



2022 Community Health Needs Assessment

In collaboration with Healthy Marin Partnership



Conducted by Community Health Insights

Acknowledgments

We are deeply grateful to all those who contributed to the Community Health Needs Assessment conducted on behalf of the many partners of Marin County. Many dedicated community health experts and members of social service organizations serving the most vulnerable members of the community gave their time and expertise to help guide and inform the assessment. Community residents also volunteered their time to tell us what it is like to live in Marin County, and shared the challenges they face trying to achieve better health. We appreciate the collaborative spirit of Kaiser Permanente (and Harder+Company) and their willingness to share the data they gathered while conducting a similar health assessment in the Marin County area. To everyone who supported this important work, we extend our heartfelt gratitude.

Thank you to the CHNA collaborating partners:

Kaiser Permanente San Rafael Medical Center

Marin Community Foundation

Marin County Department of Health and Human Services

Healthy Marin Partnership

Sutter Health Novato Community Hospital

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Executive Summary

MarinHealth Medical Center, formerly known as Marin General Hospital, is an independent, nonprofit organization that has been meeting the community's healthcare needs since 1952.

MarinHealth Medical Center has committed to identifying and closing health equity gaps in high-need communities. In 2022, MarinHealth Medical Center conducted a Community Health Needs Assessment (CHNA) in accordance with requirements in the Affordable Care Act and IRS 990 Schedule H.

The CHNA is one tool in this effort as it identifies unmet health needs in the service area, provides information to select priorities and geographical areas for action, and serves as the basis for a three-year Implementation Strategy/Community Benefit Plan.

Collaborative Process

This CHNA was conducted on behalf of MarinHealth Medical Center and Sutter Health Novato Community Hospital, in collaboration with Healthy Marin Partnership.

Community Definition

MarinHealth Medical Center is located at 250 Bon Air Road, Greenbrae, CA 94904. The service area comprises all of Marin County. Marin County covers 520 square miles, much of which is preserved as parks, tidelands, and agricultural areas. The county seat is San Rafael, one of the largest cities in the county. Despite having the 6th largest income per capita in the U.S., Marin County is home to economically vulnerable populations in Novato, Marin City, West Marin, and some areas of San Rafael.

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.* Primary (qualitative) data included one-on-one and group interviews with 32 community health experts, social service providers, and medical personnel. Four community residents or community service provider organizations participated in one focus group for Marin County. Additionally, 25 community service providers responded to a Service Provider survey asking about health need identification and prioritization.

The social determinants of health were used to identify and organize secondary (quantitative) data. Datasets included measures to describe mortality and morbidity and 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. Various indicators were also examined by race and ethnicity at the subcounty level to clarify the health and social inequities in the county.

* Robert Wood Johnson Foundation, and University of Wisconsin, 2021. County Health Rankings Model. Retrieved 31 Jan 2022 from <http://www.countyhealthrankings.org/>

Executive Summary

At the time this CHNA was conducted, the COVID-19 pandemic was impacting communities, including Marin County. The process for conducting the CHNA remained fundamentally the same. However, there were some adjustments made during the qualitative data collection to ensure the health and safety of those participating. Additionally, COVID-19 data were incorporated into the quantitative data analysis and COVID-19 impact was captured during qualitative data collection. These findings are included in the report.

Process and Criteria to Identify and Prioritize Significant Health Needs

Primary and secondary data were analyzed to identify significant health needs. These needs were derived from a list of common health needs in previously conducted CHNAs throughout Northern California. Data were analyzed to discover which, if any, of the needs were present in Marin County and were selected as significant health needs. These significant health needs were prioritized based on rankings provided by primary data sources.

List of Prioritized Significant Health Needs

The significant health needs for Marin County are listed below in priority order:

- 1 Access to basic needs (housing, jobs, food)
- 2 Access to behavioral health, mental/substance use services
- 3 Access to quality primary care health services
- 4 Increased community connections
- 5 Access to functional needs¹

Conclusion

This collaborative CHNA details the process and findings of a comprehensive health assessment to guide decision-making for the implementation of community health improvement efforts. The CHNA includes an examination of health and social indicators in Marin County and highlights the needs of community members who experience increased health disparities. This report is a resource for community organizations to use in their efforts to improve health and well-being in the communities they serve.

¹ Functional needs refers to an individual's access to adequate transportation and conditions which promote access for individuals with physical disabilities.

Introduction and Purpose



Introduction

MarinHealth Medical Center remains committed to providing access to high-quality, equitable healthcare for the entire population, including the underserved. The organization provides an integrated healthcare delivery system with clinical programs that range from primary care for preventing, diagnosing, and treating common conditions to specialized treatment for complex and advanced illnesses.

Through community partnerships, we're able to expand access to care by providing programs that help community members manage chronic conditions such as diabetes and hypertension, and provide access to dental and behavioral health care. This is in addition to providing critical connections to housing service providers to help those in need maintain their health and wellness.

Purpose

The Community Health Needs Assessment (CHNA) represents the first step in our commitment to improving health outcomes in our community through rigorous assessment of health status, incorporation of stakeholder's perspectives, and adoption of related implementation strategies to address priority health needs.

The CHNA is conducted not only to partner for improved health outcomes but also to satisfy our annual community benefit obligation by meeting requirements that are outlined in section 501(r)(3) of the Federal IRS Code, California Senate Bill 697, enacted in 1994, and the Affordable Care Act of 2010.

The goals of this Assessment are to:

- Engage public health and community stakeholders to identify low-income, minority, and other at-risk populations.
- Assess and understand the community's health issues and needs.
- Identify community resources and collaborate with community partners.
- Use findings to develop and implement a Hospital Implementation Strategy, a document that details how the health needs will be addressed in coming years.

About Healthy Marin Partnership

MarinHealth Medical Center participated in a collaborative process for the CHNA as a member of the Healthy Marin Partnership (HMP). HMP is a collaborative of local agencies, organizations and individuals that are dedicated to improving the health and well being of all Marin residents. HMP recognizes the importance of taking a comprehensive view toward understanding community health needs, and acknowledges the critical advantage of working collaboratively to address these needs and advance health equity. This shared approach avoids duplication and focuses available resources on a community's most important health needs. HMP is a convener of local communities, organizations, agencies, and policymakers to explore strategies that can enable everyone in Marin to live a healthier life.

MarinHealth Medical Center

MarinHealth Medical Center, formerly known as Marin General Hospital, is an independent, not-for-profit organization that has been meeting the community's healthcare needs since 1952.

Owned by the Marin Healthcare District, the hospital is the only full-service, acute care hospital in the county. The publicly-elected Marin Healthcare District Board of Directors work closely with the MarinHealth Medical Center Board of Directors to oversee operations of the hospital.

MarinHealth Medical Center operates the county's only designated trauma center, hospital labor and delivery services, and heart surgery programs. In keeping with the values and needs of its community, MarinHealth Medical Center is dedicated to treating the whole patient—mind, body and spirit. Its mission is to provide exceptional healthcare services in a compassionate and healing environment.

MarinHealth Medical Center offers advanced medical expertise, technology, and treatments in a healing environment, and offers patients the opportunity to complement their medical treatment with integrative therapies in both the hospital and outpatient setting through its Integrative Wellness Center. The MarinHealth enterprise includes the main inpatient hospital, outpatient departments, imaging centers, and MarinHealth Medical Network clinics throughout the North Bay.

Service Area

MarinHealth Medical Center is located at 250 Bon Air Road, Greenbrae, CA 94904. The service area comprises all of Marin County, which consists of 30 ZIP codes and includes the cities of Belvedere, Corte Madera, Fairfax, Larkspur, Mill Valley, Novato, Ross, San Anselmo, San Rafael, Sausalito, Tiburon, and the coastal towns of Stinson Beach, Bolinas, Point Reyes, Inverness, Marshall, and Tomales.

Marin County covers 520 square miles, much of which is preserved as parks, tidelands, and agricultural areas. Among them are the Point Reyes National Seashore, Mount Tamalpais State Park and Game Refuge and Samuel P. Taylor State Park. A large portion of the population lives along the Highway 101 corridor, dividing the county into a more urban environment in the eastern part of the county, and more rural environment along the coast and the western side of the county. The county is home to San Quentin State Prison, a maximum-security prison, located in the eastern portion of the county. Marin County has the 6th largest income per capita of all counties in the U.S., yet areas of the county have large proportions of economically vulnerable populations, which include Novato, Marin City, the communities of West Marin, and portions of San Rafael, to name a few.

Map of the MarinHealth Medical Center Service Area



CHNA Collaborators

This CHNA was conducted on behalf of MarinHealth Medical Center and Sutter Health Novato Community Hospital, in collaboration with Healthy Marin Partnership. The CHNA sub-committee is comprised of representatives from MarinHealth Medical Center, Sutter Health Novato Community Hospital, Marin County Health and Human Services, Marin Community Foundation, and Kaiser Permanente.

Project Oversight

The MarinHealth Medical Center CHNA process was overseen by:

Leigh Burns, RDN CDCES

Manager, QIP Programs and Complex Care

Tori Murray, RDN

Director, Strategic Initiatives

Consultants

Community Health Insights (www.communityhealthinsights.com) conducted the CHNA. 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. This report was authored by:

- Heather Diaz, DrPH, MPH, Managing Partner of Community Health Insights and Professor of Public Health at California State University, Sacramento
- Matthew Schmidlein, PhD, MS, Managing Partner of Community Health Insights and Professor of Geography at California State University, Sacramento
- Dale Ainsworth, PhD, MSOD, Managing Partner of Community Health Insights and Associate Professor of Public Health at California State University, Sacramento
- Traci Van, Senior Community Impact Specialist of Community Health Insights

CHNA Approval

This CHNA report was adopted by the MarinHealth Board of Directors on October 3, 2022.

Data Collection Methodology



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.² This model of population health includes many factors that impact and account for individual health and well-being. To guide the overall process of conducting the assessment, a defined set of data collection and analytic stages were developed. Detailed information about the conceptual and process models framing the data collection can be found in Appendix A.

Data Used in the CHNA

Data collected and analyzed for the CHNA included primary or qualitative data and secondary or quantitative data.

Primary Data Collection

Input from the community served by Marin County was collected through two main mechanisms. First, 12 small group interviews with 32 community health experts were conducted from September 22, 2021 to March 24, 2022. Participants included community health experts and area service providers (e.g., members of social service nonprofit organizations and related health care organizations). These interviews occurred in one-on-one and in group settings.

Second, a focus group was conducted on March 28, 2022 with four community residents. The focus group was conducted with service providers working in the geographic area of Marin County identified as locations or populations experiencing a disparate amount of poor socioeconomic conditions and poor health outcomes. Recruitment came from referrals from service providers representing vulnerable populations, as well as direct outreach to special population groups.

All participants were given an informed consent form prior to their participation, which provided information about the project, asked for permission to record the interview, and listed the potential benefits and risks for involvement. Data were collected through note taking and, in some instances, recording. A listing of all participants can be found in Appendix B.

Additionally, a web-based survey was administered to community service providers who delivered health and social services to community residents of Marin County. A list of community service providers affiliated with the nonprofit hospitals included in this report was used as an initial sampling frame. An email recruitment message was sent to these community service providers detailing the survey aims and inviting them to participate. Participants were also encouraged to forward the recruitment message to other community service providers in their networks. The survey was designed using Qualtrics, an online survey platform, and was available for approximately two weeks. 25 respondents completed the survey. When the survey period was over, incomplete, and duplicate responses were removed from the dataset and the survey responses were double-checked for accuracy. Descriptive statistics and frequencies were used to summarize the health needs. This information was used along with other data sources to identify and rank significant health needs in the community, and to describe how the health needs are expressed.

Primary data responses collected from the community stakeholders can be found in Appendix C.

² Robert Wood Johnson Foundation, and University of Wisconsin, 2021. County Health Rankings Model. Retrieved 31 Jan 2022 from <http://www.countyhealthrankings.org/>.

Secondary Data Collection

Secondary data collected and analyzed for the CHNA included multiple datasets. A combination of mortality and socioeconomic datasets collected at subcounty levels was used to identify portions of Marin County with greater concentrations of disadvantaged populations and poor health outcomes. A set of county-level indicators was collected from various sources to help identify and prioritize significant health needs. Additionally, socioeconomic indicators were collected to help describe the overall social conditions in Marin County. Health outcome indicators included measures of mortality (length of life) and morbidity (quality of life). Health factor indicators included measures of: 1) health behaviors, such as diet, 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.

Public Comments

Regulations require nonprofit hospitals to include written comments from the public on their previously conducted CHNAs and most recently adopted Implementation Strategies. MarinHealth Medical Center requested written comments from the public on its 2019 CHNA and most recently adopted Implementation Strategy through the hospital website at <https://www.mymarinhealth.org/about-us/community-benefit/>. At the time of the development of this CHNA report, MarinHealth Medical Center had received no written comments.

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 and are only available at the county level. County level data may mask what is occurring at the local level in Marin County and should be interpreted with caution. 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 who best represent the populations needed for this assessment was a challenge. The COVID-19 pandemic made it more difficult to recruit community members for focus groups. Finally, though this CHNA was conducted with an equity focus, data that point to differences among population subgroups, which are focused more “upstream,” 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 population groups that result in later-in-life disparities can help direct community health improvement efforts for maximum impact.

Prioritized Significant Health Needs



Primary and secondary data were analyzed to identify potential health needs. These needs were derived from a list of common health needs in previously conducted CHNAs throughout Northern California. These needs were supplemented with data derived from a preliminary analysis of the primary data collected from interviews. The potential health needs identified include:

- Access to dental care
- Access to health care
- Access to specialty services
- Basic needs (housing, food, employment, etc.)
- Chronic conditions
- Community connections (support networks and resources)
- Environmental conditions (pollution and built environment)
- Functional needs (transportation, access for persons with physical disabilities)
- Healthy eating and active living
- Injury prevention
- Mental health and substance use
- Safety and violence prevention
- System navigation (social service and health care systems)

Primary themes and secondary indicators associated with each of these health needs were identified. Values for the identified secondary health-factor and health-outcome indicators were compared to state benchmarks to determine if an 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, also indicated health outcome issues. These data were analyzed to discover which, if any, of the needs were present in Marin County and, using a calculation, were selected as significant health needs. The significant health needs included:

- Access to basic needs (housing, jobs, food)
- Access to behavioral health, mental/substance use services
- Access to functional needs
- Access to quality primary care health services
- Increased community connections

Appendix D details the methodology for selecting the significant health needs, including a description of each of the potential health needs.

Health Needs Prioritization

The final step in the data analysis was to prioritize significant health needs. To reflect the voice of the community, prioritization was based solely on primary data. Key informants and focus-group participants were asked to identify the three most significant needs in their communities.

Prioritization was based on three measures of community input. The first two measures came from the results of the key informant interviews and focus group. 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. The third measure was the percentage of Service Provider survey respondents who identified a health need as a top priority.

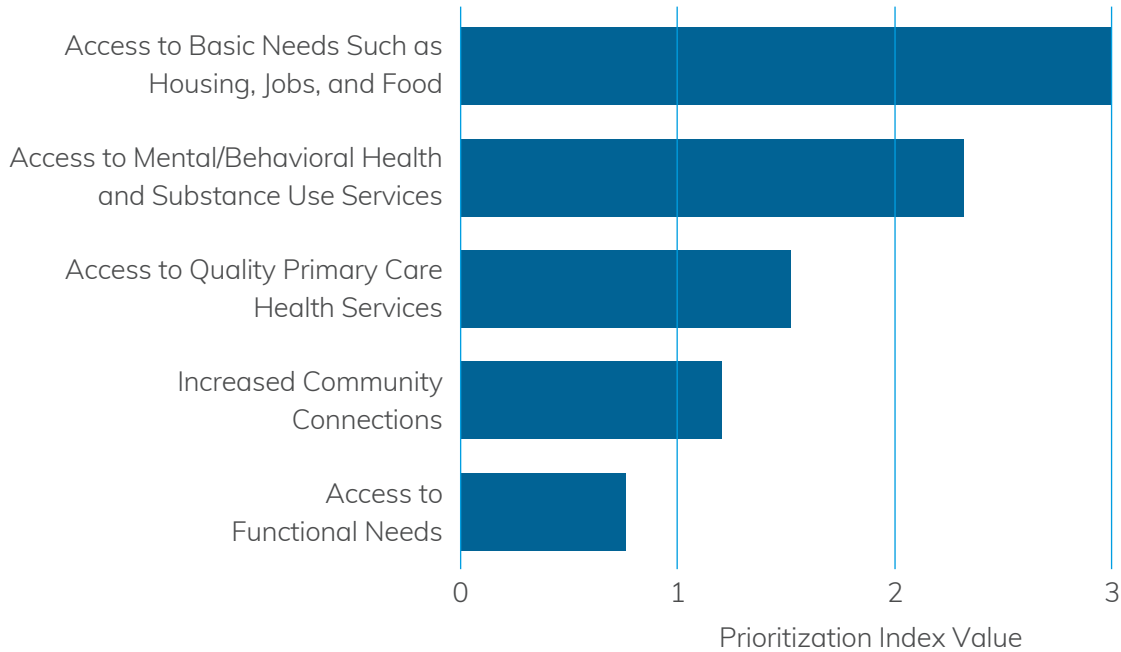
These measures were then combined to create a health need prioritization index. The highest priority was given to health needs that were more frequently mentioned and were more frequently identified among the top priority needs. The significant health needs for Marin County are listed below in priority order.

Prioritized Significant Health Needs

- 1 Access to basic needs (housing, jobs, food)
- 2 Access to behavioral health, mental/substance use services
- 3 Access to quality primary care health services
- 4 Increased community connections
- 5 Access to functional needs

These health needs are not mutually exclusive, and many characteristics of the health needs are drivers of or outcomes of other needs. Also, though other health needs exist in the Marin County area, these five prioritized needs are those where primary data clearly supports their selection as a priority. 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.

FIGURE 1: Prioritized Significant Health Needs for Marin County.



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

Resources Potentially Available to Meet the Significant Health Needs

Marin County resources potentially available to meet the significant health needs were identified. The identification method started with the list of resources from the 2019 CHNA, verifying the resources still existed, and then adding newly identified resources. This resource list is not intended to be inclusive of all the resources available. See Appendix E.

Review of Progress

In 2019, MarinHealth Medical Center conducted the previous CHNA. Significant needs were identified from issues supported by primary and secondary data sources gathered for the CHNA. The hospital's Implementation Strategy associated with the 2019 CHNA addressed: access to health care, healthy eating and active living, housing and homelessness, mental health and substance use, and violence and injury prevention through a commitment of community benefit programs and resources. The impact of the actions MarinHealth used to address these significant needs can be found in Appendix F.

Community Demographics



The total population of Marin County in 2019 was 259,943³. Population characteristics for each of the 30 ZIP Codes in Marin County are presented in Table 1. 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 highlighted.

Table 1: Population characteristics for each ZIP Code located in Marin County.






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
94901	41,713	46.2	39.2	\$90,440	14.3	3.4	7.3	17.7	42	7.5
94903	30,427	31.3	47.1	\$105,783	6.6	5.1	4.6	6	40.7	11.4
94904	12,994	22.2	47.7	\$139,500	6.8	2.9	1.4	3.1	35.9	9.4
94920	12,740	16.4	51.1	\$165,807	3.1	4.3	1.9	0.8	35.3	9.2
94924	1,127	14.4	62.2	\$68,250	18.7	3.2	2.4	0.7	40.5	9.7
94925	9,838	21.5	46.5	\$149,439	3.5	5.5	1.2	0.6	37.9	8.7
94929	254	17.7	38.9	\$119,706	0	9.4	5.1	0	54.2	10.2
94930	8,728	16.9	48.2	\$105,219	4.9	3.1	2.7	3.9	39	9.8
94933	837	43.8	40.8	\$91,384	27.2	0	5.7	9.6	28.9	7.9
94937	742	14.6	61.8	\$87,273	6.9	4.5	13.6	12.6	41.6	5.7
94938	920	4.5	40.8	\$126,429	7.3	6	1.1	0	52.1	12.4
94939	6,747	12.5	48.9	\$119,158	5.9	3.3	3.6	1.5	39.1	7
94940	287	28.9	63.2	\$107,625	2.8	0	0	0	41.6	9.8
94941	32,009	17.3	47.7	\$152,125	4.6	2.8	0.9	1.7	33.5	8.7
94945	19,043	32.8	47.3	\$120,020	8.8	3.6	4.7	9.6	36.7	9.3
94946	658	16.9	57.8	\$140,625	4.9	1.8	0.5	6.5	31.5	6.2
94947	25,867	32.1	48.1	\$110,274	5.4	2.8	2.8	6.4	39.4	10
94949	18,695	39.2	46.6	\$93,580	5.6	5.1	4.5	4.9	44.7	9.1
94950	123	13.8	48.4	~	13.8	0	0	0	25.5	20.3
94952	35,503	26.2	43.5	\$88,848	7.1	4.1	4.4	8.7	36.6	9.5
94956	1,146	8.8	56.4	\$74,926	9	1.5	1.6	5.3	43.4	10.6
94957	1,219	12.2	49.1	\$250,001	7.4	5.1	1.1	8.6	23	8.6
94960	15,868	13.8	47.5	\$133,381	3.1	4.5	1.4	3	38.6	7.8
94963	404	4	40.3	\$118,272	9.9	0	2.5	7.2	48.1	10.9

³ Source: U.S. Census Bureau, American Community Survey, 2015-2019. The 2019 census data were used for all rate calculations in this assessment.

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
94964	3,155	79.1	35	~	0	0	0	35.9	77.1	29.2
94965	11,394	27.9	51.5	\$105,391	8.8	2.9	2.3	2.7	40.7	10.9
94970	698	9.6	60.2	\$121,071	5.6	1.8	4	1	34.2	0.9
94971	226	12.8	62.3	~	3.1	0	0	0	37.9	3.1
94972	25	0	~	~	0		0	52	0	0
94973	1,228	4.6	64.1	\$56,379	8.3	5.6	2.9	5.3	40.8	13
Marin	259,943	28.8	46.8	\$115,246	7.2	3.7	3.5	6.7	38.9	9.1
California	39,283,497	62.8	36.5	\$75,235	13.4	6.1	7.5	16.7	40.6	10.6

³ Source: U.S. Census Bureau, American Community Survey 2015-2019; ~ Data not available.

Table 2: Race and ethnicity profile for Marin County.

Race or Ethnic Group	Percent
White	71.2% 
Hispanic or Latinx	16% 
Asian	5.8% 
Two or more races	3.8% 
Black or African American	2.1% 
Some other race	0.9%
American Indian and Alaska Native	0.2%
Native Hawaiian and Other Pacific Islander	0.1%

Source: U.S. Census Bureau, American Community Survey, 2015-2019.

Health Equity



The Robert Wood Johnson Foundation’s definition of health equity and social justice is used to 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.”⁴

Inequities experienced early and throughout one’s life, such as limited access to a quality education, have health consequences later in life that result in 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.”⁵

Health inequities are most apparent when comparing racial and ethnic groups to one another. Using these comparisons between racial and ethnic populations, it’s clear that health inequities persist across communities in Marin County.

Health Outcomes - The Result of Inequity

The table below displays disparities among race and ethnic groups for Marin County for life expectancy, mortality, and low birthweight. The Black population in Marin County has the lowest life expectancy, highest premature age-adjusted mortality, highest premature death, and highest percent of babies born low birth weight, compared to any other racial/ethnic group. The Black population in Marin County has a premature age-adjusted death rate and premature deaths (YPLL) more than twice that of all other groups.

Table 3: Health outcomes comparing race and ethnicity in Marin County.

Health Outcomes	Description	Asian	Black	Hispanic	White	Overall
Life Expectancy	Average number of years a person can expect to live.	90.3	78.4	88.1	85.4	85.4
Child Mortality	Number of deaths among children under age 18 per 100,000 population.	~	~	18.6	13.6	15.3
Premature Age-Adjusted Mortality	Number of deaths among residents under age 75 per 100,000 population (age-adjusted).	111.8	389.4	136.4	162.9	166.8
Premature Death	Years of potential life lost before age 75 per 100,000 population (age-adjusted).	2,042.4	7,437.7	3,125.8	3,105	3,239
Low Birthweight	Percentage of live births with low birthweight (< 2,500 grams).	7.6%	10.6%	6.1%	5.4%	5.9%

⁴ Robert Wood Johnson Foundation. 2017. What is Health Equity? And What Difference Does a Definition Make?. Health Equity Issue Brief #1. Retrieved 31 Jan 2022 from https://buildhealthyplaces.org/content/uploads/2017/05/health_equity_brief_041217.pdf.

⁵ 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.

~ Data Not Available. Data were not available for any of the listed health outcomes for American Indian/Alaska Native. Data sources are listed in

Health Factors - Inequities in Marin County

Inequalities can be seen in data that help describe health factors in Marin County, such as education attainment and income. These health factors are displayed in the table below and are compared across race and ethnic groups. Additionally, data for school suspensions by race/ethnicity and the student/teacher diversity gap are provided. Health factor data showed the Hispanic population having lower high school completion rates, lower college rates, lower third grade reading and math levels, a higher percentage of the population living in poverty and the highest uninsured population in comparison to all other race and ethnic groups. Data on median income revealed the lowest median income was among the Black population in Marin County despite higher levels of educational attainment and some college than Hispanic/Latino.

Table 4: Health factors comparing race and ethnicity in Marin County.

Health Factors	Description	American Indian\ Alaska Native	Asian	Black	Hispanic	White	Overall
Some College ^a	Percentage of adults, ages 25 and older, with some post-secondary education.	53.1%	82.6%	64.1%	46.3%	89.4%	82.8%
High School Completion ^a	Percentage of adults, ages 25 and older, with at least a high school diploma or equivalent.	77.7%	92.8%	84%	67%	97.8%	93.3%
Third Grade Reading Level	Average grade level performance for 3rd graders on English Language Arts standardized tests.	~	3.5	~	2.5	3.7	3.3
Third Grade Math Level	Average grade level performance for 3rd graders on math standardized tests.	~	3.5	~	2.3	3.5	3.2
Children in Poverty	Percentage of people, under age 18, living in poverty.	~	12.6%	8.9%	22.3%	2.4%	7.2%
Median Household Income	The income where half of households in a county earn more and half of households earn less.	~	\$107,849	\$48,602	\$67,125	\$126,501	\$112,069
Uninsured Population ^b	Percentage of the civilian non-institutionalized population without health insurance.	12.6%	2.8%	6.8%	12.4%	1.6%	3.5%

⁴ ~ Data Not Available. Unless otherwise noted, data sources are listed in Data Sources chapter.

^a From U.S. Census Bureau, American Community Survey, 2015-2019, tables B15002, C15002B, C15002C, C15002D, C15002H, and C15002I.

^b From U.S. Census Bureau, American Community Survey, 2015-2019, table S2701.

Further examination of health and social equity data includes the indicators of suspension rates by race/ethnicity and the Marin County teacher/student diversity gap. Data in Table 5 reveal that Black/African American student suspension rates in Marin County schools are twice that of any other group. Further the diversity gap, shown in Table 6, between teachers of color to that of students of color in Marin County schools is 32%.

Table 5: Suspension rate by race/ethnicity for Marin County schools

Race/Ethnic Group	2018 - 2019
American Indian or Alaska Native	0.8
Asian	1.1
Black or African American	10.4
Filipino	1.8
Hispanic or Latino	3.7
Native Hawaiian or Pacific Islander	4.5
None Reported	1.9
Two or More Races	2
White	1.8

Source: EdData: Education Data Partnership. Marin County. Retrieved from <http://www.ed-data.org/ShareData/Html/51187> on 26 March 2022.

Table 6: Marin County teacher/student diversity gap.

Credentialed Teachers of Color	All Students of Color	Gap
11%	43%	32%

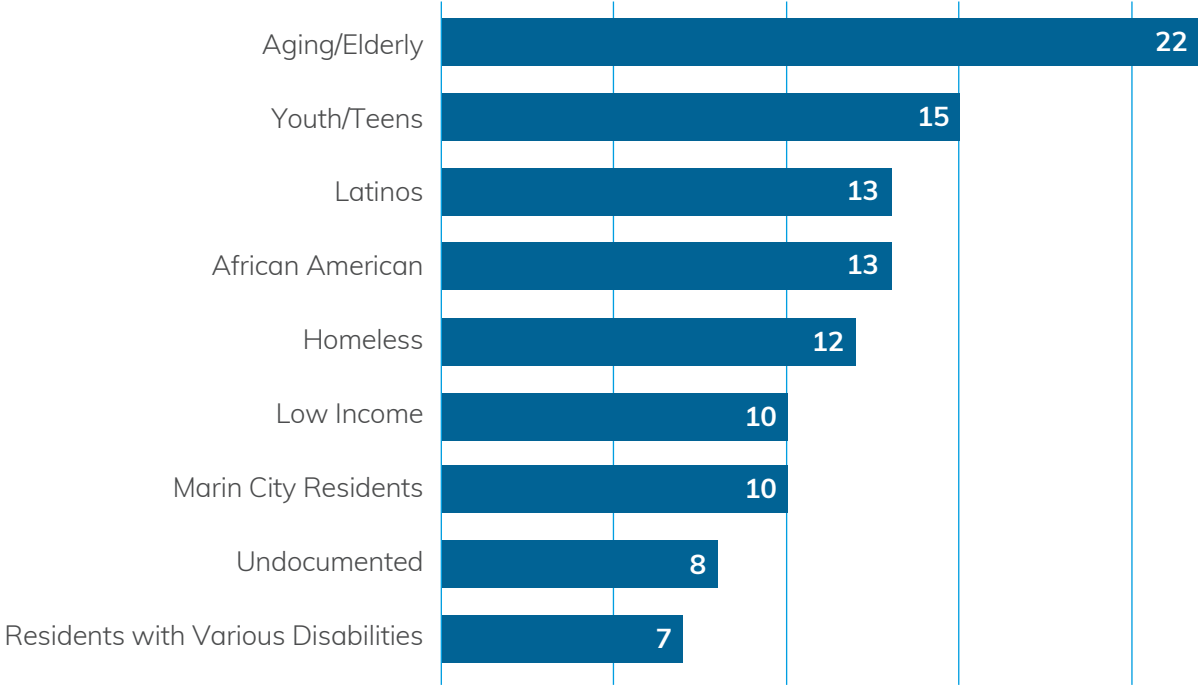
Source: Marin Promise Partnership. 2021. Students and Educators of Color in Marin County. Retrieved from <https://www.marinpromisepartnership.org/students-educators-of-color/> on 25 May 2022

Population Groups Experiencing Disparities

The figure below describes population groups in Marin County identified through qualitative data analysis who 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 key informants and focus-group participants mentioned a particular group as one experiencing disparities. Figure 2 displays the results of this analysis where participants mentioned a population more than five times. The groups are not mutually exclusive as one group could be a subset of another group.

FIGURE 2: Populations experiencing disparities in Marin County.

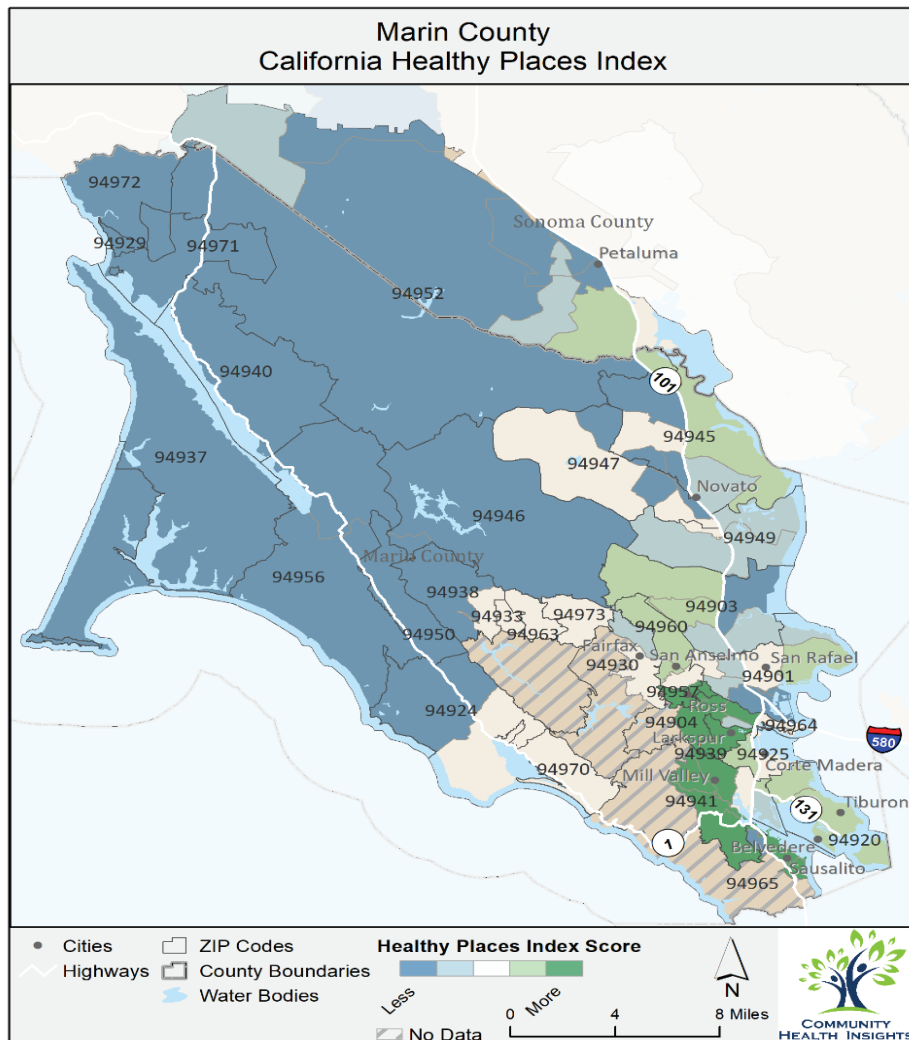
Frequency of Mentions in Interviews



California Healthy Places Index

The California Healthy Places Index (HPI)⁶ is an index based on 25 health-related measures for communities across California. The measures included in the HPI were selected based on their known relationship to life expectancy and other health outcomes. 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 within communities. Areas with the darkest blue shading have the lowest overall HPI scores, indicating factors leading to less healthy neighborhoods. These areas are in the western portions of Marin County, areas of San Rafael, the area of Marin City, and Novato. Areas with green shading have healthier communities.

FIGURE 3: Healthy Places Index for Marin.



⁶ Public Health Alliance of Southern California. 2021. The California Health Places Index (HPI): About. Retrieved 26 July 2021 from <https://healthyplacesindex.org/about/>.

Communities of Concern

Communities of Concern are geographic areas within Marin County that have the greatest concentration of poor health outcomes and are home to more medically underserved, low-income, and diverse populations at greater risk for poorer health. Communities of Concern focus on those portions of the region likely experiencing the greatest health disparities. Communities of Concern were identified using primary and secondary data sources. Analysis of primary and secondary data revealed 12 ZIP Codes that met the criteria to be classified as Communities of Concern. These are noted in Table 7, with the census population provided for each, and are displayed in Figure 5.

Table 7: Identified Communities of Concern for Marin County.

ZIP Code	Community\Area	Population
94901	San Rafael - Canal District	41,713
94903	San Rafael	30,427
94945	Novato	19,043
94947	Novato	25,867
94965	Marin City	11,394
94924	West Marin - Bolinas, Five Brooks, Woodville	1,127
94929	West Marin - Dillon Beach	254
94937	West Marin - Inverness, Seahaven	742
94940	West Marin - Marshall	287
94971	West Marin - Valley Ford; Tomales Bay	226
94950	West Marin - Point Reyes Station	123
94956	West Marin - Point Reyes Station, Inverness	1,146
Total Population in Communities of Concern		132,349
Total Population in Marin County Service Area		294,615
Percentage of Marin County Service Area Population in Communities of Concern		44.9%

Source: U.S. Census Bureau, American Community Survey, 2015-2019.

Figure 4 displays the Communities of Concern for Marin County, which are the ZIP Codes highlighted in pink.

FIGURE 4: Marin Communities of Concern.



COVID-19

The image features a solid blue background. In the lower portion, there are abstract, overlapping wavy shapes in shades of dark green and light green, transitioning into a white area at the very bottom. The text 'COVID-19' is centered in the upper half of the image.

COVID-19 related health indicators for Marin County are noted in Table 8. COVID-19 data related to mortality, cumulative incidence, and vaccination rates at the county aggregate level show Marin County fares well in comparison to state rates. Marin County has lower COVID-19 death rates, a lower fatality rate, lower cumulative incidence rate, and a higher full vaccination rate than the state of California.

Table 8: COVID-19-related rates for Marin County.

Indicators	Description	Marin	California	County to State Comparison
COVID-19 Mortality	Number of deaths due to COVID-19, per 100,000 population.	110.8	225.4	Marin: 110.8 California: 225.4
COVID-19 Case Fatality	Percentage of COVID-19 deaths per laboratory-confirmed COVID-19 cases.	0.9%	1.0%	Marin: 0.9% California: 1%
COVID-19 Cumulative Incidence	Number of laboratory-confirmed COVID-19 cases, per 100,000 population.	12,944.4	21,672.6	Marin: 12,994.4 California: 21,672.6
COVID-19 Cumulative Full Vaccination Rate	Number of completed COVID-19 vaccinations, per 100,000 population.	86,515.5	70,702.4	Marin: 86,515.5 California: 70,702.4

COVID-19 data collected on 11 April 2022

Table 9 shows how COVID-19 cases, deaths, and hospitalizations varied in Marin County between groups defined by race/ethnicity, age, and sex. COVID-19 cumulative incidence, deaths and hospitalizations by race and ethnicity, age, and sex show inequities. Specifically, the Hispanic/Latinx population represents only 16% of the county population, yet comprises 37% of all COVID cases and 26.8% of COVID hospitalizations. Additionally, Black/African American county residents represent a greater percentage of COVID deaths (4.5%) and hospitalizations (5.2%), than their representation of 3% of the county population.

Table 9: Marin County COVID-19 outcomes by race/ethnicity, age, and gender.

	Average Population	Percent of Total Cumulative Incidence	Percent of Total Deaths	Percent of Total Hospitalized
White	71%	49.0%	74.1%	56.7%
Hispanic/ Latinx	16%	37.0%	13.4%	26.8%
Multiracial or Other	4%	7.1%	3.1%	5.7%
Asian	6%	4.3%	4.9%	5.6%
Black/ African American	3%	2.6%	4.5%	5.2%
Age				
Age 0-11	13%	13.0%	0.0%	0.8%
Age 12-18	7%	11.5%	0.0%	0.5%
Age 19-34	16%	24.3%	0.0%	5.8%
Age 35-49	16%	22.6%	3.3%	15.0%
Age 50-64	23%	17.5%	7.1%	25.4%
Age 65-74	14%	6.1%	18.0%	20.6%
Age 75-89	10%	4.1%	41.8%	23.5%
Age 90+	1%	1.0%	29.7%	8.4%
Gender				
Female	51%	50.9%	47.3%	42.3%
Male	49%	49.1%	52.7%	57.7%

Key informants and focus group participants were asked how the COVID-19 pandemic had impacted the health needs they described during interviews. Service Provider survey respondents were also asked to identify ways in which COVID-19 impacted health needs in the communities they served. A summary of their responses is shown in Table 10.

Table 10: The impacts of COVID-19 on health needs as identified in primary data sources.

Key Informant and Focus Group Responses
● People came together to serve vulnerable populations, especially seniors.
● There were pockets of people not accessing the care they needed.
● Many people could not get care because the clinics were shut down.
● COVID-19 has shown us where the gaps in care are for some populations.
● Cases surged in certain communities like the Latinx community.

Key Informant and Focus Group Responses

- Essential workers were unable to work from home and often didn't have sick leave offered at their jobs, which contributed to economic hardship.
- Living conditions contributed to the rapid spread of COVID-19, such as low-income families sharing the same household and not being able to isolate a sick household member.
- COVID-19 created economic hardship, especially for those already struggling before the pandemic.
- Exacerbation of pre-existing conditions. COVID-19 made everything worse.
- COVID-19 pulled the curtain back on the sharp inequities that exist.
- A switch to telemedicine created easier access to access care for some people, but for those who struggle with computer literacy like the elderly, it was difficult to use.
- Community service organizations were forced to provide services differently.
- There was a big push to get people out of jails during COVID-19, which changed prosecution policies, especially on chronic homeless. They are going to jail less, but also getting less services.
- COVID-19 created a major workforce problem – health care workers were exhausted and there was a lot of burnout and people left.
- Youth development has been delayed.
- There was an acceleration of social media use by youth.
- Higher mental health needs for students and families during the pandemic.
- Suicidal ideation among youth increased.
- Families struggled to find childcare during the pandemic.
- The digital divide was exposed during the pandemic – you saw kids without devices or internet connectivity.
- Some kids did not have adult oversight for their online learning and fell behind.
- Isolation in the elderly increased.
- Calls to the County increased for people seeking help paying rent or accessing food.
- Substance use disorder residential treatment programs for Medi-Cal shut down due to COVID-19.
- COVID-19 made poverty and economic need obvious for all to see.
- Shelters shut down and people were left on the streets.
- People delayed accessing health care during the pandemic.

Service Provider Survey Responses

- Isolation is harming the mental health of community members.
- Residents encounter economic hardships from lost or reduced employment.
- Residents delay or forgo health care to limit their exposure to the virus.
- Youth no longer have ready access to the services they previously received at school (e.g., free/reduced lunch, mental and physical health services).
- Residents in the community are being evicted from their homes.

Marin County Data Indicators



The following data tables show the specific values for the health need indicators used as part of the health need identification process. Indicator values for Marin County were compared to the California state benchmark and are highlighted below (in light blue) when performance was worse in the county than in the state. Sources for the following indicators are found in the Data Sources section.

Length of Life

Table 11: County length of life indicators compared to state benchmarks.

Indicators	Description	Marin	California	County to State Comparisons
Early Life				
Infant Mortality	Number of all infant deaths (within 1 year), per 1,000 live births.	2.2	4.2	Marin: 2.2 California: 4.2
Child Mortality	Number of deaths among children, under age 18, per 100,000 population.	15.3	36.0	Marin: 15.3 California: 36
Life Expectancy	Average number of years a person can expect to live.	85.4	81.7	Marin: 85.4 California: 81.7
Overall				
Premature Age-Adjusted Mortality	Number of deaths among residents, under age 75, per 100,000 population (age-adjusted).	166.8	268.4	Marin: 166.8 California: 268.4
Premature Death	Years of potential life lost before age 75, per 100,000 population (age-adjusted).	3,239.0	5,253.1	Marin: 3,234 California: 5,253.1
Stroke Mortality	Number of deaths due to stroke, per 100,000 population.	39.9	41.2	Marin: 39.9 California: 41.2
Chronic Lower Respiratory Disease Mortality	Number of deaths due to chronic lower respiratory disease, per 100,000 population.	31.7	34.8	Marin: 31.7 California: 34.8

Indicators	Description	Marin	California	County to State Comparisons
Diabetes Mortality	Number of deaths due to diabetes, per 100,000 population.	13.6	24.1	Marin: 13.6 California: 24.1
Heart Disease Mortality	Number of deaths due to heart disease, per 100,000 population.	157.8	159.5	Marin: 157.8 California: 159.5
Hypertension Mortality	Number of deaths due to hypertension, per 100,000 population.	9.9	13.8	Marin: 9.9 California: 13.8
Cancer, Liver, and Kidney Disease				
Cancer Mortality	Number of deaths due to cancer, per 100,000 population.	184.7	152.9	Marin: 184.7 California: 152.9
Liver Disease Mortality	Number of deaths due to liver disease, per 100,000 population.	8.8	13.9	Marin: 8.8 California: 13.9
Kidney Disease Mortality	Number of deaths due to kidney disease, per 100,000 population.	7.5	9.7	Marin: 7.5 California: 9.7
Intentional and Unintentional Injuries				
Suicide Mortality	Number of deaths due to suicide, per 100,000 population.	15.4	11.2	Marin: 15.4 California: 11.2
Unintentional Injuries Mortality	Number of deaths due to unintentional injuries, per 100,000 population.	37.3	35.7	Marin: 37.3 California: 35.7
COVID-19				
COVID-19 Mortality	Number of deaths due to COVID-19, per 100,000 population.	110.8	225.4	Marin: 110.8 California: 225.4
COVID-19 Case Fatality	Percentage of COVID-19 deaths, per laboratory-confirmed COVID cases.	0.9%	1.0%	Marin: 0.9% California: 1%
Other				
Alzheimer's Disease Mortality	Number of deaths due to Alzheimer's disease, per 100,000 population.	64.3	41.2	Marin: 64.3 California: 41.2
Influenza and Pneumonia Mortality	Number of deaths due to influenza and pneumonia, per 100,000 population.	17.6	16.0	Marin: 17.6 California: 16

Quality of Life

Table 12: County quality of life indicators compared to state benchmarks.

Indicators	Description	Marin	California	County to State Comparisons
Chronic Disease				
Diabetes Prevalence	Percentage of adults, ages 20 and older, with diagnosed diabetes.	8.2%	8.8%	Marin:  California: 
Low Birthweight	Percentage of live births with low birthweight (<2,500 grams).	5.9%	6.9%	Marin:  California: 
Babies with Very Low Birth Weight	Percentage of births with very low birthweight (<1,500 grams).	0.9%	1.4%	Marin:  California: 
HIV (human immune-deficiency virus) Prevalence	Number of people, ages 13 years and older, living with a diagnosis of HIV infection, per 100,000 population.	355.5	395.9	Marin:  California: 
Disability	Percentage of the total civilian noninstitutionalized population with a disability	9.1%	10.6%	Marin:  California: 
Mental Health				
Poor Mental Health Days	Average number of mentally unhealthy days reported in past 30 days (age-adjusted).	3.6	3.7	Marin:  California: 
Frequent Mental Distress	Percentage of adults reporting 14 or more days of poor mental health per month (age-adjusted).	10.8%	11.3%	Marin:  California: 
Poor Physical Health Days	Average number of physically unhealthy days reported in past 30 days (age-adjusted).	3.3	3.9	Marin:  California: 
Frequent Physical Distress	Percentage of adults reporting 14 or more days of poor physical health per month (age-adjusted).	9.6%	11.6%	Marin:  California: 
Poor or Fair Health	Percentage of adults reporting fair or poor health (age-adjusted).	11.8%	17.6%	Marin:  California: 

Indicators	Description	Marin	California	County to State Comparisons
Cancer				
Colorectal Cancer Prevalence	Colon and rectum cancers, per 100,000 population (age-adjusted).	33.1	34.8	Marin: 33.1 California: 34.8
Breast Cancer Prevalence	Female in situ breast cancers, per 100,000 female population (age-adjusted).	40.3	27.9	Marin: 40.3 California: 27.9
Lung Cancer Prevalence	Lung and bronchus cancers, per 100,000 population (age-adjusted).	33.8	40.9	Marin: 33.8 California: 40.9
Prostate Cancer Prevalence	Prostate cancers, per 100,000 male population (age-adjusted).	90.3	91.2	Marin: 90.3 California: 91.2
COVID-19				
COVID-19 Cumulative Incidence	Number of laboratory-confirmed COVID-19 cases, per 100,000 population.	12,944.4	21,672.6	Marin: 12,944.4 California: 21,672.6
Other				
Asthma ED Rates	Emergency department visits due to asthma, per 10,000 (age-adjusted).	241.0	422.0	Marin: 241 California: 422
Asthma ED Rates for Children	Emergency department visits due to asthma, per 10,000 population, ages 5-17 (age-adjusted).	275.0	601.0	Marin: 275 California: 601

Health Behaviors

Table 13: County health behavior indicators compared to state benchmarks.

Indicators	Description	Marin	California	County to State Comparisons
Excessive Drinking	Percentage of adults reporting binge or heavy drinking (age-adjusted).	23.4%	18.1%	Marin: 23.4% California: 18.1%
Drug Induced Death	Drug induced deaths, per 100,000 (age-adjusted).	14.0	14.3	Marin: 14 California: 14.3
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/m ² .	17.6%	24.3%	Marin: 17.6% California: 24.3%
Mothers who Breastfeed	Percentage of mothers who breastfed their new baby after delivery.	98.7%	81.9%	Marin: 98.7% California: 81.9%
Physical Inactivity	Percentage of adults, ages 20 and older, reporting no leisure-time physical activity.	13.1%	17.7%	Marin: 13.1% California: 17.7%
Limited Access to Healthy Foods	Percentage of population who are low-income and do not live close to a grocery store.	1.7%	3.3%	Marin: 1.7% California: 3.3%
Food Environment Index	Index of factors that contribute to a healthy food environment, from 0 (worst) to 10 (best).	9.2	8.8	Marin: 9.2 California: 8.8
Access to Exercise Opportunities	Percentage of population with adequate access to locations for physical activity.	97.2%	93.1%	Marin: 97.2% California: 93.1%
Chlamydia Incidence	Number of newly diagnosed chlamydia cases, per 100,000 population.	310.0	585.3	Marin: 310 California: 585.3
Teen Birth Rate	Number of births per 1,000 female population, ages 15-19.	6.0	17.4	Marin: 6 California: 17.4
Adult Smoking	Percentage of adults who are current smokers (age-adjusted).	9.9%	11.5%	Marin: 9.9% California: 11.5%

Clinical Care

Table 14: County clinical care indicators compared to state benchmarks.

Indicators	Description	Marin	California	County to State Comparisons
Primary Care Shortage Area	Presence of a primary care health professional shortage area within the county.	No		Marin: No California: N/A
Dental Care Shortage Area	Presence of a dental care health professional shortage area within the county.	No		Marin: No California: N/A
Mental Health Care Shortage Area	Presence of a mental health professional shortage area within the county.	No		Marin: No California: N/A
Medically Underserved Area	Presence of a medically underserved area within the county.	Yes		Marin: Yes California: N/A
Mothers Who Received Early Prenatal Care	Percentage of births to mothers who began prenatal care in the first trimester of their pregnancy.	86.7%	77.9%	Marin:  California: 
Mammography Screening	Percentage of female Medicare enrollees, ages 65-74, who received annual mammography screening.	43.0%	36.0%	Marin:  California: 
Colon Cancer Screening	Percentage of respondents, ages 50-75, who have had either a fecal occult blood test in the past year, a sigmoidoscopy in the past five years AND a fecal occult blood test in the past three years, or a colonoscopy exam in the past ten years.	73.7%	74.4%	Marin:  California: 
Dentists	Dentists, per 100,000 population.	119.0	87.0	Marin:  California: 
Mental Health Providers	Mental health providers, per 100,000 population.	781.6	373.4	Marin:  California: 
Psychiatry Providers	Psychiatry providers, per 100,000 population.	48.4	13.5	Marin:  California: 
Specialty Care Providers	Specialty care providers (non-primary care physicians), per 100,000 population.	388.4	190.0	Marin:  California: 

Indicators	Description	Marin	California	County to State Comparisons
Primary Care Providers	Primary care physicians, per 100,000 population + other primary care providers, per 100,000 population.	209.7	147.3	Marin: 209.7 California: 147.3
Preventable Hospitalization	Preventable hospitalizations, per 100,000 (age-sex-poverty adjusted)	501.3	948.3	Marin: 501.3 California: 948.3
COVID-19				
COVID-19 Cumulative Full Vaccination Rate	Number of completed COVID-19 vaccinations, per 100,000 population.	86,515.5	70,702.4	Marin: 86,515.5 California: 70,702.4

Socio-Economic and Demographic Factors

Table 15: County socioeconomic and demographic indicators compared to state benchmarks.

Indicators	Description	Marin	California	County to State Comparisons
Chronic Disease				
Homicide Rate	Number of deaths due to homicide, per 100,000 population.	2.0	4.8	Marin:  2 California: 4.8
Firearm Fatalities Rate	Number of deaths due to firearms, per 100,000 population.	6.1	7.8	Marin:  6.1 California: 7.8
Violent Crime Rate	Number of reported violent crime offenses, per 100,000 population.	177.9	420.9	Marin:  177.9 California: 420.9
Juvenile Arrest Rate	Felony juvenile arrests, per 1,000 juveniles	2.2	2.1	Marin:  2.2 California: 2.1
Motor Vehicle Crash Death	Number of motor vehicle crash deaths, per 100,000 population.	5.2	9.5	Marin:  5.2 California: 9.5
Education				
Some College	Percentage of adults, ages 25-44, with some post-secondary education.	76.9%	65.7%	Marin:  76.9% California: 65.7%
High School Completion	Percentage of adults, ages 25 and older, with a high school diploma or equivalent.	93.3%	83.3%	Marin:  93.3% California: 83.3%
Disconnected Youth	Percentage of teens and young adults, ages 16-19, who are neither working nor in school.	5.9%	6.4%	Marin:  5.9% California: 6.4%
Third Grade Reading Level	Average grade level performance for 3rd graders on English Language Arts standardized tests	3.3	2.9	Marin:  3.3 California: 2.9

Indicators	Description	Marin	California	County to State Comparisons
Third Grade Math Level	Average grade level performance for 3rd graders on math standardized tests	3.2	2.7	Marin: 3.2 California: 2.7
Employment				
Unemployment	Percentage of population, ages 16 and older, unemployed but seeking work.	2.3%	4.0%	Marin: 2.3% California: 4%
Family and Social Support				
Children in Single-Parent Households	Percentage of children who live in a household headed by single parent.	18.1%	22.5%	Marin: 18.1% California: 22.5%
Social Associations	Number of membership associations, per 10,000 population.	9.4	5.9	Marin: 9.4 California: 5.9
Residential Segregation (Non-White/White)	Index of dissimilarity where higher values indicate greater residential segregation between non-White and White county residents.	34.9	38.0	Marin: 34.9 California: 38
Income				
Children Eligible for Free Lunch	Percentage of children enrolled in public schools who are eligible for free or reduced-price lunch.	27.7%	59.4%	Marin: 27.7% California: 59.4%
Children in Poverty	Percentage of people, under age 18, in poverty.	7.2%	15.6%	Marin: 7.2% California: 15.6%
Median Household Income	The income where half of households in a county earn more and half of households earn less.	\$112,069.0	\$80,423.0	Marin: \$112,069 California: \$80,423
Uninsured Population under 64	Percentage of population, under age 65, without health insurance.	4.8%	8.3%	Marin: 4.8% California: 8.3%
Income Inequality	Ratio of household income at the 80th percentile to income at the 20th percentile.	5.8	5.2	Marin: 5.8 California: 5.2

Physical Environment

Table 16: County physical environment indicators compared to state benchmarks.


Indicators	Description	Marin	California	County to State Comparisons
Employment				
Severe Housing Problems	Percentage of households with at least 1 of 4 housing problems: overcrowding, high housing costs, lack of kitchen facilities, or lack of plumbing facilities.	22.1%	26.4%	Marin:  California: 
Severe Housing Cost Burden	Percentage of households that spend 50% or more of their household income on housing.	18.9%	19.7%	Marin:  California: 
Homeownership	Percentage of occupied housing units that are owned.	63.7%	54.8%	Marin:  California: 
Homelessness Rate	Number of homeless individuals, per 100,000 population.	397.0	411.2	Marin:  California: 
Households with Internet Access	Percentage of households with an internet subscription	91.5%	86.9%	Marin:  California: 
Transit				
Households with no Vehicle Available	Percentage of occupied housing units that have no vehicles available.	4.6%	7.1%	Marin:  California: 
Long Commute - Driving Alone	Among workers who commute in their car alone, the percentage that commute more than 30 minutes.	45.7%	42.2%	Marin:  California: 
Access to Public Transit	Percentage of population living near a fixed public transportation stop	75.0%	69.6%	Marin:  California: 
Air and Water Quality				
Pollution Burden Percent	Percentage of population living in a census tract with a CalEnviroScreen 3.0 pollution burden score percentile of 50 or greater	8.8%	51.6%	Marin:  California: 
Air Pollution - Particulate Matter	Average daily density of fine particulate matter in micrograms per cubic meter (PM2.5).	6.4	8.1	Marin:  California: 
Drinking Water Violations	Presence of health-related drinking water violations in the county.	Yes		Marin:  California: 



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.

Appendix A:
CHNA Conceptual Model
and Process Model



Two related models were foundational in this CHNA. The first is a conceptual model that expresses the theoretical understanding of community health used in the analysis. This understanding provides the framework underpinning the collection of primary and secondary data. It is the tool used to ensure that the results are based on a rigorous understanding of those factors that influence the health of a community. The second model is a process model that describes the various stages of the analysis. It is the tool that ensures the analysis is based on an integration of community voices 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 health-related characteristics in terms of how they relate to upstream or downstream health and health-disparities factors. In this model, 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.

This model was used to guide the selection of secondary indicators in this analysis as well as to express how these upstream health factors lead to the downstream health outcomes. It also suggests that poor health outcomes within Marin County can be improved through policies and programs that address the contributing health factors. This conceptual model is a modified version of the County Health Rankings Model used by the Robert Wood Johnson Foundation. It was modified by adding a “Demographics” category to the “Social and Economic Factors” in recognition of the influence that demographic characteristics have on health outcomes. To generate the list of secondary indicators used in the assessment, each conceptual model category was reviewed to identify potential indicators that could be used to represent the category.

Process Model

Figure 6 outlines the data collection and analysis stages of this process. The project began by confirming the health service area, which was Marin County, for which the CHNA would be conducted. Primary data collection included key informant interviews and focus groups with community health experts and residents as well as a Service Provider survey. Key informant interviews were used to identify Communities of Concern, which are areas or population subgroups within the county experiencing health disparities.

Primary and secondary data were integrated to identify significant health needs for Marin County. 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.

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

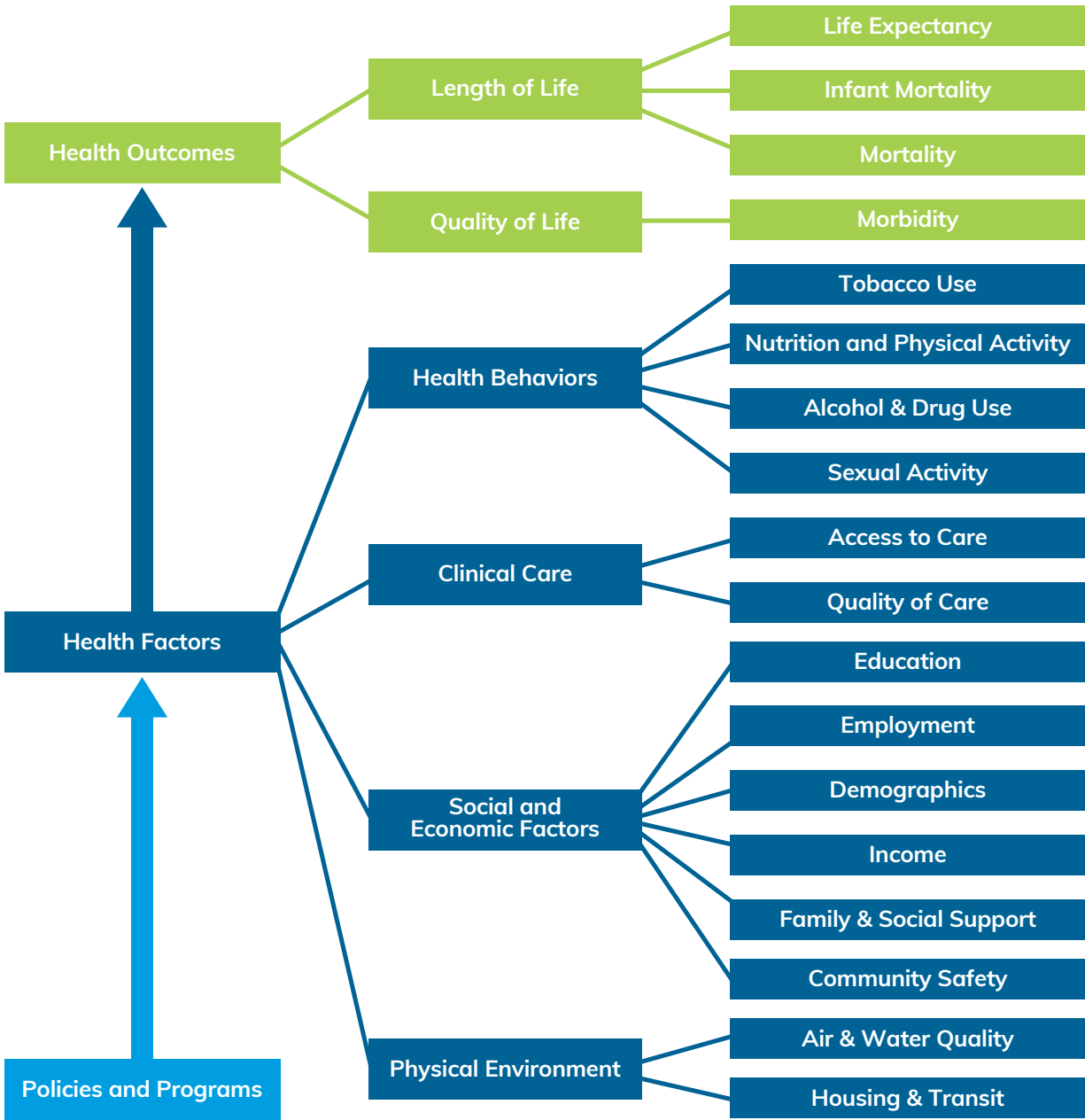
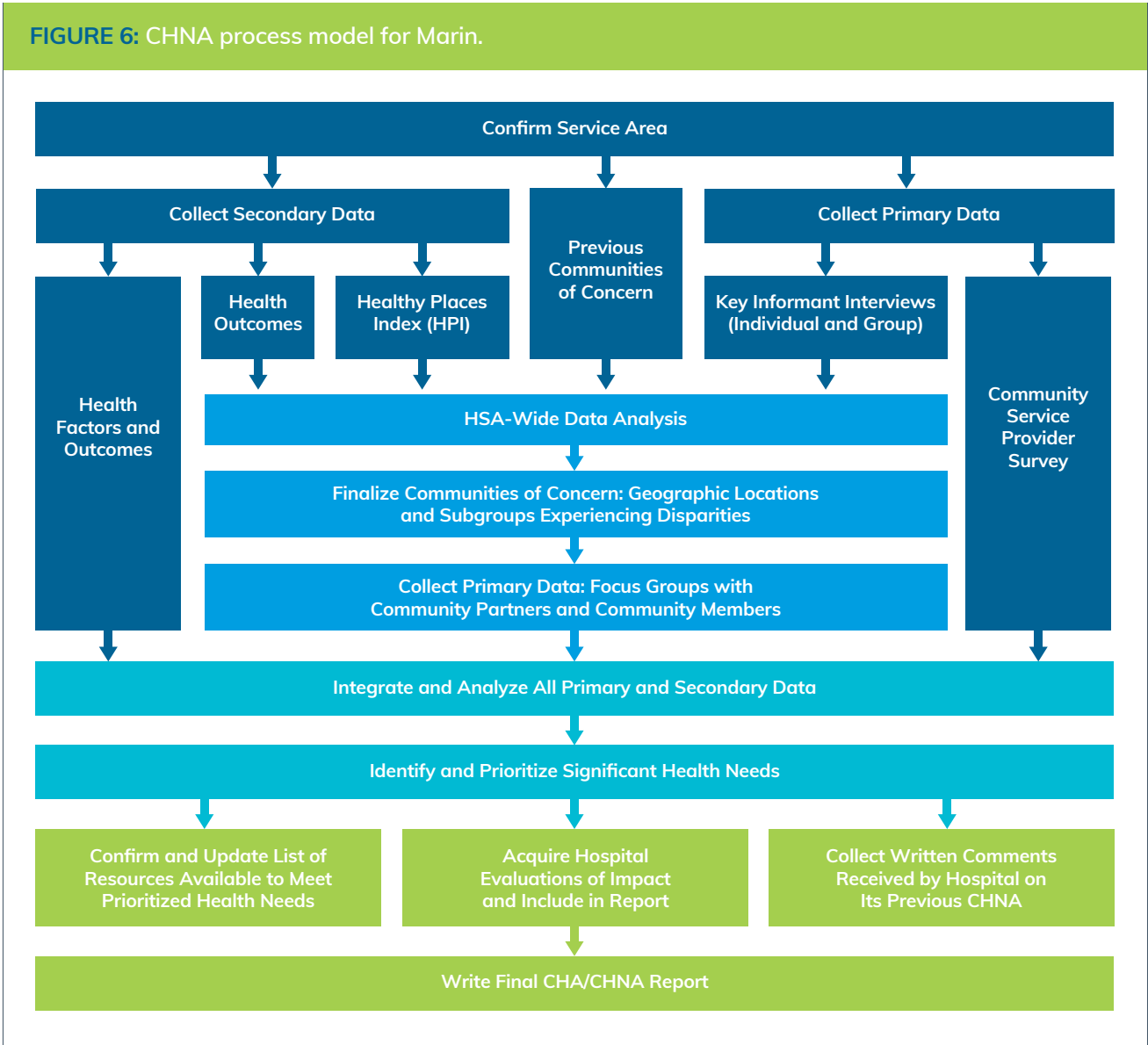


FIGURE 6: CHNA process model for Marin.



Appendix B:
Key Informant Interview and
Focus Group Participants



Table 17: Key informant list.

Organization	Date	Number of Participants	Area of Expertise	Populations Served
West Marin Community Services*	09/22/2021	1	Food pantry, youth services, financial assistance	West Marin, rural population, immigrant, agricultural workers
Marguerita C. Johnson Senior Center*	10/04/2021	1	Senior services	Older Adults, African American, Marin City
Marin County Health and Human Services*	10/19/2021	1	Public Health	Marin County
Marin City People's Plan; Multicultural Center of Marin*	10/20/2021	2	Climate and environmental justice, Marin County	Marin City; Marin County; Immigrant, San Rafael/Canal, African American
MarinHealth Medical Center Staff	01/11/2022	7	Acute Care Hospital	Marin County
MarinHealth and Human Services	01/21/2022	6	Public Health	Marin County
Integrated Community Services	01/31/2022	1	Disability Justice	People with disabilities
Redwood Community Health Coalition	02/14/2022	1	Health care	Low-income; Medi-Cal recipients
Behavioral Health Providers: Marin County Behavioral Health and Recovery Services Prevention and Outreach Team; Marin County Suicide Prevention Collaborative; Marin County Probation Department	02/16/2022	3	Behavioral Health	Marin County; schools; youth ages 9- 25; adults and youth using probation services
Novato Community Hospital and Kaiser Permanente staff	02/25/2022	5	Acute Care Hospital	Marin County
Education Partners: Marin County Office of Education; Marin Promise Partnership; College of Marin	02/28/2022	3	Education/schools	K-12 education; higher education
Marin City Health and Wellness	03/24/2022	1	Health care	Low-income; Medi-Cal recipients; Marin City, African American

*interview provided by Kaiser Permanente, via Harder+Company, for this Marin County CHNA as a part of a data sharing agreement.

Focus Group Results

Table 18 contains information about the community focus group. The table describes the hosting organization of the focus group, the date it occurred, the total number of participants, and population(s) represented.

Table 18: Key informant list.

Hosting Organization	Date	Number of Participants	Populations Represented
Ritter Center; Homeward Bound	03/28/2022	4	Homeless/unhoused and marginally housed individuals and families, low-income residents in Marin County

Appendix C: Community Stakeholder Input



The primary data responses are detailed below by significant health need. The manner in which the health needs appeared or was expressed in the community are described by key informants, focus group participants, and survey respondents.

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

Key Informant and Focus Group Responses	Service Provider Survey Responses
<p>Housing</p> <ul style="list-style-type: none"> • Access to adequate, safe, and affordable housing. • A need for workforce housing. Those who serve the county must often commute to work in the county. • A need for “universal design housing.” • Gentrification of many neighborhoods. • Devaluing of properties in highly ethnically diverse communities. • There is a need for supportive housing for those with behavioral health challenges. <p>Homelessness</p> <ul style="list-style-type: none"> • Lack of services for homeless people who are aging and/or have dementia. • Lack of services for homeless people who are undocumented. • Lack of services for homeless families. • Training needed to support empathetic engagement for those chronically homeless with mental illness. • Emergency shelters are needed; demand consistently exceeds availability. <p>Economic and education inequities</p> <ul style="list-style-type: none"> • The working poor and those with middle incomes are getting left behind in care. • Employers unwilling to pay a livable wage for workers to live in Marin County. • Financial instability results in not accessing care in a timely manner. • Access to quality affordable education. • The people who remain unemployed have significant barriers physically and mentally • Inequities are clear in Marin County between those who have economic stability and those who do not. • There is a real lack of workforce to support the aging population in Marin. • Economic insecurity affects housing stability. • Bilingual, bicultural, culturally-competent, culturally-sensitive staff in the health and social sectors. • More family support systems needed - affordable childcare, access to early education (pre-school). <p>Access to healthy food</p> <ul style="list-style-type: none"> • Marginalized populations lack access to healthy food. • Food insecurity in older adults. 	<ul style="list-style-type: none"> • Lack of affordable housing is a significant issue in the area. • It is difficult to find affordable childcare. • The area needs additional low-income housing options. • Many people in the area do not make a living wage. • Many residents struggle with food insecurity. • Services are inaccessible for Spanish-speaking and immigrant residents. • Services for homeless residents in the area are insufficient. • Employment opportunities in the area are limited. • Poverty in the county is high. • Educational attainment in the area is low.

Access to Mental/Behavioral Health and Substance Use Services

Key Informant and Focus Group Responses	Service Provider Survey Responses
<p>Substance use</p> <ul style="list-style-type: none"> • Higher rates of substance abuse than most other counties. • Increased opioid and alcohol usage in the county. • Deaths due to overdoses are becoming endemic to the county. <p>Substance use care</p> <ul style="list-style-type: none"> • Lack of substance use recovery centers in the county. • Substance use treatment for non-English speakers in the county is limited. • Wait times for recovery services are long. • County Behavioral Health Recovery Services don't comprehensively address substance use disorders. • Detox beds in the county are limited, resulting in the use of the emergency room for detoxing. • Need for more trained behavioral health staff in the county. • Many behavioral health providers are not interested in coming to Marin County as reimbursement rates are low • Need for full access reimbursement for behavioral telehealth. <p>Homelessness and mental health</p> <ul style="list-style-type: none"> • Lack of services for homeless with severe mental illness. <p>Youth and mental health</p> <ul style="list-style-type: none"> • Youth mental health services are limited in the county. • Youth mental health treatment is often outsourced to other counties. • Socio-emotional well-being among youth is very compromised right now due to COVID-19. • High rates of eating disorders and substance use across all income levels among youth. • More licensed psych facilities are needed, especially for youth. <p>Access to mental health care</p> <ul style="list-style-type: none"> • Need to build collective competency around mental health using a service integrated approach. • Increased investment in prevention and early intervention efforts. • Mobile mental health crisis resources in the county are inadequate. • Most patients with dual diagnosis of substance use and mental illness are outsourced to other counties for care. • Inadequate mental and behavioral health services in the county results in patients coming to the emergency room. • Emergency room hospital staff lack core competencies to take care of people with complex mental health disorders. • Need for more health navigators in the emergency rooms. Demand for health navigators outweighs current availability. • Change the stigma of mental health in the community. 	<ul style="list-style-type: none"> • The stigma around seeking mental health treatment keeps people out of care. • There aren't enough mental health providers or treatment centers in the area (e.g., psychiatric beds, therapists, support groups). • It's difficult for people to navigate for mental/behavioral health care. • Substance-abuse is a problem in the area (e.g., use of opiates and methamphetamine, prescription misuse). • The cost for mental/behavioral health treatment is too high. • Additional services specifically for youth are needed (e.g., child psychologists, counselors, and therapists in the schools). • Treatment options in the area for those with Medi-Cal are limited. • Substance-abuse is an issue among youth in particular. • There are too few substance-abuse treatment services in the area (e.g., detox centers, rehabilitation centers). • Awareness of mental health issues among community members is low. • Additional services for those who are homeless and experiencing mental/behavioral health issues are needed. • Substance-use treatment options for those with Medi-Cal are limited. • Mental/behavioral health services are available in the area, but people do not know about them. • The area lacks the infrastructure to support acute mental health crises. • The use of nicotine delivery products such as e-cigarettes and tobacco is a problem in the community. • There are substance-abuse treatment services available here, but people do not know about them. • There aren't enough services here for those who are homeless and dealing with substance-abuse issues.

Access to Quality Primary Care Health Services

Key Informant and Focus Group Responses	Service Provider Survey Responses
<p>Underinsured residents</p> <ul style="list-style-type: none"> • Medi-Cal patients are not admitted quickly for the extent of care needs they have. • Lack of primary care for lower income families on Medi-Cal. • Many patients are treated quickly in the emergency room, and then released only to return multiple times. • Homeless individuals have clear lack of access to primary care. <p>Barriers to primary care</p> <ul style="list-style-type: none"> • Access to primary care in the county is expensive for many. • Lack of adequate transportation a major barrier to access care. • More resources needed in the county to identify health issues in early childhood and youth. • Increased need to make primary care more accessible via telehealth. • Wait times are long across the county for primary care. • Primary care providers are retiring in record numbers post COVID-19, reducing the number of providers in the county even further. • Lack of access to a primary care doctor is a reason many youth are not yet COVID vaccinated • Lack of access to pharmacists and pharmacies in the county. <p>Solutions to improve primary care access</p> <ul style="list-style-type: none"> • Increase bilingual/bicultural primary care providers. • Expand local FQHC and community clinic capacity to reduce burden on emergency department usage for primary care. • Engage young bilingual members of community to go into health care professions to help meet the need for culturally sensitive care. • County lacks school health model, no federally qualified health centers (FQHC) at any county schools. • Establish a volunteer transportation network to get people to care, similar to that in Sonoma County. 	<ul style="list-style-type: none"> • Out-of-pocket costs are too high. • Patients have difficulty obtaining appointments outside of regular business hours. • Primary care services are available but are difficult for many people to navigate. • The quality of care is low (e.g., appointments are rushed, providers lack cultural competence). • There aren't enough primary care service providers in the area. • Wait-times for appointments are excessively long.

Increased Community Connections

Key Informant and Focus Group Responses	Service Provider Survey Responses
<p>Culturally appropriate connections</p> <ul style="list-style-type: none"> Care centers at every school with race and cultural representation will increase connection of communities to care. Increased need for coordinated culturally appropriate community opportunities. Building relationships with the community to provide access to traditional healing approaches for those most vulnerable, especially the indigenous communities. <p>Senior connection</p> <ul style="list-style-type: none"> Community opportunities for seniors to conjoin, exercise, and socialize. <p>Community</p> <ul style="list-style-type: none"> Create more connection with the community to increase awareness of what services are available in the county. Not in my backyard (NIMBY) is very prominent in the county. Clear communication with the community about the needs and what is being done to address them results in creating a “caring community.” Use an intersectional lens and find a way to collaborate together on all of the ‘isms’ using a disability justice framework. More resources are needed for case management to place those coming out of jail with medical needs, instead of sending them to the hospitals. 	<ul style="list-style-type: none"> Building community connections doesn’t seem like a focus in the area. Health and social-service providers operate in silos; cross-sector connections needed. City and county leaders need to work together. Relations between law enforcement and the community need to be improved. There isn’t enough funding for social services in the county. People in the community face discrimination from local service providers. The community needs to invest more in the local public schools.

Access to Functional Needs

Key Informant and Focus Group Responses	Service Provider Survey Responses
<p>Serving those with disabilities</p> <ul style="list-style-type: none"> • Lack of services for disabled people who are homeless. • Need more supportive services for those with physical disabilities. • Increased need to use a Universal Design concept from a disability justice framework for transportation in the county. <p>Transportation barriers</p> <ul style="list-style-type: none"> • Increased transportation to services is needed. • High bridge tolls are a barrier to access care. • Marin County public transportation needs to be better coordinated with health and social services. • The bus system in the county is inconsistent. • Transportation problems cause people to avoid follow-up care. • Transportation problems result in a fairly high cancellation rate for many providers. <p>Built environment</p> <ul style="list-style-type: none"> • Assure all sidewalks have “Curb Cut” for increased accessibility • The county is hugely car dependent and many area leaders have negative attitudes about investing in more public transit in a region that identifies as rural. • A lot of older adults live on hills with lots of steps, as their mobility declines they become more isolated. 	<ul style="list-style-type: none"> • Many residents do not have reliable personal transportation. • Public transportation is more difficult for some residents to use (e.g., non-English speakers, seniors, parents with young children). • The geography of the area makes it difficult for those without reliable transportation to get around.

Other Health Needs - Transforming Marin

Key informant and focus group participants spoke about the need for a transformation in the approach that health, social and educational partners work together in Marin County. Though not listed as a significant priority need, the mention was so pervasive in the key informant interviews and the focus group that it is detailed here. Key themes mentioned related to transforming Marin County are listed below:

- Reducing historical racial stigma associated with mental health and violence in the county is greatly needed to improve the quality of life of the county's most vulnerable residents.
- The segregation of resources is clearly defined between the haves and have nots, and it's often divided along racial lines.
- Let's consolidate and combine efforts to address the health workforce shortage in Marin County.
- Reduce the division between those that have high financial resources and those that lack such financial resources.
- Care providers (mental health, social service, health care) should work together on key initiatives to improve the health of the community.
- Marin County can be perceived as unwelcoming to diverse groups and those with lower levels of financial security.
- Utilize resources to "de-silo" social justice movements in the county.
- Fear of losing power keeps organizations from engaging in strategic collaborative work, which keeps the community unhealthy and unwell.
- Deconstruct the historical and normative practices that have been used for many years, which still create great division between the resources and care that community members need.
- There is a need for an intersectoral/collective impact approach to health strategies, combined with a better definition of equity.

Service Provider Survey Results

Table 19: Service Provider survey results for Marin County.

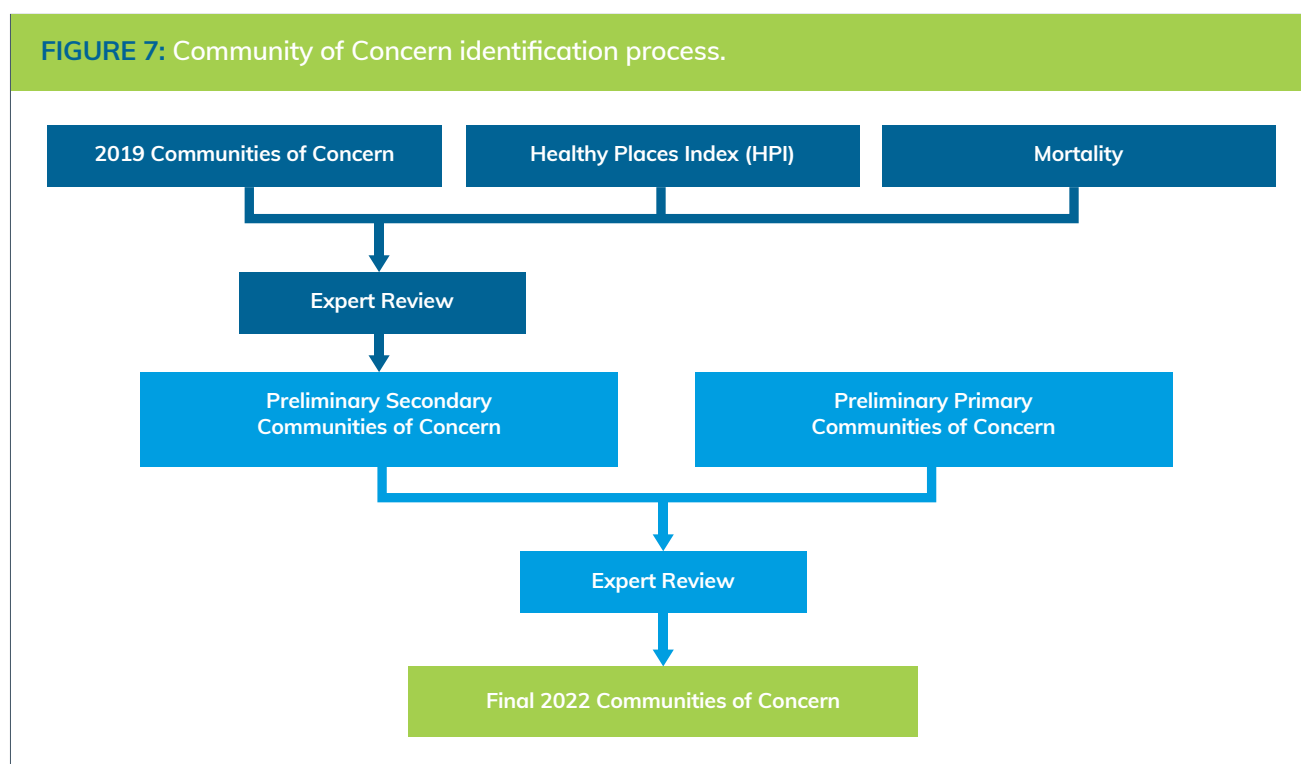
Service Provider Survey Snapshot Marin County (N=25)	
Health Needs	% Reporting
Most Frequently Reported	
Access to Basic Needs	84%
Access to Mental/Behavioral Health and Substance-Abuse Services	76%
Increased Community Connection	76%
System Navigation	76%
Top Three Priorities (Most Frequently Reported Characteristics)	
Access to Basic Needs	80%
Lack of affordable housing is a significant issue in the area.	
It is difficult to find affordable childcare.	
The area needs additional low-income housing options.	
Many people in the area do not make a living wage.	
Access to Mental/Behavioral Health and Substance-Abuse Services	60%
The stigma around seeking mental health treatment keeps people out of care.	
There aren't enough mental health providers or treatment centers in the area (e.g., psychiatric beds, therapists, support groups).	
It's difficult for people to navigate for mental/behavioral health care.	
Substance-abuse is a problem in the area (e.g., use of opiates and methamphetamine, prescription misuse).	
System Navigation	40%
Some people don't know where to start in order to access care or benefits.	
Dealing with medical and insurance paperwork can be overwhelming.	
It is difficult for people to navigate multiple, different health care systems.	
People may not be aware of the services they are eligible for.	

Appendix D:
Methodology for Selecting
Significant Health Needs

The primary and secondary data were integrated in three main analytical stages. First, secondary health outcome and health factor data were combined with area-wide key informant interviews to help identify Communities of Concern. These Communities of Concern could include geographic regions as well as specific sub-populations bearing disproportionate health burdens. This information was used to focus the remaining interviews and focus-group on those areas and subpopulations. Next, the resulting data, along with the results from the Service Provider survey, were combined with secondary health need identification data to identify significant health needs within Marin County. Finally, primary data were used to prioritize the significant health needs.

As illustrated in Figure 7, Communities of Concern were identified through a process that drew upon primary and secondary data. Three main secondary data sources were used in this analysis: Communities of Concern identified in the 2019 CHNA (if available); the census tract-level California Healthy Places Index (HPI); and the CDPH ZCTA-level mortality data.

FIGURE 7: Community of Concern identification process.



Significant Health Need Identification

The methods through which significant health needs were identified are shown in Figure 8. The first step in this process was to identify a set of potential health needs. 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.

FIGURE 8: Significant health need identification process.

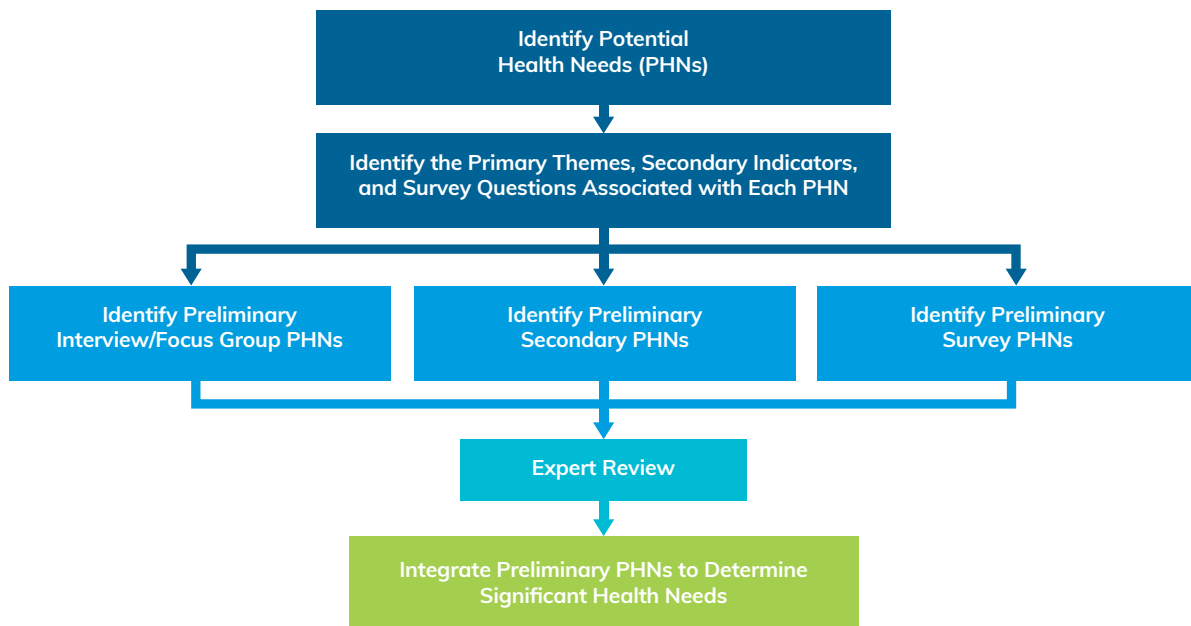


Table 20: Description of Potential Health Needs (PHNs).

Potential Health Need (PHN)	Name	Health Need Description
PHN1	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 essential for a healthy community where residents can obtain additional support when needed.
PHN2	Access to Quality Primary Care Health Services	Primary care resources include community clinics, pediatricians, family practice physicians, internists, nurse practitioners, pharmacists, telephone advice lines, and other similar resources. Primary care services are typically the first point of contact when an individual seeks health care. These services are the front line in the prevention and treatment of common diseases and injuries.
PHN3	Active Living and Healthy Eating	Physical activity and eating a healthy diet are important for overall health and well-being. Frequent physical activity is vital for prevention of disease and maintenance of a strong and healthy body and mind. When accessing healthy foods is challenging, 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 unhealthy food is sold.
PHN4	Safe and Violence-Free Environment	Feeling safe in one's home and community are fundamental to overall health. Feeling unsafe affects the way people act and react to everyday life occurrences. 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. ¹
PHN5	Access to Dental Care and Preventive Services	Oral health is important for 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, contribute to increased risk of chronic diseases, as well as play a large role in chronic absenteeism from school in children. Poor oral health impacts the health of the entire body.
PHN6	Healthy Physical Environment	Living in a pollution-free environment is essential for health. Individual health is determined by a number of factors, and some models show that one's living environment, including the physical (natural and built) and sociocultural environment, has more impact on individual health than one's lifestyle, heredity, or access to medical services. ²
PHN7	Access to Basic Needs Such as Housing, Jobs, and Food	Access to affordable and clean housing, stable employment, quality education, and adequate food are vital for good health. Research shows that the social determinants of health, such as quality housing, adequate employment and income, food security, education, and social support systems, influence individual health as much as health behaviors and access to clinical care. ³

¹ Lynn-Whaley, J., & Sugarmann, J. July 2017. The Relationship Between Community Violence and Trauma. Los Angeles: Violence Policy Center.


² Blum, H. L. 1983. Planning for Health. New York: Human Sciences Press

³ Robert Wood Johnson Foundation, and University of Wisconsin, 2022. Research Articles. Retrieved 31 Jan 2022 from <http://www.countyhealthrankings.org/learn-others/research-articles#Rankingsrationale>.

Potential Health Need (PHN)	Name	Health Need Description
PHN8	Access to Functional Needs	Functional needs refers to an individual's access to adequate transportation 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. The number of people with a disability is also an important indicator for community health.
PHN9	Access to Specialty and Extended Care	Extended care services, which include specialty care, are focused on the treatment of a particular disease. Without access to specialists, such as endocrinologists, cardiologists, and gastroenterologists, community residents are often left to manage the progression of chronic diseases, including diabetes and high blood pressure, on their own. In addition to specialty care, extended care is needed in the community to support overall health and wellness, such as skilled-nursing facilities, hospice care, and in-home health care.
PHN10	Injury and Disease Prevention and Management	Prevention efforts focus on reducing cases of injury and infectious disease control (e.g., sexually transmitted infection prevention and influenza vaccines), and intensive strategies in the management of chronic diseases (e.g., diabetes, hypertension, obesity, and heart disease) are important for community health improvement.
PHN11	Increased Community Connections	As humans are social beings, community connection is a crucial part of living a healthy life. 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." ⁴ Assuring that community members have ways to connect with each other through programs, services, and opportunities is important in fostering a healthy community. Further, health care and community support services are more effective when they are delivered in a coordinate fashion, where individual organizations collaborate with others to build a network of care.
PHN12	System Navigation	System navigation refers to an ability to navigate fragmented social services and health care systems in order to receive the necessary benefits and supports to improve health outcomes. Research has demonstrated that navigating the complex health care system is a barrier that results in health disparities. ⁵ Further, accessing social services provided by government agencies can be an obstacle for those with limited resources such as transportation access and English proficiency.

⁴ Robert Wood Johnson Foundation. 2016. Building a Culture of Health: Sense of Community. Retrieved 31 Jan 2022 from <https://www.rwjf.org/en/cultureofhealth/taking-action/making-health-a-shared-value/sense-of-community.html>

⁵ Natale-Pereira, A. et. al. .2011. The Role of Patient Navigators in Eliminating Health Disparities. US National Library of Medicine, National Institutes of Health, 117:15, 3543-3552.



The next step in the process was to identify primary themes and secondary indicators associated with each of these health needs. Identification occurred by coding (assigning) data to each health need and setting minimal thresholds. Next, the values for the identified secondary health-factors and health-outcome indicators 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 other indicators within the county, such as health professional shortage areas, indicated specific health outcomes issues.

Once these poorly performing quantitative indicators were identified, they were used to determine significant health needs. This was done by calculating the percentage of all secondary indicators associated with a given potential health need that were identified as performing poorly within Marin County. While all potential health needs represented actual health needs within Marin County to a greater or lesser extent, a potential health need was considered a health need if the percentage of poorly performing indicators exceeded one of a number of established thresholds.

For this report, a potential health need was selected as a significant health need if 50% 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; and as a preliminary service provider survey significant health need if it was identified by at least 40% of survey respondents. Finally, a potential health need was selected as a significant health need if it was included as a preliminary significant health need in at least two of these categories.

Appendix E: Detailed List of Resources to Address Health Needs



Table 21: Resources available to meet health needs.

Organization Information			Significant Health Needs					Other Health Needs						
Name	Primary ZIP Code	Website	Access to Basic Needs Such as Housing, Jobs, and Food	Access to Mental/Behavioral Health and Substance Use Services	Access to Quality Primary Care Health Services	Increased Community Connections	Access to Functional Needs	Active Living and Healthy Eating	Safe and Violence-Free Environment	Access to Dental Care and Preventive Services	Healthy Physical Environment	Access to Specialty and Extended Care	Injury and Disease Prevention and Management	System Navigation
211 Marin County	County Wide	www.211bayarea.org/marin	x	x	x	x	x	x	x	x	x	x	x	x
Age Song Marin	94903	agesongmarin.org				x								
Agricultural Institute of Marin	94901	agriculturalinstitute.org	x											
American Association of Retired Persons (AARP) San Rafael	94901	local.aarp.org/san-rafael-ca				x								
Bridge the Gap College Prep	94965	btgcollegeprep.org	x			x								
Bucklew Programs	94949	bucklew.org	x	x		x							x	
Canal Alliance	94901	canalalliance.org	x	x										x
Casa Allegra	94903	www.casaallegra.org	x			x	x		x					
Center Point, Inc.	94901	www.cpinc.org	x	x							x		x	
Ceres Community Project	95473	www.ceresproject.org	x			x								
City of San Rafael	94901	www.cityofsanrafael.org									x			
Coastal Health Alliance	94924, 94956	coastalhealth.net		x	x					x	x		x	
College of Marin	94904	www1.marin.edu	x											

Organization Information			Significant Health Needs					Other Health Needs						
Name	Primary ZIP Code	Website	Access to Basic Needs Such as Housing, Jobs, and Food	Access to Mental/Behavioral Health and Substance Use Services	Access to Quality Primary Care Health Services	Increased Community Connections	Access to Functional Needs	Active Living and Healthy Eating	Safe and Violence-Free Environment	Access to Dental Care and Preventive Services	Healthy Physical Environment	Access to Specialty and Extended Care	Injury and Disease Prevention and Management	System Navigation
Community Action Marin	County Wide	camarin.org	x	x	x			x						x
Community Institute for Psychotherapy	94901	cipmarin.org		x		x								x
Conservation Corps North Bay	94901	ccnorthbay.org	x			x					x			
County of Marin-Community Development Agency	County Wide	www.marincounty.org/depts/cd							x					
Digital Marin (network of organizations addressing digital equity)	94903	godigitalmarin.org					x							
Enterprise Resource Center	94901	mhamarin.org		x										
Extrafood.org	94904	extrafood.org	x											
First 5 Marin	94903	www.first5marin.org	x											x
First Congregational Church of San Rafael	94903	http://fccsanrafael.org	x											
Golden Gate Regional Center	94903	ggrc.org												x

Organization Information			Significant Health Needs					Other Health Needs						
Name	Primary ZIP Code	Website	Access to Basic Needs Such as Housing, Jobs, and Food	Access to Mental/Behavioral Health and Substance Use Services	Access to Quality Primary Care Health Services	Increased Community Connections	Access to Functional Needs	Active Living and Healthy Eating	Safe and Violence-Free Environment	Access to Dental Care and Preventive Services	Healthy Physical Environment	Access to Specialty and Extended Care	Injury and Disease Prevention and Management	System Navigation
Healthy Marin Partnership	County Wide	hmp.marinhs.org		X	X			X						
Homeward Bound of Marin	94901	hbofm.org	X			X								X
Huckleberry Youth Programs	94901	www.huckleberryyouth.org/marin-health-care-health-education	X				X	X	X		X			X
IHSS Public Authority Marin County	94903	pamarin.org					X					X		
Integrated Community Services	94901	www.connectics.org		X		X	X							X
Jewish Family & Children's Services	County Wide	www.jfcs.org	X			X	X		X			X		
Kaiser Permanente San Rafael Medical Center	94903	healthy.kaiserpermanente.org/northern-california/facilities/San-Rafael-Medical-Center-100327		X	X							X	X	X
Kids Cooking for Life	94903	marinlink.org/portfolio-items/kids-cooking-life				X		X						
Latino Council of Marin	County Wide	www.marinhs.org/community-resource-guide/latino-council-marin				X								X

Organization Information			Significant Health Needs					Other Health Needs						
Name	Primary ZIP Code	Website	Access to Basic Needs Such as Housing, Jobs, and Food	Access to Mental/Behavioral Health and Substance Use Services	Access to Quality Primary Care Health Services	Increased Community Connections	Access to Functional Needs	Active Living and Healthy Eating	Safe and Violence-Free Environment	Access to Dental Care and Preventive Services	Healthy Physical Environment	Access to Specialty and Extended Care	Injury and Disease Prevention and Management	System Navigation
Legal Aid of Marin	County Wide	www.legalaidmarin.org				x								x
Life House	94903, 94954	www.lifehouseagency.org					x					x		
Love is the Answer	County Wide	litamarin.org	x									x		
MarinCAN	County Wide	www.marincan.org/depts/cd/divisions/sustainability/climate-and-adaptation/marincan									x			
Marin Center for Independent Living	County Wide	www.marincil.org				x						x		
Marin Child Care Council	94903	mc3web.org	x											
Marin City Community Development Corp	94965	www.marincitycdc.org		x		x			x					
Marin City Health and Wellness Center	County Wide	www.marincityclinic.org	x	x				x	x				x	
Marin Community Clinics	County Wide	www.marincityclinic.org		x						x			x	
Marin Community Foundation	94949	www.marincf.org	x	x			x	x						x

Organization Information			Significant Health Needs					Other Health Needs						
Name	Primary ZIP Code	Website	Access to Basic Needs Such as Housing, Jobs, and Food	Access to Mental/Behavioral Health and Substance Use Services	Access to Quality Primary Care Health Services	Increased Community Connections	Access to Functional Needs	Active Living and Healthy Eating	Safe and Violence-Free Environment	Access to Dental Care and Preventive Services	Healthy Physical Environment	Access to Specialty and Extended Care	Injury and Disease Prevention and Management	System Navigation
Marin County Aging and Adult Services, Area Agency on Aging	County Wide	www.marinhhs.org/area-agency-aging	x				x					x	x	x
Marin County Clinics	County Wide	www.marincounty.org/residents/health-wellness/clinics		x		x				x			x	x
Marin County Commission on Aging	County Wide	www.marinhhs.org/boards/commission-aging				x								
Marin County Cooperation Team	94965	marincountycooperationteam.org				x			x					
Marin County of Health and Human Services- Behavioral Health and Recovery	County Wide	www.marinhhs.org/mhsus-service-categories/237		x										x
Marin County Office of Education	94903	www.marinschools.org	x			x		x	x					
Marin County Public Health	County Wide	www.marinhhs.org/public-health		x		x		x					x	
Marin County Suicide Prevention Collaborative	County Wide	prevention.marinhhs.org/marin-county-suicide-prevention-collaborative		x										

Organization Information			Significant Health Needs					Other Health Needs						
Name	Primary ZIP Code	Website	Access to Basic Needs Such as Housing, Jobs, and Food	Access to Mental/Behavioral Health and Substance Use Services	Access to Quality Primary Care Health Services	Increased Community Connections	Access to Functional Needs	Active Living and Healthy Eating	Safe and Violence-Free Environment	Access to Dental Care and Preventive Services	Healthy Physical Environment	Access to Specialty and Extended Care	Injury and Disease Prevention and Management	System Navigation
Marin Promise Partnership (collaborative focused on education)	94903	www.marinpromisepartnership.org	X			X								
Marin Senior Coordinating Council (dba Vivalon)	County Wide	vivalon.org	X			X	X	X	X			X		
Marin Transit	County Wide	marintransit.org					X							
Marin Ventures	94903	marinventures.org				X	X							
Marin YMCA	94903	www.ymcasf.org/locations/marin-ymca	X			X		X	X					
MarinHealth Medical Center	94904	www.mymarinhealth.org/locations/medical-center		X								X	X	X
Multi-cultural Center of Marin	94901	multiculturalmarin.org	X											
National Alliance of Mental Illness Marin	94903	www.namimarin.org		X			X							X
North Bay Leadership Council	94954	northbayleadership.org/about-us				X								
North Marin Community Services	County Wide	www.northmarinccs.org				X		X	X					X

Organization Information			Significant Health Needs					Other Health Needs						
Name	Primary ZIP Code	Website	Access to Basic Needs Such as Housing, Jobs, and Food	Access to Mental/Behavioral Health and Substance Use Services	Access to Quality Primary Care Health Services	Increased Community Connections	Access to Functional Needs	Active Living and Healthy Eating	Safe and Violence-Free Environment	Access to Dental Care and Preventive Services	Healthy Physical Environment	Access to Specialty and Extended Care	Injury and Disease Prevention and Management	System Navigation
Novato Chamber of Commerce	94945	www.novatochamber.com	X			X								
Novato Community Hospital, Sutter Health	94945	www.sutterhealth.org/novato		X	X			X					X	X
Novato Unified School District	94945	nusd.org	X			X								
Opening the World	94903	openingtheworld.org/	X			X								
Operation Access	94108	www.operationaccess.org										X	X	
Parent Services Project	94901	marinhhs.org/community-resource-guide/parent-services-project-inc	X			X								
Planned Parenthood San Rafael	94901	www.plannedparenthood.org/health-center/california/san-rafael/94901/san-rafael-health-center-4114-90200			X							X	X	X
Redwood Community Health Coalition	94999	www.rchc.net	X											
Ritter Center	94901	rittercenter.org	X	X	X					X				X
Rotacare Clinic of San Rafael	94901	www.rotacarebayarea.org/sanrafael			X								X	X

Organization Information			Significant Health Needs					Other Health Needs						
Name	Primary ZIP Code	Website	Access to Basic Needs Such as Housing, Jobs, and Food	Access to Mental/Behavioral Health and Substance Use Services	Access to Quality Primary Care Health Services	Increased Community Connections	Access to Functional Needs	Active Living and Healthy Eating	Safe and Violence-Free Environment	Access to Dental Care and Preventive Services	Healthy Physical Environment	Access to Specialty and Extended Care	Injury and Disease Prevention and Management	System Navigation
Salvation Army	94901	sanrafael.salvationarmy.org	X			X								
San Geronimo Valley Community Center	94963	www.sgvcc.org	X			X			X					
San Rafael Chamber of Commerce	94901	srchamber.com	X			X								
SF Marin Food Bank- Food Policy Council	94901	www.sfmfoodbank.org/advocacy-old/marin-food-policy-council	X			X		X						
St. Vincent de Paul Society of Marin County	County Wide	www.vinnies.org	X			X								
The Spahr Center	County Wide	thespahrcenter.org	X			X							X	
United Way	County Wide	www.unitedway.org/local/united-states/california/united-way-bay-area	X											
West Marin Senior Services	94956	wmss.org	X			X						X		
Youth Transforming Justice	94901	ytjustice.org	X			X			X					

Appendix F: Evaluation of the Impact of Actions



MarinHealth developed and approved an Implementation Strategy to address significant health needs identified in the 2019 CHNA. The hospital addressed: access to care, healthy eating and active living, housing and homelessness, mental health and substance use, and violence and injury prevention through a commitment of community benefit resources.

To accomplish the Implementation Strategy, goals were established that indicated the expected changes in the health needs as a result of community programs and education. Strategies to address the priority health needs were identified and measures tracked. The following section outlines the health needs addressed since the completion of the 2019 CHNA.

Access to Care

- Provided financial assistance for uninsured/underinsured and low-income residents. Following our Financial Assistance Policy, the hospital provided discounted and free health care to qualified individuals.
- Provided transportation services for persons who lacked transportation to access health care services.
- Reached 2,442 individuals with compassionate discharge services and prescriptions.
- Supported primary care and specialty care services for the uninsured at MarinHealth Medical Network Clinics.
- Supported Operation Access in their work to provide donated outpatient surgical and specialty care for the uninsured and underserved. MarinHealth Medical Center waived hospital charges and provided grant funds for Operation Access clients, enabling 431 uninsured individuals to receive 622 needed surgical and/or diagnostic services, helping to restore their quality of life. In addition, through Operation Access MarinHealth-affiliated physician volunteers provided 29 surgical procedures and diagnostic services for 27 uninsured individuals.
- Provided free education, counseling, and support to 3,016 breastfeeding mothers.
- Provided outpatient care coordination and transitions of care through the Supportive Care Center, addressing barriers to care for vulnerable patients and their caregivers.
- Assisted 17,015 individuals with health insurance enrollment in partnership with Marin Community Clinics. Supported 13,054 appointments to link patients to community resources including legal services, rental assistance, and social security benefits in partnership with Marin Community Clinics.
- Identified 486 COVID-19 cases in partnership with Canal Alliance. Contact tracing was conducted for each case and all individuals were provided case management services during their 14 days of self-isolation.
- Provided 929 unduplicated individuals with dental services in partnership with Petaluma Health Center dba Coastal Health Alliance.

- Approximately 176 rides were provided in a pilot program to prevent missed medical appointments in partnership with Whistlestop.
- Provided a mobile care team with a van equipped with COVID testing capability and personal protective equipment. The group proactively visited nursing homes for education, testing patients, testing staff, and providing them with proper use of Personal Protective Equipment (PPE). With Marin Healthcare District funding, a second mobile care unit was dispatched to vulnerable communities, such as the Canal District, where residents are more likely to live in multi-generational housing and work in higher-risk occupations, putting them at higher risk for contracting the virus as it is difficult to socially distance. Additionally, in Novato, a MarinHealth Adult Acute Care Clinic provided drive-through COVID-19 testing in 2021.

Healthy Eating and Active Living

- Distributed the free Health Connection e-Newsletter and quarterly educational podcasts to the public and provided education on healthy eating and active living.
- Facilitated a Caregiver Class that educated 30 community caregivers who worked with persons with diabetes and other chronic diseases.
- Registered Dietitian Nutritionists provided free advice to the public on nutrition needs.
- The Braden Diabetes Center provided free diabetes support groups, community education and screenings. In FY2020, 218 community members participated either in-person, or virtually due to COVID-19 shelter in place orders. In 2021, 278 community members participated either in-person or virtually.
- The Integrative Wellness Center provided education, support groups, nutrition classes, and Qi Gong events free to the public. In FY2020, more than 1,280 community members were served either in-person, or virtually due to COVID-19 shelter in place orders. In 2021, more than 1,880 community members were served.
- Delivered 25,885 organic, medically tailored meals to individuals with a serious illness and their family members in partnership with Ceres Community Project.
- 3,500 households in Novato and San Rafael received nutritious food boxes in partnership with Marin Community Clinics.
- 7,673 home meals were delivered to seniors in partnership with West Marin Senior Services.

Housing and Homelessness

- Provided 2,176 individuals experiencing homelessness with quality health care services, inclusive of medical, mental health, and alcohol/drug treatment services in partnership with Ritter Center, a Federally Qualified Health Center (FQHC) that assists Marin's low-income and homeless population.
- In partnership with North Marin Community Services, 419 households received financial assistance; 1,255 older adults, children, and families remained housed through financial assistance for eviction prevention.
- Provided 148 individuals experiencing homelessness with a stable environment to recuperate and receive wraparound support services to promote economic independence, housing stability and establish a medical home in partnership with Homeward Bound. This resulted in preventing 1,616 avoidable hospital days.
- Provided 510 low-income individuals with free acute medical care and medications in partnership with RotaCare Bay Area Clinic, the only free clinic in Marin County serving the adult population.

Mental Health and Substance Use

- Provided accredited hospital inpatient and outpatient behavioral health care services, including partial hospitalization and a co-occurring behavioral health and substance use. MarinHealth Medical Center's Behavioral Health program is Marin County's designated 5150 facility. With 17 adult inpatient beds, it is the county's only inpatient psychiatric program and the only provider of electroconvulsive therapy (ECT) in the North Bay. The program offers a continuum of care through the hospital-based ambulatory program. Behavioral Health staff provide care coordination and linkages to services for patients who present to the Emergency Department with complex psychosocial issues related to homelessness, poverty, domestic violence, human trafficking, violent crimes and trauma. MarinHealth's Behavioral Health program partners with Marin County Behavioral Health Services and other community stakeholders, such as Whole Person Care, Marin Community Clinics, Marin County Adult Protective Services, Ritter Center, Helen Vine and many others.
- In partnership with the Huckleberry Teen Youth Program, Buckelew Programs, Community Institute for Psychotherapy, and North Marin Community Services, more than 1,180 youth and adults were provided bilingual, culturally sensitive mental health counseling sessions.
- Ninety-nine (99) seniors received cognitive behavioral therapy, Healthy Ideas Behavioral Activation and linkages to other services, as needed, in partnership with Jewish Family and Children's Services. In addition, 18 family members and caregivers were provided therapy and linkages to community resources.
- Provided transportation for seniors in the Behavioral Health program to increase access to care.

- In partnership with Community Action Marin, 4,500 community members were able to access support through a Warmline in English and Spanish. Trained peer specialists assisted adults with their recovery journeys. Additionally, 220 adults and transitional-age-youth with serious mental illness were provided substance use recovery support and empowerment services.
- In partnership with San Geronimo Valley Community Center, a Let's Talk speaker series focused on substance use, teen development and parenting. All classes were free and open to the public.
- Sixty-six (66) individuals received multiple peer-to-peer behavioral health interventions with promotores from North Marin Community Services
- In partnership with the Spahr Center, 32 LGBTQ+ individuals were provided individual therapy.
- Supported Marin City Community Development Corporation, a substance use recovery-oriented mental health program for those with serious mental illness, including transitional age youth. 12 adults and transitional-age-youth with serious mental illness were enrolled in training courses and received certificates in customer services and/or food service in partnership with Community Development Corporation of Marin's Transitional Employment Program.

Violence and Injury Prevention

- Provided 443 West Marin seniors with case management services, home-delivered meals and frequent contact via phone, Facetime and Zoom to reduce isolation and fear during the COVID-19 pandemic in partnership with West Marin Senior Services.
- Over 4,100 youth participated in health education, substance use prevention, and sexual violence prevention workshops with Huckleberry Youth Programs.
- Provided 5,000 individuals and families with support services to prevent and address substance use, mental health, isolation, sexual health and trauma with San Geronimo Valley Community Center.
- 750 Boy Scouts participated in the American College of Surgeon's Stop the Bleed training held at MarinHealth. Stop the Bleed encourages bystanders to become trained, equipped, and empowered to help in a bleeding emergency before professional help arrives.

Data Sources

Conceptual Model Alignment	Indicator	Data Source	Time Period	
Health Outcomes				
Length of Life	Infant Mortality	Infant Mortality	County Health Rankings	2013 - 2019
		Life Expectancy	Child Mortality	County Health Rankings
	Life Expectancy		County Health Rankings	2017 - 2019
	Premature Age-Adjusted Mortality		County Health Rankings	2017 - 2019
	Premature Death		County Health Rankings	2017 - 2019
	Mortality	Stroke Mortality	CDPH California Vital Data (Cal-ViDa)	2015 - 2019
		Chronic Lower Respiratory Disease Mortality	CDPH California Vital Data (Cal-ViDa)	2015 - 2019
		Diabetes Mortality	CDPH California Vital Data (Cal-ViDa)	2015 - 2019
		Heart Disease Mortality	CDPH California Vital Data (Cal-ViDa)	2015 - 2019
		Hypertension Mortality	CDPH California Vital Data (Cal-ViDa)	2015 - 2019
		Cancer Mortality	CDPH California Vital Data (Cal-ViDa)	2015 - 2019
		Liver Disease Mortality	CDPH California Vital Data (Cal-ViDa)	2015 - 2019
		Kidney Disease Mortality	CDPH California Vital Data (Cal-ViDa)	2015 - 2019
		Suicide Mortality	CDPH California Vital Data (Cal-ViDa)	2015 - 2019
		Unintentional Injuries Mortality	CDPH California Vital Data (Cal-ViDa)	2015 - 2019
		COVID-19 Mortality	CDPH COVID-19 Time-Series Metrics by County and State	Collected on 2022-04-11
		COVID-19 Case Fatality	CDPH COVID-19 Time-Series Metrics by County and State	Collected on 2022-04-11
		Alzheimer's Disease Mortality	CDPH California Vital Data (Cal-ViDa)	2015 - 2019
	Influenza and Pneumonia Mortality	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
		Babies with Very Low Birth Weight	Healthy Marin Partnership	2013
		HIV Prevalence	County Health Rankings	2018

Conceptual Model Alignment		Indicator	Data Source	Time Period
		Disability	2019 American Community Survey 5 year estimate variable S1810_C03_001E	2015 - 2019
		Poor Mental Health Days	County Health Rankings	2018
		Frequent Mental Distress	County Health Rankings	2018
		Poor Physical Health Days	County Health Rankings	2018
		Frequent Physical Distress	County Health Rankings	2018
		Poor or Fair Health	County Health Rankings	2018
		Colorectal Cancer Prevalence	California Cancer Registry	2013 - 2017
		Breast Cancer Prevalence	California Cancer Registry	2013 - 2017
		Lung Cancer Prevalence	California Cancer Registry	2013 - 2017
		Prostate Cancer Prevalence	California Cancer Registry	2013 - 2017
		COVID-19 Cumulative Incidence	CDPH COVID-19 Time-Series Metrics by County and State	Collected on 2022-04-11
		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
	Nutrition and Physical Activity	Adult Obesity	County Health Rankings	2017
		Mothers who Breastfeed	Healthy Marin Partnership	2015 - 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

Conceptual Model Alignment		Indicator	Data Source	Time Period
Clinical Care	Access to Care	Primary Care Shortage Area	U.S. Health Resources and Services Administration	2021
		Dental Care Shortage Area	U.S. Health Resources and Services Administration	2021
		Mental Health Care Shortage Area	U.S. Health Resources and Services Administration	2021
		Medically Underserved Area	U.S. Health Resources and Services Administration	2021
		Mothers who received early prenatal care	Healthy Marin Partnership	2015 - 2017
		Mammography Screening	County Health Rankings	2018
		Colon Cancer Screening	Healthy Marin Partnership	2018
		Dentists	County Health Rankings	2019
		Mental Health Providers	County Health Rankings	2020
		Psychiatry Providers	County Health Rankings	2020
		Specialty Care Providers	County Health Rankings	2020
	Primary Care Providers	County Health Rankings	2018; 2020	
	Quality Care	Preventable Hospitalization	California Office of Statewide Health Planning and Development Prevention Quality Indicators for California	2019
COVID-19 Cumulative Full Vaccination Rate		CDPH COVID-19 Vaccine Progress Dashboard Data	Collected on 2022-04-11	
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

Conceptual Model Alignment		Indicator	Data Source	Time Period	
		Third Grade Reading Level	County Health Rankings	2018	
		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	
	Socio-Economic and Demographic Factors				
	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 Internet Access			2019 American Community Survey 5-year estimate Table S2801	2015 - 2019	
Households with no Vehicle Available			2019 American Community Survey 5-year estimate variable DP04_0058PE	2015 - 2019	
Long Commute - Driving Alone			County Health Rankings	2015 - 2019	
Access to Public Transit			OpenMobilityData, Transitland, TransitWiki.org, Santa Ynez Valley Transit; US Census Bureau	2021; 2020	
Air and Water Quality		Pollution Burden Percent	California Office of Environmental Health Hazard Assessment	2018	
		Air Pollution - Particulate Matter	County Health Rankings	2016	
	Drinking Water Violations	County Health Rankings	2019		