.42	Adults with Health Insurance: 18-64	percent	89.5	100	89.6		2016	N	27
1.14	Children with Health Insurance	0	98.2	100	96.9	95	2017	N	1
1.06	Non-Physician Primary Care Provider Rate	0	71.7		52.2	81.2	2017	N/A	27
SCORE	ALTERNATIVE MEDICINE	UNITS	LAKE COUNTY	HP2020	CA	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	Source
2.17	Consumer Expenditures: Prescription and Non-Prescription Drugs	percent	1.2		0.8	1	2018	N/A	27

APPENDIX C. **SECONDARY DATA METHODOLOGY**

SCORE	CANCER	UNITS	LAKE COUNTY	HP2020	CA	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	Source
2.61	Mammography Screening: Medicare Population	percent	50.6		59.5	63.2	2015	N/A	27
2.50	Age-Adjusted Death Rate due to Breast Cancer	deaths/ 100,000 females	29.5	20.7	19.1		2014-2016	N/A	1
2.44	Lung and Bronchus Cancer Incidence Rate	cases/ 100,000 population	73.9		43.3	60.2	2011-2015	N	27
2.44	Oral Cavity and Pharynx Cancer Incidence Rate	cases/ 100,000 population	14.2		10.3	11.6	2011-2015	N	27
2.28	Age-Adjusted Death Rate due to Prostate Cancer	deaths/ 100,000 males	23.4	21.8	19.7	19.5	2011-2015	N	27
2.17	Age-Adjusted Death Rate due to Colorectal Cancer	deaths/ 100,000 population	14.8	14.5	13.3	14.5	2011-2015	N	27
2.06	Age-Adjusted Death Rate due to Cancer	deaths/ 100,000 population	192.7	161.4	140.2		2014-2016	N/A	1
1.94	Age-Adjusted Death Rate due to Lung Cancer	deaths/ 100,000 population	46.5	45.5	28.9		2014-2016	N/A	1
1.72	Colorectal Cancer Incidence Rate	cases/ 100,000 population	41.8	39.9	36.2	39.2	2011-2015	N	27
0.56	Cancer: Medicare Population	0	6.2		7.5	7.8	2015	N/A	27
0.39	Breast Cancer Incidence Rate	0	101.8		121.5	124.7	2011-2015	N	27
0.39	Prostate Cancer Incidence Rate	0	80.5		101.2	109	2011-2015	N	27

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SCORE	CHILDREN'S HEALTH	UNITS	LAKE COUNTY	HP2020	CA	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	Source
2.17	Child Food Insecurity Rate	percent	24.5		19	17.9	2016	N/A	27
2.17	Substantiated Child Abuse Rate	cases/ 1,000 children	9.9		7.5		2017	N/A	27
2.00	Age-Adjusted ER Rate due to Pediatric Mental Health	ER visits/ 10,000 population under 18 years	69.4		30.4		2013-2015	Y	23
2.00	Age-Adjusted Hospitalization Rate due to Pediatric Mental Health	hospitalizations/ 10,000 population under 18 years	31.1		26.5		2013-2015	Y	23
1.78	5th Grade Students who are at a Healthy Weight or Underweight	percent	57.4		59.5		2017-2018	N/A	1
1.67	Age-Adjusted ER Rate due to Pediatric Asthma	ER visits/ 10,000 population under 18 years	72.5		70.9		2013-2015	N	23
1.56	Kindergartners with Required Immunizations	percent	93.9		95.1		2017	N/A	1
1.39	Children and Teens with Asthma	percent	15.1				2014	N/A	23
1.33	Children with Low Access to a Grocery Store	percent	3.9				2015	N/A	28
1.17	Age-Adjusted Hospitalization Rate due to Pediatric Asthma	0	6.9		9.8		2013-2015	N/A	23
1.14	Children with Health Insurance	0	98.2	100	96.9	95	2017	N	1
0.67	Consumer Expenditures: Childcare	0	0.3		0.5	0.5	2018	N/A	27
0.61	Food Insecure Children Likely Ineligible for Assistance	0	18		33	20	2016	N/A	27

APPENDIX C. **SECONDARY DATA METHODOLOGY**

SCORE	DIABETES	UNITS	LAKE COUNTY	HP2020	CA	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	Source
2.00	Age-Adjusted ER Rate due to Diabetes	ER visits/ 10,000 population 18+ years	51.3		26.6		2013-2015	N/A	23
2.00	Age-Adjusted ER Rate due to Long-Term Complications of Diabetes	ER visits/ 10,000 population 18+ years	18.6		12.4		2013-2015	N/A	23
2.00	Age-Adjusted ER Rate due to Short-Term Complications of Diabetes	ER visits/ 10,000 population 18+ years	10.2		1.8		2013-2015	N/A	23
2.00	Age-Adjusted ER Rate due to Uncontrolled Diabetes	ER visits/ 10,000 population 18+ years	6.3		2.2		2013-2015	N/A	23
2.00	Age-Adjusted Hospitalization Rate due to Diabetes	hospitalizations/ 10,000 population 18+ years	29.4		17.2		2013-2015	N/A	23
2.00	Age-Adjusted Hospitalization Rate due to Long-Term Complications of Diabetes	hospitalizations/ 10,000 population 18+ years	12.3		10.2		2013-2015	N/A	23
2.00	Age-Adjusted Hospitalization Rate due to Short-Term Complications of Diabetes	hospitalizations/ 10,000 population 18+ years	16		5.9		2013-2015	N/A	23
1.89	Adults with Diabetes	percent	12.8		9.4		2015-2016	N/A	23
1.33	Age-Adjusted Hospitalization Rate due to Uncontrolled Diabetes	hospitalizations/ 10,000 population 18+ years	0.8		0.9		2013-2015	N/A	23
0.78	Diabetes: Medicare Population	0	21.1		25.3	26.5	2015	N/A	27
0.64	Age-Adjusted Death Rate due to Diabetes	0	14.6		20.7	21.1	2014-2016	N/A	1
SCORE	DISABILITIES	UNITS	LAKE COUNTY	HP2020	CA	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	Source
2.25	Persons with Disability Living in Poverty (5-year)	percent	37.1		25.5	27.1	2013-2017	N/A	1



APPENDIX C. **SECONDARY DATA METHODOLOGY**

SCORE	ECONOMY	UNITS	LAKE COUNTY	HP2020	CA	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	Source
2.83	Families Living Below Poverty Level	percent	17.8		11.1	10.5	2013-2017	Y	1
2.83	Students Eligible for the Free Lunch Program	percent	66.3		50.1	42.6	2015-2016	N/A	27
2.44	Unemployed Workers in Civilian Labor Force	percent	4.9		3.9	3.5	November 2018	N/A	27
2.39	Children Living Below Poverty Level	percent	31.6		20.8	20.3	2013-2017	Y	1
2.39	Median Household Income	dollars	40446		67169	57652	2013-2017	Y	1
2.39	People Living 200% Above Poverty Level	percent	53.2		66.1	67.2	2013-2017	N/A	1
2.39	People Living Below Poverty Level	percent	22.8		15.1	14.6	2013-2017	Y	1
2.39	Renters Spending 30% or More of Household Income on Rent	percent	62.6		56	50.6	2013-2017	N	1
2.39	Youth not in School or Working	percent	8.1		2.1	2.1	2013-2017	N	1
2.28	Severe Housing Problems	percent	27.3		27.9	18.8	2010-2014	N/A	27
2.25	Persons with Disability Living in Poverty (5-year)	percent	37.1		25.5	27.1	2013-2017	N/A	1
2.22	Homeownership	percent	48.6		50.2	56	2013-2017	N/A	1
2.17	Child Food Insecurity Rate	percent	24.5		19	17.9	2016	N/A	27
2.17	Food Insecurity Rate	percent	17		11.7	12.9	2016	N/A	27
1.83	Low-Income and Low Access to a Grocery Store	percent	8.8				2015	N/A	28
1.83	Per Capita Income	dollars	23345		33128	31177	2013-2017	Y	1
0.89	People 65+ Living Below Poverty Level	0	8.6		10.2	9.3	2013-2017	N	1
0.61	Food Insecure Children Likely Ineligible for Assistance	0	18		33	20	2016	N/A	27

APPENDIX C. **SECONDARY DATA METHODOLOGY**

SCORE	EDUCATION	UNITS	LAKE COUNTY	HP2020	CA	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	Source
2.44	People 25+ with a Bachelor's Degree or Higher	percent	15.3		32.6	30.9	2013-2017	Y	1
2.11	High School Graduation	percent	75.5	87	82.7		2016-2017	N/A	1
2.00	11th Grade Students Proficient in English/Language Arts	percent	46		56		2018	N/A	1
2.00	11th Grade Students Proficient in Math	percent	14.6		31.4		2018	N/A	1
2.00	3rd Grade Students Proficient in English/Language Arts	percent	34.4		48.2		2018	N/A	1
2.00	3rd Grade Students Proficient in Math	percent	31		48.9		2018	N/A	1
2.00	4th Grade Students Proficient in English/Language Arts	percent	28.5		48.7		2018	N/A	1
2.00	4th Grade Students Proficient in Math	percent	25.9		42.9		2018	N/A	1
2.00	5th Grade Students Proficient in English/Language Arts	percent	30.1		49.4		2018	N/A	1
2.00	5th Grade Students Proficient in Math	percent	18.3		36		2018	N/A	1
2.00	6th Grade Students Proficient in English/Language Arts	percent	25.5		47.8		2018	N/A	1
2.00	6th Grade Students Proficient in Math	percent	16.2		37.5		2018	N/A	1
2.00	7th Grade Students Proficient in English/Language Arts	percent	34.6		50.2		2018	N/A	1
2.00	7th Grade Students Proficient in Math	percent	22.3		37.3		2018	N/A	1
2.00	8th Grade Students Proficient in English/Language Arts	percent	32.3		49.1		2018	N/A	1
2.00	8th Grade Students Proficient in Math	percent	16.4		36.9		2018	N/A	1
1.89	Student-to-Teacher Ratio	students/ teacher	23		24	18	2015-2016	N/A	27
1.78	People 25+ with a High School Degree or Higher	percent	84.7		82.5	87.3	2013-2017	Y	1
0.67	Consumer Expenditures: Childcare	0	0.3		0.5	0.5	2018	N/A	27

APPENDIX C. **SECONDARY DATA METHODOLOGY**

SCORE	ENVIRONMENT	UNITS	LAKE COUNTY	HP2020	CA	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	Source
2.39	Food Environment Index		6.7		8.8	7.7	2018	N/A	27
2.28	Severe Housing Problems	percent	27.3		27.9	18.8	2010-2014	N/A	27
1.83	Access to Exercise Opportunities	percent	75		89.6	83.1	2018	N/A	27
1.83	Households with No Car and Low Access to a Grocery Store	percent	3.6				2015	N/A	28
1.83	Low-Income and Low Access to a Grocery Store	percent	8.8				2015	N/A	28
1.67	People 65+ with Low Access to a Grocery Store	percent	3.5				2015	N/A	28
1.61	Number of Extreme Precipitation Days	days	99				2016	N/A	27
1.61	Weeks of Moderate Drought or Worse	weeks per year	52				2016	N/A	27
1.50	Recreation and Fitness Facilities	facilities/ 1,000 population	0.1				2014	N/A	28
1.39	Months of Mild Drought or Worse	months per year	7				2016	N/A	27
1.39	Number of Extreme Heat Events	events	5				2016	N/A	27
1.33	Children with Low Access to a Grocery Store	percent	3.9				2015	N/A	28
1.28	Annual Particle Pollution	grade	B				2014-2016	N/A	1
1.28	Fast Food Restaurant Density	0	0.5				2014	N/A	28
1.22	Daily Dose of UV Irradiance	0	3077		3216		2015	N/A	27
1.11	Farmers Market Density	0	0.1				2016	N/A	28
1.11	Grocery Store Density	0	0.3				2014	N/A	28
0.89	Annual Ozone Air Quality	grade	A				2014-2016	N/A	1
0.39	Liquor Store Density	0	6.2		10.1	10.5	2015	N/A	28

APPENDIX C. **SECONDARY DATA METHODOLOGY**

SCORE	ENVIRONMENTAL & OCCUPATIONAL HEALTH	UNITS	LAKE COUNTY	HP2020	CA	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	Source
2.50	Asthma: Medicare Population	percent	8.7		7.5	8.2	2015	N/A	27
2.00	Age-Adjusted ER Rate due to Adult Asthma	ER visits/ 10,000 population 18+ years	65		34.6		2013-2015	N/A	23
2.00	Age-Adjusted ER Rate due to Asthma	ER visits/ 10,000 population	66.9		44		2013-2015	N/A	23
2.00	Age-Adjusted Hospitalization Rate due to Adult Asthma	hospitalizations/ 10,000 population 18+ years	9.1		6.8		2013-2015	N/A	23
2.00	Age-Adjusted Hospitalization Rate due to Asthma	hospitalizations/ 10,000 population	8.5		7.6		2013-2015	N/A	23
1.67	Age-Adjusted ER Rate due to Pediatric Asthma	ER visits/ 10,000 population under 18 years	72.5		70.9		2013-2015	N	23
1.39	Adults with Asthma	percent	15.9		15		2016-2017	N	23
1.17	Age-Adjusted Hospitalization Rate due to Pediatric Asthma	0	6.9		9.8		2013-2015	N/A	23

APPENDIX C. **SECONDARY DATA METHODOLOGY**

SCORE	EXERCISE, NUTRITION, & WEIGHT	UNITS	LAKE COUNTY	HP2020	CA	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	Source
2.39	Food Environment Index		6.7		8.8	7.7	2018	N/A	27
2.17	Child Food Insecurity Rate	percent	24.5		19	17.9	2016	N/A	27
2.17	Food Insecurity Rate	percent	17		11.7	12.9	2016	N/A	27
2.00	7th Grade Students who are Physically Fit	percent	49.6		63.6		2017-2018	N/A	1
2.00	Adults who Walk Regularly	percent	29.2		33		2013-2014	N/A	23
2.00	Consumer Expenditures: High Sugar Beverages	percent	0.6		0.5	0.6	2018	N/A	27
2.00	Consumer Expenditures: High Sugar Foods	percent	0.9		0.8	0.8	2018	N/A	27
1.94	9th Grade Students who are at a Healthy Weight or Underweight	percent	56.6		62.7		2017-2018	N/A	1
1.83	Access to Exercise Opportunities	percent	75		89.6	83.1	2018	N/A	27
1.83	Adults who Drink Sugar-Sweetened Beverages	percent	20.5		17.4		2013-2014	N/A	23
1.83	Households with No Car and Low Access to a Grocery Store	percent	3.6				2015	N/A	28
1.83	Low-Income and Low Access to a Grocery Store	percent	8.8				2015	N/A	28
1.78	5th Grade Students who are at a Healthy Weight or Underweight	percent	57.4		59.5		2017-2018	N/A	1
1.67	People 65+ with Low Access to a Grocery Store	percent	3.5				2015	N/A	28
1.56	Adults who are Overweight or Obese	percent	65.5		60.4		2017	N	23
1.50	Recreation and Fitness Facilities	facilities/ 1,000 population	0.1				2014	N/A	28
1.33	Children with Low Access to a Grocery Store	percent	3.9				2015	N/A	28
1.28	Fast Food Restaurant Density	0	0.5				2014	N/A	28
1.25	Adults Who Are Obese	0	28.1	30.5	27.9	29.9	2016	N/A	23
1.22	Workers who Walk to Work	0	3	3.1	2.7	2.7	2013-2017	N	1
1.11	Adult Fast Food Consumption	0	48.5		65.6		2016	N	23
1.11	Farmers Market Density	0	0.1				2016	N/A	28
1.11	Grocery Store Density	0	0.3				2014	N/A	28
0.67	Consumer Expenditures: Fruits and Vegetables	0	1.6		1.5	1.4	2018	N/A	27
0.61	Food Insecure Children Likely Ineligible for Assistance	0	18		33	20	2016	N/A	27

APPENDIX C. **SECONDARY DATA METHODOLOGY**

SCORE	FAMILY PLANNING	UNITS	LAKE COUNTY	HP2020	CA	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	Source
1.92	Teen Birth Rate: 15-19	live births/ 1,000 females aged 15-19	30.5		17.6	22.3	2014-2016	N/A	1
SCORE	GOVERNMENT & POLITICS	UNITS	LAKE COUNTY	HP2020	CA	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	Source
1.94	Voter Turnout: Presidential Election	percent	72.3		75.3		2016	N/A	23
SCORE	HEART DISEASE & STROKE	UNITS	LAKE COUNTY	HP2020	CA	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	Source
2.17	High Blood Pressure Prevalence	percent	43.9	26.9	29		2017	N	23
2.08	Age-Adjusted Death Rate due to Coronary Heart Disease	deaths/ 100,000 population	115.7	103.4	89.1	96.8	2014-2016	N/A	1
2.00	Adults with Heart Disease	percent	8.7		5.9		2013-2014	N/A	23
2.00	Age-Adjusted ER Rate due to Heart Failure	ER visits/ 10,000 population 18+ years	34		9.4		2013-2015	N/A	23
2.00	Age-Adjusted ER Rate due to Hypertension	ER visits/ 10,000 population 18+ years	29.8		26.4		2013-2015	Y	23
1.83	Ischemic Heart Disease: Medicare Population	percent	26.8		23.6	26.5	2015	N/A	27
1.75	Age-Adjusted Death Rate due to Cerebrovascular Disease (Stroke)	deaths/ 100,000 population	40.8	34.8	35.3	37.2	2014-2016	N/A	1
1.67	Age-Adjusted Hospitalization Rate due to Heart Failure	hospitalizations/ 10,000 population 18+ years	31.8		29.1		2013-2015	N/A	23
1.56	Age-Adjusted Death Rate due to Heart Attacks	deaths/ 100,000 population	54		50.7		2015	N/A	27
1.44	Heart Failure: Medicare Population	percent	12.8		12.9	13.5	2015	N/A	27
1.17	Age-Adjusted Hospitalization Rate due to Hypertension	0	2.4		3.3		2013-2015	N	23
1.00	Age-Adjusted Hospitalization Rate due to Heart Attack	0	20.9		23.6		2014	N/A	27
0.72	Hyperlipidemia: Medicare Population	0	35.1		41.5	44.6	2015	N/A	27
0.61	Atrial Fibrillation: Medicare Population	0	6.3		7.3	8.1	2015	N/A	27
0.56	Hypertension: Medicare Population	0	44.5		49.6	55	2015	N/A	27
0.39	Stroke: Medicare Population	0	2.9		3.7	4	2015	N/A	27
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APPENDIX C. **SECONDARY DATA METHODOLOGY**

SCORE	IMMUNIZATIONS & INFECTIOUS DISEASES	UNITS	LAKE COUNTY	HP2020	CA	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	Source
2.14	Age-Adjusted Death Rate due to Influenza and Pneumonia	deaths/ 100,000 population	19.6		14.3	14.6	2014-2016	N/A	1
2.11	Death Rate Among Persons with Diagnosed HIV Infection	deaths/ 100,000 population	9.2		4.4		2016	N/A	1
2.11	Gonorrhea Incidence Rate	cases/ 100,000 population	286.2		190.3		2017	N/A	15
2.00	Age-Adjusted ER Rate due to Community Acquired Pneumonia	ER visits/ 10,000 population 18+ years	69.8		19		2013-2015	N/A	23
2.00	Age-Adjusted ER Rate due to Hepatitis	ER visits/ 10,000 population 18+ years	2.7		0.9		2013-2015	N/A	23
2.00	Age-Adjusted Hospitalization Rate due to Community Acquired Pneumonia	hospitalizations/ 10,000 population 18+ years	30.6		16.7		2013-2015	N/A	23
2.00	Age-Adjusted Hospitalization Rate due to Hepatitis	hospitalizations/ 10,000 population 18+ years	4		2.3		2013-2015	N/A	23
1.67	Age-Adjusted ER Rate due to Immunization-Preventable Pneumonia and Influenza	ER visits/ 10,000 population 18+ years	9.6		9.5		2013-2015	N	23
1.56	Kindergartners with Required Immunizations	percent	93.9		95.1		2017	N/A	1
1.50	Age-Adjusted Hospitalization Rate due to Immunization-Preventable Pneumonia and Influenza	hospitalizations/ 10,000 population 18+ years	1.4		1.5		2013-2015	N/A	23
1.50	Reported Incidence of Persons Diagnosed with HIV/AIDS: 13+	cases/ 100,000 population 13+ years	257.5		391.7		2013-2015	N/A	1
1.44	Chlamydia Incidence Rate	cases/ 100,000 population	404.7		552.2		2017	N/A	15
1.28	Syphilis Incidence Rate	0	6.2		16.8		2017	N/A	15
1.00	Congenital Syphilis Incidence Rate	0	0		58.2		2017	N/A	15
1.00	Persons Living and Diagnosed with HIV who are in Care	0	89.1		73.2		2016	N/A	1
0.89	HIV Incidence Rate	0	1.5		12.9		2016	N/A	1

APPENDIX C. **SECONDARY DATA METHODOLOGY**

SCORE	MATERNAL, FETAL & INFANT HEALTH	UNITS	LAKE COUNTY	HP2020	CA	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	Source
2.53	Infant Mortality Rate	deaths/ 1,000 live births	11.2	6	4.8	6.1	2011	N/A	1
2.17	Mothers who Received Early Prenatal Care	percent	69.9	77.9	83.3		2014-2016	N/A	1
1.92	Teen Birth Rate: 15-19	live births/ 1,000 females aged 15-19	30.5		17.6	22.3	2014-2016	N/A	1
1.47	Preterm Births	percent	9.4	9.4	8.8	11.4	2013	N/A	27
1.39	Mothers who Breastfeed	percent	92.5	81.9	93.8		2014-2016	N/A	1
1.00	Congenital Syphilis Incidence Rate	0	0		58.2		2017	N/A	15
0.92	Babies with Low Birth Weight	0	6.3	7.8	6.8	8.1	2014-2016	N/A	1
0.67	Consumer Expenditures: Childcare	0	0.3		0.5	0.5	2018	N/A	27
SCORE	MEDICINE, DRUGS, & MEDICAL TECHNOLOGY	UNITS	LAKE COUNTY	HP2020	CA	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	Source
2.17	Consumer Expenditures: Medical Services	percent	2		1.8	1.7	2018	N/A	27
2.17	Consumer Expenditures: Prescription and Non-Prescription Drugs	percent	1.2		0.8	1	2018	N/A	27
2.00	Consumer Expenditures: Medical Supplies	percent	0.3		0.3	0.3	2018	N/A	27
1.64	Opioid Prescription Patients	percent	6				43313	N/A	27
1.64	Opioid Prescription Rate	prescriptions per 10,000 population	754.7				43313	N/A	27
SCORE	MEN'S HEALTH	UNITS	LAKE COUNTY	HP2020	CA	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	Source
2.28	Age-Adjusted Death Rate due to Prostate Cancer	deaths/ 100,000 males	23.4	21.8	19.7	19.5	2011-2015	N	27
2.06	Life Expectancy for Males	years	73.3		78.6	76.7	2014	N/A	27
0.39	Prostate Cancer Incidence Rate	0	80.5		101.2	109	2011-2015	N	27



APPENDIX C. **SECONDARY DATA METHODOLOGY**

SCORE	MENTAL HEALTH & MENTAL DISORDERS	UNITS	LAKE COUNTY	HP2020	CA	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	Source
2.28	Depression: Medicare Population	percent	16.8		14.3	16.7	2015	N/A	27
2.11	Adults Needing and Receiving Behavioral Health Care Services	percent	52.5		60.5		2015-2016	N/A	23
2.11	Adults Who Ever Thought Seriously About Committing Suicide	percent	16.3		10.4		2016-2017	N	23
2.11	Adults with Likely Serious Psychological Distress	percent	11.5		8.9		2015-2017	N	23
2.00	Age-Adjusted ER Rate due to Adolescent Suicide and Intentional Self-inflicted Injury	ER visits/ 10,000 population aged 12-17	91.3		46.3		2013-2015	Y	23
2.00	Age-Adjusted ER Rate due to Mental Health	ER visits/ 10,000 population 18+ years	202.7		93.4		2013-2015	Y	23
2.00	Age-Adjusted ER Rate due to Pediatric Mental Health	ER visits/ 10,000 population under 18 years	69.4		30.4		2013-2015	Y	23
2.00	Age-Adjusted ER Rate due to Suicide and Intentional Self-inflicted Injury	ER visits/ 10,000 population 18+ years	52.6		21.7		2013-2015	Y	23
2.00	Age-Adjusted Hospitalization Rate due to Adolescent Suicide and Intentional Self-inflicted Injury	hospitalizations/ 10,000 population aged 12-17	22.1		13.9		2013-2015	N	23
2.00	Age-Adjusted Hospitalization Rate due to Mental Health	hospitalizations/ 10,000 population 18+ years	66		51.3		2013-2015	Y	23
2.00	Age-Adjusted Hospitalization Rate due to Pediatric Mental Health	hospitalizations/ 10,000 population under 18 years	31.1		26.5		2013-2015	Y	23
2.00	Age-Adjusted Hospitalization Rate due to Suicide and Intentional Self-inflicted Injury	hospitalizations/ 10,000 population 18+ years	17.3		10.7		2013-2015	N	23
0.61	Alzheimer's Disease or Dementia: Medicare Population	0	7		9.3	9.9	2015	N/A	27

APPENDIX C. **SECONDARY DATA METHODOLOGY**

SCORE	MORTALITY DATA	UNITS	LAKE COUNTY	HP2020	CA	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	Source
2.61	Alcohol-Impaired Driving Deaths	percent	39.7		29.4	29.3	2012-2016	N/A	27
2.61	Death Rate due to Drug Poisoning	deaths/ 100,000 population	44.1		11.8	16.9	2014-2016	N/A	27
2.53	Age-Adjusted Death Rate due to Unintentional Injuries	deaths/ 100,000 population	88.5	36.4	30.3	43.2	2014-2016	N/A	1
2.53	Infant Mortality Rate	deaths/ 1,000 live births	11.2	6	4.8	6.1	2011	N/A	1
2.50	Age-Adjusted Death Rate due to Breast Cancer	deaths/ 100,000 females	29.5	20.7	19.1		2014-2016	N/A	1
2.31	Age-Adjusted Death Rate due to Motor Vehicle Traffic Collisions	deaths/ 100,000 population	22.8	12.4	8.8	11	2014-2016	N/A	1
2.28	Age-Adjusted Death Rate due to Drug Use	deaths/ 100,000 population	43.6	11.3	12.2		2014-2016	N/A	1
2.28	Age-Adjusted Death Rate due to Prostate Cancer	deaths/ 100,000 males	23.4	21.8	19.7	19.5	2011-2015	N	27
2.17	Age-Adjusted Death Rate due to Colorectal Cancer	deaths/ 100,000 population	14.8	14.5	13.3	14.5	2011-2015	N	27
2.14	Age-Adjusted Death Rate due to Influenza and Pneumonia	deaths/ 100,000 population	19.6		14.3	14.6	2014-2016	N/A	1
2.11	Age-Adjusted Death Rate due to Heroin Overdose	deaths/ 100,000 population	2.9		1.4		2017	N/A	23
2.11	Death Rate Among Persons with Diagnosed HIV Infection	deaths/ 100,000 population	9.2		4.4		2016	N/A	1
2.08	Age-Adjusted Death Rate due to Coronary Heart Disease	deaths/ 100,000 population	115.7	103.4	89.1	96.8	2014-2016	N/A	1
2.06	Age-Adjusted Death Rate due to Cancer	deaths/ 100,000 population	192.7	161.4	140.2		2014-2016	N/A	1
1.94	Age-Adjusted Death Rate due to Lung Cancer	deaths/ 100,000 population	46.5	45.5	28.9		2014-2016	N/A	1
1.75	Age-Adjusted Death Rate due to Cerebrovascular Disease (Stroke)	deaths/ 100,000 population	40.8	34.8	35.3	37.2	2014-2016	N/A	1
1.56	Age-Adjusted Death Rate due to Heart Attacks	deaths/ 100,000 population	54		50.7		2015	N/A	27
0.64	Age-Adjusted Death Rate due to Diabetes	0	14.6		20.7	21.1	2014-2016	N/A	1

APPENDIX C. **SECONDARY DATA METHODOLOGY**

SCORE	OLDER ADULTS & AGING	UNITS	LAKE COUNTY	HP2020	CA	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	Source
2.61	Mammography Screening: Medicare Population	percent	50.6		59.5	63.2	2015	N/A	27
2.61	People 65+ Living Alone	percent	30.3		22.8	26.2	2013-2017	N/A	1
2.50	Asthma: Medicare Population	percent	8.7		7.5	8.2	2015	N/A	27
2.28	Depression: Medicare Population	percent	16.8		14.3	16.7	2015	N/A	27
2.22	COPD: Medicare Population	percent	14		8.9	11.2	2015	N/A	27
1.83	Ischemic Heart Disease: Medicare Population	percent	26.8		23.6	26.5	2015	N/A	27
1.67	Consumer Expenditures: Eldercare	percent	0.2		0.2	0.2	2018	N/A	27
1.67	People 65+ with Low Access to a Grocery Store	percent	3.5				2015	N/A	28
1.44	Heart Failure: Medicare Population	percent	12.8		12.9	13.5	2015	N/A	27
1.17	Chronic Kidney Disease: Medicare Population	0	14.9		17.9	18.1	2015	N/A	27
0.89	People 65+ Living Below Poverty Level	0	8.6		10.2	9.3	2013-2017	N	1
0.83	Rheumatoid Arthritis or Osteoarthritis: Medicare Population	0	25.6		27.6	30	2015	N/A	27
0.78	Diabetes: Medicare Population	0	21.1		25.3	26.5	2015	N/A	27
0.72	Hyperlipidemia: Medicare Population	0	35.1		41.5	44.6	2015	N/A	27
0.61	Alzheimer's Disease or Dementia: Medicare Population	0	7		9.3	9.9	2015	N/A	27
0.61	Atrial Fibrillation: Medicare Population	0	6.3		7.3	8.1	2015	N/A	27
0.56	Cancer: Medicare Population	0	6.2		7.5	7.8	2015	N/A	27
0.56	Hypertension: Medicare Population	0	44.5		49.6	55	2015	N/A	27
0.39	Osteoporosis: Medicare Population	0	3.1		6.7	6	2015	N/A	27
0.39	Stroke: Medicare Population	0	2.9		3.7	4	2015	N/A	27
SCORE	ORAL HEALTH	UNITS	LAKE COUNTY	HP2020	CA	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	Source
2.44	Oral Cavity and Pharynx Cancer Incidence Rate	cases/ 100,000 population	14.2		10.3	11.6	2011-2015	N	27
2.00	Age-Adjusted ER Rate due to Dental Problems	ER visits/ 10,000 population	154.4		36.6		2013-2015	Y	23
1.83	Dentist Rate	dentists/ 100,000 population	45.2		82.4	67.4	2016	N/A	27

APPENDIX C. **SECONDARY DATA METHODOLOGY**

SCORE	OTHER CHRONIC DISEASES	UNITS	LAKE COUNTY	HP2020	CA	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	Source
1.17	Chronic Kidney Disease: Medicare Population	0	14.9		17.9	18.1	2015	N/A	27
0.83	Rheumatoid Arthritis or Osteoarthritis: Medicare Population	0	25.6		27.6	30	2015	N/A	27
0.39	Osteoporosis: Medicare Population	0	3.1		6.7	6	2015	N/A	27
SCORE	OTHER CONDITIONS	UNITS	LAKE COUNTY	HP2020	CA	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	Source
2.00	Age-Adjusted ER Rate due to Dehydration	ER visits/ 10,000 population 18+ years	39.6		14.4		2013-2015	N/A	23
2.00	Age-Adjusted ER Rate due to Urinary Tract Infections	ER visits/ 10,000 population 18+ years	167.7		93.9		2013-2015	N/A	23
2.00	Age-Adjusted Hospitalization Rate due to Dehydration	hospitalizations/ 10,000 population 18+ years	13		9		2013-2015	N/A	23
1.50	Age-Adjusted Hospitalization Rate due to Urinary Tract Infections	hospitalizations/ 10,000 population 18+ years	12.9		12.9		2013-2015	N/A	23
SCORE	PREVENTION & SAFETY	UNITS	LAKE COUNTY	HP2020	CA	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	Source
2.61	Death Rate due to Drug Poisoning	deaths/ 100,000 population	44.1		11.8	16.9	2014-2016	N/A	27
2.53	Age-Adjusted Death Rate due to Unintentional Injuries	deaths/ 100,000 population	88.5	36.4	30.3	43.2	2014-2016	N/A	1
2.28	Severe Housing Problems	percent	27.3		27.9	18.8	2010-2014	N/A	27

APPENDIX C. **SECONDARY DATA METHODOLOGY**

SCORE	PUBLIC SAFETY	UNITS	LAKE COUNTY	HP2020	CA	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	Source
2.61	Alcohol-Impaired Driving Deaths	percent	39.7		29.4	29.3	2012-2016	N/A	27
2.33	Violent Crime Rate	crimes/ 100,000 population	609.4		450.7		2017	N/A	1
2.31	Age-Adjusted Death Rate due to Motor Vehicle Traffic Collisions	deaths/ 100,000 population	22.8	12.4	8.8	11	2014-2016	N/A	1
2.17	Substantiated Child Abuse Rate	cases/ 1,000 children	9.9		7.5		2017	N/A	27
1.28	Bicycle-Involved Collision Rate	collisions/ 100,000 population	18.5		32.7		2015	N/A	27
SCORE	RESPIRATORY DISEASES	UNITS	LAKE COUNTY	HP2020	CA	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	Source
2.50	Asthma: Medicare Population	percent	8.7		7.5	8.2	2015	N/A	27
2.44	Lung and Bronchus Cancer Incidence Rate	cases/ 100,000 population	73.9		43.3	60.2	2011-2015	N	27
2.22	COPD: Medicare Population	percent	14		8.9	11.2	2015	N/A	27
2.14	Age-Adjusted Death Rate due to Influenza and Pneumonia	deaths/ 100,000 population	19.6		14.3	14.6	2014-2016	N/A	1
2.00	Age-Adjusted ER Rate due to Adult Asthma	ER visits/ 10,000 population 18+ years	65		34.6		2013-2015	N/A	23
2.00	Age-Adjusted ER Rate due to Asthma	ER visits/ 10,000 population	66.9		44		2013-2015	N/A	23
2.00	Age-Adjusted ER Rate due to Community Acquired Pneumonia	ER visits/ 10,000 population 18+ years	69.8		19		2013-2015	N/A	23
2.00	Age-Adjusted ER Rate due to COPD	ER visits/ 10,000 population 18+ years	78.7		16.4		2013-2015	N/A	23
2.00	Age-Adjusted Hospitalization Rate due to Adult Asthma	hospitalizations/ 10,000 population 18+ years	9.1		6.8		2013-2015	N/A	23
2.00	Age-Adjusted Hospitalization Rate due to Asthma	hospitalizations/ 10,000 population	8.5		7.6		2013-2015	N/A	23

APPENDIX C. **SECONDARY DATA METHODOLOGY**

SCORE	RESPIRATORY DISEASES	UNITS	LAKE COUNTY	HP2020	CA	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	Source
2.00	Age-Adjusted Hospitalization Rate due to Community Acquired Pneumonia	hospitalizations/ 10,000 population 18+ years	30.6		16.7		2013-2015	N/A	23
2.00	Age-Adjusted Hospitalization Rate due to COPD	hospitalizations/ 10,000 population 18+ years	20.1		12.9		2013-2015	N/A	23
1.94	Age-Adjusted Death Rate due to Lung Cancer	deaths/ 100,000 population	46.5	45.5	28.9		2014-2016	N/A	1
1.67	Age-Adjusted ER Rate due to Immunization-Preventable Pneumonia and Influenza	ER visits/ 10,000 population 18+ years	9.6		9.5		2013-2015	N	23
1.67	Age-Adjusted ER Rate due to Pediatric Asthma	ER visits/ 10,000 population under 18 years	72.5		70.9		2013-2015	N	23
1.50	Age-Adjusted Hospitalization Rate due to Immunization-Preventable Pneumonia and Influenza	hospitalizations/ 10,000 population 18+ years	1.4		1.5		2013-2015	N/A	23
1.39	Adults with Asthma	percent	15.9		15		2016-2017	N	23
1.39	Children and Teens with Asthma	percent	15.1				2014	N/A	23
1.17	Age-Adjusted Hospitalization Rate due to Pediatric Asthma	0	6.9		9.8		2013-2015	N/A	23

APPENDIX C. **SECONDARY DATA METHODOLOGY**

SCORE	SOCIAL ENVIRONMENT	UNITS	LAKE COUNTY	HP2020	CA	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	Source
2.61	People 65+ Living Alone	percent	30.3		22.8	26.2	2013-2017	N/A	1
2.61	Single-Parent Households	percent	44.5		31.4	33.3	2013-2017	N/A	1
2.44	People 25+ with a Bachelor's Degree or Higher	percent	15.3		32.6	30.9	2013-2017	Y	1
2.39	Children Living Below Poverty Level	percent	31.6		20.8	20.3	2013-2017	Y	1
2.39	Median Household Income	dollars	40446		67169	57652	2013-2017	Y	1
2.39	People Living Below Poverty Level	percent	22.8		15.1	14.6	2013-2017	Y	1
2.39	Youth not in School or Working	percent	8.1		2.1	2.1	2013-2017	N	1
2.33	Mean Travel Time to Work	minutes	28.9		28.8	26.4	2013-2017	N	1
2.22	Homeownership	percent	48.6		50.2	56	2013-2017	N/A	1
2.17	Substantiated Child Abuse Rate	cases/ 1,000 children	9.9		7.5		2017	N/A	27
1.94	Voter Turnout: Presidential Election	percent	72.3		75.3		2016	N/A	23
1.83	Per Capita Income	dollars	23345		33128	31177	2013-2017	Y	1
1.78	People 25+ with a High School Degree or Higher	percent	84.7		82.5	87.3	2013-2017	Y	1
SCORE	SUBSTANCE ABUSE	UNITS	LAKE COUNTY	HP2020	CA	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	Source
2.61	Alcohol-Impaired Driving Deaths	percent	39.7		29.4	29.3	2012-2016	N/A	27
2.61	Death Rate due to Drug Poisoning	deaths/ 100,000 population	44.1		11.8	16.9	2014-2016	N/A	27
2.33	Age-Adjusted ED Visit Rate due to Heroin Overdose	Rate per 100,000 residents	28		9.9		2017	N	23
2.28	Age-Adjusted Death Rate due to Drug Use	deaths/ 100,000 population	43.6	11.3	12.2		2014-2016	N/A	1
2.17	Adults who Smoke	percent	27	12	11		2016-2017	N	23
2.11	Age-Adjusted Death Rate due to Heroin Overdose	deaths/ 100,000 population	2.9		1.4		2017	N/A	23
2.11	Age-Adjusted ED Visit Rate due to All Drug Overdose	Rate per 100,000 residents	339		117.3		2017	N/A	23
2.11	Teens who have Used Alcohol	percent	46.2		33.4		2009	N/A	23
2.00	Age-Adjusted Death Rate due to Synthetic Opioid Overdose (excluding Methadone)	Rate per 100,000 residents	6		1.1		2017	N/A	23

APPENDIX C. **SECONDARY DATA METHODOLOGY**

SCORE	SUBSTANCE ABUSE	UNITS	LAKE COUNTY	HP2020	CA	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	Source
2.00	Age-Adjusted ER Rate due to Alcohol Use	ER visits/ 10,000 population 18+ years	56.6		44.2		2013-2015	Y	23
2.00	Age-Adjusted ER Rate due to Substance Use	ER visits/ 10,000 population 18+ years	41.2		18.6		2013-2015	Y	23
2.00	Age-Adjusted Hospitalization Rate due to Alcohol Use	hospitalizations/ 10,000 population 18+ years	13.4		11.7		2013-2015	Y	23
2.00	Age-Adjusted Hospitalization Rate due to All Drug Overdose	Rate per 100,000 residents	126.1		49.7		2016	N/A	23
2.00	Age-Adjusted Hospitalization Rate due to Heroin Overdose	Rate per 100,000 residents	3.5		1.6		2014	N/A	23
2.00	Age-Adjusted Hospitalization Rate due to Opioid Overdose (excluding Heroin)	Rate per 100,000 residents	18.6		8.5		2016	N	23
2.00	Age-Adjusted Hospitalization Rate due to Substance Use	hospitalizations/ 10,000 population 18+ years	9.5		6.1		2013-2015	N	23
2.00	Age-Adjusted Long Acting or Extended Release Opioid Prescription Rate to Opioid Naive Residents	per 100,000 population	2.6		1.4		2017	N/A	23
1.89	Age-Adjusted Death Rate due to All Opioid Overdose	Rate per 100,000 residents	15.2		4.5		2017	N	23
1.89	Age-Adjusted Death Rate due to Prescription Opioid Overdose	Rate per 100,000 residents	12.3		3.2		2017	N/A	23
1.89	Age-Adjusted ED Visit Rate due to Opioid Overdose (excluding Heroin)	Rate per 100,000 residents	20.8		10.3		2017	N	23
1.83	Consumer Expenditures: Tobacco	percent	0.7		0.4	0.7	2018	N/A	27
1.64	Opioid Prescription Patients	percent	6				43313	N/A	27
1.64	Opioid Prescription Rate	prescriptions per 10,000 population	754.7				43313	N/A	27
1.33	Consumer Expenditures: Alcoholic Beverages	percent	0.9		1.1	1	2018	N/A	27
0.89	Adults who Binge Drink: Year	0	26		32.6		2014	N/A	23
0.39	Liquor Store Density	0	6.2		10.1	10.5	2015	N/A	28



APPENDIX C. **SECONDARY DATA METHODOLOGY**

SCORE	TEEN & ADOLESCENT HEALTH	UNITS	LAKE COUNTY	HP2020	CA	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	Source
2.11	Teens who have Used Alcohol	percent	46.2		33.4		2009	N/A	23
2.00	7th Grade Students who are Physically Fit	percent	49.6		63.6		2017-2018	N/A	1
2.00	Age-Adjusted ER Rate due to Adolescent Suicide and Intentional Self-inflicted Injury	ER visits/ 10,000 population aged 12-17	91.3		46.3		2013-2015	Y	23
2.00	Age-Adjusted Hospitalization Rate due to Adolescent Suicide and Intentional Self-inflicted Injury	hospitalizations/ 10,000 population aged 12-17	22.1		13.9		2013-2015	N	23
1.94	9th Grade Students who are at a Healthy Weight or Underweight	percent	56.6		62.7		2017-2018	N/A	1
1.92	Teen Birth Rate: 15-19	live births/ 1,000 females aged 15-19	30.5		17.6	22.3	2014-2016	N/A	1
1.39	Children and Teens with Asthma	percent	15.1				2014	N/A	23
SCORE	TRANSPORTATION	UNITS	LAKE COUNTY	HP2020	CA	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	Source
2.33	Mean Travel Time to Work	minutes	28.9		28.8	26.4	2013-2017	N	1
2.31	Age-Adjusted Death Rate due to Motor Vehicle Traffic Collisions	deaths/ 100,000 population	22.8	12.4	8.8	11	2014-2016	N/A	1
2.17	Solo Drivers with a Long Commute	percent	38.8		39.3	34.7	2012-2016	N/A	27
1.89	Workers Commuting by Public Transportation	percent	1	5.5	5.2	5.1	2013-2017	N	1
1.83	Households with No Car and Low Access to a Grocery Store	percent	3.6				2015	N/A	28
1.28	Bicycle-Involved Collision Rate	collisions/ 100,000 population	18.5		32.7		2015	N/A	27
1.22	Workers who Walk to Work	0	3	3.1	2.7	2.7	2013-2017	N	1
0.67	Workers who Drive Alone to Work	0	71.3		73.6	76.4	2013-2017	Y	1

APPENDIX C. **SECONDARY DATA METHODOLOGY**

SCORE	WELLNESS & LIFESTYLE	UNITS	LAKE COUNTY	HP2020	CA	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	Source
2.06	Life Expectancy for Females	years	78.6		83	81.5	2014	N/A	27
2.06	Life Expectancy for Males	years	73.3		78.6	76.7	2014	N/A	27
2.00	Self-Reported General Health Assessment: Good or Better	percent	72.5		83.1		2016-2017	N	23
1.17	Insufficient Sleep	0	32.2		34.5	38	2016	N/A	27
SCORE	WOMEN'S HEALTH	UNITS	LAKE COUNTY	HP2020	CA	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	Source
2.61	Mammography Screening: Medicare Population	percent	50.6		59.5	63.2	2015	N/A	27
2.50	Age-Adjusted Death Rate due to Breast Cancer	deaths/ 100,000 females	29.5	20.7	19.1		2014-2016	N/A	1
2.06	Life Expectancy for Females	years	78.6		83	81.5	2014	N/A	27
0.39	Breast Cancer Incidence Rate	0	101.8		121.5	124.7	2011-2015	N	27

## APPENDIX D. PRIMARY DATA METHODOLOGY

### DATA COLLECTION INSTRUMENTS

#### Key Informant Interview Questionnaire (Conduent Healthy Communities Institute)

##### I. BACKGROUND & COMMUNITY ISSUES

- Goal: Elicit unbiased perceptions of the county
  - o How would you describe Lake County?
  - o How would you describe the community? (examples include demographics, cohesiveness, active engagement/involvement, socio-economic conditions)
    - What are strengths of this community?
    - What are some of the problems and/or threats that people face?
    - Why are these important? What has gotten better and worse over the years?
    - What factors contribute to these problems?
    - What has been/can be done to reduce the magnitude of these?
    - What are some opportunities that the county may have had in improving these problems?
  - o What are the main assets in the community? (examples include educational, health, faith based, social, recreational facilities/ organizations)
  
- Goal: Ascertain the perceived health status of the county
  - o How would you describe the overall health of Lake County?
  - o What are some of the dominant health issues or topics of concern for the county?

##### II. AREA OF WORK AND PRIORITIES

- Goal: Ascertain the participant's organization, affiliation and role in the community and experience with health topics as well as social determinants of health
  - o Please tell me a little bit about your organization and the services it provides.
  - o Please tell me about your specific role
  - o Who are the target/beneficiaries that are in need of your services? (definition by areas of residence, age, gender, race, income, insurance status, health profile)
  - o Who do you consider to be the populations in the community who suffer the worst impact from these conditions/issues? (vulnerable populations)

- o From your experience, what are your clients'/beneficiaries' biggest barriers to addressing the health issues you identified and to achieving optimal health?
  - PROBE: Social determinants of health?
  - PROBE: Barriers to accessing medical care?
  - PROBE: Barriers to accessing preventive services or programs?
- o What has your organization done to address some of these issues?
- o What has the impact of your efforts been so far? What else is needed?
- o What kind of agencies have you collaborated with in these efforts? (multi-organizational, multi-sectoral collaborations)
- o What funding, programs and/or grants do you know of exist within your organization or within the county that address these issues?

### **III. IMPROVING THE HEALTH OF THE COMMUNITY/RESIDENTS**

- o Goal: Identify opportunities for community engagement, and community improvement
- o If you could make one suggestion to improving community health, what would that be?
- o What do you think needs to happen in the community for this improvement to be carried out? (policy, laws, infrastructure, resources, personnel, organization) Who should have the responsibility for seeing it through?
- o What do you think hospitals/health systems/public health departments can do to address these issues that they are not doing right now?
- o The last exercise similar to this that was carried out had identified 4 priorities:
  - Mental Health
  - Substance Abuse
  - Homelessness
  - Access to programs and services

How would you rate the county on these priorities and what improvements can be made in these areas?

### LAKE COUNTY FOCUS GROUP DISCUSSION QUESTIONS

- What do you like most about living in Lake County?
- What concerns you most about living here?
- How do you define a healthy community?
- What kinds of resources are needed to create a healthy community?
- Who is responsible for keeping a community healthy?
- What community values promote a healthy neighborhood? How can county residents contribute to their own health and to the health of others?
- What do you think are the most important health related problems faced by Lake County residents?
- What do you think are the main reasons for these health issues or problems?
- What do you think are the main factors that contribute to the reasons you mentioned for poor health in Lake County?
- The data for our county shows that some of the high priorities for our county are [mention those that disproportionately affect the population being interviewed]. What reactions do you have?
- What are the strengths of the health services available in Lake County? And what are the weaknesses?
- What do you think are some changes in healthcare that need to be made in Lake County?
- What one or two things would you recommend as priorities for improving health in Lake County? What would be most useful to you?

## COMMUNITY SURVEY INSTRUMENT (ENGLISH)

## Hope Rising Lake County Collaborative

## Welcome to the Hope Rising Lake County Community Survey

**INSTRUCTIONS:**

**Hope Rising Lake County Collaborative is a partnership of hospitals, health centers, county leaders, non-profit organizations and other relevant organizations of Lake County to improve the overall health and wellness of Lake County, California.**

**Thank you very much for being willing to help Hope Rising to understand the health care needs of the Lake County population and for answering this short survey. Your answers are completely confidential and will be used in combination with all other answers to help us better understand the needs of the community. Please read each question and mark the choice that best reflects your answer.**

**Note: Open only to residents of Lake County and to those 18 years and above. Please respond before 28 February, 2019.**

1. What zip code do you live in?

2. How old are you?

- |                             |                             |
|-----------------------------|-----------------------------|
| <input type="radio"/> 18-24 | <input type="radio"/> 55-64 |
| <input type="radio"/> 25-34 | <input type="radio"/> 65-74 |
| <input type="radio"/> 35-44 | <input type="radio"/> 75+   |
| <input type="radio"/> 45-54 |                             |

3. What is your gender identity?

- |                                   |                                      |
|-----------------------------------|--------------------------------------|
| <input type="radio"/> Female      | <input type="radio"/> Non-conforming |
| <input type="radio"/> Male        | <input type="radio"/> Not listed     |
| <input type="radio"/> Transgender |                                      |

4. What is the highest grade or year of school you completed?

- |   |  |
|---|--|
| <input type="radio"/> Never attended school or only attended kindergarten | <input type="radio"/> College 1 year to 3 years (Some college or technical school) |
| <input type="radio"/> Grades 1 through 8                                  | <input type="radio"/> College 4 years or more (College graduate)                   |
| <input type="radio"/> Grades 9 through 11                                 | <input type="radio"/> More than 4 year College degree                              |
| <input type="radio"/> Grade 12 or GED                                     |  |

5. What language(s) do you speak at home?

- English
- Spanish
- Other (please specify)

6. What is your race or ethnicity?

- White or Caucasian
- Black or African American
- Hispanic or Latino
- Asian
- Other (please specify)
- American Indian or Alaska Native
- Native Hawaiian or other Pacific Islander
- Multi-racial
- Not listed

7. Write the number of adults (age 18 years and above) in your household, including yourself.

8. Write the number of children (below age 18 years) in your household.

9. Select your total household income level.

- Under \$25,000
- Between \$25,000 and \$34,999
- Between \$35,000 and \$49,999
- Between \$50,000 and \$74,999
- \$75,000 and more

Hope Rising Lake County Collaborative

10. In the past 30 days, would you say your health has been:

- Excellent
- Very Good
- Good
- Fair
- Poor

11. In the past 30 days have you felt mostly:

- Peaceful and calm
- A little bit sad or off
- Worried or upset
- So upset that day-to-day life is difficult
- Close to a breakdown and cannot function

12. What do you think are the **three most important factors** that make Lake County a good place to live?

- Being able to see a doctor upon need
- Housing that is easily available, safe and affordable
- Arts and cultural events
- Clean spaces, water and air
- Races getting along with each other
- Good jobs and equal opportunities
- Good place to raise children
- Good schools
- People take steps to stay healthy
- People are mostly healthy and live long
- Low crime / safe neighborhoods
- Babies have a good chance to make it past the first birthday
- Parks and places to meet others
- Places to worship and practice religion
- Strong family life

Other (please specify)



13. What do you think are the **three most important health problems** facing people living in Lake County?

- |  |  |
|--|--|
| <input type="checkbox"/> Aging problems (e.g., arthritis, hearing/vision loss) | <input type="checkbox"/> Housing that is not adequate, safe and affordable                   |
| <input type="checkbox"/> Alcohol misuse  | <input type="checkbox"/> Deaths of babies before the first birthday                          |
| <input type="checkbox"/> Drug misuse   | <input type="checkbox"/> Diseases that spread from person to person (e.g., hepatitis, TB)    |
| <input type="checkbox"/> Cancers   | <input type="checkbox"/> Mental health problems like sadness, worry, anger over many days    |
| <input type="checkbox"/> Dental problems                                       | <input type="checkbox"/> Car/Motor crash injuries  |
| <input type="checkbox"/> Diabetes  | <input type="checkbox"/> Obesity   |
| <input type="checkbox"/> Domestic Violence                                     | <input type="checkbox"/> Rape/sexual assault   |
| <input type="checkbox"/> Gun-related injuries                                  | <input type="checkbox"/> Respiratory/lung disease  |
| <input type="checkbox"/> Heart disease and stroke                              | <input type="checkbox"/> Diseases caused through sexual contact (e.g., gonorrhea, chlamydia) |
| <input type="checkbox"/> High blood pressure                                   | <input type="checkbox"/> Suicide   |
| <input type="checkbox"/> HIV/AIDS  | <input type="checkbox"/> Birth to teenage girls  |

14. What do you think are the **three most important risky behaviors** in our community that have the greatest impact on the overall health of Lake County?

- |  |  |
|--|--|
| <input type="checkbox"/> Alcohol misuse          | <input type="checkbox"/> Not getting "shots" to prevent disease    |
| <input type="checkbox"/> Being overweight        | <input type="checkbox"/> Not using seat belts / child safety seats |
| <input type="checkbox"/> Dropping out of school  | <input type="checkbox"/> Poor eating habits                        |
| <input type="checkbox"/> Drug misuse             | <input type="checkbox"/> Racism                                    |
| <input type="checkbox"/> Lack of exercise        | <input type="checkbox"/> Tobacco use                               |
| <input type="checkbox"/> Not using birth control | <input type="checkbox"/> Unsafe sex                                |

Other (please specify)

15. Where do you receive routine health care?

- Regular Doctor's Office
- Lakeview Health Center
- Hospital Emergency Room
- Urgent Care
- Other (please specify)
- Migrant Health Center
- Indian/Tribal Health Center
- I do not receive routine healthcare

16. How do you pay for your health care?

- Pay cash
- Health Insurance (e.g., Partnership Health Plan, private insurance, HMO through employer)
- Medi-Cal
- Other (please specify)
- Medicare
- Veterans Administration
- Indian Health Services

17. In general what prevents you from seeking health care? **(check all that apply)**

- Cost of care
- Co-pays
- Distance to health facilities
- Disability/Lack of mobility
- Fear or distrust of health care system
- Lack of doctors/staff that speak my language
- Lack of insurance
- Other (please specify)
- Lack of specialists in the county
- Lack of transportation
- Long wait time
- Other living expenses such as housing, utilities, food
- Too much paperwork
- Unavailability of appointments
- Nothing

Hope Rising Lake County Collaborative

18. Which of the following have you been worried about in the past 12 months? **(check all that apply)**

- Availability of employment
- Crime and violence
- Ability to afford food
- Housing
- Cost of healthcare
- Illegal and prescription drugs in the community
- Cost of medicines
- Lack of assistance in completing daily activities (such as bathing, preparing meals etc.)
- Cost of transportation
- Lack of social support
- Cost of utilities
- Nothing
- Other (please specify)

19. From the list below, **select three kinds of services** that are needed more in Lake County.

- Food pantries
- Support for people re-entering communities after addiction, prison, or mental health treatment
- Job training or employment camps
- Help with transportation to appointments
- Housing aid
- Meal assistance
- Free screenings and vaccinations
- Free community exercise classes
- Crises and counseling centers
- Free classes that teach people to manage diseases like diabetes, heart disease, cancer through diet and exercise
- Public transportation
- Community support groups
- Utility assistance
- Nothing
- Programs to help stop smoking
- Other (please specify)

20. From the list below, **rate each of the things** that area hospitals can do to improve quality of service to the people of Lake County based on their importance to you.

	Very Important	Somewhat Important	Not Important
Having staff speak in your language	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Have Hospital Patient Navigators to explain hospital procedures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Have Community Health Workers to connect people to community resources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Give easy to follow medical instructions and information	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Give all information and instructions on personal health issues in one Care Plan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Send text or voice reminders for regular appointments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Give medical advice through telephone or video	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Conduct classes in healthy eating, diabetes management, fitness etc.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Provide a list of organizations that provide shelter, housing, food etc.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Connect patients who need help to agencies that provide shelter, housing, food etc.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Connect members who need help to agencies that provide social support like counseling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify)

21. From the list below, **rate each of the programs** that could tackle some of the current health challenges of Lake County based on their importance to you.

	Very Important	Somewhat Important	Not Important
Increasing parks, walkways and bike paths	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fresh food markets in communities lacking access to fresh produce	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Community gardens or food programs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reduce alcohol use in public places or stores that sell alcohol	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Restrict advertising of tobacco products (including e-cigarettes, vaping, snuff etc.) to young adults	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vocational training or dropout prevention programs for high risk students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Computer based education programs to prevent diseases passed through sexual contact	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Provide medical prescription to partners of those diagnosed with diseases passed through sexual contact without doctor visit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Youth programs like Big Brother, Big Sisters	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Community Centers for socializing and seeking support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Community policing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Family Courts for substance using parents	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internet based or doctor monitored programs to stop smoking with medicines or counseling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Small grants for housing repairs and improvements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify)

22. Where do you get information about health resources available in your community? (**check all that apply**)

- School
- Church
- Neighbors
- Family
- Television
- Local radio shows
- Newspaper
- Other (please specify)
- Internet
- Hospital
- Hospital websites
- Facebook
- County Government office/website
- Agencies that provide services and programs in your community

23. What agencies that provide services and programs do you interact with regularly or know are active in Lake County?

Name:

Name:

Name:

Name:

Name:

24. How did you get this survey?

Church

Grocery Store / Shopping Mall

Hospital

E-Mail

Your doctor's office

Mail

Lakeview Health Center

Personal Contact

Indian/Tribal Health Center

Workplace

Community Meeting

County of Lake Government

COMMUNITY SURVEY INSTRUMENT (SPANISH)



Hope Rising Lake County Collaborative

Bienvenidos a la Encuesta Comunitaria del Condado Hope Rising Lake

INSTRUCCIONES:

El Colaborativo de Hope Rising del Condado de Lake es un consorcio de hospitales, centros de salud, líderes del condado, organizaciones sin fines de lucro y otras organizaciones pertinente del Condado de Lake para mejorar la salud y el bienestar en general del Condado de Lake, California.

Muchas gracias por estar dispuesto de ayudar a Hope Rising a entender las necesidades de salud médica de la población de Lake County y por responder a esta breve encuesta. Sus respuestas son completamente confidenciales y serán utilizadas en combinación con todas las demás respuestas para ayudarnos a entender mejor las necesidades de la comunidad. Por favor, lea cada pregunta y marque la opción que mejor refleje su respuesta.

Nota: Solamente para los residentes de Lake County y a los mayores de 18 años. Por favor, responda antes del 15 de marzo de 2019. Por favor responda todas las preguntas.

1. ¿En qué código postal vive?

2. ¿Cuántos años tienes?

- |  |                                    |
|--|------------------------------------|
| <input type="checkbox"/> Entre 18 y 24 | <input type="checkbox"/> 55-64     |
| <input type="checkbox"/> 25-34         | <input type="checkbox"/> 65-74     |
| <input type="checkbox"/> 35-44         | <input type="checkbox"/> Mas de 75 |
| <input type="checkbox"/> 45-54         |                                    |

3. ¿Cuál es su identidad de género?

- |                                       |  |
|---------------------------------------|--|
| <input type="checkbox"/> Mujer        | <input type="checkbox"/> No conforme         |
| <input type="checkbox"/> Masculino    | <input type="checkbox"/> No está en la lista |
| <input type="checkbox"/> Transgéneros |  |

4. ¿Cuál es el grado o año escolar más alto que ha completado?

- Nunca asistió a la escuela o sólo asistió al kindergarten
- Grados 1 al 8

- Grados 9 a 11
- Grado 12 o GED
- Universidad 1 año a 3 años (algunas universidades o escuelas técnicas)
- Universidad 4 años o más (graduado universitario)
- Más de 4 años de estudios universitarios

5. ¿Qué idioma(s) habla en su casa?

- Inglés
- Español
- Otro (especifique

6. ¿Cuál es su raza u origen étnico?

- |  |   |
|--|---|
| <input type="checkbox"/> Blanco o caucásico                        | <input type="checkbox"/> Indio Americano o Nativo de Alaska         |
| <input type="checkbox"/> Negro o Afroamericano                     | <input type="checkbox"/> Hawaiano nativo u otro isleño del Pacífico |
| <input type="checkbox"/> Hispano o Latino                          | <input type="checkbox"/> Multi-racial                               |
| <input type="checkbox"/> Asiático                                  | <input type="checkbox"/> No está en la lista                        |
| <input type="checkbox"/> Otro (especifique<br><input type="text"/> |   |

7. Escriba el número de adultos (de 18 años o más) en su hogar, incluyéndose a sí mis

8. Escriba el número de niños (menores de 18 años de edad) en su hogar.

9. Seleccione el nivel de ingresos totales de su hogar.

- |  |  |
|--|--|
| <input type="checkbox"/> Menos de \$25,000             | <input type="checkbox"/> Entre \$50,000 y \$74,999 |
| <input type="checkbox"/> Entre \$25,000 y \$34,999     | <input type="checkbox"/> \$75,000 y más            |
| <input type="checkbox"/> Between \$35,000 and \$49,999 |  |

10. En los últimos 30 días, ¿diría que su salud ha sido:



- |                                    |                                |
|------------------------------------|--------------------------------|
| <input type="checkbox"/> Excelente | <input type="checkbox"/> Justo |
| <input type="checkbox"/> Muy Bueno | <input type="checkbox"/> Pobre |
| <input type="checkbox"/> Bueno     |                                |

11. En los últimos 30 días te has sentido más que nada:

- |  |   |
|--|---|
| <input type="checkbox"/> Pacífica y tranquila            | <input type="checkbox"/> Tan molesto que la vida cotidiana es difícil |
| <input type="checkbox"/> Un poco triste o fuera de lugar | <input type="checkbox"/> Cerca de una avería y no puede funcionar     |
| <input type="checkbox"/> Preocupado o molesto            |   |

12. ¿Cuáles crees que son los tres factores más importantes que hacen del Condado de Lake un buen lugar para vivir? (Esta pregunta requiere una respuesta.)

- Poder ver a un médico cuando sea necesario
  - Viviendas de fácil acceso, seguras y asequibles
  - Eventos artísticos y culturales
  - Espacios limpios, agua y aire
  - Las razas se llevan bien entre sí
  - Buenos empleos e igualdad de oportunidades
  - Un buen lugar para criar a los niños
  - Buenas escuelas
  - La gente toma medidas para mantenerse saludable
  - La mayoría de las personas están sanas y viven mucho tiempo
  - Baja criminalidad / vecindarios seguros
  - Los bebés tienen una buena oportunidad de pasar del primer cumpleaños
  - Parques y lugares de encuentro
  - Lugares para adorar y practicar la religión
  - Fuerte vida familiar
  - Otro (especifique)
- 

13. ¿Cuáles crees que son los tres problemas de salud más importantes a los que se enfrentan las personas que viven en el Condado de Lake? (Esta pregunta requiere una respuesta.)

- Problemas de envejecimiento (por ejemplo, artritis, pérdida de audición/visión)

- Abuso de alcohol
- Abuso de drogas
- Cánceres
- Problemas dentales
- Diabetes
- Violencia doméstica
- Lesiones relacionadas con armas
- Enfermedad cardíaca y accidente cerebrovascular
- Presión arterial alta
- VIH/SIDA
- Obesidad
- Violación/agresión sexual
- Enfermedad respiratoria/pulmonar
- Suicidio
- Vivienda que no es adecuada, segura y asequible
- Muertes de bebés antes del primer cumpleaños
- Lesiones por choques automovilísticos
- Enfermedades causadas por contacto sexual (por ejemplo, gonorrea, clamidia)
- Del nacimiento a la adolescencia
- Enfermedades que se propagan de persona a persona (por ejemplo, hepatitis, tuberculosis)
- Problemas de salud mental como tristeza, preocupación, enojo durante muchos días

14. ¿Cuáles cree usted que son las tres conductas de riesgo más importantes en nuestra comunidad que tienen el mayor impacto en la salud general de Lake County? (Esta pregunta requiere una respuesta.)

- Abuso de alcohol
- Tener sobrepeso
- Abandonar la escuela
- Abuso de drogas

- Falta de ejercicio
  - No usar anticonceptivos
  - No ponerse las "vacunas" para prevenir enfermedades
  - No usar cinturones de seguridad / asientos de seguridad para niños
  - Malos hábitos alimenticios
  - Racismo
  - Consumo de tabaco
  - Sexo inseguro
  - Otro (especifique)
- 

15. ¿Dónde recibe atención médica de rutina?

- Consultorio médico habitual
  - Centro de Salud de Lakeview
  - Sala de Emergencia de un Hospital
  - Atención de urgencia
  - Centro de Salud para Migrantes
  - Centro de Salud Indígena/Tribal
  - No recibo atención médica de rutina
  - Otro (especifique)
- 

16. ¿Cómo paga usted por su atención médica?

- Pague en efectivo
  - Seguro de Salud (por ejemplo, Plan de Salud de la Asociación, seguro privado, HMO a través del empleador)
  - Medi-Cal
  - Medicare
  - Administración de Veteranos
  - Servicios de Salud para Indígenas
  - Otro (especifique)
- 

17. En general, ¿qué es lo que le impide buscar atención médica? ( marque todo lo que corresponda)

- Costo de la atención
- Copagos
- Distancia a los centros de salud

- Discapacidad/Falta de movilidad
  - Miedo o desconfianza en el sistema de salud
  - Falta de médicos y personal que hablen mi idioma
  - Falta de seguro
  - Falta de especialistas en la comarca
  - Falta de transporte
  - Tiempo de espera
  - Otros gastos de subsistencia como vivienda, servicios públicos, alimentos
  - Demasiado papeleo
  - Falta de disponibilidad de citas
  - Nada
  - Otro (especifique)
- 

18. ¿Cuál de los siguientes aspectos le ha preocupado en los últimos 12 meses? ( marque todo lo que corresponda)

- Disponibilidad de empleo
  - Capacidad de comprar alimentos
  - Costo de la atención médica
  - Costo de los medicamentos
  - Costo de transporte
  - Costo de los servicios
  - Crimen y violencia
  - Alojamiento
  - Medicamentos ilegales y recetados en la comunidad
  - Falta de asistencia para completar las actividades diarias (como bañarse, preparar las comidas, etc.)
  - Falta de apoyo social
  - Nada
  - Otro (especifique)
- 

19. De la siguiente lista, seleccione tres tipos de servicios que se necesitan más en el Condado de Lake.

- Despensa de alimentos
- Capacitación laboral o campamentos de empleo
- Ayuda para la vivienda
- Pruebas de detección y vacunas gratuitas
- Crisis y centros de asesoramiento
- Transporte público
- Ayuda con los servicios públicos
- Programas para ayudar a dejar de fumar
- Apoyo a las personas que se reincorporan a la comunidad después de un tratamiento de adicción, prisión o salud mental

APPENDIX D. PRIMARY DATA METHODOLOGY

- Ayuda con el transporte a las citas
  - Asistencia en la comida
  - Clases de ejercicios comunitarios gratuitos
  - Clases gratuitas que enseñan a las personas a controlar enfermedades como la diabetes, las enfermedades cardíacas, el cáncer a través de la dieta y el ejercicio
  - Grupos de apoyo comunitario
  - Nada
  - Otro (especifique)
- 

20. De la lista de abajo, valore cada una de las cosas que los hospitales del área pueden hacer para mejorar la calidad del servicio a la gente del Condado de Lake basado en su importancia para usted.

	Muy importante	Algo Importante	Sin Importancia
Hacer que el personal hable en su idioma			
Tenga Navegadores de Pacientes del Hospital para explicar los procedimientos del hospital			
Contar con Trabajadores Comunitarios de Salud para conectar a las personas con los recursos de la comunidad			
Dar instrucciones e información médica fácil de seguir			
Dar toda la información e instrucciones sobre temas de salud personal en un solo Plan de Cuidados			
Enviar recordatorios de texto o de voz para citas regulares			
Dar consejos médicos por teléfono o video			
Llevar a cabo clases de alimentación saludable, control de la diabetes, acondicionamiento físico, etc.			
Proporcione una lista de organizaciones que proporcionan refugio, vivienda, alimentos, etc.			
Conectar a los pacientes que necesitan ayuda con agencias que proveen refugio, vivienda, comida, etc.			
Proporcione una lista de organizaciones que proporcionan refugio, vivienda, alimentos, etc.			

- Otro (especifique)
- 

21. De la lista siguiente, calificar cada uno de los programas que podría abordar algunos de los desafíos de salud actuales del Condado de Lake basado en su importancia para usted.

	Muy importante	Algo Importante	Sin Importancia

Aumentar los parques, las pasarelas y los carriles para bicicletas			
Mercados de alimentos frescos en comunidades que carecen de acceso a productos frescos			
Huertos comunitarios o programas de alimentación			
Reducir el consumo de alcohol en lugares públicos o tiendas que venden alcohol			
Restringir la publicidad de los productos del tabaco (incluyendo los cigarrillos electrónicos, el vapor, el tabaco en polvo, etc.) a los adultos jóvenes			
Programas de capacitación vocacional o de prevención de la deserción escolar para estudiantes de alto riesgo			
Programas de educación basados en la computadora para prevenir enfermedades transmitidas por contacto sexual			
Proporcionar prescripción médica a las parejas de personas diagnosticadas con enfermedades transmitidas por contacto sexual sin visita al médico			
Programas juveniles como Big Brothers, Big Sisters			
Centros comunitarios para socializar y buscar apoyo			
Policía de proximidad			
Tribunales de Familia para padres que consumen drogas			
Programas basados en Internet o monitoreados por un médico para dejar de fumar con medicamentos u orientación			
Pequeñas subvenciones para reparaciones y mejoras de viviendas			

Otro (especifique)

22. ¿Dónde obtener información sobre los recursos de salud disponibles en su comunidad?  
(Marque todas las que apliquen)

- Escuela
- Iglesia
- Vecinos
- Familia
- Televisión
- Programas de radio locales
- Periódico
- Internet
- Hospital
- Sitios web de hospitales
- Facebook
- Oficina gubernamental del condado/sitio web
- Agencias que proporcionan servicios y programas en su comunidad

Otro (especifique)

23. ¿Qué agencias que brindan servicios y programas con los que interactúa regularmente o saben que están activas en el Condado de Lake?

Nombre:

Nombre:

Nombre:

Nombre:

Nombre:

24. ¿Cómo obtuviste esta encuesta?

Iglesia

Hospital

El consultorio de su médico

Centro de Salud de Lakeview

Centro de Salud Indígena/Tribal

Reunión de la comunidad

Tienda de comestibles / Centro comercial

Correo electrónico

Correo

Contacto personal

Lugar de trabajo

Gobierno del Condado de Lake

# APPENDIX E. PRIORITIZATION PROCESS

## PRIORITIZATION SURVEY

### LAKE COUNTY PRIORITIZATION SURVEY

#### Prioritization Criteria Survey

Thank you for your participation as a Lake County and Hope Rising partner in this prioritization process.

The Community Health Needs Assessment (CHNA) process has multiple steps. Conduent HCI is currently engaged in the process of identifying the significant health needs in Lake County, where after these health needs will be prioritized. Prioritization is the process of determining the most important or urgent health needs to address in communities.

This survey is being done to rate the criteria that will be used to prioritize significant health problems for future strategic planning and implementation efforts.

If you have any questions or concerns about this process, please email Anindita Fahad at [Anindita.Fahad@conduent.com](mailto:Anindita.Fahad@conduent.com)

\* 1. Please Indicate the level of importance that should be given to the listed criteria in deciding which health problems your organization will to address in the next few years.

	Not important	Slightly Important	Important	Fairly Important	Very Important
Number or percentage of people affected by the health problem in the county	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Alignment of problem with your organization's strengths, priorities, mission	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability and commitment from leadership in the involved organizations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Degree of death, disability, suffering or complications for patients and care givers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
County rates are poorer than state, national and Healthy 2020 benchmarks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
State mandates requiring the public health system prioritizes this health problem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Health problem impacts other health outcomes and/or is a driver of other conditions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Expertise and resources within the county to address this health problem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
High community demand to address this health problem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Existence of evidence backed solutions that have ease of implementation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Targeting the health problem eases the economic burden on the community	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



APPENDIX E. **PRIORITIZATION PROCESS**

	Not important	Slightly important	Important	Fairly important	Very important
Correction of social or economic inequalities that contribute to poor health	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Opportunities for partnerships that will allow leveraging of shared resources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Opportunities to address the health problem before it gets exacerbated	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of or opportunity to raise funding to target this health problem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reduction in Emergency Department utilization and subsequent return in investment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of county data collected by state or federal agencies to measure success	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Potential to impact multiple problems with solution and benefit the community at large	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Potential to add physical or social community assets with solution	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Easing of disproportionate impact that is felt by vulnerable populations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. Please provide your name.

3. Please provide your email address.

4. Please provide the name of your organization.

**PRIORITIZATION MATRIX**

This packet will help you assess each of the pressing health needs identified by Conduen HCI’s data analysis, and how each of those health needs relate to the criteria set forth by you through the survey for prioritizing health topics in your service area. For each health need you will score how well you believe the health need meets the criteria. After you have completed the ranking, please submit your results to the Conduent HCI team. The team will collate your results with those of other participants, and will instantaneously show the group’s collective ranking of the most pressing health needs in your service area.

**INSTRUCTIONS**

Given below is a list of Health Topics that have emerged as priorities for Lake County through the Data Synthesis exercise. On the following page, score each health need for how well it meets each criteria:

**1=does not meet criteria through 3=meets criteria**

HEALTH TOPICS	KEY THEMES FROM SECONDARY DATA (*INDICATOR SHOWS A SIGNIFICANT RACE/ETHNIC DISPARITY)	TOPIC SCORE
Drug Use	<i>Indicators:</i> Alcohol-Impaired Driving Deaths, Death Rate due to Drug Poisoning, Age-Adjusted ED Visit Rate due to Heroin Overdose, Age-Adjusted Death Rate due to Drug Use, Adults who Smoke, Age-Adjusted Death Rate due to Heroin Overdose, Age-Adjusted ED Visit Rate due to All Drug Overdose, Teens who have Used Alcohol, Age-Adjusted Death Rate due to, Synthetic Opioid Overdose (excluding Methadone), Age-Adjusted ER Rate due to Alcohol Use, Age-Adjusted ER Rate due to Substance Use, Age-Adjusted Hospitalization Rate due to Alcohol Use, Age-Adjusted Hospitalization Rate due to All Drug Overdose, Age-Adjusted Hospitalization Rate due to Heroin Overdose, Age-Adjusted Hospitalization Rate due to Opioid Overdose (excluding Heroin), Age-Adjusted Hospitalization Rate due to Substance Use, Age-Adjusted Long Acting or Extended Release Opioid Prescription Rate to Opioid Naive Residents, Age-Adjusted Death Rate due to All Opioid Overdose, Age-Adjusted Death Rate due to Prescription Opioid Overdose, Age-Adjusted ED Visit Rate due to Opioid Overdose (excluding Heroin), Consumer Expenditures: Tobacco, Opioid Prescription Patients, Opioid Prescription Rate, Consumer Expenditures: Alcoholic Beverages, Adults who Binge Drink: Year, Liquor Store Density	1.91
Mental Health	<i>Indicators:</i> Depression: Medicare Population, Adults Needing and Receiving Behavioral Health Care Services, **Adults Who Ever Thought Seriously About Committing Suicide, Adults with Likely Serious Psychological Distress, Age-Adjusted ER Rate due to Adolescent Suicide and Intentional Self-inflicted Injury, Age-Adjusted ER Rate due to Mental Health, Age-Adjusted ER Rate due to Pediatric Mental Health, Age-Adjusted ER Rate due to Suicide and Intentional Self-inflicted Injury, Age-Adjusted Hospitalization Rate due to Adolescent Suicide and Intentional Self-inflicted Injury, Age-Adjusted Hospitalization Rate due to Mental Health, Age-Adjusted Hospitalization Rate due to Pediatric Mental Health, Age-Adjusted Hospitalization Rate due to Suicide and Intentional Self-inflicted Injury, Alzheimer’s Disease or Dementia: Medicare Population	1.94

APPENDIX E. **PRIORITIZATION PROCESS**

HEALTH TOPICS	KEY THEMES FROM SECONDARY DATA (*INDICATOR SHOWS A SIGNIFICANT RACE/ETHNIC DISPARITY)	TOPIC SCORE
Alcoholism	<b>Indicators:</b> Alcohol-Impaired Driving Deaths, Death Rate due to Drug Poisoning, Age-Adjusted ED Visit Rate due to Heroin Overdose, Age-Adjusted Death Rate due to Drug Use, Adults who Smoke, Age-Adjusted Death Rate due to Heroin Overdose, Age-Adjusted ED Visit Rate due to All Drug Overdose, Teens who have Used Alcohol, Age-Adjusted Death Rate due to, Synthetic Opioid Overdose (excluding Methadone), Age-Adjusted ER Rate due to Alcohol Use, Age-Adjusted ER Rate due to Substance Use, Age-Adjusted Hospitalization Rate due to Alcohol Use, Age-Adjusted Hospitalization Rate due to All Drug Overdose, Age-Adjusted Hospitalization Rate due to Heroin Overdose, Age-Adjusted Hospitalization Rate due to Opioid Overdose (excluding Heroin), Age-Adjusted Hospitalization Rate due to Substance Use, Age-Adjusted Long Acting or Extended Release Opioid Prescription Rate to Opioid Naive Residents, Age-Adjusted Death Rate due to All Opioid Overdose, Age-Adjusted Death Rate due to Prescription Opioid Overdose, Age-Adjusted ED Visit Rate due to Opioid Overdose (excluding Heroin), Consumer Expenditures: Tobacco, Opioid Prescription Patients, Opioid Prescription Rate, Consumer Expenditures: Alcoholic Beverages, Adults who Binge Drink: Year, Liquor Store Density	1.91
Housing and Homelessness	<b>Indicators:</b> Severe Housing Problems, Homeownership, Median Household Income	2.28
Access to Specialists	<b>Indicators:</b> People Delayed or had Difficulty Obtaining Care, Consumer Expenditures: Medical Services, Consumer Expenditures: Prescription and Non-Prescription Drugs, Adults Needing and Receiving Behavioral Health Care Services, Primary Care Provider Rate, Consumer Expenditures: Medical Supplies, Dentist Rate, Adults Delayed or had Difficulty Obtaining Care, People with a Usual Source of Health Care, Adults with Health Insurance: 18-64, Children with Health Insurance, Non-Physician Primary Care Provider Rate	1.79
Unemployment	<b>Indicators:</b> Unemployed Workers in Civilian Labor Force	2.44
Poverty	<b>Indicators:</b> **Families Living Below Poverty Level, Students Eligible for the Free Lunch Program, Unemployed Workers in Civilian Labor Force, Children Living Below Poverty Level, Median Household Income, People Living 200% Above Poverty Level, **People Living Below Poverty Level, Renters Spending 30% or More of Household Income on Rent, Youth not in School or Working, Severe Housing Problems, Persons with Disability Living in Poverty (5-year, Homeownership, Child Food Insecurity Rate, Food Insecurity Rate, Low-Income and Low Access to a Grocery Store, Per Capita Income, People 65+ Living Below Poverty Level, Food Insecure Children Likely Ineligible for Assistance	2.15
Cancer	<b>Indicators:</b> Mammography Screening: Medicare Population, Age-Adjusted Death Rate due to Breast Cancer, Lung and Bronchus Cancer Incidence Rate, Oral Cavity and Pharynx Cancer Incidence Rate, Age-Adjusted Death Rate due to Prostate Cancer, Age-Adjusted Death Rate due to Colorectal Cancer, Age-Adjusted Death Rate due to Cancer. Age-Adjusted Death Rate due to Lung Cancer, Colorectal Cancer Incidence Rate, Cancer: Medicare Population, Breast Cancer Incidence Rate, Prostate Cancer Incidence Rate	1.79

APPENDIX E. **PRIORITIZATION PROCESS**

Health Need	Availability and commitment from leadership in the involved organizations 1 - criterion not met 2 - criterion met 3 - criterion met well	Expertise and resources within the county to address this health problem 1 - criterion not met 2 - criterion met 3 - criterion met well	Opportunities for partnerships that will allow leveraging of shared resources 1 - criterion not met 2 - criterion met 3 - criterion met well	Opportunities to address the health problem before it gets exacerbated 1 - criterion not met 2 - criterion met 3 - criterion met well	Alignment of problem with your organization's strengths, priorities, mission 1 - criterion not met 2 - criterion met 3 - criterion met well	TOTAL
Drug Use						
Mental Health						
Alcoholism						
Housing and Homelessness						
Access to Specialists						
Unemployment						
Poverty						
Cancer						

**PRIORTIZATION MATRIX RESULTS**

	Availability and commitment from leadership in the involved organizations		Expertise and resources within the county to address this health problem		Opportunities for partnerships that will allow leveraging of shared resources		Opportunities to address the health problem before it gets exacerbated		Alignment of problem with your organization's strengths, priorities, mission		
Weights	4.8		4.6		4.6		4.6		4.47		Total
Drug Use (n=17)	33	158.4	26	119.6	37	170.2	26	119.6	36	160.92	8.57
Mental Health (n=17)	33	158.4	25	115	37	170.2	26	119.6	33	147.51	8.36
Housing and Homelessness (n=17)	34	163.2	23	105.8	32	147.2	22	101.2	28	125.16	7.56
Cancer (n=16)	27	129.6	24	110.4	26	119.6	26	119.6	27	120.69	7.50
Alcoholism (n=17)	25	120	25	115	28	128.8	24	110.4	30	134.1	7.16
Access to Specialists (n=17)	26	124.8	23	105.8	24	110.4	19	87.4	27	120.69	6.46
Unemployment (n=17)	25	120	19	87.4	22	101.2	21	96.6	28	125.16	6.24
Poverty (n=17)	25	120	19	87.4	23	105.8	19	87.4	27	120.69	6.13

## APPENDIX F. COMMUNITY RESOURCES

The following is a list of community resources in Lake County mentioned by community input participants.

1. 4-H Youth Development Program
2. Adult Protective Services
3. Adventist Health Clear Lake
4. Alcoholics Anonymous
5. American Red Cross
6. Area Agency on Aging
7. Behavioral Health Services
8. Calvary Chapel
9. Career Point Lake County
10. Child Welfare Services
11. Circle of Native Minds Wellness Center
12. Clear Lake Gleaners Inc.
13. Clear Lake Senior Community Center
14. Community Garden
15. Continuum of Care
16. Disaster Recovery Center
17. Easter Seals
18. Elder Day Services of Lake County
19. First 5 Lake County
20. Free Friday Produce Pantry
21. Grace Church Kelseyville
22. Habitat for Humanity
23. Healthy Start Youth & Family Services
24. Hilltop Recovery Services
25. Home Energy Assistance Program (HEAP)
26. Hope Harbor Warming Center
27. Hope Rising Lake County
28. Hospice Services of Lake County
29. In-Home Supportive Services
30. Konocti Unified School District
31. La Voz de la Esperanza Latino Center
32. Lake County Alcohol & Other Drugs Services
33. Lake County Be Well
34. Lake County Campus of Woodland Community College
35. Lake County Chamber of Commerce
36. Lake County Channel Cats
37. Lake County Child Welfare Services
38. Lake County Children's Council
39. Lake County Community Development
40. Lake County Family Law Facilitator
41. Lake County Haven
42. Lake County Hunger Task Force
43. Lake County Office of Education
44. Lake County PRIDE Foundation
45. Lake County Sherriff's Department
46. Lake County Social Services Department
47. Lake County Tribal Health Consortium
48. Lake County Vector Control District
49. Lake County Veteran Services Office
50. Lake County Victim Witness
51. Lake County Women, Infants & Children
52. Lake Family Resource Center
53. Lakeview Health Center
54. Lower Lake Community Action Group
55. Meals on Wheels
56. Mendo-Lake Home Respiratory Services
57. Middletown Art Center
58. Mother-Wise
59. New Hope Fellowship
60. North Coast Opportunities
61. Planned Parenthood - Clearlake Health Center
62. Redwood Children's Services
63. Redwood Coast Regional Center
64. Redwood Community Services
65. Restoration House Lower Lake County
66. Rural Arts Initiative
67. SafeRx Lake County
68. Salvation Army
69. Senior Community Center
70. St. Helena Physical Therapy Center
71. St. Vincent DePaul Lower Lake
72. Sutter Lakeside Hospital
73. The Harbor on Main
74. Tribal Health
75. Tule House
76. Upper Lake Citizens Patrol
77. Veteran Affairs Clinic
78. Workforce Lake Business and Career Center
79. Worldwide Healing Hands

## APPENDIX G: IRS GUIDELINES FOR FORM 990, SCHEDULE H COMPLIANCE

	REQUIREMENT	SECTION AND PAGE NUMBER(S) IN WRITTEN CHNA REPORT
The CHNA report adopted for the hospital facility by an authorized body of the hospital facility must include:		
	A definition of the community served by the hospital facility	Section 2.2
	A description of how the community served was determined	Section 2.2
	A description of the process and methods used to conduct the CHNA, and	Section 3
	A description of how the hospital facility solicited and took into account input received from persons who represent the broad interests of the community it serves	Section 3
A prioritized description of the significant health needs of the community identified through the CHNA along with		
	A description of the process and criteria used in identifying certain health needs as significant and prioritizing those significant health needs	Section 7; Appendix E
	A description of the resources potentially available to address the significant health needs	Appendix F
	An evaluation of the impact of any actions that were taken, since the hospital facility finished conducting its immediately preceding CHNA, to address significant health needs identified in the hospital facility's prior CHNA	Appendix A
A hospital facility's CHNA report will be considered to describe the process and methods used to conduct the CHNA if the CHNA report		
	Describes the data and other information used in the assessment	Section 4-7; Appendix C
	Describes the methods of collecting and analyzing this data and information, and	Appendix C; Appendix D
	Identifies any parties with whom the hospital collaborated, or contracted for assistance	Section 2.8
A hospital facility's CHNA report* will be considered to describe how the hospital facility took into account input received from persons who represent the broad interest of the community it serves if it		
	Summarizes any input provided by such persons and how and over what time period such input was provided	Section 6; Section 7.2; Appendix D
	Provides the names of any organizations providing input, and	Section 6.2
	Describes the medically underserved, low-income, or minority populations being represented by organizations or individuals that provided input	All through the report
JOINT CHNA: This section to be completed only if your hospital facility conducted a joint CHNA**. A hospital facility may conduct its CHNA in collaboration with other organizations and facilities including, but not limited to: related and unrelated hospital organizations and facilities; for-profit and government hospitals; governmental departments; and non-profit organizations. However, every hospital facility must document its CHNA in a separate CHNA report unless it adopts a joint CHNA report.		
	A joint CHNA report produced for the hospital facility and one or more of the collaborating facilities and/or organizations is permitted provided that the following conditions are met	Yes
	The joint CHNA report includes all required content	Yes
	The joint CHNA report is clearly identified as applying to the hospital facility, and	Yes
	All of the collaborating hospital facilities and organizations included in the joint CHNA report define their community to be the same	Yes

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