

# 2022 Community Health Needs Assessment

Conducted on behalf of

**Sutter Coast Hospital**  
**800 East Washington Boulevard**  
**Crescent City, CA 95531**

Conducted by



January 2022

## Acknowledgments

We are deeply grateful to all those who contributed to the community health needs assessment conducted on behalf of Sutter Coast Hospital. Many dedicated community health experts and members of various social service organizations serving the most vulnerable members of the community gave their time and expertise as key informants to help guide and inform the findings of the assessment. Many community residents also participated and volunteered their time to tell us what it is like to live in the community and shared the challenges they face trying to achieve better health. To everyone who supported this important work, we extend our heartfelt gratitude.

Community Health Insights ([www.communityhealthinsights.com](http://www.communityhealthinsights.com)) conducted the assessment on behalf of Sutter Coast Hospital. Community Health Insights is a Sacramento-based research-oriented consulting firm dedicated to improving the health and well-being of communities across Central and Northern California. This joint report was authored by:

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# Report Summary

## Purpose

The purpose of this community health needs assessment (CHNA) was to identify and prioritize significant health needs of the Sutter Coast Hospital (SCH) service area. The priorities identified in this report help to guide nonprofit hospital's community health improvement programs and community benefit activities as well as their collaborative efforts with other organizations that share a mission to improve health. This CHNA report meets the requirements of the Patient Protection and Affordable Care Act (and in California, Senate Bill 697) that nonprofit hospitals conduct a community health needs assessment at least once every three years. The CHNA was conducted by Community Health Insights ([www.communityhealthinsights.com](http://www.communityhealthinsights.com)).

## Community Definition

The definition of the community served included the primary service area of the hospital, which included the coastal communities of Del Norte County, California and Brookings Harbor areas of Curry County, Oregon. The total population of the service area was 41,677.

Del Norte County is located in the northwest corner of the state of California, along the Pacific Ocean adjacent to the Oregon Boarder. Harbor is an unincorporated community in Curry County, Oregon. It is located across the Chetco River from the city of Brookings.

## Assessment Process and Methods

The data used to conduct the CHNA were identified and organized using the widely recognized Robert Wood Johnson Foundation's County Health Rankings model.<sup>1</sup> This model of population health includes many factors that impact and account for individual health and well-being. Furthermore, to guide the overall process of conducting the assessment, a defined set of data collection and analytic stages were developed. These included the collection and analysis of both primary (qualitative) and secondary (quantitative) data. Qualitative data included one-on-one and group interviews with 14 community health experts, social service providers, and medical personnel. Furthermore, 29 community residents or community service provider organizations participated in 6 focus groups across the service area.

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

At the time that this CHNA was conducted, the COVID-19 pandemic was still impacting communities across the United States, including SCH's service area. The process for conducting the CHNA remained fundamentally the same. However, some adjustments were made during the qualitative data collection to ensure the health and safety of those participating. Additionally, COVID-19 data were incorporated

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<sup>1</sup> See: County Health Rankings Model, Robert Wood Johnson Foundation, and University of Wisconsin, 2021. Retrieved from: <http://www.countyhealthrankings.org/>.

into the quantitative data analysis and COVID-19 impact was captured during qualitative data collection. These findings are reported throughout various sections of the report.

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

Primary and secondary data were analyzed to identify and prioritize significant health needs. This began by identifying 12 potential health needs (PHNs). These PHNs were identified in previously conducted CHNAs. Data were analyzed to discover which, if any, of the PHNs were present in the service area. After these were identified, PHNs were prioritized based on rankings provided by primary data sources. Data were also analyzed to detect emerging health needs beyond those 12 PHNs identified in previous CHNAs.

## **List of Prioritized Significant Health Needs**

The following significant health needs identified for Sutter Coast Hospital are listed below in prioritized order.

1. Access to Basic Needs Such as Housing, Jobs, and Food
2. Access to Mental/Behavioral Health and Substance-Use Services
3. Access to Specialty and Extended Care
4. Access to Quality Primary Care Health Services
5. Active Living and Healthy Eating
6. Access to Functional Needs
7. Injury and Disease Prevention and Management
8. Safe and Violence-Free Environment
9. Increased Community Connections
10. Access to Dental Care and Preventive Services

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

In all, 186 resources were identified in the service area that are potentially available to meet the identified significant health needs. The identification method included starting with the list of resources from the 2019 CHNA, verifying that the resources still existed, and then adding newly identified resources into the 2022 CHNA report.

## **Conclusion**

This CHNA details the process and findings of a comprehensive community health needs assessment to guide decision-making for the implementation of community health improvement efforts using a health equity lens. The CHNA includes an overall health and social examination of SCH's service area. This report also serves as a resource for community organizations in their effort to improve the health and well-being of the communities they serve.

## Introduction and Purpose

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

This report documents the processes, methods, and findings of a CHNA conducted on behalf of Sutter Coast Hospital (SCH), located at 800 East Washington Boulevard, Crescent City, CA 95531. SCH’s primary service area includes Del Norte County, California and the Brookings Harbor area of Curry County, Oregon. The total population of the service area was 41,677 in 2021.

SCH is an affiliate of Sutter Health, a not-for-profit healthcare system. The CHNA was conducted over a period of 6 months, beginning in August 2021, and concluding in December 2021. This CHNA report meets requirements of the Patient Protection and Affordable Care Act and California Senate Bill 697 that nonprofit hospitals conduct a community health needs assessment at least once every three years.

Community Health Insights ([www.communityhealthinsights.com](http://www.communityhealthinsights.com)) conducted the CHNA on the behalf of SCH. Community Health Insights is a Sacramento-based, research-oriented consulting firm dedicated to improving the health and well-being of communities across Central and Northern California. Community Health Insights has conducted dozens of CHNAs and CHAs for multiple health systems and local health departments over the previous decade.

## Findings

### Prioritized Significant Health Needs

Primary and secondary data were analyzed to identify and prioritize the significant health needs in the SCH service area. In all, 10 significant health needs were identified. Primary data were then used to prioritize these significant health needs.

Prioritization was based on two measures, which came from the key informant interview and focus group results. These included the percentage of sources that identified a health need as existing in the community, and the percentage of times the sources identified a health need as a top priority. Table 1 shows the value of these measures for each significant health need.

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



Table 1: Health need prioritization inputs for the SCH service area.

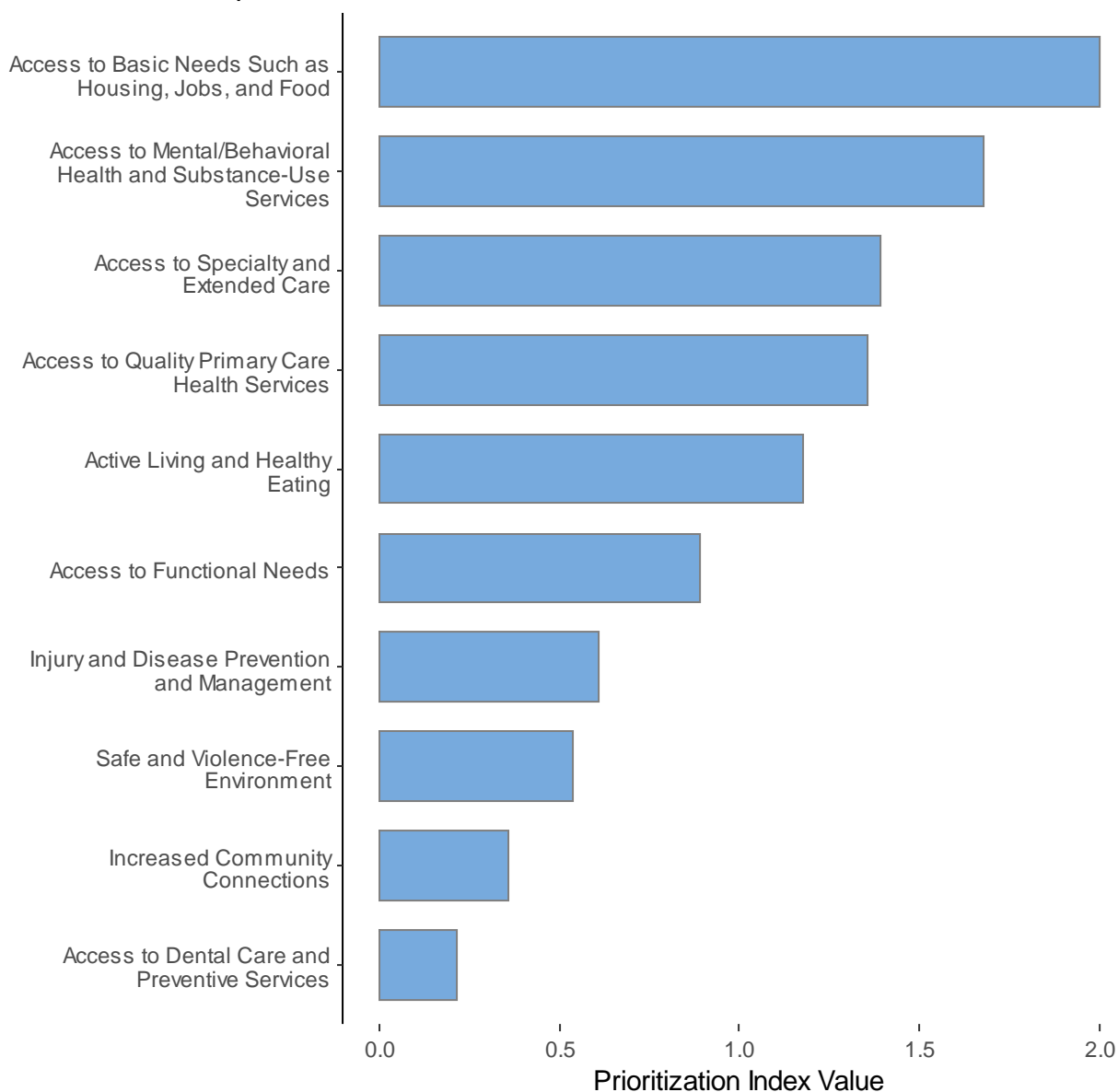
Prioritized Health Needs	% of Key Informants and Focus Groups Identifying Health Need	% of Times Key Informants and Focus Groups Identified Health Need as a Top Priority
Access to Basic Needs Such as Housing, Jobs, and Food	100%	31%
Access to Mental/Behavioral Health and Substance-Use Services	100%	21%
Access to Specialty and Extended Care	93%	14%
Access to Quality Primary Care Health Services	86%	15%
Active Living and Healthy Eating	79%	12%
Access to Functional Needs	79%	3%
Injury and Disease Prevention and Management	57%	1%
Safe and Violence-Free Environment	50%	1%
Increased Community Connections	36%	~
Access to Dental Care and Preventive Services	21%	~
~ Data not available		

These measures were then combined to create a health need prioritization index. The highest priority was given to health needs that were more frequently mentioned and were more frequently identified among the top priority needs.<sup>3</sup> The prioritization index values are shown in Figure 1, where health needs are ordered from highest priority at the top of the figure to lowest priority at the bottom.

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<sup>3</sup> Further details regarding the creation of the prioritization index can be found in the technical section of the report.

## Sutter Coast Hospital 2022 Prioritized Health Needs



*Figure 1: Prioritized significant health needs for the SCH service area.*

COVID-19 was top of mind for many participating in the primary data collection process, and feedback regarding the impact of COVID-19 confirmed that the pandemic exacerbated existing needs in the community.

The significant health needs are described below. Those secondary data indicators used in the CHNA that performed poorly compared to benchmarks are listed in the table below each significant health need and ordered by their relationship to the conceptual model used to guide data collection for this report. Results from primary data analysis are also provided in the table. (A full listing of all quantitative indicators can be found in the technical section of this report).

**1. Access to Basic Needs Such as Housing, Jobs, and Food**

Access to affordable and clean housing, stable employment, quality education, and adequate food for good health are vital for survival. Maslow’s Hierarchy of Needs<sup>4</sup> suggests that only when people have their basic physiological and safety needs met can they become engaged members of society and self-actualize or live to their fullest potential, including enjoying good health.

Primary Data Analysis	Secondary Data Analysis
<p>The manner in which the health need appeared or was expressed in the community was described as follows by key informants and focus group participants:</p>	<p>The following indicators performed worse in the service area when compared to state averages:</p>
<ul style="list-style-type: none"> <li>• Generational poverty is a real issue in the community</li> <li>• Affordable housing is a growing problem, and has been exacerbated by the pandemic</li> <li>• Jobs seem to be available, but not everyone wants to work</li> <li>• There are not enough entry-level jobs to keep people living in the community</li> <li>• Wages are not keeping up with rising costs of living</li> <li>• Many community members cannot afford internet</li> <li>• More homeless shelters are needed</li> <li>• Homelessness is on the rise across all parts of the community</li> <li>• Food insecurity is a growing issue</li> <li>• There are no higher education opportunities in the community</li> <li>• Vacation rentals are driving up the cost of housing</li> <li>• There is overcrowding in homes, with multiple families living in one home</li> <li>• The community needs more job skills and vocational training</li> <li>• There are not enough social services to meet the demand</li> <li>• Wages of social services jobs make it hard to recruit workers</li> <li>• The waiting list for HUD (House and Urban Development) is significant, and there is limited availability when approved</li> </ul>	<ul style="list-style-type: none"> <li>• Life Expectancy</li> <li>• Premature Age-Adjusted Mortality</li> <li>• Premature Death</li> <li>• COVID-19 Mortality</li> <li>• Diabetes Prevalence</li> <li>• Poor Mental Health Days</li> <li>• Frequent Mental Distress</li> <li>• Poor Physical Health Days</li> <li>• Frequent Physical Distress</li> <li>• Poor or Fair Health</li> <li>• COVID-19 Cumulative Incidence</li> <li>• Asthma Emergency Department (ED) Rates</li> <li>• Asthma ED Rates for Children</li> <li>• Drug Induced Death</li> <li>• Adult Obesity</li> <li>• Limited Access to Healthy Foods</li> <li>• Food Environment Index</li> <li>• Medically Underserved Area</li> <li>• COVID-19 Cumulative Full Vaccination Rate</li> <li>• Some College</li> <li>• High School Completion</li> <li>• Disconnected Youth</li> <li>• Third Grade Reading Level</li> <li>• Third Grade Math Level</li> <li>• Unemployment</li> <li>• Children in Single-Parent Households</li> <li>• Social Associations</li> <li>• Children Eligible for Free Lunch</li> <li>• Children in Poverty</li> <li>• Median Household Income</li> </ul>

<sup>4</sup> McLeod, S. 2014. Maslow’s Hierarchy of Needs. Retrieved from: <http://www.simplypsychology.org/maslow.html>

<b>Primary Data Analysis</b>	<b>Secondary Data Analysis</b>
The manner in which the health need appeared or was expressed in the community was described as follows by key informants and focus group participants:	The following indicators performed worse in the service area when compared to state averages:
	<ul style="list-style-type: none"> <li>• Income Inequality</li> <li>• Severe Housing Problems</li> <li>• Homelessness Rate</li> <li>• Households with no Vehicle Available</li> </ul>

## **2. Access to Mental/Behavioral Health and Substance-Use Services**

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

<b>Primary Data Analysis</b>	<b>Secondary Data Analysis</b>
The manner in which the health need appeared or was expressed in the community was described as follows by key informants and focus group participants:	The following indicators performed worse in the service area when compared to state averages:
<ul style="list-style-type: none"> <li>• There are limited services available to low-income populations</li> <li>• The area needs a crisis stabilization unit</li> <li>• More inpatient facilities are needed in the area</li> <li>• Those with private insurance have limited options in locating providers</li> <li>• The area has extensive mental, behavioral, and substance use issues</li> <li>• Those without internet services cannot access virtual mental health services</li> <li>• Isolation is a significant issue, and has been exacerbated by the pandemic, especially among seniors</li> <li>• There is generational trauma among the community</li> <li>• It is difficult to recruit mental health providers into the community</li> <li>• There are no residential treatment centers for those with substance use disorders</li> <li>• Due to the lack of services, some experiencing a mental health crisis end up incarcerated</li> </ul>	<ul style="list-style-type: none"> <li>• Life Expectancy</li> <li>• Premature Age-Adjusted Mortality</li> <li>• Premature Death</li> <li>• Liver Disease Mortality</li> <li>• Poor Mental Health Days</li> <li>• Frequent Mental Distress</li> <li>• Poor Physical Health Days</li> <li>• Frequent Physical Distress</li> <li>• Poor or Fair Health</li> <li>• Excessive Drinking</li> <li>• Drug Induced Death</li> <li>• Adult Smoking</li> <li>• Primary Care Shortage Area</li> <li>• Mental Health Care Shortage Area</li> <li>• Medically Underserved Area</li> <li>• Mental Health Providers</li> <li>• Psychiatry Providers</li> <li>• Firearm Fatalities Rate</li> <li>• Disconnected Youth</li> <li>• Social Associations</li> <li>• Income Inequality</li> <li>• Homelessness Rate</li> </ul>

### 3. Access to Specialty and Extended Care

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

Primary Data Analysis	Secondary Data Analysis
The manner in which the health need appeared or was expressed in the community was described as follows by key informants and focus group participants:	The following indicators performed worse in the service area when compared to state averages:
<ul style="list-style-type: none"> <li>• People often have to travel out of the area to get specialty care</li> <li>• The community lacks most specialty services</li> <li>• There are not enough senior care services</li> <li>• There is a significant need for short-term skilled nursing facilities</li> <li>• Seniors on fixed incomes do not have support services</li> <li>• Seniors are sometime exploited by others, including family members</li> <li>• It is challenging to recruit and retain specialists</li> <li>• Current ophthalmologists are retiring soon and there are no replacements</li> </ul>	<ul style="list-style-type: none"> <li>• Life Expectancy</li> <li>• Premature Age-Adjusted Mortality</li> <li>• Premature Death</li> <li>• Stroke Mortality</li> <li>• Chronic Lower Respiratory Disease Mortality</li> <li>• Diabetes Mortality</li> <li>• Heart Disease Mortality</li> <li>• Cancer Mortality</li> <li>• Liver Disease Mortality</li> <li>• Kidney Disease Mortality</li> <li>• COVID-19 Mortality</li> <li>• Diabetes Prevalence</li> <li>• Poor Mental Health Days</li> <li>• Frequent Mental Distress</li> <li>• Poor Physical Health Days</li> <li>• Frequent Physical Distress</li> <li>• Poor or Fair Health</li> <li>• Lung Cancer Prevalence</li> <li>• Asthma ED Rates</li> <li>• Asthma ED Rates for Children</li> <li>• Drug Induced Death</li> <li>• Psychiatry Providers</li> <li>• Specialty Care Providers</li> <li>• Income Inequality</li> <li>• Homelessness Rate</li> </ul>

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

Primary care resources include community clinics, pediatricians, family practice physicians, internists, nurse practitioners, pharmacists, telephone advice nurses, and other similar resources. Primary care

services are typically the first point of contact when an individual seeks healthcare. These services are the front line in the prevention and treatment of common diseases and injuries in a community.

Primary Data Analysis	Secondary Data Analysis
<p>The manner in which the health need appeared or was expressed in the community was described as follows by key informants and focus group participants:</p>	<p>The following indicators performed worse in the service area when compared to state averages:</p>
<ul style="list-style-type: none"> <li>• The cost of healthcare is increasingly unaffordable</li> <li>• There are not enough providers in the community</li> <li>• Recruiting providers into the community is difficult</li> <li>• There is a high turnover rate of providers in the community</li> <li>• There are long wait-times for appointments for some in the community</li> <li>• There is distrust of the healthcare system by some in the community</li> <li>• Those with limited English skills have difficulty communicating with providers</li> <li>• The cost of healthcare is an obstacle for low-income populations seeking care</li> <li>• Community members avoid needed healthcare services due to the high cost</li> <li>• The lack of culturally competent care is a barrier for many who are seeking services</li> </ul>	<ul style="list-style-type: none"> <li>• Life Expectancy</li> <li>• Premature Age-Adjusted Mortality</li> <li>• Premature Death</li> <li>• Stroke Mortality</li> <li>• Chronic Lower Respiratory Disease Mortality</li> <li>• Diabetes Mortality</li> <li>• Heart Disease Mortality</li> <li>• Cancer Mortality</li> <li>• Liver Disease Mortality</li> <li>• Kidney Disease Mortality</li> <li>• COVID-19 Mortality</li> <li>• Influenza and Pneumonia Mortality</li> <li>• Diabetes Prevalence</li> <li>• Poor Mental Health Days</li> <li>• Frequent Mental Distress</li> <li>• Poor Physical Health Days</li> <li>• Frequent Physical Distress</li> <li>• Poor or Fair Health</li> <li>• Lung Cancer Prevalence</li> <li>• Asthma ED Rates</li> <li>• Asthma ED Rates for Children</li> <li>• Primary Care Shortage Area</li> <li>• Medically Underserved Area</li> <li>• Mammography Screening</li> <li>• Primary Care Providers</li> <li>• COVID-19 Cumulative Full Vaccination Rate</li> <li>• Income Inequality</li> <li>• Homelessness Rate</li> </ul>

### **5. Active Living and Healthy Eating**

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

absent the means to consistently secure food for themselves or their families, relying on food pantries and school meals often lacking in sufficient nutrition for maintaining health

Primary Data Analysis	Secondary Data Analysis
<p>The manner in which the health need appeared or was expressed in the community was described as follows by key informants and focus group participants:</p>	<p>The following indicators performed worse in the service area when compared to state averages:</p>
<ul style="list-style-type: none"> <li>• Access to healthy food is an issue in the community</li> <li>• There are limited recreational opportunities for youth</li> <li>• The community lacks recreational opportunities (e.g., YMCA, skate rink, bowling alleys)</li> <li>• Obesity, especially childhood obesity, is an issue in the community</li> </ul>	<ul style="list-style-type: none"> <li>• Life Expectancy</li> <li>• Premature Age-Adjusted Mortality</li> <li>• Premature Death</li> <li>• Stroke Mortality</li> <li>• Diabetes Mortality</li> <li>• Heart Disease Mortality</li> <li>• Cancer Mortality</li> <li>• Kidney Disease Mortality</li> <li>• Diabetes Prevalence</li> <li>• Poor Mental Health Days</li> <li>• Frequent Mental Distress</li> <li>• Poor Physical Health Days</li> <li>• Frequent Physical Distress</li> <li>• Poor or Fair Health</li> <li>• Asthma ED Rates</li> <li>• Asthma ED Rates for Children</li> <li>• Adult Obesity</li> <li>• Physical Inactivity</li> <li>• Limited Access to Healthy Foods</li> <li>• Food Environment Index</li> <li>• Access to Exercise Opportunities</li> <li>• Income Inequality</li> <li>• Homelessness Rate</li> </ul>

**6. Access to Functional Needs**

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

Primary Data Analysis	Secondary Data Analysis
The manner in which the health need appeared or was expressed in the community was described as follows by key informants and focus group participants:	The following indicators performed worse in the service area when compared to state averages:
<ul style="list-style-type: none"> <li>• There are limited transportation options for those who do not own a car</li> <li>• The bus system in town is inadequate</li> <li>• There are few services to transport individuals with medical needs</li> <li>• There are limited transportation services for those with disabilities</li> <li>• Transportation options for seniors are limited</li> <li>• The transportation infrastructure is unreliable</li> <li>• People have to travel out of the community to get services</li> <li>• Poor weather can make it hard to get in and out of the community</li> </ul>	<ul style="list-style-type: none"> <li>• Disability</li> <li>• Frequent Mental Distress</li> <li>• Frequent Physical Distress</li> <li>• Poor or Fair Health</li> <li>• Adult Obesity</li> <li>• COVID-19 Cumulative Full Vaccination Rate</li> <li>• Income Inequality</li> <li>• Homelessness Rate</li> <li>• Households with no Vehicle Available</li> </ul>

### ***7. Injury and Disease Prevention and Management***

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



Primary Data Analysis	Secondary Data Analysis
<p>The manner in which the health need appeared or was expressed in the community was described as follows by key informants and focus group participants:</p>	<p>The following indicators performed worse in the service area when compared to state averages:</p>
<ul style="list-style-type: none"> <li>• There needs to be more focus on prevention</li> <li>• The community needs a more holistic approach to healthcare</li> <li>• Youth need more education on the dangers of substance use</li> <li>• The community needs additional tobacco prevention programs</li> </ul>	<ul style="list-style-type: none"> <li>• Stroke Mortality</li> <li>• Chronic Lower Respiratory Disease Mortality</li> <li>• Diabetes Mortality</li> <li>• Heart Disease Mortality</li> <li>• Liver Disease Mortality</li> <li>• Kidney Disease Mortality</li> <li>• Unintentional Injuries Mortality</li> <li>• COVID-19 Mortality</li> <li>• Diabetes Prevalence</li> <li>• Poor Mental Health Days</li> <li>• Frequent Mental Distress</li> <li>• Frequent Physical Distress</li> <li>• Poor or Fair Health</li> <li>• COVID-19 Cumulative Incidence</li> <li>• Asthma ED Rates</li> <li>• Asthma ED Rates for Children</li> <li>• Excessive Drinking</li> <li>• Drug Induced Death</li> <li>• Adult Obesity</li> <li>• Physical Inactivity</li> <li>• Teen Birth Rate</li> <li>• Adult Smoking</li> <li>• COVID-19 Cumulative Full Vaccination Rate</li> <li>• Firearm Fatalities Rate</li> <li>• Motor Vehicle Crash Death</li> <li>• Disconnected Youth</li> <li>• Third Grade Reading Level</li> <li>• Third Grade Math Level</li> <li>• Income Inequality</li> <li>• Homelessness Rate</li> </ul>

### ***8. Safe and Violence-Free Environment***

Feeling safe in one’s home and community are fundamental to overall health. Next to having basic needs met (e.g., food, shelter, and clothing) is having physical safety. Feeling unsafe affects the way people act and react to everyday life occurrences. Furthermore, research has demonstrated that

individuals exposed to violence in their homes, the community, and schools are more likely to experience depression and anxiety and demonstrate more aggressive, violent behavior.<sup>5</sup>

Primary Data Analysis	Secondary Data Analysis
<p>The manner in which the health need appeared or was expressed in the community was described as follows by key informants and focus group participants:</p>	<p>The following indicators performed worse in the service area when compared to state averages:</p>
<ul style="list-style-type: none"> <li>• Child abuse and neglect, as well as domestic violence, are issues in the community, and have been exacerbated by the pandemic</li> </ul>	<ul style="list-style-type: none"> <li>• Life Expectancy</li> <li>• Premature Death</li> <li>• Poor Mental Health Days</li> <li>• Frequent Mental Distress</li> <li>• Frequent Physical Distress</li> <li>• Poor or Fair Health</li> <li>• Physical Inactivity</li> <li>• Access to Exercise Opportunities</li> <li>• Homicide Rate</li> <li>• Firearm Fatalities Rate</li> <li>• Violent Crime Rate</li> <li>• Motor Vehicle Crash Death</li> <li>• Disconnected Youth</li> <li>• Social Associations</li> <li>• Income Inequality</li> <li>• Severe Housing Problems</li> <li>• Homelessness Rate</li> </ul>

### 9. Increased Community Connections

As humans are social beings, community connection is a crucial part of living a healthy life. People have a need to feel connected with a larger support network and the comfort of knowing they are accepted and loved. Research suggests “individuals who feel a sense of security, belonging, and trust in their community have better health. People who don’t feel connected are less inclined to act in healthy ways or work with others to promote well-being for all.”<sup>6</sup> Ensuring that community members have ways to connect with each other through programs, services, and opportunities is important in fostering a healthy community. Furthermore, healthcare and community support services are more effective when they are delivered in a coordinated fashion, where individual organizations collaborate with others to build a network of care.

<sup>5</sup> Lynn-Whaley, J., & Sugarmann, J. July 2017. The Relationship Between Community Violence and Trauma. Los Angeles: Violence Policy Center.

<sup>6</sup> Robert Wood Johnson Foundation. 2016. Building a Culture of Health: Sense of Community. See: <https://www.rwjf.org/en/cultureofhealth/taking-action/making-health-a-shared-value/sense-of-community.html>

Primary Data Analysis	Secondary Data Analysis
<p>The manner in which the health need appeared or was expressed in the community was described as follows by key informants and focus group participants:</p>	<p>The following indicators performed worse in the service area when compared to state averages:</p>
<ul style="list-style-type: none"> <li>• Some families are experiencing isolation</li> <li>• Community organizations need to work more collaboratively in delivering services</li> <li>• Some in the community lack empathy for those who are disabled</li> <li>• Some in the community have become isolated from their family support systems</li> </ul>	<ul style="list-style-type: none"> <li>• Life Expectancy</li> <li>• Premature Age-Adjusted Mortality</li> <li>• Premature Death</li> <li>• Stroke Mortality</li> <li>• Diabetes Mortality</li> <li>• Heart Disease Mortality</li> <li>• Unintentional Injuries Mortality</li> <li>• Diabetes Prevalence</li> <li>• Poor Mental Health Days</li> <li>• Frequent Mental Distress</li> <li>• Poor Physical Health Days</li> <li>• Frequent Physical Distress</li> <li>• Poor or Fair Health</li> <li>• Excessive Drinking</li> <li>• Drug Induced Death</li> <li>• Physical Inactivity</li> <li>• Access to Exercise Opportunities</li> <li>• Teen Birth Rate</li> <li>• Primary Care Shortage Area</li> <li>• Mental Health Care Shortage Area</li> <li>• Medically Underserved Area</li> <li>• Mental Health Providers</li> <li>• Psychiatry Providers</li> <li>• Specialty Care Providers</li> <li>• Primary Care Providers</li> <li>• COVID-19 Cumulative Full Vaccination Rate</li> <li>• Homicide Rate</li> <li>• Firearm Fatalities Rate</li> <li>• Violent Crime Rate</li> <li>• Some College</li> <li>• High School Completion</li> <li>• Disconnected Youth</li> <li>• Unemployment</li> <li>• Children in Single-Parent Households</li> <li>• Social Associations</li> <li>• Income Inequality</li> <li>• Homelessness Rate</li> <li>• Households with no Vehicle Available</li> </ul>

## 10. Access to Dental Care and Preventive Services

Oral health is important for overall quality of life. When individuals have dental pain, it is difficult to eat, concentrate, and fully engage in life. Oral health disease, including gum disease and tooth decay are preventable chronic diseases that contribute to increased risk of other chronic disease, as well as play a large role in chronic absenteeism from school in children. Poor oral health status impacts the health of the entire body, especially the heart and the digestive and endocrine systems.

Primary Data Analysis	Secondary Data Analysis
The manner in which the health need appeared or was expressed in the community was described as follows by key informants and focus group participants:	The following indicators performed worse in the service area when compared to state averages:
<ul style="list-style-type: none"><li>• There are limited dental services in the community</li><li>• There are no specialty dental services available</li><li>• There are not enough dental providers working in the community</li></ul>	<ul style="list-style-type: none"><li>• Frequent Mental Distress</li><li>• Poor Physical Health Days</li><li>• Frequent Physical Distress</li><li>• Poor or Fair Health</li><li>• Dental Care Shortage Area</li><li>• Dentists per 100K of Population</li><li>• Income Inequality</li><li>• Homelessness Rate</li></ul>

## Methods Overview

### Conceptual and Process Models

The data used to conduct the CHNA were identified and organized using the widely recognized Robert Wood Johnson Foundation’s County Health Rankings model.<sup>7</sup> This model of population health includes the many factors that impact and account for individual health and well-being. Furthermore, to guide the overall process of conducting the assessment, a defined set of data collection and analytic stages were developed. For a detailed review of methods, see the technical section.

### Public Comments from Previously Conducted CHNAs

Regulations require that nonprofit hospitals include written comments from the public on their previously conducted CHNAs and most recently adopted implementation strategies. SCH requested written comments from the public on its 2019 CHNA and most recently adopted Implementation Strategy through a dedicated email address: SHCB@sutterhealth.org.

At the time of the development of this CHNA report, SCH had not received written comments. However, input from the broader community was incorporated in the 2022 CHNA through key informant

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<sup>7</sup> See: County Health Rankings Model, Robert Wood Johnson Foundation, and University of Wisconsin, 2021. Retrieved from: <http://www.countyhealthrankings.org/>.

interviews and focus groups. SCH will continue to use its website as a tool to solicit public comments and ensure that these comments are considered as community input in the development of future CHNAs.

## Data Used in the CHNA

Data collected and analyzed included both primary (qualitative) and secondary (quantitative) data. Primary data included 10 interviews with 14 community health experts and six focus groups conducted with a total of 29 community residents or community-facing service providers. (A full listing of all participants can be seen in the technical section of this report.)

Secondary data included multiple datasets selected for use in the various stages of the analysis. A set of county-level indicators was collected from various sources to help identify and prioritize significant health needs. Additionally, socioeconomic indicators were collected to help describe the overall social conditions within the service area. Health outcome indicators included measures of both mortality (length of life) and morbidity (quality of life). Health factor indicators included measures of 1) health behaviors, such as diet and exercise and tobacco, alcohol, and drug use; 2) clinical care, including access to quality care; 3) social and economic factors such as race/ethnicity, income, educational attainment, employment, neighborhood safety, and similar; and 4) physical environment measures, such as air and water quality, transit and mobility resources, and housing affordability. In all, 68 different health-outcome and health factor indicators were collected for the CHNA.

## Data Analysis

Primary and secondary data were analyzed to identify and prioritize the significant health needs within the SCH service area. This included identifying 12 potential health needs (PHNs) in these communities. These potential health needs were those identified in previously conducted CHNAs. Data were analyzed to discover which, if any, of the PHNs were present in the hospital's service area. After these were identified, health needs were prioritized based on an analysis of primary data sources that described the PHN as a significant health need.

For an in-depth description of the processes and methods used to conduct the CHNA, including primary and secondary data collection, analysis, and results, see the technical section of this report.

## Description of Community Served

The definition of the community served included the primary service area of SCH. This includes coastal communities of Del Norte County, California and Brookings Harbor areas of Curry County, Oregon.

Del Norte County is located in the northwest corner of the state of California, along the Pacific Ocean adjacent to the Oregon border. Harbor is an unincorporated community in Curry County, Oregon. It is located across the Chetco River by the city of Brookings. The total population of the service area was 41,677 in 2021. The service area is shown in Figure 2.

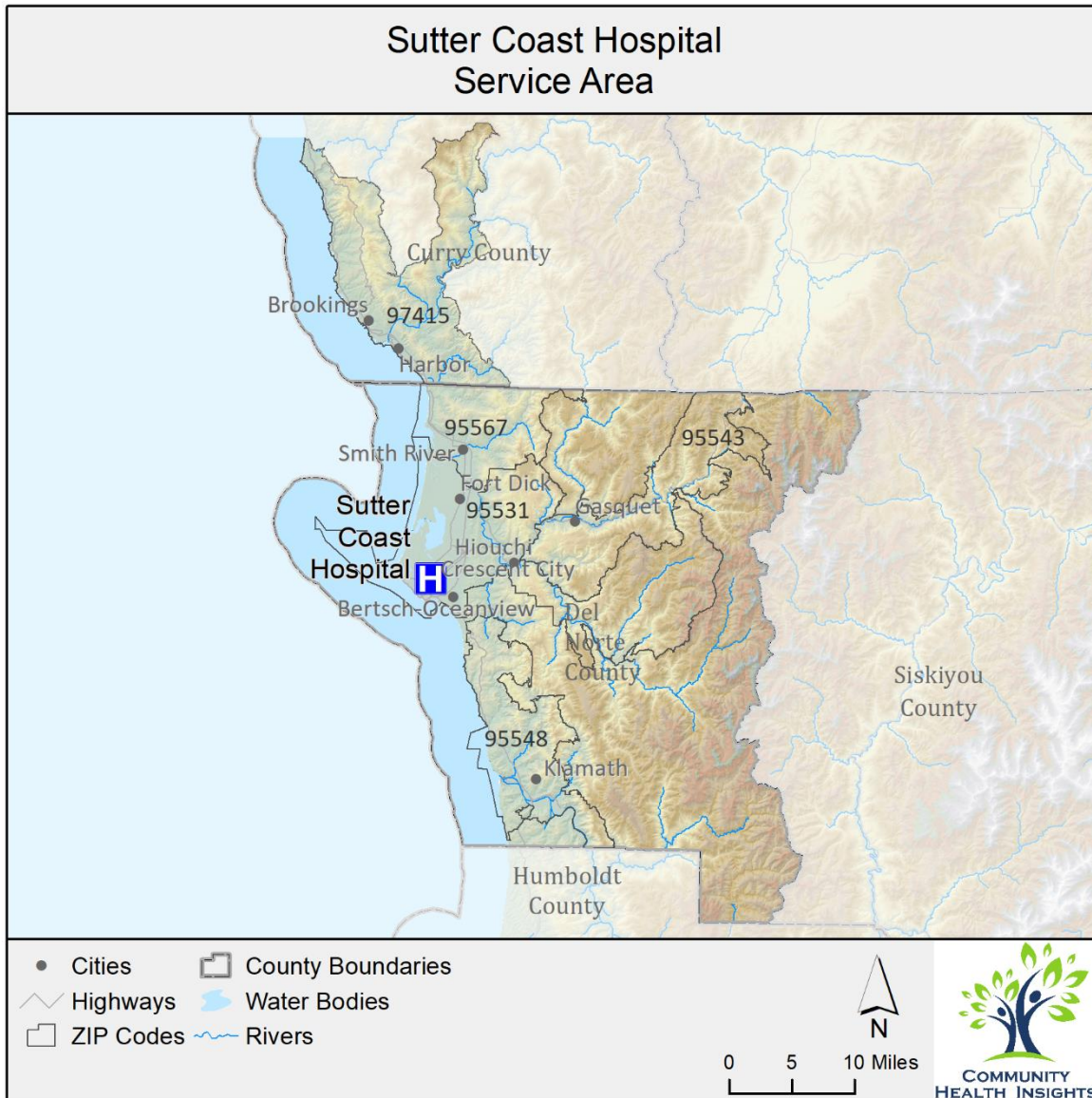


Figure 2: Community served by SCH.

Population characteristics for each ZIP Code in the service area are presented in Table 2. These are compared to the state and county characteristics for descriptive purposes. Any ZIP Code with values that compared negatively to the state or county is shaded in the table.

Table 2: Population characteristics for each ZIP Code located in the SCH service area.

ZIP Code	Total Population	% Non-White or Hispanic\Latinx	Median Age (yrs.)	Median Income	% Poverty	% Unemployment	% Uninsured	% Without High School Graduation	% With High Housing Costs	% With Disability
95531	23,737	37.8	38.2	\$44,894	19.2	7.6	7.0	20.8	35.9	19.2
95543	705	23.7	51.8	\$37,321	13.7	0.0	0.0	25.1	26.9	42.9
95548	1,251	48.7	45.8	\$38,977	25.8	15.5	5.2	18.1	22.8	30.2
95567	1,802	39.6	49.3	\$57,266	20.6	6.4	4.9	9.0	25.0	13.3
Del Norte County	27,495	38.1	39.5	\$45,283	19.5	7.7	6.5	19.9	34.2	20.0
California	39,283,497	62.8	36.5	\$75,235	13.4	6.1	7.5	16.7	40.6	10.6
97415	14,182	17.1	56.4	\$50,547	11.3	7.3	5.9	10.7	31.3	22.9
Curry County	22,650	13.7	56.3	\$48,440	12.4	8.3	6.1	9.7	31.2	23.5
Oregon	4,129,803	24.3	39.3	\$62,818	13.2	5.5	6.7	9.3	33.5	14.4

Source: 2019 American Community Survey 5-year estimates; U.S. Census Bureau.

## Health Equity

The Robert Wood Johnson Foundation’s definition of health equity and social justice is used here to help establish a common understanding for the concept of health equity.

*“Health equity means that everyone has a fair and just opportunity to be healthier. This requires removing obstacles to health such as poverty, discrimination, and their consequences, including powerlessness and lack of access to good jobs with fair pay, quality education and housing, safe environments, and health care.”*

Inequities experienced early and throughout one’s life, such as limited access to a quality education, have health consequences that appear later in life as health disparities. Health disparities are defined as “preventable differences in the burden of disease, injury, violence, or opportunities to achieve optimal health experienced by populations, and defined by factors such as race or ethnicity, gender, education or income, disability, geographic location or sexual orientation.”<sup>8</sup>

In the U.S., and many parts of the world inequities are most apparent when comparing health outcomes of various racial and ethnic groups to one another. Comparisons of outcomes between racial and ethnic populations demonstrate that health inequities persist across communities, including Del Norte and

<sup>8</sup> Center for Disease Control and Prevention. 2008. Health Disparities Among Racial/Ethnic Populations. Community Health and Program Services (CHAPS): Atlanta: U.S. Department of Health and Human Services.

Curry counties. The data provided in this section are a high-level summary of health equity and not intended to provide an extensive exploration of inequity in the area. Quantifying and describing inequity in a community is challenging due to data limitations and the fact that inequity is a contributor to all health needs that exist in a community.

## Health Outcomes - the Results of Inequity

The table below displays disparities among racial and ethnic groups for the hospital service area for life expectancy, mortality, and low birth weight for Del Norte County.

Table 3: Health outcomes comparing race and ethnicity in the SCH service area

Health Outcomes	Description	American Indian\ Alaska Native	Asian	Black	Hispanic	White	Overall
Life Expectancy	Average number of years a person can expect to live	69.2	~	~	85.1	75.8	76.4
Premature Age-Adjusted Mortality	Number of deaths among residents under age 75 per 100,000 population (age-adjusted)	829.5	~	~	211.8	513.3	480.1
Premature Death	Years of potential life lost before age 75 per 100,000 population (age-adjusted)	20,524	~	~	~	9,231	8,783.4
Low Birthweight	Percentage of live births with low birthweight (< 2,500 grams)	7.5%	8.9%	~	4.7%	5.4%	5.9%
~ Data not available							
Data sources included in the technical section of the report							
Data not available for Curry County							

When examining health outcomes across all racial and ethnic groups, disparities are apparent. For example, in Del Norte County, premature death among Native Indian/Alaska Native is more than double compared to Whites.

## Health Factors - Inequities in the Service Area

Inequalities can be seen in data that help describe health factors in the health service area, such as education attainment and income. These health factors are displayed in Table 4 and are compared across racial and ethnic groups.



Table 4: Health factors by race and ethnicity in the SCH service area

Health Factors	Description	American Indian\ Alaska Native	Asian	Black	Hispanic	White	Overall
<b>Del Norte County</b>							
Some College <sup>a</sup>	Percentage of adults ages 25 and over with some post-secondary education	45.7%	51.4%	44.6%	27.8%	54.8%	49%
High School Completion <sup>a</sup>	Percentage of adults ages 25 and over with at least a high school diploma or equivalent	85.8%	71.4%	65.9%	53.3%	87.4%	80.1%
Third Grade Reading Level	Average grade level performance for 3rd graders on English Language Arts standardized tests	~	~	~	2.4	2.6	2.5
Third Grade Math Level	Average grade level performance for 3rd graders on math standardized tests	~	~	~	2.1	2.3	2.2
Children in Poverty	Percentage of people under age 18 in poverty	27.0%	~	~	16.7%	19.5%	25.8%
Median Household Income	The income where half of households in a county earn more and half of households earn less	\$37,924	\$82,875	\$103,661	\$41,803	\$45,974	\$48,979
Uninsured Population <sup>b</sup>	Percentage of the civilian non-institutionalized population without health insurance	11.4%	4.4%	0.0%	9.2%	5.5%	6.5%
<b>Curry County</b>							
Some College <sup>a</sup>	Percentage of adults ages 25 and over with some post-secondary education	74.9%	63.6%	97.0%	56.3%	63.4%	62.9%
High School Completion <sup>a</sup>	Percentage of adults ages 25 and over with at least a high school diploma or equivalent	78.9%	100%	99%	71.4%	91.4%	90.3%
Third Grade Reading Level	Average grade level performance for 3rd graders on English Language Arts standardized tests	~	~	~	2.3	3	2.9
Third Grade Math Level	Average grade level performance for 3rd graders on math standardized tests	~	~	~	2.3	2.8	2.6

Health Factors	Description	American Indian\ Alaska Native	Asian	Black	Hispanic	White	Overall
Children in Poverty	Percentage of people under age 18 in poverty	~	~	~	22.3%	9.9%	19.9%
Median Household Income	The income where half of households in a county earn more and half of households earn less	\$54,120	\$34,651	~	\$60,691	\$49,655	\$51,267
Uninsured Population <sup>b</sup>	Percentage of the civilian non-institutionalized population without health insurance	27.3%	0.0%	0.0%	13.8%	5.3%	6.1%
~Data Not Available							
Data sources included in the technical section of the report.							

**Population Groups Experiencing Disparities**

The figure below describes populations in the SCH service area identified through qualitative data analysis that were identified as experiencing health disparities. Interview participants were asked, “What specific groups of community members experience health issues the most?” Responses were analyzed by counting the total number of times all key informants and focus group participants mentioned a particular group as one experiencing disparities. Figure 3 displays the results of this analysis. The groups are not mutually exclusive—one group could be a subset of another group. One of the purposes of identifying the sub-populations was to help guide additional qualitative data collection efforts to focus on the needs of these population groups.

### Frequency of Mentions in Interviews

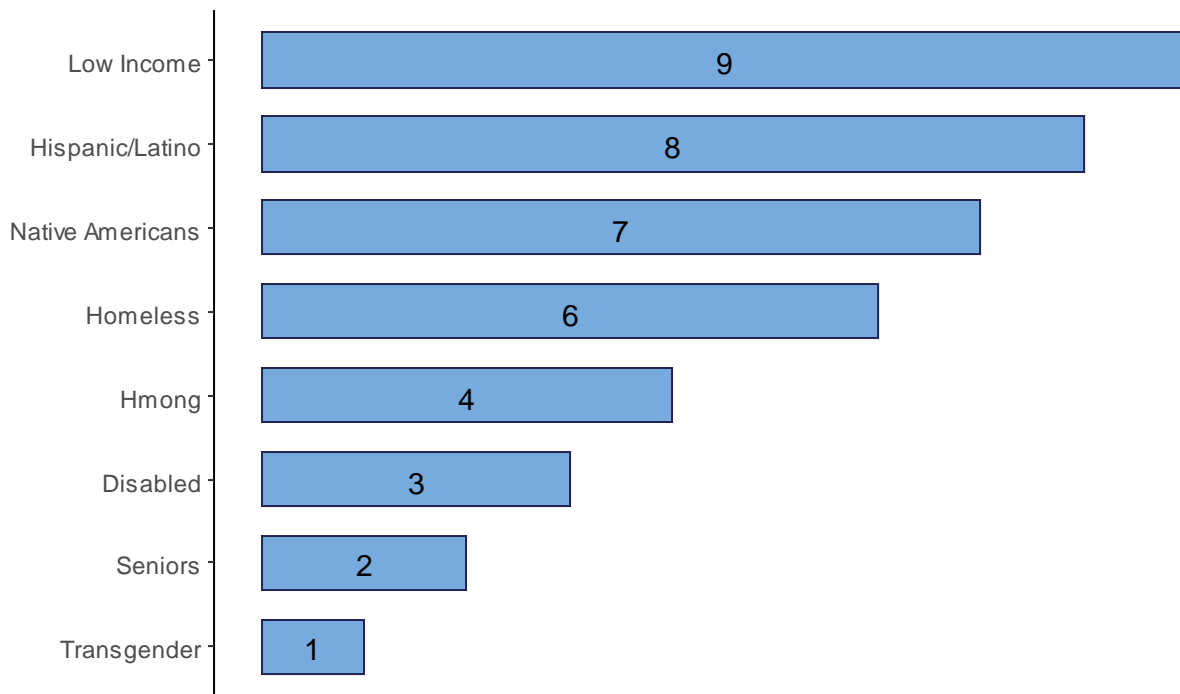


Figure 3: Populations experiencing disparities in the SCH service area.

### California Healthy Places Index

Figure 4 displays the California Healthy Places Index (HPI)<sup>9</sup> values for the SCH service area. The HPI is an index based on 25 health-related measures for communities across California. These measures included in the HPI were selected based on their known relationship to life expectancy and other health outcomes. These values are combined into a final score representing the overall health and well-being of the community which can then be used to compare the factors influencing health between communities. Higher HPI index values are found in communities with a collection of factors that contribute to greater health, and lower HPI values are found in communities where these factors are less present.

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<sup>9</sup> Public Health Alliance of Southern California. 2021. The California Health Places Index (HPI): About. Retrieved 26 July 2021 from <https://healthyplacesindex.org/about/>.

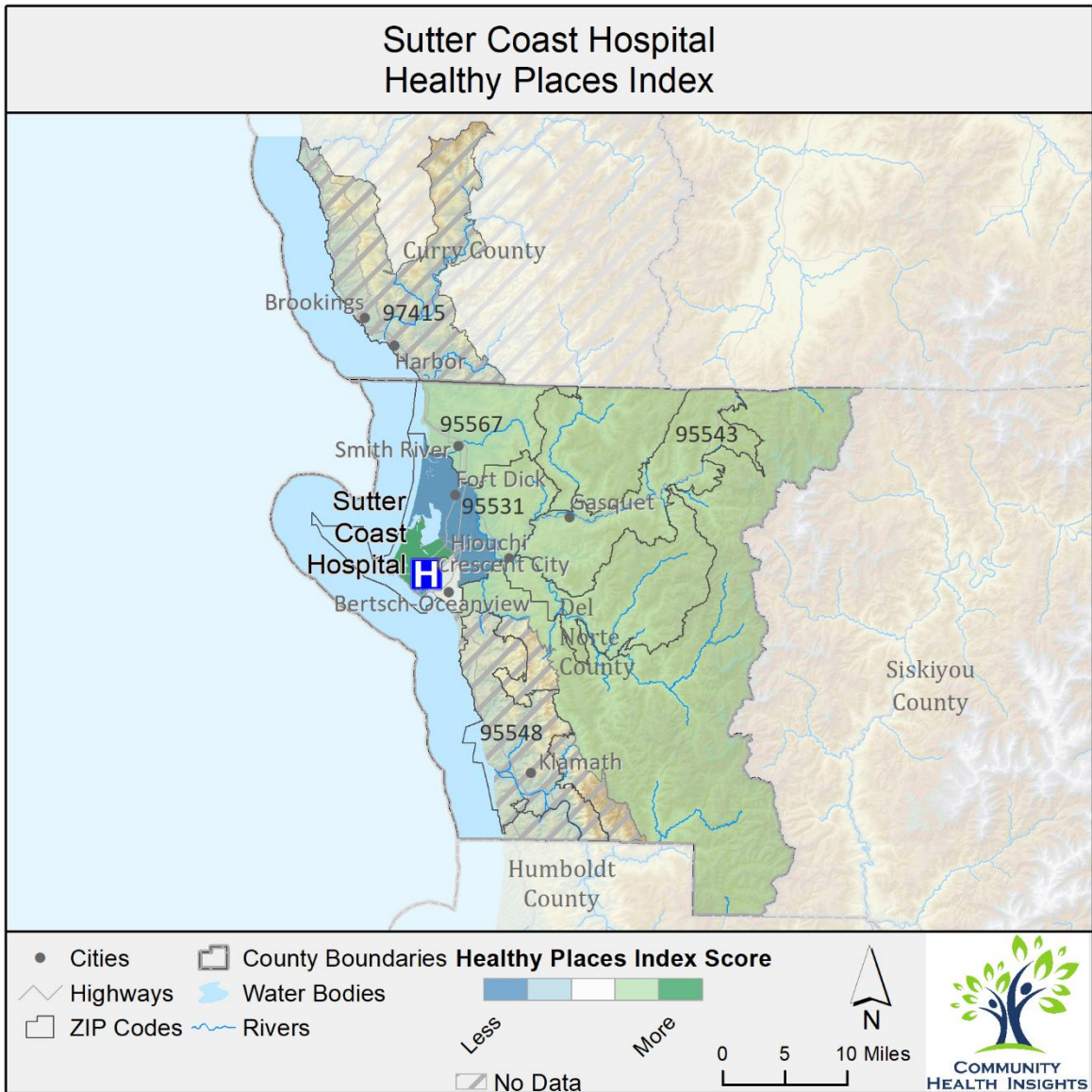


Figure 4: Healthy Places Index for SCH.

Areas with the darkest blue shading in Figure 4 have the lowest overall HPI scores, indicating factors leading to less healthy neighborhoods. There are likely to be a higher concentration of residents in these locations experiencing health disparities.

## The Impact of COVID-19 on Health Needs

COVID-19 related health indicators for the hospital service area are noted in Table 5.

Table 5: COVID-19-related rates for the SCH service area.

Indicators	Description	Del Norte	Curry	California	Oregon	
COVID-19 Mortality	Number of deaths due to COVID-19 per 100,000 population.	152.8	110.4	185.1	105.0	Del Norte: 152.8 Curry: 110.4 California: 185.1 Oregon: 105
COVID-19 Case Fatality	Percentage of COVID-19 deaths per laboratory-confirmed COVID-19 cases.	1.2%	1.4%	1.5%	1.2%	Del Norte: 1.2% Curry: 1.4% California: 1.5% Oregon: 1.2%
COVID-19 Cumulative Incidence	Number of laboratory-confirmed COVID-19 cases per 100,000 population.	13,202.4	8,101.6	12,087.6	8,901.4	Del Norte: 13,202.4 Curry: 8,101.6 California: 12,087.6 Oregon: 8,901.4
COVID-19 Cumulative Full Vaccination Rate	Number of completed COVID-19 vaccinations per 100,000 population.	42,702.3	50,702.0	63,134.6	63,322.4	Del Norte: 42,702.3 Curry: 50,702 California: 63,134.6 Oregon: 63,322.4

COVID-19 data collected on November 17 2021 for Del Norte County and November 1, 2021 for Curry County.

COVID-19 data for Del Norte County shows that COVID-19 mortality and case fatality incidence rates are better than California state rates. However, cumulative incidence is higher, and full vaccination rates for Del Norte County are lower than the state rate. In Curry County, COVID-19 mortality and case fatality incidence rates are higher than the Oregon state rates. Cumulative incidence rate and the full vaccination rate are lower than the state rates.

Key informants and focus group participants were asked how the COVID-19 pandemic impacted the health needs they described during interviews. A summary of their responses is shown in Table 6.

Table 6: The impacts of COVID-19 on health need as identified in primary data sources.

<b>Key Informant and Focus Group Responses</b>
<ul style="list-style-type: none"> <li>• There has been a marked increase in the demand for mental and behavioral health services, especially for children. There was an uptick in suicide ideation among teens during the shutdown of school.</li> <li>• The pandemic has created a political divide in the community and that has impacted vaccination rates, which are low when compared to the state rate.</li> <li>• Housing issues were exacerbated during the pandemic, creating health issues for families that were sharing homes and could not isolate if needed.</li> <li>• With many gathering places closed, community members lacked engagement opportunities and felt isolated, unhappy, stressed, and anxious. This was especially true of seniors in the community, which added to a higher need for mental and behavioral health services.</li> <li>• Community members are still afraid to go to the doctor; their chronic diseases are no longer managed, and they are ending up in the hospital sicker than before.</li> <li>• Students suffered due to inadequate internet access and/or technology issues when trying to do online schooling.</li> <li>• When schools closed, this created a huge issue for parents due the lack of childcare options in the community. It also placed some children in vulnerable situations being more exposed to abuse and neglect.</li> <li>• People developed unhealthy habits during COVID and are slow to get back to taking care of themselves.</li> <li>• Workers are in short supply in the community and businesses are struggling to fill job openings.</li> </ul>

## Resources Potentially Available to Meet the Significant Health Needs

In all, 186 resources were identified in the SCH service area that are potentially available to meet the identified significant health needs. These resources were provided by a total of 70 social service, nonprofit, and governmental organizations, agencies, and programs identified in the CHNA. The identification method included starting with the list of resources from the 2019 Sutter Coast Hospital CHNA, verifying that the resources still existed, and then adding newly identified resources into the 2022 CHNA report. Examination of the resources revealed the following numbers of resources for each significant health need as shown in Table 7.

Table 7: Resources potentially available to meet significant health needs in priority order.

<b>Significant Health Needs (in Priority Order)</b>	<b>Number of Resources</b>
Access to Basic Needs Such as Housing, Jobs, and Food	34
Access to Mental/Behavioral Health and Substance-Use Services	20
Access to Specialty and Extended Care	17
Access to Quality Primary Care Health Services	19
Active Living and Healthy Eating	15
Access to Functional Needs	7
Injury and Disease Prevention and Management	21
Safe and Violence-Free Environment	23

<b>Significant Health Needs (in Priority Order)</b>	<b>Number of Resources</b>
Increased Community Connections	17
Access to Dental Care and Preventive Services	13
<b>Total Resources</b>	<b>186</b>

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

## Impact and Evaluation of Actions Taken by Hospital

Regulations require that each hospital’s CHNA report include “an evaluation of the impact of any actions that were taken since the hospital facility finished conducting its immediately preceding CHNA to address the significant health needs identified in the hospital facility’s prior CHNA(s) (p. 78969).”<sup>10</sup> SCH invested efforts to address the significant health needs identified in the prior CHNA. Appendix A includes details of those efforts.

## Conclusion

CHNAs play an important role in helping nonprofit hospitals and other community organizations determine where to focus community benefit and health improvement efforts, including targeting efforts in geographic locations and on specific populations experiencing inequities leading to health disparities. Data in the CHNA report can help provide nonprofit hospitals and community service providers with content to work in collaboration to engage in meaningful community work.

Please send any feedback about this CHNA report to [SHCB@sutterhealth.org](mailto:SHCB@sutterhealth.org) with “CHNA Comments” in the subject line. Feedback received will be incorporate into the next CHNA cycle.

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<sup>10</sup> Federal Register, Vol. 79, No. 250, (Wednesday, December 31, 2014). Department of the Treasury, Internal Revenue Service.

## 2022 CHNA Technical Section

The following section presents a detailed account of data collection, analysis, and results for the Sutter Coast Hospital (SCH) hospital service area (HSA).




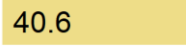

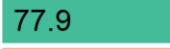

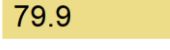
### Results of Data Analysis

#### Complied Secondary Data

The tables and figures that follow show the specific values for the health need indicators used as part of the health need identification process. Indicator values for Del Norte County were compared to the California state benchmark and are shaded below when performance was worse in the county than in the state. Rates for Curry County are also included in the tables and figures below. The associated figures show rates for the counties compared to the California or Oregon state rates.

#### Length of Life

Table 8: County length of life indicators compared to state benchmarks.

Indicators	Description	Del Norte	Curry	California	Oregon
<b>Early Life</b>					
Infant Mortality	Number of all infant deaths (within 1 year), per 1,000 live births.		4.2	4.8	
				Del Norte:	
				Curry:	
				California: 4.2	
				Oregon: 4.8	
Child Mortality	Number of deaths among children under age 18 per 100,000 population.		36.0	40.6	
				Del Norte:	
				Curry:	
				California: 36	
				Oregon: 40.6	
Life Expectancy	Average number of years a person can expect to live.	76.4	77.9	81.7	79.9
				Del Norte: 76.4	
				Curry: 77.9	
				California: 81.7	
				Oregon: 79.9	
<b>Overall</b>					



Indicators	Description	Del Norte	Curry	California	Oregon	
Premature Age-Adjusted Mortality	Number of deaths among residents under age 75 per 100,000 population (age-adjusted).	480.1	374.3	268.4	303.0	Del Norte: 480.1 Curry: 374.3 California: 268.4 Oregon: 303
Premature Death	Years of potential life lost before age 75 per 100,000 population (age-adjusted).	8,783.4	7,632.5	5,253.1	5,918.7	Del Norte: 8,783.4 Curry: 7,632.5 California: 5,253.1 Oregon: 5,918.7
Stroke Mortality	Number of deaths due to stroke per 100,000 population.	48.5	108.7	41.2	50.4	Del Norte: 48.5 Curry: 108.7 California: 41.2 Oregon: 50.4
Chronic Lower Respiratory Disease Mortality	Number of deaths due to chronic lower respiratory disease per 100,000 population.	78.9	113.0	34.8	49.9	Del Norte: 78.9 Curry: 113 California: 34.8 Oregon: 49.9
Diabetes Mortality	Number of deaths due to diabetes per 100,000 population.	29.8	56.5	24.1	29.9	Del Norte: 29.8 Curry: 56.5 California: 24.1 Oregon: 29.9
Heart Disease Mortality	Number of deaths due to heart disease per 100,000 population.	213.9	430.4	159.5	168.5	Del Norte: 213.9 Curry: 430.4 California: 159.5 Oregon: 168.5

Indicators	Description	Del Norte	Curry	California	Oregon	
Hypertension Mortality	Number of deaths due to hypertension per 100,000 population.	12.4	52.2	13.8	15.0	Del Norte: 12.4 Curry: 52.2 California: 13.8 Oregon: 15
<b>Cancer, Liver, and Kidney Disease</b>						
Cancer Mortality	Number of deaths due to cancer per 100,000 population.	207.2	413.0	152.9	190.8	Del Norte: 207.2 Curry: 413 California: 152.9 Oregon: 190.8
Liver Disease Mortality	Number of deaths due to liver disease per 100,000 population.	18.2	39.1	13.9	15.5	Del Norte: 18.2 Curry: 39.1 California: 13.9 Oregon: 15.5
Kidney Disease Mortality	Number of deaths due to kidney disease per 100,000 population.	10.0	47.8	9.7	10.3	Del Norte: 10 Curry: 47.8 California: 9.7 Oregon: 10.3
<b>Intentional and Unintentional Injuries</b>						
Suicide Mortality	Number of deaths due to suicide per 100,000 population.	11.0	39.1	11.2	21.4	Del Norte: 11 Curry: 39.1 California: 11.2 Oregon: 21.4
Unintentional Injuries Mortality	Number of deaths due to unintentional injuries per 100,000 population.	64.6	69.6	35.7	52.5	Del Norte: 64.6 Curry: 69.6 California: 35.7 Oregon: 52.5

Indicators	Description	Del Norte	Curry	California	Oregon	
<b>COVID-19</b>						
COVID-19 Mortality	Number of deaths due to COVID-19 per 100,000 population.	152.8	110.4	185.1	105.0	Del Norte: 152.8 Curry: 110.4 California: 185.1 Oregon: 105
COVID-19 Case Fatality	Percentage of COVID-19 deaths per laboratory-confirmed COVID-19 cases.	1.2%	1.4%	1.5%	1.2%	Del Norte: 1.2% Curry: 1.4% California: 1.5% Oregon: 1.2%
<b>Other</b>						
Alzheimer's Disease Mortality	Number of deaths due to Alzheimer's disease per 100,000 population.	28.8	73.9	41.2	47.0	Del Norte: 28.8 Curry: 73.9 California: 41.2 Oregon: 47
Influenza and Pneumonia Mortality	Number of deaths due to influenza and pneumonia per 100,000 population.	18.3	21.7	16.0	11.5	Del Norte: 18.3 Curry: 21.7 California: 16 Oregon: 11.5

### Quality of Life

Table 9: County quality of life indicators compared to state benchmarks.

Indicators	Description	Del Norte	Curry	California	Oregon	
<b>Chronic Disease</b>						
Diabetes Prevalence	Percentage of adults ages 20 and above with diagnosed diabetes.	16.9%	12.0%	8.8%	9.7%	Del Norte: 16.9% Curry: 12% California: 8.8% Oregon: 9.7%

Indicators	Description	Del Norte	Curry	California	Oregon	
Low Birthweight	Percentage of live births with low birthweight (< 2,500 grams).	5.9%	5.9%	6.9%	6.5%	Del Norte: 5.9% Curry: 5.9% California: 6.9% Oregon: 6.5%
HIV Prevalence	Number of people ages 13 years and older living with a diagnosis of human immunodeficiency virus (HIV) infection per 100,000 population.	114.4	68.5	395.9	197.9	Del Norte: 114.4 Curry: 68.5 California: 395.9 Oregon: 197.9
Disability	Percentage of the total civilian noninstitutionalized population with a disability	20.0%	23.5%	10.6%	14.4%	Del Norte: 20% Curry: 23.5% California: 10.6% Oregon: 14.4%
<b>Mental Health</b>						
Poor Mental Health Days	Average number of mentally unhealthy days reported in past 30 days (age-adjusted).	5.2	5.0	3.7	4.8	Del Norte: 5.2 Curry: 5 California: 3.7 Oregon: 4.8
Frequent Mental Distress	Percentage of adults reporting 14 or more days of poor mental health per month (age-adjusted).	16.0%	15.8%	11.3%	14.8%	Del Norte: 16% Curry: 15.8% California: 11.3% Oregon: 14.8%
Poor Physical Health Days	Average number of physically unhealthy days reported in past 30 days (age-adjusted).	5.2	4.7	3.9	4.7	Del Norte: 5.2 Curry: 4.7 California: 3.9 Oregon: 4.7

Indicators	Description	Del Norte	Curry	California	Oregon	
Frequent Physical Distress	Percentage of adults reporting 14 or more days of poor physical health per month (age-adjusted).	16.0%	14.5%	11.6%	14.9%	Del Norte: 16% Curry: 14.5% California: 11.6% Oregon: 14.9%
Poor or Fair Health	Percentage of adults reporting fair or poor health (age-adjusted).	22.6%	18.6%	17.6%	18.2%	Del Norte: 22.6% Curry: 18.6% California: 17.6% Oregon: 18.2%
<b>Cancer</b>						
Colorectal Cancer Prevalence	Colon and rectum cancers per 100,000 population (age-adjusted).	34.6		34.8		Del Norte: 34.6 Curry: California: 34.8 Oregon:
Breast Cancer Prevalence	Female in situ breast cancers per 100,000 female population (age-adjusted).	21.6		27.9		Del Norte: 21.6 Curry: California: 27.9 Oregon:
Lung Cancer Prevalence	Lung and bronchus cancers per 100,000 population (age-adjusted).	53.4		40.9		Del Norte: 53.4 Curry: California: 40.9 Oregon:
Prostate Cancer Prevalence	Prostate cancers per 100,000 male population (age-adjusted).	84.1		91.2		Del Norte: 84.1 Curry: California: 91.2 Oregon:
<b>COVID</b>						

Indicators	Description	Del Norte	Curry	California	Oregon
COVID-19 Cumulative Incidence	Number of laboratory-confirmed COVID-19 cases per 100,000 population.	13,202.4	8,101.6	12,087.6	8,901.4
		Del Norte: 13,202.4	Curry: 8,101.6	California: 12,087.6	Oregon: 8,901.4
<b>Other</b>					
Asthma ED Rates	Emergency department visits due to asthma per 10,000 (age-adjusted).	532.0	422.0		
		Del Norte: 532	Curry: 422	California: 422	Oregon:
Asthma ED Rates for Children	Emergency department visits due to asthma among ages 5-17 per 10,000 population ages 5-17 (age-adjusted).	855.0	601.0		
		Del Norte: 855	Curry: 601	California: 601	Oregon:

### Health Behavior

Table 10: County health behavior indicators compared to state benchmarks.

Indicators	Description	Del Norte	Curry	California	Oregon
Excessive Drinking	Percentage of adults reporting binge or heavy drinking (age-adjusted).	21.2%	21.5%	18.1%	19.5%
		Del Norte: 21.2%	Curry: 21.5%	California: 18.1%	Oregon: 19.5%
Drug Induced Death	Drug induced deaths per 100,000 (age-adjusted).	25.4	14.3		
		Del Norte: 25.4	Curry: 14.3	California: 14.3	Oregon:

Indicators	Description	Del Norte	Curry	California	Oregon	
Adult Obesity	Percentage of the adult population (age 20 and older) that reports a body mass index (BMI) greater than or equal to 30 kg/m2.	33.9%	36.0%	24.3%	29.3%	Del Norte: 33.9% Curry: 36% California: 24.3% Oregon: 29.3%
Physical Inactivity	Percentage of adults ages 20 and over reporting no leisure-time physical activity.	32.8%	25.9%	17.7%	17.3%	Del Norte: 32.8% Curry: 25.9% California: 17.7% Oregon: 17.3%
Limited Access to Healthy Foods	Percentage of population who are low-income and do not live close to a grocery store.	14.0%	5.1%	3.3%	5.4%	Del Norte: 14% Curry: 5.1% California: 3.3% Oregon: 5.4%
Food Environment Index	Index of factors that contribute to a healthy food environment, from 0 (worst) to 10 (best).	6.3	7.5	8.8	7.8	Del Norte: 6.3 Curry: 7.5 California: 8.8 Oregon: 7.8
Access to Exercise Opportunities	Percentage of population with adequate access to locations for physical activity.	89.1%	91.9%	93.1%	87.9%	Del Norte: 89.1% Curry: 91.9% California: 93.1% Oregon: 87.9%
Chlamydia Incidence	Number of newly diagnosed chlamydia cases per 100,000 population.	324.0	220.6	585.3	464.0	Del Norte: 324 Curry: 220.6 California: 585.3 Oregon: 464



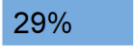
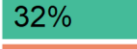
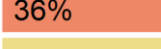
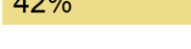
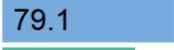




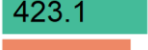
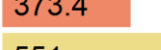




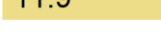


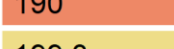
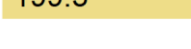
Indicators	Description	Del Norte	Curry	California	Oregon
Teen Birth Rate	Number of births per 1,000 female population ages 15-19.	38.4	21.5	17.4	16.8
					Del Norte: Curry: California: Oregon:
Adult Smoking	Percentage of adults who are current smokers (age-adjusted).	19.2%	19.5%	11.5%	15.7%
					Del Norte: Curry: California: Oregon:

### Clinical Care

Table 11: County clinical care indicators compared to state benchmarks.

Indicators	Description	Del Norte	Curry	California	Oregon
Primary Care Shortage Area	Presence of a primary care health professional shortage area within the county.	Yes	Yes		
					Del Norte: Curry: California: Oregon:
Dental Care Shortage Area	Presence of a dental care health professional shortage area within the county.	Yes	Yes		
					Del Norte: Curry: California: Oregon:
Mental Health Care Shortage Area	Presence of a mental health professional shortage area within the county.	Yes	Yes		
					Del Norte: Curry: California: Oregon:



Indicators	Description	Del Norte	Curry	California	Oregon
Medically Underserved Area	Presence of a medically underserved area within the county.	Yes	Yes		
					Del Norte:  Yes Curry:  Yes California: Oregon:
Mammography Screening	Percentage of female Medicare enrollees ages 65-74 that received an annual mammography screening.	29.0%	32.0%	36.0%	42.0%
					Del Norte:  29% Curry:  32% California:  36% Oregon:  42%
Dentists	Dentists per 100,000 population.	79.1	61.1	87.0	82.7
					Del Norte:  79.1 Curry:  61.1 California:  87 Oregon:  82.7
Mental Health Providers	Mental health providers per 100,000 population.	427.9	423.1	373.4	551.0
					Del Norte:  427.9 Curry:  423.1 California:  373.4 Oregon:  551
Psychiatry Providers	Psychiatry providers per 100,000 population.	3.6	4.4	13.5	11.9
					Del Norte:  3.6 Curry:  4.4 California:  13.5 Oregon:  11.9
Specialty Care Providers	Specialty care providers (non-primary care physicians) per 100,000 population.	58.3	57.8	190.0	199.3
					Del Norte:  58.3 Curry:  57.8 California:  190 Oregon:  199.3













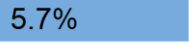
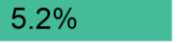
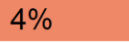
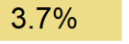
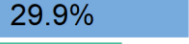
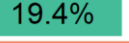
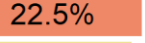
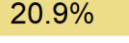
Indicators	Description	Del Norte	Curry	California	Oregon	
Primary Care Providers	Primary care physicians per 100,000 population + other primary care providers per 100,000 population.	140.2	188.0	147.3	186.5	Del Norte: 140.2 Curry: 188 California: 147.3 Oregon: 186.5
Preventable Hospitalization	Preventable hospitalizations per 100,000 (age-sex-poverty adjusted)	592.7		948.3		Del Norte: 592.7 Curry: California: 948.3 Oregon:
<b>COVID</b>						
COVID-19 Cumulative Full Vaccination Rate	Number of completed COVID-19 vaccinations per 100,000 population.	42,702.3	50,702.0	63,134.6	63,322.4	Del Norte: 42,702.3 Curry: 50,702 California: 63,134.6 Oregon: 63,322.4

### Socio-Economic and Demographic Factors

Table 12: County socio-economic and demographic factors indicators compared to state benchmarks.

Indicators	Description	Del Norte	Curry	California	Oregon	
<b>Community Safety</b>						
Homicide Rate	Number of deaths due to homicide per 100,000 population.	9.3		4.8	2.8	Del Norte: 9.3 Curry: California: 4.8 Oregon: 2.8
Firearm Fatalities Rate	Number of deaths due to firearms per 100,000 population.	14.5	33.4	7.8	12.6	Del Norte: 14.5 Curry: 33.4 California: 7.8 Oregon: 12.6

Indicators	Description	Del Norte	Curry	California	Oregon	
Violent Crime Rate	Number of reported violent crime offenses per 100,000 population.	609.1	108.0	420.9	248.7	Del Norte: 609.1 Curry: 108 California: 420.9 Oregon: 248.7
Juvenile Arrest Rate (California)	Felony juvenile arrests per 1,000 juveniles	1.4	~	2.1	~	
Juvenile Arrest Rate (Oregon)	Rate of delinquency cases per 1,000 juveniles	~	51.3	~	26.7	
Motor Vehicle Crash Death	Number of motor vehicle crash deaths per 100,000 population.	22.8	24.0	9.5	11.0	Del Norte: 22.8 Curry: 24 California: 9.5 Oregon: 11
<b>Education</b>						
Some College	Percentage of adults ages 25-44 with some post-secondary education.	42.1%	54.6%	65.7%	69.9%	Del Norte: 42.1% Curry: 54.6% California: 65.7% Oregon: 69.9%
High School Completion	Percentage of adults ages 25 and over with a high school diploma or equivalent.	80.1%	90.3%	83.3%	90.7%	Del Norte: 80.1% Curry: 90.3% California: 83.3% Oregon: 90.7%

Indicators	Description	Del Norte	Curry	California	Oregon	
Disconnected Youth	Percentage of teens and young adults ages 16-19 who are neither working nor in school.	19.3%		6.4%	6.8%	Del Norte:  19.3% Curry:  6.4% California:  6.8% Oregon:  6.8%
Third Grade Reading Level	Average grade level performance for 3rd graders on English Language Arts standardized tests	2.5	2.9	2.9	2.9	Del Norte:  2.5 Curry:  2.9 California:  2.9 Oregon:  2.9
Third Grade Math Level	Average grade level performance for 3rd graders on math standardized tests	2.2	2.6	2.7	2.8	Del Norte:  2.2 Curry:  2.6 California:  2.7 Oregon:  2.8
<b>Employment</b>						
Unemployment	Percentage of population ages 16 and older unemployed but seeking work.	5.7%	5.2%	4.0%	3.7%	Del Norte:  5.7% Curry:  5.2% California:  4% Oregon:  3.7%
<b>Family and Social Support</b>						
Children in Single-Parent Households	Percentage of children that live in a household headed by single parent.	29.9%	19.4%	22.5%	20.9%	Del Norte:  29.9% Curry:  19.4% California:  22.5% Oregon:  20.9%

Indicators	Description	Del Norte	Curry	California	Oregon	
Social Associations	Number of membership associations per 10,000 population.	3.6	9.2	5.9	10.2	Del Norte: 3.6 Curry: 9.2 California: 5.9 Oregon: 10.2
Residential Segregation (Non-White/White)	Index of dissimilarity where higher values indicate greater residential segregation between non-White and White county residents.	21.0	16.1	38.0	32.6	Del Norte: 21 Curry: 16.1 California: 38 Oregon: 32.6
<b>Income</b>						
Children Eligible for Free Lunch	Percentage of children enrolled in public schools that are eligible for free or reduced price lunch.	67.1%	58.1%	59.4%	48.9%	Del Norte: 67.1% Curry: 58.1% California: 59.4% Oregon: 48.9%
Children in Poverty	Percentage of people under age 18 in poverty.	25.8%	19.9%	15.6%	13.6%	Del Norte: 25.8% Curry: 19.9% California: 15.6% Oregon: 13.6%

Indicators	Description	Del Norte	Curry	California	Oregon
Median Household Income	The income where half of households in a county earn more and half of households earn less.	\$48,979.0	\$51,267.0	\$80,423.0	\$66,955.0
				Del Norte: \$48,979	Curry: \$51,267
				California: \$80,423	Oregon: \$66,955
Uninsured Population under 64	Percentage of population under age 65 without health insurance.	7.3%	9.0%	8.3%	8.4%
				Del Norte: 7.3%	Curry: 9%
				California: 8.3%	Oregon: 8.4%
Income Inequality	Ratio of household income at the 80th percentile to income at the 20th percentile.	5.0	4.8	5.2	4.6
				Del Norte: 5	Curry: 4.8
				California: 5.2	Oregon: 4.6

### Physical Environment

Table 13: County physical environment indicators compared to state benchmarks.

Indicators	Description	Del Norte	Curry	California	Oregon
<b>Housing</b>					
Severe Housing Problems	Percentage of households with at least 1 of 4 housing problems: overcrowding, high housing costs, lack of kitchen facilities, or lack of plumbing facilities.	20.2%	17.5%	26.4%	19.1%
				Del Norte: 20.2%	Curry: 17.5%
				California: 26.4%	Oregon: 19.1%

Indicators	Description	Del Norte	Curry	California	Oregon	
Severe Housing Cost Burden	Percentage of households that spend 50% or more of their household income on housing.	15.1%	12.9%	19.7%	15.5%	Del Norte: 15.1% Curry: 12.9% California: 19.7% Oregon: 15.5%
Homeownership	Percentage of occupied housing units that are owned.	63.1%	71.4%	54.8%	62.4%	Del Norte: 63.1% Curry: 71.4% California: 54.8% Oregon: 62.4%
Homelessness Rate	Number of homeless individuals per 100,000 population.	490.7		411.2		Del Norte: 490.7 Curry: California: 411.2 Oregon:
<b>Transit</b>						
Households with no Vehicle Available	Percentage of occupied housing units that have no vehicles available.	8.6%	6.4%	7.1%	7.4%	Del Norte: 8.6% Curry: 6.4% California: 7.1% Oregon: 7.4%
Long Commute - Driving Alone	Among workers who commute in their car alone, the percentage that commute more than 30 minutes.	9.8%	16.9%	42.2%	30.0%	Del Norte: 9.8% Curry: 16.9% California: 42.2% Oregon: 30%
Access to Public Transit	Percentage of population living near a fixed public transportation stop	78.7%	22.4%	69.6%		Del Norte: 78.7% Curry: 22.4% California: 69.6% Oregon:
<b>Air and Water Quality</b>						

Indicators	Description	Del Norte	Curry	California	Oregon
Pollution Burden Percent	Percentage of population living in a census tract with a CalEnviroScreen 3.0 pollution burden score percentile of 50 or greater	0.0%		51.6%	
					Del Norte: 0% Curry: California: 51.6% Oregon:
Air Pollution - Particulate Matter	Average daily density of fine particulate matter in micrograms per cubic meter (PM2.5).	5.8	5.7	8.1	6.3
					Del Norte: 5.8 Curry: 5.7 California: 8.1 Oregon: 6.3
Drinking Water Violations	Presence of health-related drinking water violations in the county.	Yes	Yes		
					Del Norte: Yes Curry: Yes California: Oregon:

## CHNA Methods and Processes

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

### Conceptual Model

The conceptual model used in this needs assessment is shown in Figure 5. This model organizes population's individual health-related characteristics in relation to up- or downstream health and health-disparities factors. This model illustrates how health outcomes (quality and length of life) result from the influence of health factors describing interrelated individual, environmental, and community characteristics, which in turn are influenced by underlying policies and programs.



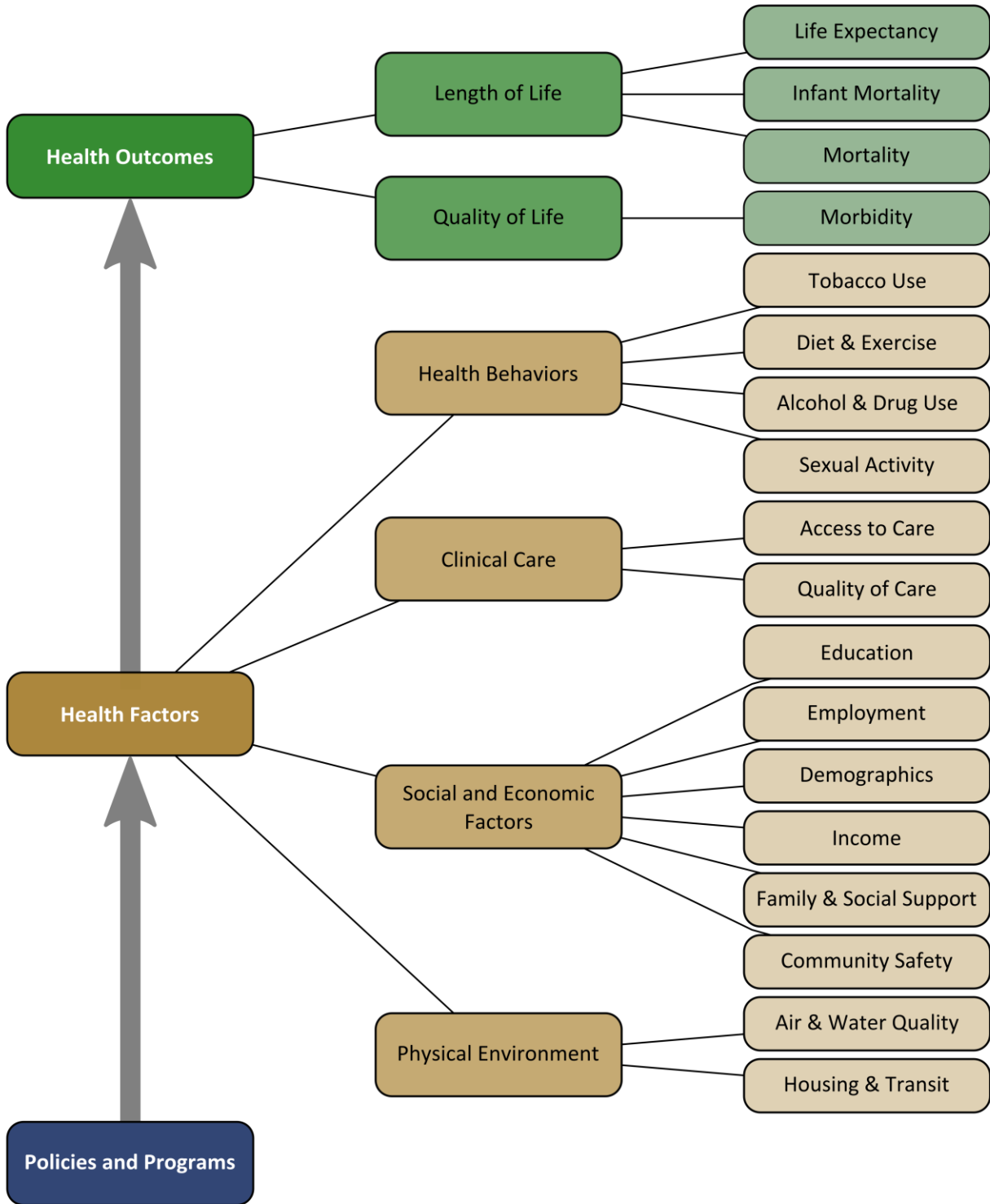


Figure 5: Community Health Assessment Conceptual Model as modified from the County Health Rankings Model, Robert Wood Johnson Foundation, and University of Wisconsin, 2015.

This model was used to guide the selection of secondary indicators in this analysis as well as to illustrate in general how these upstream health factors lead to the downstream health outcomes. It also suggests

that poor health outcomes within the service area can be improved through policies and programs that address the health factors contributing to them. This conceptual model is a slightly modified version of the County Health Rankings Model used by the Robert Wood Johnson Foundation. It was primarily altered by adding a “Demographics” category to the “Social and Economic Factors” in recognition of the influence of demographic characteristics on health outcomes.

To generate the list of secondary indicators for the assessment, each conceptual model category was reviewed to identify potential indicators that could be used to fully represent the category. The results were used to guide secondary data collection.

### *Process Model*

Figure 6 outlines the data collection and analysis stages of this process. The project began by confirming the hospital service area for Sutter Coast Hospital for which the CHNA would be conducted. Primary data collection included both key informant and focus-group interviews with community health experts and residents. Initial key informant interviews were used to identify Communities of Concern which are areas or population subgroups within the county experiencing health disparities.

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

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

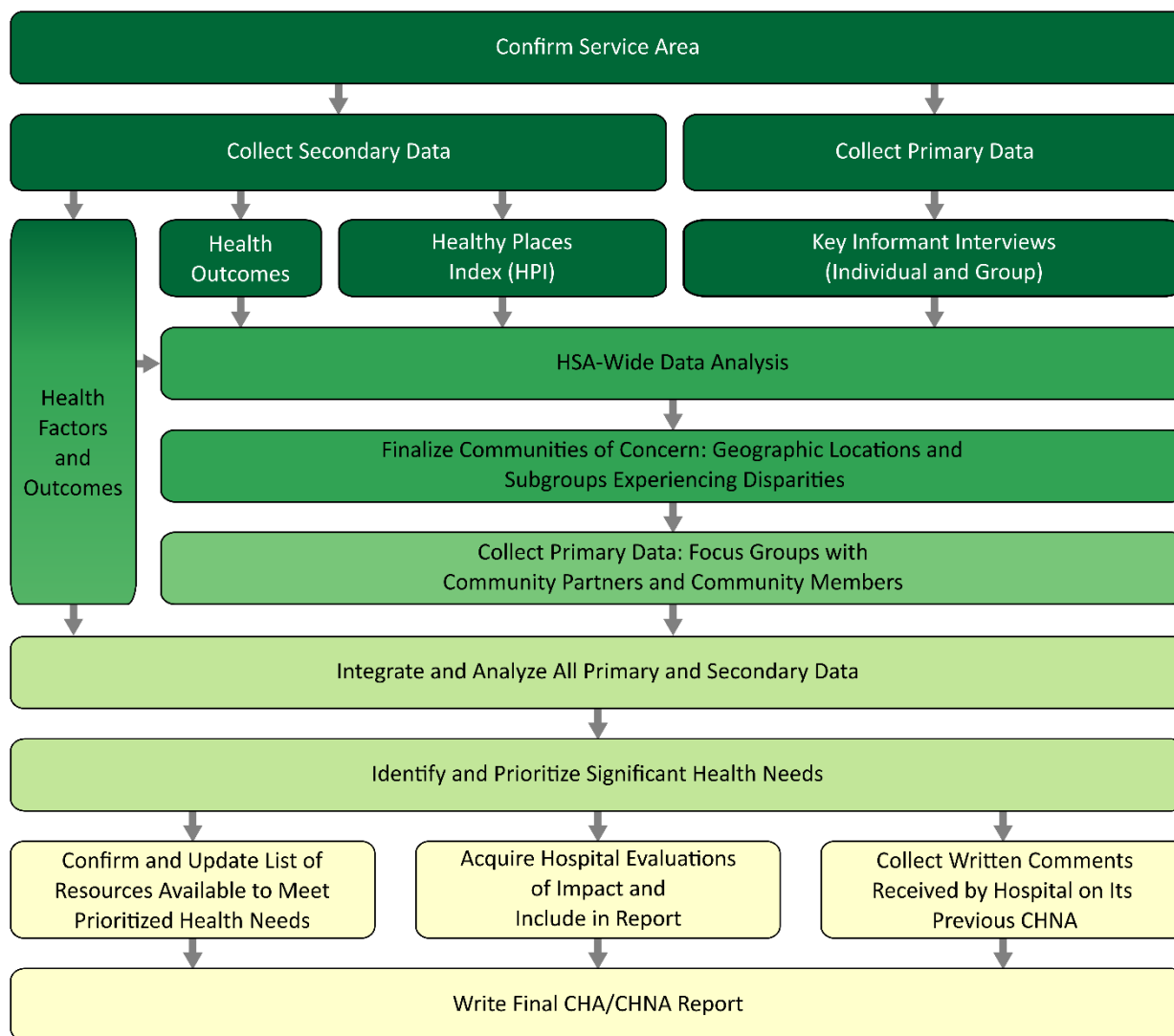


Figure 6: CHNA process model for SCH.

## Primary Data Collection and Processing

### Primary Data Collection

Input from the community served by Sutter Coast Hospital was collected through two main mechanisms. First, key informant interviews were conducted with community health experts and area service providers (i.e., members of social service nonprofit organizations and related healthcare organizations). These interviews occurred in both one-on-one and in group interview settings. Second, focus groups were conducted with community residents or community service providers working directly with populations experiencing disparities.

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

## Key Informant Results

Primary data collection with key informants included two phases. First, phase one began by interviewing area-wide service providers with knowledge of the service area, including input from the designated Public Health Department. Data from these area-wide informants, coupled with socio-demographic data, were used to identify additional key informants for the assessment that were included in phase two.

As a part of the interview process, all key informants were asked to identify vulnerable populations. The interviewer asked each participant to verbally describe what vulnerable populations existed in the county. As needed for a visual aid, key informants were shown a map of the hospital service area to directly point to the geographic locations of these vulnerable communities. Additional key informant interviews were focused on the geographic locations and/or subgroups identified in the earlier phase.

Table 14 contains a listing of community health experts, or key informants, that contributed input to the CHNA. The table describes the name of the represented organization, the number of participants and area of expertise, the populations served by the organization, and the date of the interview.

*Table 14: Key Informant List*

<b>Organization</b>	<b>Date</b>	<b>Number of Participants</b>	<b>Area of Expertise</b>	<b>Populations Served</b>
First 5	09/17/2021	1	Early childhood development	Del Norte County, families with children 0-5 years
Family Resource Center	09/17/2021	1	Family services	Del Norte County
Open Door Clinic	09/17/2021	1	Primary care and behavioral health	Del Norte County
College of the Redwoods	09/22/2021	1	Education, social determinants of health	Del Norte County
City of Crescent City and County of Del Norte	09/23/2021	2	Governance and policy	Crescent City and Del Norte County
Del Norte Dept of Health and Human Services	09/23/2021	1	Public Health	Del Norte County
Sutter Coast Hospital Board of Directors	09/24/2021	2	Mental health, governance and policy	Del Norte County
Del Norte Health Care District	09/29/2021	1	Community health care, mental health, behavioral health	Del Norte County
Brookings Harbor Community Helpers, Inc.	09/30/2021	2	Low income, homeless, struggle families	Brookings/Harbor Oregon
Sutter Coast Hospital staff	10/07/2021	2	Acute care hospital	Del Norte County, Brookings/Harbor Oregon

## Key Informant Interview Guide

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

### 2022 CHNA Group/Key Informant Interview Protocol

#### BACKGROUND

- a) **Please tell me about your current role and the organization you work for?**
  - i. Probe for:
    1. Public health (division or unit)
    2. Hospital health system
    3. Local non-profit
    4. Community member
  - b. **How would you define the community (ies) you or your organization serves?**
    - i. Probe for:
      5. Specific geographic areas?
      6. Specific populations served?
      7. *Who? Where? Racial/ethnic make-up, physical environment (urban/rural, large/small)*

#### CHARACTERISTICS OF A HEALTHY COMMUNITY

- a. **In your view, what does a healthy community look like?**
  - i. Probe for:
    8. Social factors
    9. Economic factors
    10. Clinical care
    11. Physical/built environment (food environment, green spaces)
    12. Neighborhood safety

#### HEALTH ISSUES

- a. **What would you say are the biggest health needs in the community?**
  - i. Probe for:
    1. How has the presence of COVID impacted these health needs?
- b. **INSERT MAP exercise: Please use the map provided to help our team understand where communities that experience the greatest health disparities live?**
  - i. Probe for:
    1. What specific geographic locations struggle with health issues the most?
    2. What specific groups of community members experience health issues the most?

#### CHALLENGES/BARRIERS

- a. **Looking through the lens of equity, what are the challenges (barriers or drivers) to being healthy for the community as a whole?**
  - i. **Do these inequities exist among certain population groups?**
  - ii. Probe for:
    1. Health behaviors (maladaptive, coping)
    2. Social factors (social connections, family connectedness, relationship with law enforcement)
    3. Economic factors (income, access to jobs, affordable housing, affordable food)

4. Clinical care factors (access to primary care, secondary care, quality of care)
5. Physical (built) environment (safe and healthy housing, walkable communities, safe parks)

**SOLUTIONS**

- a. **What solutions are needed to address the health needs and or challenges mentioned?**
  - i. Probe for:
    1. Policies
    2. Care coordination
    3. Access to care
    4. Environmental change

**PRIORITY**

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

**RESOURCES**

- a. **What resources exist in the community to help people live healthy lives?**
  - i. Probe for:
    1. Barriers to accessing these resources.
    2. New resources that have been created since 2019
    3. New partnerships/projects/funding

**PARTICIPANT DRIVEN SAMPLING:**

- a. **What other people, groups or organizations would you recommend we speak to about the health of the community?**
  - i. Name 3 types of service providers that you would suggest we include in this work
  - ii. Name 3 types of community members that you would recommend we speak to in this work

**OPEN: Is there anything else you would like to share with our team about the health of the community?**

*Focus Group Results*

Focus group interviews were conducted with community members or service providers living or working in geographic areas of the service area identified as locations or populations disproportionately experiencing poor socioeconomic conditions and poor health outcomes. Recruitment consisted of referrals from designated service providers representing vulnerable populations, as well as direct outreach to special population groups.

Table 15 contains a listing of community resident groups that contributed input to the CHNA. The table describes the hosting organization of the focus group, the date it occurred, the total number of participants, and populations represented by focus group members.

*Table 15: Focus Group List*

<b>Hosting Organization</b>	<b>Date</b>	<b>Number of Participants</b>	<b>Populations Represented</b>
Sutter Coast Health Center at Brookings-Harbor	10/15/2021	1	Brookings/Harbor community, seniors

Hosting Organization	Date	Number of Participants	Populations Represented
Rural Human Services - Harrington House	10/26/2021	1	Survivors of domestic violence, low income residents
Tolowa Dee-Ni' Nation Community and Family Services	10/26/2021	1	Native Americans
Family Resource Center	10/27/2021	13	Low income, youth, seniors, Hispanic, Native American
Rural Human Services - Helping Hands	10/28/2021	11	Low income, food insecure, seniors, homeless
Community Physicians	11/02/2021	2	Del Norte County

### *Focus Group Interview Guide*

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

#### **2022 CHNA Focus Group Interview Protocol**

1. Let's start by introducing ourselves. Please tell us your name, the town you live in, and one thing that you are proud of about your community.
2. We would like to hear about the community where you live. Tell us in a few words what you think of as "your community". What it is like to live in your community?
3. What do you think a "healthy environment" is?
4. When thinking about your community based on the healthy environment you just described, what are the biggest health needs in your community?
5. Are needs more prevalent in a certain geographic area, or within a certain group of the community?
6. How has the presence of COVID impacted these health needs?
7. What are the challenges or barriers to being healthy in your community?
8. What are some solutions that can help solve the barriers and challenges you talked about?
9. Based on what we have discussed so far, what are currently the most important or urgent top 3 health issues or challenges to address to improve the health of the community?
10. Are these needs that have recently come up or have they been around for a long time?
11. What are resources that exist in the community that help your community live healthy lives and address the health issues and inequity we have discussed?
12. Is there anything else you would like to share with our team about the health of the community?

### *Primary Data Processing*

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

## Secondary Data Collection and Processing

“Secondary data” refers to those quantitative variables used in this analysis that were obtained from third party sources. Secondary data were used to 1) support the identification of health needs and 2) describe the population and illuminate issues of health equity within the SCH HSA. This section details the data sources, as well as the process for collecting the secondary data and preparing them for analysis.

### Significant Health Need Identification Dataset

The first main set of data used in the CHNA includes the health factor and health outcome indicators used to identify significant health needs. The selection of these indicators was guided by the previously identified conceptual model. Table 16 gives the ICD 10 codes used to define by-cause mortality data. Table 17 lists these indicators, their sources, the years they were measured, and the health-related characteristics from the conceptual model they are primarily used to represent.

Table 16: Mortality indicators used in the report.

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

Table 17: Health factor and health outcome indicators used in health need identification.

Conceptual Model Alignment	Indicator	Data Source	Time Period	
Health Outcomes	Length of Life	Infant Mortality	County Health Rankings	2013 - 2019
		Child Mortality	County Health Rankings	2016 - 2019
	Life Expectancy	Life Expectancy	County Health Rankings	2017 - 2019
		Premature Age-Adjusted Mortality	County Health Rankings	2017 - 2019
		Premature Death	County Health Rankings	2017 - 2019



Conceptual Model Alignment		Indicator	Data Source	Time Period
		Stroke Mortality	(CA) CDPH California Vital Data (Cal-ViDa) (OR) Oregon Health Authority Center for Health Statistics	2015 - 2019
		Chronic Lower Respiratory Disease Mortality	(CA) CDPH California Vital Data (Cal-ViDa) (OR) Oregon Health Authority Center for Health Statistics	2015 - 2019
		Diabetes Mortality	(CA) CDPH California Vital Data (Cal-ViDa) (OR) Oregon Health Authority Center for Health Statistics	2015 - 2019
		Heart Disease Mortality	(CA) CDPH California Vital Data (Cal-ViDa) (OR) Oregon Health Authority Center for Health Statistics	2015 - 2019
		Hypertension Mortality	(CA) CDPH California Vital Data (Cal-ViDa) (OR) Oregon Health Authority Center for Health Statistics	2015 - 2019
		Cancer Mortality	(CA) CDPH California Vital Data (Cal-ViDa) (OR) Oregon Health Authority Center for Health Statistics	2015 - 2019
		Liver Disease Mortality	(CA) CDPH California Vital Data (Cal-ViDa) (OR) Oregon Health Authority Center for Health Statistics	2015 - 2019
		Kidney Disease Mortality	(CA) CDPH California Vital Data (Cal-ViDa) (OR) Oregon Health Authority Center for Health Statistics	2015 - 2019
		Suicide Mortality	(CA) CDPH California Vital Data (Cal-ViDa)	2015 - 2019

Conceptual Model Alignment		Indicator	Data Source	Time Period	
		Unintentional Injuries Mortality	(OR) Oregon Health Authority Center for Health Statistics	2019	
			(CA) CDPH California Vital Data (Cal-ViDa)	2015 - 2019	
		COVID-19 Mortality	(OR) Oregon Health Authority Center for Health Statistics	2019	
			CDPH COVID-19 Time-Series Metrics by County and State	Collected on 2021-11-17	
		COVID-19 Case Fatality	Oregon Health Authority Oregon COVID-19 Update/Severity Trends	Collected on 2021-11-01	
			CDPH COVID-19 Time-Series Metrics by County and State	Collected on 2021-11-17	
	Alzheimer's Disease Mortality	(OR) Oregon Health Authority Center for Health Statistics	2019		
		(CA) CDPH California Vital Data (Cal-ViDa)	2015 - 2019		
	Influenza and Pneumonia Mortality	(OR) Oregon Health Authority Center for Health Statistics	2019		
		(CA) CDPH California Vital Data (Cal-ViDa)	2015 - 2019		
	Quality of Life	Morbidity	Diabetes Prevalence	County Health Rankings	2017
			Low Birthweight	County Health Rankings	2013 - 2019
HIV Prevalence			County Health Rankings	2018	
Disability			2019 American Community Survey 5 year estimate variable S1810_C03_001E	2015 - 2019	
Poor Mental Health Days			County Health Rankings	2018	
Frequent Mental Distress			County Health Rankings	2018	
Poor Physical Health Days			County Health Rankings	2018	

Conceptual Model Alignment		Indicator	Data Source	Time Period	
			Frequent Physical Distress	County Health Rankings	2018
			Poor or Fair Health	County Health Rankings	2018
			Colorectal Cancer Prevalence	California Cancer Registry	2013 - 2017
			Breast Cancer Prevalence	California Cancer Registry	2013 - 2017
			Lung Cancer Prevalence	California Cancer Registry	2013 - 2017
			Prostate Cancer Prevalence	California Cancer Registry	2013 - 2017
			COVID-19 Cumulative Incidence	CDPH COVID-19 Time-Series Metrics by County and State	Collected on 2021-11-17
				Oregon Health Authority Oregon COVID-19 Update	Collected on 2021-11-01
			Asthma ED Rates	Tracking California	2018
			Asthma ED Rates for Children	Tracking California	2018
Health Factors	Health Behavior	Alcohol and Drug Use	Excessive Drinking	County Health Rankings	2018
			Drug Induced Death	CDPH 2021 County Health Status Profiles	2017 - 2019
		Diet and Exercise	Adult Obesity	County Health Rankings	2017
			Physical Inactivity	County Health Rankings	2017
			Limited Access to Healthy Foods	County Health Rankings	2015
			Food Environment Index	County Health Rankings	2015 & 2018
			Access to Exercise Opportunities	County Health Rankings	2010 & 2019
		Sexual Activity	Chlamydia Incidence	County Health Rankings	2018
			Teen Birth Rate	County Health Rankings	2013 - 2019
	Tobacco Use	Adult Smoking	County Health Rankings	2018	
	Clinical Care	Access to Care	Primary Care Shortage Area	U.S. Heath Resources and Services Administration	2021
			Dental Care Shortage Area	U.S. Heath Resources and Services Administration	2021
			Mental Health Care Shortage Area	U.S. Heath Resources and Services Administration	2021

Conceptual Model Alignment		Indicator	Data Source	Time Period	
		Medically Underserved Area	U.S. Health Resources and Services Administration	2021	
		Mammography Screening	County Health Rankings	2018	
		Dentists	County Health Rankings	2019	
		Mental Health Providers	County Health Rankings	2020	
		Psychiatry Providers	County Health Rankings	2020	
		Specialty Care Providers	County Health Rankings	2020	
		Primary Care Providers	County Health Rankings	2018; 2020	
	Quality Care	Preventable Hospitalization	California Office of Statewide Health Planning and Development Prevention Quality Indicators for California	2019	
		COVID-19 Cumulative Full Vaccination Rate	CDPH COVID-19 Vaccine Progress Dashboard Data Oregon Health Authority Oregon County Vaccination Trends	Collected on 2021-11-17 Collected on 2021-11-01	
	Socio-Economic and Demographic Factors	Community Safety	Homicide Rate	County Health Rankings	2013 - 2019
			Firearm Fatalities Rate	County Health Rankings	2015 - 2019
			Violent Crime Rate	County Health Rankings	2014 & 2016
			Juvenile Arrest Rate	Criminal Justice Data: Arrests, OpenJustice, California Department of Justice	2015 - 2019
			Motor Vehicle Crash Death	County Health Rankings	2013 - 2019
Education		Some College	County Health Rankings	2015 - 2019	
		High School Completion	County Health Rankings	2015 - 2019	
		Disconnected Youth	County Health Rankings	2015 - 2019	
	Third Grade Reading Level	County Health Rankings	2018		

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

Conceptual Model Alignment			Indicator	Data Source	Time Period
			Drinking Water Violations	County Health Rankings	2019

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

### County Health Rankings Data

All indicators listed with County Health Rankings (CHR) as their source were obtained from the 2021 County Health Rankings<sup>11</sup> dataset. This was the most common source of data, with 52 associated indicators included in the analysis. Indicators were collected at both the county and state levels. County-level indicators were used to represent the health factors and health outcomes in the service area. State-level indicators served as benchmarks for comparison purposes. All variables included in the CHR dataset were obtained from other data providers. The original data providers for each CHR variable are given in Table 18.

Table 18: Sources and time periods for indicators obtained from County Health Rankings.

CHR Indicator	Time Period	Data Source
Infant Mortality	2013 - 2019	National Center for Health Statistics - Mortality Files
Child Mortality	2016 - 2019	National Center for Health Statistics - Mortality Files
Life Expectancy	2017 - 2019	National Center for Health Statistics - Mortality Files
Premature Age-Adjusted Mortality	2017 - 2019	National Center for Health Statistics - Mortality Files
Premature Death	2017 - 2019	National Center for Health Statistics - Mortality Files
Diabetes Prevalence	2017	United States Diabetes Surveillance System
Low Birthweight	2013 - 2019	National Center for Health Statistics - Natality files
HIV Prevalence	2018	National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
Poor Mental Health Days	2018	Behavioral Risk Factor Surveillance System
Frequent Mental Distress	2018	Behavioral Risk Factor Surveillance System
Poor Physical Health Days	2018	Behavioral Risk Factor Surveillance System
Frequent Physical Distress	2018	Behavioral Risk Factor Surveillance System
Poor or Fair Health	2018	Behavioral Risk Factor Surveillance System
Excessive Drinking	2018	Behavioral Risk Factor Surveillance System

<sup>11</sup> University of Wisconsin Population Health Institute. 2021. County Health Rankings State Report 2021. Retrieved 6 May 2021 from <https://www.countyhealthrankings.org/app/oregon/2021/downloads> and <https://www.countyhealthrankings.org/app/california/2021/downloads>.

<b>CHR Indicator</b>	<b>Time Period</b>	<b>Data Source</b>
Adult Obesity	2017	United States Diabetes Surveillance System
Physical Inactivity	2017	United States Diabetes Surveillance System
Limited Access to Healthy Foods	2015	USDA Food Environment Atlas
Food Environment Index	2015 & 2018	USDA Food Environment Atlas, Map the Meal Gap from Feeding America
Access to Exercise Opportunities	2010 & 2019	Business Analyst, Delorme map data, ESRI, & US Census Tigerline Files
Chlamydia Incidence	2018	National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
Teen Birth Rate	2013 - 2019	National Center for Health Statistics - Natality files
Adult Smoking	2018	Behavioral Risk Factor Surveillance System
Mammography Screening	2018	Mapping Medicare Disparities Tool
Dentists	2019	Area Health Resource File/National Provider Identification file
Mental Health Providers	2020	CMS, National Provider Identification
Psychiatry Providers	2020	Area Health Resource File
Specialty Care Providers	2020	Area Health Resource File
Primary Care Providers	2018; 2020	Area Health Resource File/American Medical Association; CMS, National Provider Identification
Homicide Rate	2013 - 2019	National Center for Health Statistics - Mortality Files
Firearm Fatalities Rate	2015 - 2019	National Center for Health Statistics - Mortality Files
Violent Crime Rate	2014 & 2016	Uniform Crime Reporting - FBI
Juvenile Arrests (OR)	2018	Rate of delinquency cases per 1,000 juveniles
Motor Vehicle Crash Death	2013 - 2019	National Center for Health Statistics - Mortality Files
Some College	2015 - 2019	American Community Survey, 5-year estimates
High School Completion	2015 - 2019	American Community Survey, 5-year estimates
Disconnected Youth	2015 - 2019	American Community Survey, 5-year estimates
Third Grade Reading Level	2018	Stanford Education Data Archive
Third Grade Math Level	2018	Stanford Education Data Archive
Unemployment	2019	Bureau of Labor Statistics
Children in Single-Parent Households	2015 - 2019	American Community Survey, 5-year estimates
Social Associations	2018	County Business Patterns
Residential Segregation (Non-White/White)	2015 - 2019	American Community Survey, 5-year estimates
Children Eligible for Free Lunch	2018 - 2019	National Center for Education Statistics

<b>CHR Indicator</b>	<b>Time Period</b>	<b>Data Source</b>
Children in Poverty	2019	Small Area Income and Poverty Estimates
Median Household Income	2019	Small Area Income and Poverty Estimates
Uninsured Population under 64	2018	Small Area Health Insurance Estimates
Income Inequality	2015 - 2019	American Community Survey, 5-year estimates
Severe Housing Problems	2013 - 2017	Comprehensive Housing Affordability Strategy (CHAS) data
Severe Housing Cost Burden	2015 - 2019	American Community Survey, 5-year estimates
Homeownership	2015 - 2019	American Community Survey, 5-year estimates
Long Commute - Driving Alone	2015 - 2019	American Community Survey, 5-year estimates
Air Pollution - Particulate Matter	2016	Environmental Public Health Tracking Network
Drinking Water Violations	2019	Safe Drinking Water Information System

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

### *California Department of Public Health*

#### *By-Cause Mortality Data*

By-cause mortality data for California were obtained at the county and state level from the CDPH Cal-ViDa<sup>12</sup> online data query system for the years 2015-2019. Empirically Bayes smoothed rates (EBRs) were calculated for each mortality indicator using the total county population figure reported in the 2017 American Community Survey 5-year Estimates table B03002. Data for 2017 were used because this represented the central year of the 2015–2019 range of years for which CDPH data were collected. The population data for 2017 were multiplied by five to match the five years of mortality data used to calculate smoothed rates. The smoothed mortality rates were then multiplied by 100,000 so that the final rates represented deaths per 100,000 people.

CDPH masks the actual number of deaths that occur in a county for a given year and cause if there are between 1 and 10 total deaths recorded. Because of this, the following process was used to estimate the total number of deaths for counties whose actual values were masked. First, mortality rates for each cause and year were calculated for the state. The differences between the by-cause mortality for the state and the total by-cause mortality reported across all counties in the the state for each cause and year were also calculated.

Next, the state by-cause mortality rate was applied for each cause and year to estimate mortality at the county level if the reported value was masked. This was done by multiplying the cause/year appropriate

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<sup>12</sup> State of California, Department of Public Health. 2021. California Vital Data (Cal-ViDa), Death Query. Retrieved 1 Jun 2021 from <https://cal-vida.cdph.ca.gov/>



state-level mortality rate by the 2017 populations of counties with masked values. Resulting estimates that were less than 1 or greater than 10 were set to 1 and 10 respectively to match the known CDPH masking criteria.

The total number of deaths estimated for counties that had masked values for each year/cause was then compared to the difference between the reported total county and state deaths for the corresponding year/cause. If the number of estimated county deaths exceeded this difference, county estimates were further adjusted. This was done by iteratively ranking county estimates for a given year/cause, then from highest to lowest, reducing the estimates by 1 until they reached a minimum of 1 death. This continued until the estimated deaths for counties with masked values equaled the difference between the state and total reported county values.

By-cause mortality data for Oregon were obtained from the Oregon Health Authority Center for Health Statistics<sup>13</sup>. Values represent crude deaths per 100,000 in 2019 due to the respective cause.

### *COVID-19 Data*

Data on the cumulative number of cases and deaths<sup>14</sup> and completed vaccinations<sup>15</sup> for COVID-19 were used to calculate mortality, case-fatality, incidence, and vaccination rates. County mortality, incidence, and vaccination rates were calculated by dividing each of the respective values by the total population variable from the 2019 American Community Survey 5-year estimates table B01001, and then multiplying the resulting value by 100,000 to create rates per 100,000. Case-fatality rates were calculated by dividing COVID-19 mortality by the total number of cases, then multiplying by 100, representing the percentage of cases that ended in death.

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<sup>13</sup> State of Oregon, Oregon Health Authority. 2021. Leading causes of death by county. Retrieved 1 November 2021 from [https://visual-data.dhsoha.state.or.us/t/OHA/views/CountyDash/CountyDash\\_cause?:showAppBanner=false&:display\\_count=n&:showVizHome=n&:origin=viz\\_share\\_link&:isGuestRedirectFromVizportal=y&:embed=y](https://visual-data.dhsoha.state.or.us/t/OHA/views/CountyDash/CountyDash_cause?:showAppBanner=false&:display_count=n&:showVizHome=n&:origin=viz_share_link&:isGuestRedirectFromVizportal=y&:embed=y).

<sup>14</sup> State of California, Department of Public Health. 2021. Statewide COVID-19 Cases Deaths Tests. Retrieved 16 December 2021 from [https://data.chhs.ca.gov/dataset/f333528b-4d38-4814-bebb-12db1f10f535/resource/046cdd2b-31e5-4d34-9ed3-b48cdbc4be7a/download/Covid-19cases\\_test.csv](https://data.chhs.ca.gov/dataset/f333528b-4d38-4814-bebb-12db1f10f535/resource/046cdd2b-31e5-4d34-9ed3-b48cdbc4be7a/download/Covid-19cases_test.csv); State of Oregon, Oregon Health Authority COVID-19. 2021. Oregon COVID-19 Case Demographics and Disease Severity Statewide. Retrieved 1 November 2021 from

<https://public.tableau.com/app/profile/oregon.health.authority.covid.19/viz/OregonCOVID-19CaseDemographicsandDiseaseSeverityStatewide/SeverityTrendsDeath>; State of Oregon, Oregon Health Authority COVID-19. 2021. Oregon COVID-19 Update. Retrieved 1 November 2021 from

<https://public.tableau.com/app/profile/oregon.health.authority.covid.19/viz/OregonCOVID-19Update/DailyDataUpdate>.

<sup>15</sup> State of California, Department of Public Health. 2021. COVID-19 Vaccine Progress Dashboard Data . Retrieved 16 December 2021 from <https://data.chhs.ca.gov/dataset/e283ee5a-cf18-4f20-a92c-ee94a2866ccd/resource/130d7ba2-b6eb-438d-a412-741bde207e1c/download/Covid-19vaccinesbycounty.csv>; State of Oregon, Oregon Health Authority COVID-19. 2021. Oregon COVID-19 Vaccination Trends. Retrieved 1 November 2021 from <https://public.tableau.com/app/profile/oregon.health.authority.covid.19/viz/OregonCOVID-19VaccinationTrends/OregonCountyVaccinationTrends>.

### *Drug-Induced Deaths Data*

Drug-induced death rates were obtained from Table 19 of the 2021 County Health Status Profiles<sup>16</sup> and report age-adjusted deaths per 100,000.

### *U.S. Health Resources and Services Administration*

Indicators related to the availability of healthcare providers were obtained from the Health Resources and Services Administration<sup>17</sup> (HRSA). These included Dental, Mental Health, and Primary Care Health Professional Shortage Areas and Medically Underserved Areas/Populations. They also included the number of specialty care providers and psychiatrists per 100,000 residents, derived from the county-level Area Health Resource Files.

### *Health Professional Shortage Areas*

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

### *Psychiatry and Specialty Care Providers*

HRSA's Area Health Resource Files provide information on physicians and allied healthcare providers for U.S. counties. This information was used to determine the rate of specialty care providers and the rate of psychiatrists for each county and for the state. For the purposes of this analysis, a specialty care provider was defined as a physician who was not defined by the HRSA as a primary care provider. This was found by subtracting the total number of primary care physicians (both MDs and DOs, primary care, patient care, and non-federal, excluding hospital residents and those 75 years of age or older) from the total number of physicians (both MDs and DOs, patient care, non-federal) in 2018. This number was then divided by the 2018 total population given in the 2018 American Community Survey 5-year Estimates table B03002, and then multiplied by 100,000 to give the total number of specialty care physicians per 100,000 residents.

The total of specialty care physicians in each county was summed to find the total specialty care physicians in the state, and state rates were calculated following the same approach as used for county rates. This same process was also used to calculate the number of psychiatrists per 100,000 for each county and the state using the number of total patient care, non-federal psychiatrists from the Area Health Resource Files. It should be noted that psychiatrists are included in the list of specialty care

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<sup>16</sup> State of California, Department of Public Health, Vital Records Data and Statistics. 2021. County Health Status Profiles 2021: CHSP 2021 Tables 1-29. Spreadsheet. Retrieved on 21 Jul 2021 from [https://www.cdph.ca.gov/Programs/CHSI/CDPH%20Document%20Library/CHSP\\_2021\\_Tables\\_1-29\\_04.16.2021.xlsx](https://www.cdph.ca.gov/Programs/CHSI/CDPH%20Document%20Library/CHSP_2021_Tables_1-29_04.16.2021.xlsx).

<sup>17</sup> US Health Resources & Services Administration. 2021. Area Health Resources Files and Shortage Areas. Retrieved on 3 Feb 2021 from <https://data.hrsa.gov/data/download>.

physicians, so that indicator represents a subset of specialty care providers rather than a separate group.

### *California Cancer Registry*

Data obtained from the California Cancer Registry<sup>18</sup> includes age-adjusted incidence rates for colon and rectum, female breast, lung and bronchus, and prostate cancer sites for counties and the state. Reported rates were based on data from 2013 - 2017, and report cases per 100,000. For low-population counties, rates were calculated for a group of counties rather than for individual counties. That group rate was used in this report to represent incidence rates for each individual county in the group.

### *Tracking California*

Data on emergency department visits rates for all ages as well as children ages 5 to 17 were obtained from Tracking California.<sup>19</sup> These data report age-adjusted rates per 10,000. They were multiplied by 100 in this analysis to convert them to rates per 100,000 to make them more comparable to the standard used for other rate indicators.

### *U.S. Census Bureau*

Data from the US Census Bureau was used for two additional indicators: the percentage of households with no vehicles available (table DPO4, variable 0058PE), and the percentage of the civilian non-institutionalized population with some disability (table S1810, variable C03\_001E). Values for both of these variables were obtained from the 2019 American Community Survey 5-year Estimates dataset.

### *California Office of Environmental Health Hazard Assessment*

Data used to calculate the pollution burden percent indicator were obtained from the CalEnviroScreen 3.0<sup>20</sup> dataset produced by the California Office of Environmental Health Hazard Assessment. This indicator reports the percentage of the population within a given county, or within the state as a whole, that live in a US Census tract with a CalEnviroScreen 3.0 Pollution Burden score in the 50th percentile or higher. Data on total population came from Table B03002 from the 2019 American Community Survey 5-year Estimates dataset.

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<sup>18</sup> California Cancer Registry. 2021. Age-Adjusted Invasive Cancer Incidence Rates in California. Retrieved on 22 Jan 2021 from <https://www.cancer-rates.info/ca/>.

<sup>19</sup> Tracking California, Public Health Institute. 2021. Asthma Related Emergency Department & Hospitalization data. Retrieved on 24 Jun 2021 from [www.trackingcalifornia.org/asthma/query](http://www.trackingcalifornia.org/asthma/query).

<sup>20</sup> California Office of Environmental Health Hazard Assessment. 2018. CalEnviroScreen 3.0. Retrieved on 22 Jan 2021 from <https://oehha.ca.gov/calenviroscreen/maps-data>.

### *California Department of Health Care Access and Information*

Data on preventable hospitalizations were obtained from the California Department of Health Care Access and Information (formerly Office of Statewide Health Planning and Development) Prevention Quality Indicators.<sup>21</sup> These data are reported as risk-adjusted rates per 100,000.

### *California Department of Justice*

Data reporting the total number of juvenile felony arrests for California was obtained from the California Department of Justice.<sup>22</sup> This indicator reports the rate of felony arrests per 1,000 juveniles under the age of 18. It was calculated by dividing the total number of juvenile felony arrests for each county or state from 2015 - 2019 by the total population under 18 as reported in Table B01001 in the 2017 American Community Survey 5-year Estimates program. Population data from 2017 were used as this was the central year of the period over which juvenile felony arrest data were obtained. Population figures from 2017 were multiplied by 5 to match the years of arrest data used. Empirical Bayes smoothed rates were calculated to increase the reliability of rates calculated for small counties. Finally, juvenile felony arrest rates were also calculated for Black, White, and Hispanic populations following the same manner, but using input population data from 2017 American Community Survey 5-year Estimates Tables B01001H, B01001B, and B01001I respectively.

### *U.S. Department of Housing and Urban Development*

Data from the US Department of Housing and Urban Development's 2020 Annual Homeless Assessment Report<sup>23</sup> were used to calculate homelessness rates for the counties and states. These data report point-in-time (PIT) homelessness estimates for individual Continuum of Care (CoC) organizations across the state. Each CoC works within a defined geographic area, which could be a group of counties, an individual county, or a portion of a county.

To calculate county rates, CoC were first related to county boundaries. Rates for CoC that covered single counties were calculated by dividing the CoC PIT estimate by the county population. If a given county was covered by multiple CoC, their PIT were totaled and then divided by the total county population to calculate the rate. When a single CoC covered multiple counties, the CoC PIT was divided by the total of all included county populations, and the resulting rate was applied to each individual county.

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

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<sup>21</sup> Office of Statewide Health Planning and Development. 2021. Prevention Quality Indicators (PQI) for California. Data files for Statewide and County. Retrieved on 12 Mar 2021 from <https://oshpd.ca.gov/data-and-reports/healthcare-quality/ahrq-quality-indicators/>.

<sup>22</sup> California Department of Justice, OpenJustice. 2021. Criminal Justice Data: Arrests. Retrieved on 17 Jun 2021 from <https://data-openjustice.doj.ca.gov/sites/default/files/dataset/2020-07/OnlineArrestData1980-2019.csv>.

<sup>23</sup> US Department of Housing and Urban Development. 2021. 2020 Annual Homeless Assessment Report: 2007 - 2020 Point-in-Time Estimates by CoC. Retrieved on 14 Jul 2021 from <https://www.huduser.gov/portal/sites/default/files/xls/2007-2020-PIT-Estimates-by-CoC.xlsx>.

## *Proximity to Transit Stops*

The proximity to transit stops indicator reports the percent of county and state population that lives in a US Census block located within 1/4 mile of a fixed transit stop. Two sets of information were needed in order to calculate this indicator: total population at the Census block level, and the location of transit stops. Likely due to delays in data releases stemming from the COVID-19 pandemic, the most recent Census block population data available at the time of the analysis was from the 2010 Decennial Census,<sup>24</sup> so this was the data used to represent the distribution of population for this indicator.

Transit stop data were identified first by using tools in the TidyTransit<sup>25</sup> library for the R statistical programming language.<sup>26</sup> This was used to identify transit providers with stops located within 100 miles of the state's boundaries. A search for transit stops for these agencies, as well as all other transit agencies in the state, was conducted by reviewing three main online sources: OpenMobilityData,<sup>27</sup> Transitland,<sup>28</sup> Transitwiki.org,<sup>29</sup> and Santa Ynez Valley Transit.<sup>30</sup> Each of these websites list public transit data that have been made public by transit agencies. Transit data from all providers that could be identified were downloaded, and fixed transit stop locations were extracted from them.

The sf<sup>31</sup> library in R was then used to calculate 1/4 mile (402.336 meter) buffers around each of these transit stops, and then to identify which Census blocks fell within these areas. The total population of all tracts within the stop's buffer was then divided by the total population of each county or state to generate the final indicator value.

## *Service Area Description and Health Equity Datasets*

### **Detailed Analytical Methodology**

The collected and processed primary and secondary data were integrated in three main analytical stages. First, area-wide key informant interviews were used to help focus the remaining interview and focus group collection efforts on those areas and subpopulations experiencing elevated poor health

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<sup>24</sup> US Census Bureau. 2011. Census Blocks with Population and Housing Counts. Retrieved on 7 Jun 2021 from <https://www2.census.gov/geo/tiger/TIGER2010BLKPOPHU/>.

<sup>25</sup> Flavio Poletti, Daniel Herszenhut, Mark Padgham, Tom Buckley and Danton Noriega-Goodwin. 2021. tidytransit: Read, Validate, Analyze, and Map Files in the General Transit Feed Specification. R package version 1.0.0. <https://CRAN.R-project.org/package=tidytransit>.

<sup>26</sup> R Core Team (2021). R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. URL <https://www.R-project.org/>.

<sup>27</sup> OpenMobilityData. 2021. California, USA. Retrieved all feeds listed on 31 May to 1 June 2021 from <https://openmobilitydata.org/l/67-california-usa>.

<sup>28</sup> Transitland. 2021. Transitland Operators. Retrieved all operators with California locations on 31 May to 1 June 2021 from <https://www.transit.land/operators>.

<sup>29</sup> Transitwiki.org. 2021. List of publicly-accessible transportation data feeds: dynamic and others. Retrieved on 31 May to 1 June 2021 from [https://www.transitwiki.org/TransitWiki/index.php/Publicly-accessible\\_public\\_transportation\\_data#List\\_of\\_publicly-accessible\\_public\\_transportation\\_data\\_feeds:\\_dynamic\\_data\\_and\\_others](https://www.transitwiki.org/TransitWiki/index.php/Publicly-accessible_public_transportation_data#List_of_publicly-accessible_public_transportation_data_feeds:_dynamic_data_and_others).

<sup>30</sup> Santa Ynez Valley Transit. GTFS Files. Retrieved on 1 Jun 2021 from [http://www.cityofsolvang.com/DocumentCenter/View/2756/syvt\\_gtfs\\_011921](http://www.cityofsolvang.com/DocumentCenter/View/2756/syvt_gtfs_011921).

<sup>31</sup> Pebesma, E., 2018. Simple Features for R: Standardized Support for Spatial Vector Data. The R Journal 10 (1), 439-446, <https://doi.org/10.32614/RJ-2018-009>.

outcomes. Next, these data were combined with the results from focus groups and secondary health need identification data to identify significant health needs within the service area. Finally, primary data were used to prioritize those identified significant health needs. The specific details for these analytical steps are given in the following sections.

### Significant Health Need Identification

The general methods through which significant health needs (SHNs) were identified are shown in Figure 7 and described here in greater detail. The first step in this process was to identify a set of potential health needs (PHNs) from which significant health needs could be selected. This was done by reviewing the health needs identified during prior CHNAs among various hospitals throughout Central and Northern California and then supplementing this list based on a preliminary analysis of the primary qualitative data collected for the current CHNA. This resulted the list of PHNs shown in Table 19.

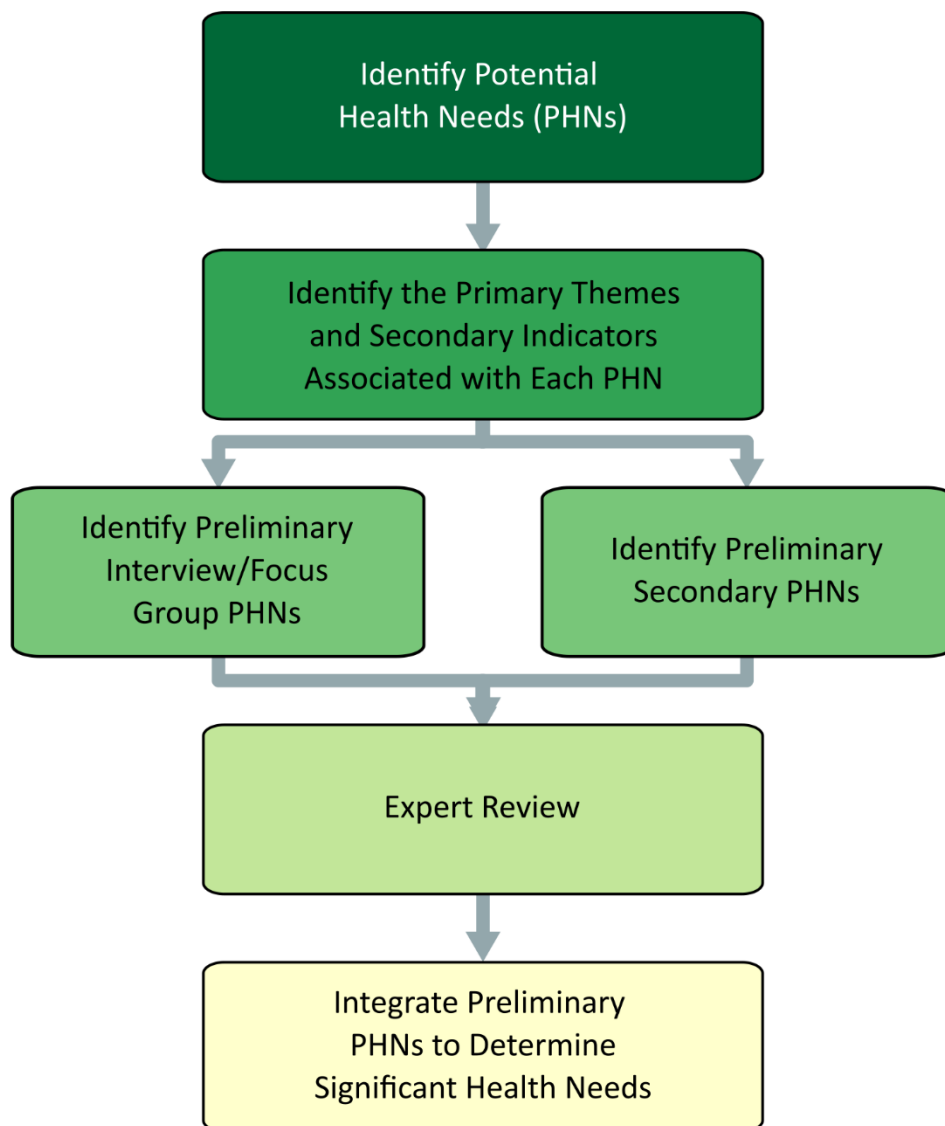


Figure 7: Significant health need identification process.

Table 19: 2022 Potential Health Needs.

<b>Potential Health Needs (PHNs)</b>	
PHN1	Access to Mental/Behavioral Health and Substance-Use Services
PHN2	Access to Quality Primary Care Health Services
PHN3	Active Living and Healthy Eating
PHN4	Safe and Violence-Free Environment
PHN5	Access to Dental Care and Preventive Services
PHN6	Healthy Physical Environment
PHN7	Access to Basic Needs Such as Housing, Jobs, and Food
PHN8	Access to Functional Needs
PHN9	Access to Specialty and Extended Care
PHN10	Injury and Disease Prevention and Management
PHN11	Increased Community Connections
PHN12	System Navigation

The next step in the process was to identify primary themes and secondary indicators associated with each of these health needs as shown in Tables 20 through 31. Primary theme associations were used to guide coding of the primary data sources to specific PHNs.

### **Access to Mental/Behavioral Health and Substance-Use Services**

Table 20: Primary themes and secondary indicators associated with PHN1

<b>Primary Themes</b>	<b>Secondary Indicators</b>
<ul style="list-style-type: none"> <li>There aren't enough mental health providers or treatment centers in the area (e.g., psychiatric beds, therapists, support groups)</li> <li>The cost for mental/behavioral health treatment is too high</li> <li>Treatment options in the area for those with Medi-Cal are limited</li> <li>Awareness of mental health issues among community members is low</li> <li>Additional services specifically for youth are needed (e.g., child psychologists, counselors and therapists in the schools)</li> <li>The stigma around seeking mental health treatment keeps people out of care</li> <li>Additional services for those who are homeless and dealing with mental/behavioral health issues are needed</li> <li>The area lacks the infrastructure to support those experiencing a mental health crisis</li> <li>Mental/behavioral health services are available in the area, but people do not know about them</li> <li>It's difficult for people to navigate mental/behavioral healthcare</li> <li>Substance-use is a problem in the area (e.g., use of opiates and methamphetamine, prescription misuse)</li> <li>There are too few substance-use treatment services in the area (e.g., detox centers, rehabilitation centers)</li> </ul>	<ul style="list-style-type: none"> <li>Life Expectancy</li> <li>Premature Age-Adjusted Mortality</li> <li>Premature Death</li> <li>Liver Disease Mortality</li> <li>Suicide Mortality</li> <li>Poor Mental Health Days</li> <li>Frequent Mental Distress</li> <li>Poor Physical Health Days</li> <li>Frequent Physical Distress</li> <li>Poor or Fair Health</li> <li>Excessive Drinking</li> <li>Drug Induced Death</li> <li>Adult Smoking</li> <li>Primary Care Shortage Area</li> <li>Mental Health Care Shortage Area</li> <li>Medically Underserved Area</li> <li>Mental Health Providers</li> <li>Psychiatry Providers</li> <li>Firearm Fatalities Rate</li> </ul>

<b>Primary Themes</b>	<b>Secondary Indicators</b>
<ul style="list-style-type: none"> <li>• Substance-use treatment options for those with Medi-Cal are limited</li> <li>• There aren't enough services here for those who are homeless and dealing with substance-use issues</li> <li>• The use of nicotine delivery products such as e-cigarettes and tobacco is a problem in the community</li> <li>• Substance-use is an issue among youth in particular</li> <li>• There are substance-use treatment services available here, but people do not know about them</li> </ul>	<ul style="list-style-type: none"> <li>Juvenile Arrest Rate</li> <li>Disconnected Youth</li> <li>Social Associations</li> <li>Residential Segregation (Non-White/White)</li> <li>Income Inequality</li> <li>Severe Housing Cost Burden</li> <li>Homelessness Rate</li> </ul>

### Access to Quality Primary Care Health Services

Table 21: Primary themes and secondary indicators associated with PHN2

<b>Primary Themes</b>	<b>Secondary Indicators</b>
<ul style="list-style-type: none"> <li>• Insurance is unaffordable</li> <li>• Wait-times for appointments are excessively long</li> <li>• Out-of-pocket costs are too high</li> <li>• There aren't enough primary care service providers in the area</li> <li>• Patients have difficulty obtaining appointments outside of regular business hours</li> <li>• Too few providers in the area accept Medi-Cal</li> <li>• It is difficult to recruit and retain primary care providers in the region</li> <li>• Specific services are unavailable here (e.g., 24-hour pharmacies, urgent care, telemedicine)</li> <li>• The quality of care is low (e.g., appointments are rushed, providers lack cultural competence)</li> <li>• Patients seeking primary care overwhelm local emergency departments</li> <li>• Primary care services are available, but are difficult for many people to navigate</li> </ul>	<ul style="list-style-type: none"> <li>Infant Mortality</li> <li>Child Mortality</li> <li>Life Expectancy</li> <li>Premature Age-Adjusted Mortality</li> <li>Premature Death</li> <li>Stroke Mortality</li> <li>Chronic Lower Respiratory Disease Mortality</li> <li>Diabetes Mortality</li> <li>Heart Disease Mortality</li> <li>Hypertension Mortality</li> <li>Cancer Mortality</li> <li>Liver Disease Mortality</li> <li>Kidney Disease Mortality</li> <li>COVID-19 Mortality</li> <li>COVID-19 Case Fatality</li> <li>Alzheimer's Disease Mortality</li> <li>Influenza and Pneumonia Mortality</li> <li>Diabetes Prevalence</li> <li>Low Birthweight</li> <li>Poor Mental Health Days</li> <li>Frequent Mental Distress</li> <li>Poor Physical Health Days</li> <li>Frequent Physical Distress</li> <li>Poor or Fair Health</li> <li>Colorectal Cancer Prevalence</li> <li>Breast Cancer Prevalence</li> <li>Lung Cancer Prevalence</li> </ul>



Primary Themes	Secondary Indicators
	Prostate Cancer Prevalence
	Asthma Emergency Department (ED) Rates
	Asthma ED Rates for Children
	Primary Care Shortage Area
	Medically Underserved Area
	Mammography Screening
	Primary Care Providers
	Preventable Hospitalization
	COVID-19 Cumulative Full Vaccination Rate
	Residential Segregation (Non-White/White)
	Uninsured Population under 64
	Income Inequality
	Homelessness Rate

### Active Living and Healthy Eating

Table 22: Primary themes and secondary indicators associated with PHN3

Primary Themes	Secondary Indicators
<ul style="list-style-type: none"> <li>• There are food deserts in the area where fresh, unprocessed foods are not available</li> <li>• Fresh, unprocessed foods are unaffordable.</li> <li>• Food insecurity is an issue here</li> <li>• Students need healthier food options in schools</li> <li>• The built environment doesn't support physical activity (e.g., neighborhoods aren't walk-able, roads aren't bike-friendly, or parks are inaccessible)</li> <li>• The community needs nutrition education programs</li> <li>• Homelessness in parks or other public spaces deters residents from their use</li> <li>• Recreational opportunities in the area are unaffordable (e.g., gym memberships, recreational activity programs)</li> <li>• There aren't enough recreational opportunities in the area (e.g., organized activities, youth sports leagues)</li> <li>• The food available in local homeless shelters and food banks is not nutritious</li> <li>• Grocery store options in the area are limited</li> </ul>	Life Expectancy Premature Age-Adjusted Mortality Premature Death Stroke Mortality Diabetes Mortality Heart Disease Mortality Hypertension Mortality Cancer Mortality Kidney Disease Mortality Diabetes Prevalence Poor Mental Health Days Frequent Mental Distress Poor Physical Health Days Frequent Physical Distress Poor or Fair Health Colorectal Cancer Prevalence Breast Cancer Prevalence Prostate Cancer Prevalence Asthma Emergency Department (ED) Rates

Primary Themes	Secondary Indicators
	Asthma ED Rates for Children
	Adult Obesity
	Physical Inactivity
	Limited Access to Healthy Foods
	Food Environment Index
	Access to Exercise Opportunities
	Residential Segregation (Non-White/White)
	Income Inequality
	Severe Housing Cost Burden
	Homelessness Rate
	Long Commute - Driving Alone
	Access to Public Transit

### Safe and Violence-Free Environment

Table 23: Primary themes and secondary indicators associated with PHN4

Primary Themes	Secondary Indicators
<ul style="list-style-type: none"> <li>• People feel unsafe because of crime</li> <li>• There are not enough resources to address domestic violence and sexual assault</li> <li>• Isolated or poorly-lit streets make pedestrian travel unsafe</li> <li>• Public parks seem unsafe because of illegal activity taking place</li> <li>• Youth need more safe places to go after school</li> <li>• Specific groups in this community are targeted because of characteristics like race/ethnicity or age</li> <li>• There isn't adequate police protection</li> <li>• Gang activity is an issue in the area</li> <li>• Human trafficking is an issue in the area</li> <li>• The current political environment makes some concerned for their safety</li> </ul>	Life Expectancy Premature Death Hypertension Mortality Poor Mental Health Days Frequent Mental Distress Frequent Physical Distress Poor or Fair Health Physical Inactivity Access to Exercise Opportunities Homicide Rate Firearm Fatalities Rate Violent Crime Rate Juvenile Arrest Rate Motor Vehicle Crash Death Disconnected Youth Social Associations Income Inequality Severe Housing Problems

Primary Themes	Secondary Indicators
	Severe Housing CBurden Homelessness Rate

### Access to Dental Care and Preventive Services

Table 24: Primary themes and secondary indicators associated with PHN5

Primary Themes	Secondary Indicators
<ul style="list-style-type: none"> <li>There aren't enough providers in the area who accept Denti-Cal</li> <li>The lack of access to dental care here leads to overuse of emergency departments</li> <li>Quality dental services for kids are lacking</li> <li>It's hard to get an appointment for dental care</li> <li>People in the area have to travel to receive dental care</li> <li>Dental care here is unaffordable, even if you have insurance</li> </ul>	Frequent Mental Distress Poor Physical Health Days Frequent Physical Distress Poor or Fair Health Dental Care Shortage Area Dentists Residential Segregation (Non-White/White) Income Inequality Homelessness Rate

### Healthy Physical Environment

Table 25: Primary themes and secondary indicators associated with PHN6

Primary Themes	Secondary Indicators
<ul style="list-style-type: none"> <li>Poorer air quality contributes to high rates of asthma</li> <li>Poor water quality is a concern in the area</li> <li>Agricultural activity harms the air quality</li> <li>Low-income housing is substandard</li> <li>Residents' use of tobacco and e-cigarettes harms the air quality</li> <li>Industrial activity in the area harms the air quality</li> <li>Heavy traffic in the area harms the air quality</li> <li>Wildfires in the region harm the air quality</li> </ul>	Infant Mortality Life Expectancy Premature Age-Adjusted Mortality Premature Death Chronic Lower Respiratory Disease Mortality Hypertension Mortality Cancer Mortality Frequent Mental Distress Frequent Physical Distress Poor or Fair Health Colorectal Cancer Prevalence Breast Cancer Prevalence Lung Cancer Prevalence Prostate Cancer Prevalence Asthma Emergency Department (ED) Rates Asthma ED Rates for Children Adult Smoking Income Inequality

Primary Themes	Secondary Indicators
	Severe Housing Cost Burden
	Homelessness Rate
	Long Commute - Driving Alone
	Pollution Burden Percent
	Air Pollution - Particulate Matter
	Drinking Water Violations

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

Table 26: Primary themes and secondary indicators associated with PHN7

Primary Themes	Secondary Indicators
<ul style="list-style-type: none"> <li>Lack of affordable housing is a significant issue in the area</li> <li>The area needs additional low-income housing options</li> <li>Poverty in the county is high</li> <li>Many people in the area do not make a living wage</li> <li>Employment opportunities in the area are limited</li> <li>Services for homeless residents in the area are insufficient</li> <li>Services are inaccessible for Spanish-speaking and immigrant residents</li> <li>Many residents struggle with food insecurity</li> <li>It is difficult to find affordable childcare</li> <li>Educational attainment in the area is low</li> </ul>	Infant Mortality Child Mortality Life Expectancy Premature Age-Adjusted Mortality Premature Death Hypertension Mortality COVID-19 Mortality COVID-19 Case Fatality Diabetes Prevalence Low Birthweight Poor Mental Health Days Frequent Mental Distress Poor Physical Health Days Frequent Physical Distress Poor or Fair Health COVID-19 Cumulative Incidence Asthma Emergency Department (ED) Rates Asthma ED Rates for Children Drug Induced Death Adult Obesity Limited Access to Healthy Foods Food Environment Index Medically Underserved Area COVID-19 Cumulative Full Vaccination Rate Some College High School Completion Disconnected Youth Third Grade Reading Level Third Grade Math Level Unemployment Children in Single-Parent Households

Primary Themes	Secondary Indicators
	Social Associations
	Residential Segregation (Non-White/White)
	Children Eligible for Free Lunch
	Children in Poverty
	Median Household Income
	Uninsured Population under 64
	Income Inequality
	Severe Housing Problems
	Severe Housing Cost Burden
	Homeownership
	Homelessness Rate
	Households with no Vehicle Available
	Long Commute - Driving Alone

### Access to Functional Needs

Table 27: Primary themes and secondary indicators associated with PHN8

Primary Themes	Secondary Indicators
<ul style="list-style-type: none"> <li>• Many residents do not have reliable personal transportation</li> </ul>	Disability
<ul style="list-style-type: none"> <li>• Medical transport in the area is limited</li> </ul>	Frequent Mental Distress
<ul style="list-style-type: none"> <li>• Roads and sidewalks in the area are not well-maintained</li> </ul>	Frequent Physical Distress
<ul style="list-style-type: none"> <li>• The distance between service providers is inconvenient for those using public transportation</li> </ul>	Poor or Fair Health
<ul style="list-style-type: none"> <li>• Using public transportation to reach providers can take a very long time</li> </ul>	Adult Obesity
<ul style="list-style-type: none"> <li>• The cost of public transportation is too high</li> </ul>	COVID-19 Cumulative Full Vaccination Rate
<ul style="list-style-type: none"> <li>• Public transportation service routes are limited</li> </ul>	Income Inequality
<ul style="list-style-type: none"> <li>• Public transportation schedules are limited</li> </ul>	Homelessness Rate
<ul style="list-style-type: none"> <li>• The geography of the area makes it difficult for those without reliable transportation to get around</li> </ul>	Households with no Vehicle Available
<ul style="list-style-type: none"> <li>• Public transportation is more difficult for some residents to use (e.g., non-English speakers, seniors, parents with young children)</li> </ul>	Long Commute - Driving Alone
<ul style="list-style-type: none"> <li>• There aren't enough taxi and ride-share options (e.g., Uber, Lyft)</li> </ul>	Access to Public Transit

## Access to Specialty and Extended Care

Table 28: Primary themes and secondary indicators associated with PHN9

Primary Themes	Secondary Indicators
<ul style="list-style-type: none"> <li>• Wait-times for specialist appointments are excessively long</li> <li>• It is difficult to recruit and retain specialists in the area</li> <li>• Not all specialty care is covered by insurance</li> <li>• Out-of-pocket costs for specialty and extended care are too high</li> <li>• People have to travel to reach specialists</li> <li>• Too few specialty and extended care providers accept Medi-Cal</li> <li>• The area needs more extended care options for the aging population (e.g. skilled nursing homes, in-home care)</li> <li>• There isn't enough OB/GYN care available</li> <li>• Additional hospice and palliative care options are needed</li> </ul>	<p>Infant Mortality  Life Expectancy  Premature Age-Adjusted Mortality  Premature Death  Stroke Mortality  Chronic Lower Respiratory Disease Mortality  Diabetes Mortality  Heart Disease Mortality  Hypertension Mortality  Cancer Mortality  Liver Disease Mortality  Kidney Disease Mortality  COVID-19 Mortality  COVID-19 Case Fatality  Alzheimer's Disease Mortality  Diabetes Prevalence  Poor Mental Health Days  Frequent Mental Distress  Poor Physical Health Days  Frequent Physical Distress  Poor or Fair Health  Lung Cancer Prevalence  Asthma Emergency Department (ED) Rates  Asthma ED Rates for Children  Drug Induced Death  Psychiatry Providers  Specialty Care Providers  Preventable Hospitalization  Residential Segregation (Non-White/White)  Income Inequality  Homelessness Rate</p>

## Injury and Disease Prevention and Management

Table 29: Primary themes and secondary indicators associated with PHN10

Primary Themes	Secondary Indicators
<ul style="list-style-type: none"> <li>• There isn't a focus on prevention</li> <li>• Preventive health services for women are needed (e.g., breast and cervical cancer screening)</li> <li>• There should be a greater focus on chronic disease prevention (e.g., diabetes, heart disease)</li> <li>• Vaccination rates are lower than they should be</li> <li>• Health education in the schools needs to be improved</li> <li>• Additional HIV and sexual transmitted infection (STI) prevention efforts are needed</li> <li>• The community needs nutrition education opportunities</li> <li>• Schools should offer better sexual health education</li> <li>• Prevention efforts need to be focused on specific populations in the community (e.g., youth, Spanish-speaking residents, the elderly, LGBTQ individuals, immigrants)</li> <li>• Patients need to be better connected to service providers (e.g., case management, patient navigation, or centralized service provision)</li> </ul>	<p>Infant Mortality            Child Mortality            Stroke Mortality            Chronic Lower Respiratory Disease Mortality            Diabetes Mortality            Heart Disease Mortality            Hypertension Mortality            Liver Disease Mortality            Kidney Disease Mortality            Suicide Mortality            Unintentional Injuries Mortality            COVID-19 Mortality            COVID-19 Case Fatality            Alzheimer's Disease Mortality            Diabetes Prevalence            Low Birthweight            HIV Prevalence            Poor Mental Health Days            Frequent Mental Distress            Frequent Physical Distress            Poor or Fair Health            COVID-19 Cumulative Incidence            Asthma Emergency Department (ED) Rates            Asthma ED Rates for Children            Excessive Drinking            Drug Induced Death            Adult Obesity            Physical Inactivity            Chlamydia Incidence            Teen Birth Rate            Adult Smoking            COVID-19 Cumulative Full Vaccination Rate            Firearm Fatalities Rate            Juvenile Arrest Rate</p>

Primary Themes	Secondary Indicators
	Motor Vehicle Crash Death Disconnected Youth Third Grade Reading Level Third Grade Math Level Income Inequality Homelessness Rate

### Increased Community Connections

Table 30: Primary themes and secondary indicators associated with PHN11

Primary Themes	Secondary Indicators
<ul style="list-style-type: none"> <li>• Health and social service providers operate in silos; we need cross-sector connection</li> <li>• Building community connections doesn't seem like a focus in the area</li> <li>• Relations between law enforcement and the community need to be improved</li> <li>• The community needs to invest more in local public schools</li> <li>• There isn't enough funding for social services in the county</li> <li>• People in the community face discrimination from local service providers</li> <li>• City and county leaders need to work together</li> </ul>	Infant Mortality Child Mortality Life Expectancy Premature Age-Adjusted Mortality Premature Death Stroke Mortality Diabetes Mortality Heart Disease Mortality Hypertension Mortality Suicide Mortality Unintentional Injuries Mortality Diabetes Prevalence Low Birthweight Poor Mental Health Days Frequent Mental Distress Poor Physical Health Days Frequent Physical Distress Poor or Fair Health Excessive Drinking Drug Induced Death Physical Inactivity Access to Exercise Opportunities Teen Birth Rate Primary Care Shortage Area Mental Health Care Shortage Area Medically Underserved Area Mental Health Providers Psychiatry Providers Specialty Care Providers



Primary Themes	Secondary Indicators
	Primary Care Providers
	Preventable Hospitalization
	COVID-19 Cumulative Full Vaccination Rate
	Homicide Rate
	Firearm Fatalities Rate
	Violent Crime Rate
	Juvenile Arrest Rate
	Some College
	High School Completion
	Disconnected Youth
	Unemployment
	Children in Single-Parent Households
	Social Associations
	Residential Segregation (Non-White/White)
	Income Inequality
	Homelessness Rate
	Households with no Vehicle Available
	Long Commute - Driving Alone
	Access to Public Transit

## System Navigation

Table 31: Primary themes and secondary indicators associated with PHN12

Primary Themes	Secondary Indicators
<ul style="list-style-type: none"> <li>• People may not be aware of the services they are eligible for</li> <li>• It is difficult for people to navigate multiple, different health care systems</li> <li>• The area needs more navigators to help to get people connected to services</li> <li>• People have trouble understanding their insurance benefits</li> <li>• Automated phone systems can be difficult for those who are unfamiliar with the healthcare system</li> <li>• Dealing with medical and insurance paperwork can be overwhelming</li> <li>• Medical terminology is confusing</li> <li>• Some people don't know where to start in order to access care or benefits</li> </ul>	

Next, values for the secondary health factor and health outcome indicators identified were compared to state benchmarks to determine if a secondary indicator performed poorly within the county. Some indicators were considered problematic if they exceeded the benchmark, others were considered problematic if they were below the benchmark, and the presence of certain other indicators within the

county, such as health professional shortage areas, indicated issues. Table 32 lists each secondary indicator and describes the comparison made to the benchmark to determine if it was problematic.

*Table 32: Benchmark comparisons to show indicator performance.*

<b>Indicator</b>	<b>Benchmark Comparison Indicating Poor Performance</b>
Infant Mortality	Higher
Child Mortality	Higher
Life Expectancy	Lower
Premature Age-Adjusted Mortality	Higher
Premature Death	Higher
Stroke Mortality	Higher
Chronic Lower Respiratory Disease Mortality	Higher
Diabetes Mortality	Higher
Heart Disease Mortality	Higher
Hypertension Mortality	Higher
Cancer Mortality	Higher
Liver Disease Mortality	Higher
Kidney Disease Mortality	Higher
Suicide Mortality	Higher
Unintentional Injuries Mortality	Higher
COVID-19 Mortality	Higher
COVID-19 Case Fatality	Higher
Alzheimer's Disease Mortality	Higher
Influenza and Pneumonia Mortality	Higher
Diabetes Prevalence	Higher
Low Birthweight	Higher
HIV Prevalence	Higher
Disability	Higher
Poor Mental Health Days	Higher
Frequent Mental Distress	Higher
Poor Physical Health Days	Higher
Frequent Physical Distress	Higher
Poor or Fair Health	Higher
Colorectal Cancer Prevalence	Higher
Breast Cancer Prevalence	Higher
Lung Cancer Prevalence	Higher
Prostate Cancer Prevalence	Higher
COVID-19 Cumulative Incidence	Higher
Asthma Emergency Department (ED) Rates	Higher
Asthma ED Rates for Children	Higher
Excessive Drinking	Higher
Drug Induced Death	Higher
Adult Obesity	Higher
Physical Inactivity	Higher
Limited Access to Healthy Foods	Higher
Food Environment Index	Lower
Access to Exercise Opportunities	Lower

<b>Indicator</b>	<b>Benchmark Comparison Indicating Poor Performance</b>
Chlamydia Incidence	Higher
Teen Birth Rate	Higher
Adult Smoking	Higher
Primary Care Shortage Area	Present
Dental Care Shortage Area	Present
Mental Health Care Shortage Area	Present
Medically Underserved Area	Present
Mammography Screening	Lower
Dentists	Lower
Mental Health Providers	Lower
Psychiatry Providers	Lower
Specialty Care Providers	Lower
Primary Care Providers	Lower
Preventable Hospitalization	Higher
COVID-19 Cumulative Full Vaccination Rate	Lower
Homicide Rate	Higher
Firearm Fatalities Rate	Higher
Violent Crime Rate	Higher
Juvenile Arrest Rate	Higher
Motor Vehicle Crash Death	Higher
Some College	Lower
High School Completion	Lower
Disconnected Youth	Higher
Third Grade Reading Level	Lower
Third Grade Math Level	Lower
Unemployment	Higher
Children in Single-Parent Households	Higher
Social Associations	Lower
Residential Segregation (Non-White/White)	Higher
Children Eligible for Free Lunch	Higher
Children in Poverty	Higher
Median Household Income	Lower
Uninsured Population under 64	Higher
Income Inequality	Higher
Severe Housing Problems	Higher
Severe Housing Cost Burden	Higher
Homeownership	Lower
Homelessness Rate	Higher
Households with no Vehicle Available	Higher
Long Commute - Driving Alone	Higher
Access to Public Transit	Lower
Pollution Burden Percent	Higher
Air Pollution - Particulate Matter	Higher
Drinking Water Violations	Present

Once these poorly performing quantitative indicators were identified, they were used to determine preliminary secondary significant health needs. This was done by calculating the percentage of all

secondary indicators associated with a given potential health need (PHN) that were identified as performing poorly within the HSA. While all PHNs represented actual health needs within the HSA to a greater or lesser extent, a PHN was considered a preliminary secondary health need if the percentage of poorly performing indicators exceeded one of a number of established thresholds: any poorly performing associated secondary indicators; or at least 10%, 20%, 30%, 40%, 50%, 60%, 70%, or 80% of the associated indicators were found to perform poorly. A similar set of standards was used to identify the preliminary interview and focus-group health needs: if at least 10%, 20%, 30%, 40%, 50%, 60%, 70%, or 80% of the respondents mentioned an associated theme.

These sets of criteria (any mention, 10%, 20%, 30%, 40%, 50%, 60%, 70%, or 80%) were used because it was not feasible to anticipate which specific standard would be most meaningful within the context of the HSA. Having multiple objective decision criteria allows the process to be more easily described while still allowing still for enough flexibility to respond to evolving conditions in the HSA. To this end, a final round of expert reviews was used to compare the set selection criteria to find the level at which the criteria converged towards a final set of SHNs.

For this report, a PHN was selected as a preliminary quantitative significant health need if 70% of the associated quantitative indicators were identified as performing poorly, as a preliminary qualitative significant health need if it was identified by 50% or more of the primary sources as performing poorly. Finally, a PHN was selected as a significant health need if it was included as a preliminary significant health need in either of these two categories.

### **Health Need Prioritization**

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

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

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

## Detailed List of Resources to Address Health Needs

Table 33: Resources available to meet health needs.

Organization Information			Significant Health Needs										Other Health Needs	
Name	ZIP Code	Website	Access to Basic Needs Such as Housing, Jobs, and Food	Access to Mental/Behavioral Health and Substance Use Services	Access to Specialty and Extended Care	Access to Quality Primary Care Health Services	Active Living and Healthy Eating	Access to Functional Needs	Injury and Disease Prevention and Management	Safe and Violence- Free Environment	Increased Community Connections	Access to Dental Care and Preventive Services	Healthy Physical Environment	System Navigation
24 Hour Abuse Hotline	Throughout Del Norte Cunty	<a href="http://www.co.del-norte.ca.us/reportabuse">www.co.del-norte.ca.us/reportabuse</a>								X				
Alcoholics Anonymous of Humboldt and Del Norte Counties	Humboldt and Del Norte Counties	<a href="http://aahumboltdelnorte.org">aahumboltdelnorte.org</a>	X							X				
Area 1- Area Agency on Aging	Humboldt and Del Norte Counties	<a href="http://www.a1aa.org">www.a1aa.org</a>												
Brookings Harbor Community Helpers, Inc. Food Bank	97415	<a href="http://www.brookingsharborfoodbank.org">www.brookingsharborfoodbank.org</a>	X				X				X			
Brookings Harbor Medical Center	97415	<a href="http://bhmc-oak.com">bhmc-oak.com</a>				X								
Brookings Presbyterian Church	97415	<a href="http://www.brookingspres.com">www.brookingspres.com</a>	X								X			
Brookings Seventh Day Adventist	97415	<a href="http://www.brookingsda.org">www.brookingsda.org</a>	X								X			
Cal-Ore Life Flight	97415	<a href="http://www.cal-ore.com">www.cal-ore.com</a>			X			X						
Chetco Activity Center	97415	<a href="http://chetcoac.org">chetcoac.org</a>	X				X		X		X			
City of Crecent City- Fred Ender Municipal Pool	95531	<a href="http://www.crescentcity.org/departments/SwimmingPool">www.crescentcity.org/departments/SwimmingPool</a>								X				

Organization Information			Significant Health Needs										Other Health Needs	
Name	ZIP Code	Website	Access to Basic Needs Such as Housing, Jobs, and Food	Access to Mental/Behavioral Health and	Access to Specialty and Extended Care	Access to Quality Primary Care Health Services	Active Living and Healthy Eating	Access to Functional Needs	Injury and Disease Prevention and Management	Safe and Violence- Free Environment	Increased Community Connections	Access to Dental Care and Preventive Services	Healthy Physical Environment	System Navigation
City of Crescent City	95531	www.crescentcity.org											X	
College of the Redwoods	95501	www.redwoods.edu		X		X								
Community Food Council for Del Norte and Tribal Lands	95531	www.dnatlfood.com								X	X			
County of Del Norte	95531	www.co.del-norte.ca.us	X	X		X								X
County of Del Norte Social Services Branch	95531	www.co.del- norte.ca.us/departments/SocialServices	X		X					X				
County of Del Norte Behavioral Health Branch- Mental Health and Substance Use	95531	www.co.del- norte.ca.us/departments/BehavioralHea lth		X					X					
County of Del Norte Child Welfare Services	95531	www.co.del- norte.ca.us/departments/SocialServices/ ChildWelfareServices								X				
COUNTY OF DEL NORTE- Coastal Connections	95531	www.co.del- norte.ca.us/departments/PublicHealth/ CoastalConnections	X						X					
County of Del Norte- Foster Care Services	95531	www.co.del- norte.ca.us/FosterCareServices												X
County of Del Norte Health and Human Services	95531	www.co.del- norte.ca.us/departments/HealthAndHu manServices	X	X										
County of Del Norte Public Health Branch	95531	www.co.del- norte.ca.us/departments/PublicHealth		X		X	X		X	X		X		

Organization Information			Significant Health Needs										Other Health Needs	
Name	ZIP Code	Website	Access to Basic Needs Such as Housing, Jobs, and Food	Access to Mental/Behavioral Health and	Access to Specialty and Extended Care	Access to Quality Primary Care Health Services	Active Living and Healthy Eating	Access to Functional Needs	Injury and Disease Prevention and Management	Safe and Violence- Free Environment	Increased Community Connections	Access to Dental Care and Preventive Services	Healthy Physical Environment	System Navigation
County of Del Norte Veterans Services	95531	www.co.del-norte.ca.us/departments/VeteransServices	x	x		x	x					x		x
Court Appointed Special Advocates (CASA) of Del Norte	95531	www.casadn.org								x				
Crescent City Housing Authority	95531	www.crescentcity.org/departments/HousingAuthority	x											
Curry Health Foundation	97444	curryhealthfoundation.com		x	x	x			x			x		x
Curry Health Network-Curry Medical Center	97415	www.curryhealthnetwork.com/CurryMedicalCenter?sub=Locations			x	x						x		x
Curry Public Transit Dial a Ride	97415	currypublictransit.org/dial-a-ride						x						
Del Norte CalFresh Healthy Living (also known as Champions for Change)	95531	delnortecalfresh.org					x				x			
Del Norte Childcare Council	95531	www.dnccc.com	x						x	x				
Del Norte County Library	95531	delnortecountylibrary.org							x		x			
Del Norte County Office of Education	95531	www.dnUSD.org/Domain/12	x							x	x			x
Del Norte Healthcare District	95531	www.co.del-norte.ca.us/local-resources/health-care-district	x								x			
Del Norte Mission Possible	95531	delnortemissionpossible.org	x							x				x
Del Norte Senior Center	95531	www.delnorteseniorcenter.org	x				x		x		x			

Organization Information			Significant Health Needs										Other Health Needs	
Name	ZIP Code	Website	Access to Basic Needs Such as Housing, Jobs, and Food	Access to Mental/Behavioral Health and	Access to Specialty and Extended Care	Access to Quality Primary Care Health Services	Active Living and Healthy Eating	Access to Functional Needs	Injury and Disease Prevention and Management	Safe and Violence- Free Environment	Increased Community Connections	Access to Dental Care and Preventive Services	Healthy Physical Environment	System Navigation
Del Norte Unified School District	95531	www.dnUSD.org		X			X							X
Del Norte WIC	95531	www.co.del-norte.ca.us/departments/PublicHealth/WIC									X			
Family Resource Center of the Redwoods	95531	www.frcredwoods.org	X				X		X		X			X
Family Resource Center of the Redwoods- Pacific Pantry	95531	www.dnatlfood.com/pacific-pantry.html	X							X			X	
First 5 Del Norte	95531	www.delnortekids.org	X	X	X	X	X	X	X	X		X	X	
Foursquare Church "Laundry Love"	95531	www.ccfoursquare.org								X	X			
Habitat for Humanity Del Norte	95531	www.habitat.org/us-ca/crescent-city/del-norte-hfh	X											
Health Insurance Counseling & Advocacy Program	95531	www.needymeds.org/local_programs taf?_function=detail&local_pid=2976		X	X	X						X		
Howonquet Early Learning Program	95567	www.tolowa-nsn.gov/163/Xaa-wan-kwvt-Howonquet-Early-Learning-Pr							X					
Humboldt State University	95521	www.humboldt.edu			X									
New Dawn Support Services	95531	www.newdawnsupportservices.net	X											
North Coast Rape Crisis Team	95531	www.ncrct.org								X				



Organization Information			Significant Health Needs										Other Health Needs	
Name	ZIP Code	Website	Access to Basic Needs Such as Housing, Jobs, and Food	Access to Mental/Behavioral Health and	Access to Specialty and Extended Care	Access to Quality Primary Care Health Services	Active Living and Healthy Eating	Access to Functional Needs	Injury and Disease Prevention and Management	Safe and Violence-Free Environment	Increased Community Connections	Access to Dental Care and Preventive Services	Healthy Physical Environment	System Navigation
Open Door Community Health Centers-Del Norte Community Health Center Dental/Health and Wellness Garden/Mobile Dental Van	95531	opendoorhealth.com/locations/del-norte-community-health-center		X	X	X						X		X
Our Daily Bread Ministries	95531	dailybreadcc.org	X				X							X
Oxford House Crescent City	95531	www.oxfordhouse.org/index	X							X	X			
Partnership HealthPlan of California	95531	www.partnershiphp.org/Pages/PHC.aspx	X	X	X	X	X	X	X	X		X		
Redwood Coast Regional Center	95531	redwoodcoastrc.org		X	X	X		X	X			X		
Resolution Care	95501	www.resolutioncare.com			X									
Rural Human Services	95531	ruralhumanservices.net	X				X		X	X				
Rural Human Services-Harrington House Shelter	95531	ruralhumanservices.net/Our-Services/Harrington-House							X	X				
Smith River Methodist Church	95567	www.umc.org/en/find-a-church/church/?id=77106	X	X							X			
St. Paul Crescent City	95531	stpaulscrescentcity.org	X							X				
St. Timothy's Episcopal Church	97415	www.sttimothyepiscopal.org	X											
Star of the Sea Catholic Church	97415	staroftheseastcharles.org	X								X			

Organization Information			Significant Health Needs										Other Health Needs	
Name	ZIP Code	Website	Access to Basic Needs Such as Housing, Jobs, and Food	Access to Mental/Behavioral Health and	Access to Specialty and Extended Care	Access to Quality Primary Care Health Services	Active Living and Healthy Eating	Access to Functional Needs	Injury and Disease Prevention and Management	Safe and Violence- Free Environment	Increased Community Connections	Access to Dental Care and Preventive Services	Healthy Physical Environment	System Navigation
Sutter Coast Community Clinic	95531	<a href="http://www.sutterhealth.org/find-location/facility/sutter-coast-community-clinic">www.sutterhealth.org/find-location/facility/sutter-coast-community-clinic</a>				X								
Sutter Coast Health Center at Brookings-Harbor	97415	<a href="http://www.sutterhealth.org/find-location/facility/sutter-coast-health-center-at-brookings-harbor">www.sutterhealth.org/find-location/facility/sutter-coast-health-center-at-brookings-harbor</a>			X	X								
Sutter Coast Home Health and Hospice Care	95531	<a href="http://www.sutterhealth.org/city/crescent-city/services/home-health-hospice">www.sutterhealth.org/city/crescent-city/services/home-health-hospice</a>			X									
Sutter Coast Hospital	95531	<a href="http://www.sutterhealth.org/coast">www.sutterhealth.org/coast</a>		X	X	X			X					X
Sutter Coast Walk-In Clinic	95531	<a href="http://www.sutterhealth.org/find-location/facility/sutter-coast-walk-in-clinic">www.sutterhealth.org/find-location/facility/sutter-coast-walk-in-clinic</a>				X						X		
The Pregnancy Care Center of Crescent City	95531	<a href="http://optionsforpregnancy.com/free-clinic/the-pregnancy-care-center-of-crescent-city">optionsforpregnancy.com/free-clinic/the-pregnancy-care-center-of-crescent-city</a>			X				X					
Tolowa Dee-ni' Nation	95567	<a href="http://www.tolowa-nsn.gov">www.tolowa-nsn.gov</a>	X	X	X	X		X	X	X		X		
Tolpwa Dee=Ni' Nation Community and Family Services	95567	<a href="http://www.tolowa-nsn.gov/158/NUU-DA-YE-DVN-COMMUNITY-FAMILY-SERVICES">www.tolowa-nsn.gov/158/NUU-DA-YE-DVN-COMMUNITY-FAMILY-SERVICES</a>		X						X				
Trinity Lutheran Church	97415	<a href="http://tlcbrookings.org">tlcbrookings.org</a>	X								X			
United Indian Health Services	Throughout Del Norte County	<a href="http://www.unitedindianhealthservices.org">www.unitedindianhealthservices.org</a>	X	X		X	X	X	X			X		
Wild Rivers Community Foundation	95531	<a href="http://www.wildriverscf.org">www.wildriverscf.org</a>	X	X		X	X		X					
Yurok Tribal programs	95548	<a href="http://www.yuroktribe.org">www.yuroktribe.org</a>	X	X	X		X		X	X		X		

## Limits and Information Gaps

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

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

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

## Appendix A: Impact of Actions Taken

### Access to quality primary healthcare services

<b>Name of program/activity/initiative</b>	Recruitment and Retention of Primary Care Providers
<b>Description</b>	Access to primary care services is directly tied to retention and recruitment. Frequently, the importance of retention is overlooked. Will utilize various data sources to discern and identify tactics which increase the likelihood of retaining primary care providers; e.g., increasing connection of the school district for providers with children; connecting new providers (and current) with the Chamber/Visitors Bureau to get more ingrained into the community; looking at social capital and the opportunities for spouses of providers to have enhanced opportunities in the local job market. Plan to review exit surveys of providers leaving the community to develop an appropriate retention plan.
<b>Goals</b>	For 2020 and 2021, the ratio of total population to primary care provider will be equal to the baseline.
<b>Anticipated Outcomes</b>	Retaining community providers will improve access to Primary Care Services. When a provider departs, there is a gap in coverage until the person is replaced. If turnover can be avoided, then the gap in coverage will be avoided and thereby, there will be greater access to primary care services.
<b>Metrics Used to Evaluate the program/activity/initiative</b>	The Hospital will evaluate success by tracking the ratio of Total Population to 1 Primary Care Provider.
<b>Impact</b>	Primary care recruitment and retention has been and remains a high priority. Sutter Coast has been effective in the recruitment of 2 primary care providers. The community has also experienced the retirement of a couple of primary care providers furthering the need for continued focus in this area.
<b>Community Benefit Contribution/Expense</b>	Recruitment Firms fees for finding and securing a provider is \$3,000 a month and \$30,000 placement fee.
<b>Program, Initiative, or Activity Refinement</b>	Recruitment of primary care providers is and will remain a high priority. The goal is to add two additional full-time primary care providers during the coming 24 months. While this section is entitled "retention", its intent is to enhance access to medical care.

### Access to mental/behavioral/substance abuse services

<b>Name of program/activity/initiative</b>	Suicide Risk Assessment
<b>Description</b>	Assessing patients that come to SCH to identify if they are actively at risk for suicide and connecting them to mental and behavioral health services
<b>Goals</b>	To identify and connect those individuals experiencing suicidal ideations with services to assist them in staying safe.

<b>Anticipated Outcomes</b>	Early and ongoing assessments to identify if a patient is at high risk for suicide will help prevent suicide as well as identify patients who are in need of additional services that can then be provided.
<b>Metrics Used to Evaluate the program/activity/initiative</b>	The Hospital will evaluate success with A) the implementation of a Suicide Risk Assessment policy and B) # of patients identified as high risk.
<b>Impact</b>	The implementation of a suicide risk assessment tool has allowed for earlier detection of patients who are in need of additional mental/behavioral health services. This early detection in turn leads to an avenue for the patient to be connect to available services in an effort to prevent serious harm.
<b>Community Benefit Contribution/Expense</b>	
<b>Program, Initiative, or Activity Refinement</b>	With the successful implementation of the suicide risk assessment a focus on the follow up services for these patients can be evaluated.

<b>Name of program/activity/initiative</b>	Access to Psychiatric Services
<b>Description</b>	In collaboration with other community agencies, revitalize the effort to recruit a psychiatrist to the SCH Service Area.
<b>Goals</b>	Improve access to psychiatric services locally by adding a full time equivalent psychiatric provider to the community.
<b>Anticipated Outcomes</b>	A collaborative effort among community leaders to successfully recruit a full-time psychiatrist to the SCH Service area. With success, some patients will experience local access to psychiatric services resulting in improved mental health outcomes. For physicians and mid-level providers to have a local resource to refer patients to and to have local access to physician colleague to coordinate patient mental health needs. For the community, to have an additional mental health professional to collaborate with relative to the local mental health delivery system (operations & design).
<b>Metrics Used to Evaluate the program/activity/initiative</b>	Increase access to psychiatric providers by 1 FTE to serve Del NorteCounty residents.
<b>Impact</b>	SCH has engages tele-psychiatry services routinely for patients experiencing mental/behavioral health ailments. Additionally, SCH and Del Norte County Mental Health Services work collaboratively to care for those patients who come into the emergency department. SCH engaged Stallant Health in discussions and recruitment efforts to bring a 1 FTE psychiatric provider to serve Del Norte County. While the provider has not yet been hired recruitment, efforts are underway.
<b>Community Benefit Contribution/Expense</b>	Recruitment fees for finding and securing a psychiatry provider is approximately \$3,000 a month and a \$30,000 placement fee. Additionally, providing access to the right level of care at the time the

	patient/community member needs it is a benefit to the community. SCH provided over \$20,000.00 a year in tele-psych services.
<b>Program, Initiative, or Activity Refinement</b>	With the successful partnership with Del Norte County Mental Health and the active engagement with tele-psychiatry visits focus is now on recruiting a psychiatry provider to work with Stallant Health.

Access to basic needs such as housing, jobs, and food

<b>Name of program/activity/initiative</b>	Safe Patient Discharge Planning
<b>Description</b>	Improving discharge planning to ensure individuals experiencing homelessness connect with necessary resources and shelter post discharge.
<b>Goals</b>	To connect individuals experiencing homelessness with the continuum of care to improve health outcomes.
<b>Anticipated Outcomes</b>	Decreased utilization of emergency services by the homeless population; increased utilization of wraparound support services.
<b>Metrics Used to Evaluate the program/activity/initiative</b>	# of referrals to community resources; readmission rates for individuals experiencing homelessness.
<b>Impact</b>	SCH implemented a process to refer patients experiencing homelessness to community resources additionally there has been a decrease in readmission rates for those individuals.
<b>Community Benefit Contribution/Expense</b>	SCH provided \$60,000.00 in support for patients experiencing homelessness and or having special care needs at discharge over the last three years.
<b>Program, Initiative, or Activity Refinement</b>	Homelessness continues to be a challenge for some members of our community. With the adoption of a clear process for referring patients to local services evaluation on ways to enhance the process and services available should be considered.

<b>Name of program/activity/initiative</b>	Humboldt State Collaboration
<b>Description</b>	RN to BSN bridge program in partnership with Humboldt State and University of the Redwoods.
<b>Goals</b>	Create greater opportunities for nurses to advance in their field and provide higher quality care.
<b>Anticipated Outcomes</b>	Increase the number of BSN nurses in the hospital service area.
<b>Metrics Used to Evaluate the program/activity/initiative</b>	# of participants in the program who obtain BSN.
<b>Impact</b>	Program has not yet started although it is anticipated to begin 2022.
<b>Community Benefit Contribution/Expense</b>	SCH donated \$200,000.00 to Humboldt State University to support the BSN program over the past 3 years.
<b>Program, Initiative, or Activity Refinement</b>	As the program begins in 2022 focus can shift to clinical rotation support and retention of BSN nurses in the community.

<b>Name of program/activity/initiative</b>	No Place Like Home
<b>Description</b>	Partnering with local government and other non-profit agencies to identify ways to support and expand services to individuals experiencing homelessness.
<b>Goals</b>	Create expanded services for individuals experiencing homelessness and reduce the number of individuals experiencing homelessness in our community.
<b>Anticipated Outcomes</b>	Implementation of new and expanded services for community members who experience homelessness will provide expanded access to basic needs such as shelter, food, water, and hygiene options.
<b>Metrics Used to Evaluate the program/activity/initiative</b>	Identify and participate in the implementation of 1 new service provided in the community for individuals experiencing homelessness.
<b>Impact</b>	In partnership with community agencies Del Norte Mission Possible was able to implement mobile shower services weekly to multiple locations in the community.
<b>Community Benefit Contribution/Expense</b>	
<b>Program, Initiative, or Activity Refinement</b>	Future project evaluation to be considered.

<b>Name of program/activity/initiative</b>	Food Banks
<b>Description</b>	Partner with local food banks to distribute healthy food options to low-income and underserved residents.
<b>Goals</b>	Our goal is to assist in providing food/meals to individuals in our community who do not have access to food.
<b>Anticipated Outcomes</b>	Provide access to basic needs such as food to underserved residents.
<b>Metrics Used to Evaluate the program/activity/initiative</b>	# of pounds of food donated as well as dollars contributed
<b>Impact</b>	Providing assistance to local food banks continues to be an area SCH contributes to.
<b>Community Benefit Contribution/Expense</b>	\$7,500.00 provided to local foodbanks over the last three years.
<b>Program, Initiative, or Activity Refinement</b>	SCH intends to continue this initiative.

Access to meeting functional needs (transportation and physical mobility)

<b>Name of program/activity/initiative</b>	Taxi Vouchers for Low-Income Patients
<b>Description</b>	Provide taxi vouchers for low-income, often Medi-Cal patients who are discharged from the hospital and do not have means to obtain transportation home or to a shelter.

<b>Goals</b>	Our goal is to provide individuals with access to safe and reliable transportation from the hospital.
<b>Anticipated Outcomes</b>	We anticipate there will be a decrease in emergency department readmissions for individuals who are able to be transported to a safe location after their hospital stay.
<b>Metrics Used to Evaluate the program/activity/initiative</b>	Number of taxi vouchers provided.
<b>Impact</b>	Patients who are discharged receive transportation to a safe location regardless of their ability to pay for the transportation.
<b>Community Benefit Contribution/Expense</b>	SCH has contributed \$ 25,000.00 in taxi vouchers and other means of uncompensated transportation.
<b>Program, Initiative, or Activity Refinement</b>	SCH intends to continue this initiative in providing transportation assistance post hospital discharge.

Access to specialty and extended care

<b>Name of program/activity/initiative</b>	Recruitment for Specialty Providers
<b>Description</b>	While retaining current physicians, continue to recruit into the following specialty disciplines: Ear, Nose and Throat; Orthopedics; and, Urology.
<b>Goals</b>	Improve access to specialty services locally and reduce the number of patients having to obtain services outside of the community by adding a full time equivalent specialty provider to the community.
<b>Anticipated Outcomes</b>	With increased access to Specialty Care, the number of preventable hospital stays should decline – with the assistance of specialist, patients are avoiding medical crisis which result in hospitalizations.
<b>Metrics Used to Evaluate the program/activity/initiative</b>	Increase local specialty provider FTE by 1 FTE.
<b>Impact</b>	SCH has been successful in recruiting specialists in the following areas Pain Management, ENT, Orthopedics and OB/GYN.
<b>Community Benefit Contribution/Expense</b>	Recruitment Firms fees for finding and securing a specialty provider is \$5,000 a month and \$40,000 placement fee.
<b>Program, Initiative, or Activity Refinement</b>	Recruitment of specialty providers who can provide expanded care and much needed services will continue as an initiative.