2019 Community Health Needs Assessment

Stanford HEALTH CARE
STANFORD MEDICINE

ValleyCare

Acknowledgments

The 2019 Community Health Needs Assessment report was prepared by the research firm Actionable Insights, LLC.

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- Jennifer van Stelle, PhD, co-founder and principal

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1. Executive Summary

COMMUNITY HEALTH NEEDS ASSESSMENT BACKGROUND

The Patient Protection and Affordable Care Act of 2010, which was enacted March 23, 2010, includes requirements for nonprofit hospitals that wish to maintain their tax-exempt status. Regulations finalized December 31, 2014, also provide guidance related to section 501(r) of the Internal Revenue Code. These regulations mandate that all nonprofit hospitals conduct a Community Health Needs Assessment (CHNA) every three years.

The CHNA must be conducted by the last day of a hospital's taxable year, and the CHNA report must be made widely available to the public. The CHNA must also include input from public health experts, local health departments, and the community. The community must include representatives of high-need groups, such as minority, low-income, and medically underserved populations.[1]

The 2019 CHNA serves as the basis for implementation strategies that are required to be filed with the IRS as part of the hospital organization's 2019 Form 990, Schedule H, four and a half months into the next taxable year.[1]

PROCESS AND METHODS

This 2019 assessment is the third such assessment conducted since the Affordable Care Act was enacted. It builds upon the information and understanding that resulted from the 2016 CHNA. The CHNA process, completed in fiscal year 2019 and described in this report, was conducted collaboratively by Stanford Health Care - ValleyCare (SHC - VC) and 13 other hospitals in Alameda and Contra Costa counties ("the Hospitals") in compliance with federal requirements.

COMMUNITY INPUT

Community input was obtained during the summer and fall of 2018 by the research firm Actionable Insights (AI) through key informant interviews with local health experts and focus groups with community leaders, residents, and people who serve residents. Secondary data, culled from various sources, were available for the Tri-Valley/Central Contra Costa County region and, in many cases, also for our hospital's service area separately. (See Attachment 1: Secondary Data Indicators for a list of sources.)

IDENTIFICATION OF HEALTH NEEDS

In November 2018, the Hospitals identified community health needs by (1) synthesizing primary qualitative research and secondary data and (2) filtering those needs through a set of criteria.

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[1] U.S. Federal Register. (2014). Department of the Treasury, Internal Revenue Service, 26 CFR Parts 1, 53, and 602. Vol. 79, No. 250, December 31, 2014. Retrieved November 2018 from https://www.govinfo.gov/content/pkg/FR-2014-12-31/pdf/2014-30525.pdf

For the purposes of this assessment, the Hospitals went beyond traditional measures to define "community health," including indicators about the physical health of the county's residents, as well as broader social and environmental determinants of health, such as access to health care, affordable housing, child care, education, and employment.

This more inclusive definition reflects SHC - VC's understanding that myriad factors impact community health. SHC - VC is committed to supporting community health improvement through upstream (social determinants of health) and downstream (health condition) intervention.

PRIORITIZATION OF HEALTH NEEDS

SHC - VC's Community Benefit Advisory Group (CBAG) met on February 27, 2019, to review the health needs identified during the assessment and to participate in the prioritization process. (The CBAG members who participated are listed in the Process and Methods section of this report.)

The CBAG used these criteria to prioritize the list of health needs:

- **Community priority.** The frequency with which the community expressed concern over the health need (compared with others) during the CHNA primary data collection process.
- **Clear disparities or inequities.** The differences in health outcomes by subgroup. Subgroups may be based on geography, language, ethnicity, culture, citizenship status, economic status, sexual orientation, age, gender, or other factors.
- **Multiplier effect.** The potential a successful solution to the health need has to solve additional problems. (For example, if obesity rates drop, heart attack rates may do so as well.)
- **Magnitude.** The number of people affected by the health need.

PRIORITIZED 2019 HEALTH NEEDS

Based on those criteria, the CBAG members reached consensus in ranking 11 community health needs. These needs are listed below in our hospital's priority order, from highest to lowest. Summarized descriptions of each need, including statistical data and community feedback, appear in the Community Health Needs section of this report.

1. Behavioral Health
2. Health Care Access and Delivery
3. Housing and Homelessness
4. Healthy Eating/Active Living, Diabetes and Obesity
5. Heart Disease and Stroke
6. Economic Stability
7. Community and Family Safety
8. Oral/Dental Health

9. Cancer
10. Climate and Natural Environment
11. Transportation and Traffic

NEXT STEPS

After making this CHNA report publicly available on the Community Benefits page of its website by August 31, 2019, SHC - VC will solicit feedback and comments about the report until two subsequent CHNA reports have been posted.[2] The hospital will also develop an implementation plan based on the CHNA results, which will be filed with the IRS by January 15, 2020.

[2] https://www.valleycare.com/about-community-benefits.aspx

2. Introduction

CHNA BACKGROUND AND FEDERAL REQUIREMENTS

In 2018, Stanford Health Care - ValleyCare (SHC - VC) and 13 other hospitals in Alameda and Contra Costa counties (subsequently referred to as "the Hospitals") collaborated for the purpose of identifying critical health needs of the community. Working together, the Hospitals conducted an extensive Community Health Needs Assessment (CHNA). The 2019 CHNA built upon earlier assessments conducted by the Hospitals.

Enacted on March 23, 2010, the Affordable Care Act provided guidance at a national level for Community Health Needs Assessments for the first time. Federal requirements included in the Affordable Care Act stipulate that hospital organizations under 501(c)(3) status must adhere to new 501(r) regulations, one of which is assessing needs every three years. The CHNA report must document the community served, the process and methods used to conduct the assessment, who was involved, and the health needs that were identified and prioritized as a result. Final requirements were published in December 2014.

The federal definition of community health needs includes social determinants of health in addition to morbidity and mortality. For the purposes of this assessment, the Hospitals went beyond traditional measures to define "community health," including indicators about the physical health of the county's residents, as well as broader social and environmental determinants of health, such as access to health care, affordable housing, child care, education, and employment. This more inclusive definition reflects SHC - VC's understanding that myriad factors impact community health. SHC - VC is committed to supporting community health improvement through upstream (social determinants of health) and downstream (health condition) intervention.

Beyond providing a national set of standards and definitions related to community health needs, the Affordable Care Act has had an impact on upstream factors. For example, the Affordable Care Act created more incentives for health care providers to focus on prevention of disease by including lower or no co-payments for preventative screenings. Also, funding has been established to support community-based primary and secondary prevention efforts.

CALIFORNIA'S ASSESSMENT HISTORY AND STATE REQUIREMENTS

California Legislative Senate Bill 697, enacted in 1994, stipulates that each private nonprofit hospital submit an annual report to the Office of Statewide Health Planning and Development that shall include, but not be limited to, a description of the activities that the hospital has undertaken to address identified community needs within its mission and financial capacity. Additionally, the hospital shall describe the process by which it involved the community in

identifying and prioritizing needs to be addressed. This community needs assessment shall be updated at least once every three years.[3]

The 2019 CHNA meets federal and state requirements.

SUMMARY OF 2016 CHNA

In 2016, SHC - VC collaborated with other hospitals (Alta Bates Summit Medical Center and Herrick Campus; Eden Medical Center; Delta Medical Center; Kaiser Foundation Hospitals in Antioch, Fremont, Oakland, Richmond, San Leandro, and Walnut Creek; John Muir Health and its joint venture partner San Ramon Regional Medical Center; St. Rose Hospital; UCSF Benioff Children's Hospital Oakland; and Washington Hospital Healthcare System) to assess community health needs and to meet the IRS and SB 697 requirements.

SHC - VC's 2016 CHNA report is publicly available online.[4]

The health needs identified and prioritized through the 2016 CHNA process were:

- Health Care Access and Delivery
- Mental Health
- Obesity, Diabetes, Healthy Eating/Active Living
- Cardiovascular/Stroke
- Cancer
- Substance Abuse (Alcohol, Tobacco, and Other Drugs)
- Oral Health
- Maternal and Child Health
- Communicable Diseases
- Economic Security
- Violence/Injury Prevention
- Asthma
- Unintentional Injuries
- Climate and Health

WRITTEN PUBLIC COMMENTS TO 2016 CHNA

So that the public may provide written comments on 2016 CHNA report, SHC - VC maintains a Contact Us email link on the Community Benefits page of its website.[5] This link and page will allow for public comments on the 2019 CHNA report as well.

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[3] California Office of Statewide Health Planning and Development. (1998). Not-for-Profit Hospital Community Benefit Legislation (SB 697), Report to the Legislature. Retrieved November 2019 from https://oshpd.ca.gov/wp-content/uploads/2018/07/SB-697-Report-to-the-Legislature-Community-Benefit.pdf

[4] https://www.valleycare.com/pdfs/CHNA2016.pdf

[5] https://www.valleycare.com/about-community-benefits.aspx

As of the time this CHNA report was written, SHC - VC has not received any written comments about the 2016 CHNA report. The hospital will continue to track submissions and ensure that all relevant comments are reviewed and addressed by appropriate hospital staff.

3. Our Hospital and the Community

ABOUT STANFORD HEALTH CARE - VALLEYCARE

Stanford Health Care - ValleyCare (SHC - VC) has been dedicated to providing high-quality, nonprofit health care to the Tri-Valley and surrounding communities since 1961. Through state-of-the-art technology and highly skilled physicians, nurses, and staff, SHC - VC provides a wide range of health care services at its Livermore, Pleasanton, and Dublin medical facilities. SHC - VC has a total of 242 beds and a medical staff of approximately 500, offering an array of inpatient and outpatient services to the community.

COMMUNITY BENEFITS

As a community-based organization, SHC - VC understands the value of continuously assessing the health needs of the community it serves. By doing so, the hospital is able to establish a systematic process for identifying community health needs that will guide thoughtful and effective community investment for years to come.

Mission Statement: To care, to educate, to discover.

Vision: Healing humanity through science and compassion, one patient at a time.

COMMUNITY SERVED

SHC - VC's primary service area is the Tri-Valley. The Tri-Valley encompasses the suburban cities of Livermore, Pleasanton, Dublin, and San Ramon in the three valleys from which it takes its name: Amador Valley, Livermore Valley, and San Ramon Valley. Livermore, Pleasanton, and Dublin are in Alameda County, and San Ramon is in Contra Costa County. SHC - VC operates facilities in Pleasanton, Livermore, and Dublin (see Map of the Community Served, next page). The Tri-Valley accounts for the majority of SHC - VC's inpatient discharges.

The U.S. Census estimates a population of about 750,000 in the Tri-Valley/Central Contra Costa County (TV/C-CCC).[6] The area is highly diverse: The two largest ethnic subpopulations are White and Asian (60% and 18%, respectively). Foreign-born residents account for 25% of the population in Contra Costa County and 32% of the population in Alameda County.[7]

[6] U.S. Census Bureau. (2016). American Community Survey, 5-Year Estimates, 2012–2016.
[7] U.S. Census Bureau. (2017). American Community Survey, 5-Year Estimates, 2013–2017.

MAP OF THE COMMUNITY SERVED

DEMOGRAPHICS, TRI-VALLEY/CENTRAL CONTRA COSTA COUNTY

Ethnicity		Socioeconomic Data	
Total population	**750,746**	Residents living in poverty (<100% federal poverty level)	6.2%
White	59.8%	Children in poverty	6.3%
Asian	18.2%	Unemployment	3.0%
Hispanic/Latinx	14.5%	Uninsured population	5.5%
Multi-Racial	4.2%	Adults with no high school diploma	5.8%
African Ancestry	2.4%		
Pacific Islander/Native Hawaiian	0.4%		
Native American/Alaska Native	0.2%		
Some other race	0.2%		

Percentages do not add up to 100% because they overlap. Source: U.S. Census Bureau. (2016). American Community Survey, 5-Year Estimates, 2012–2016.

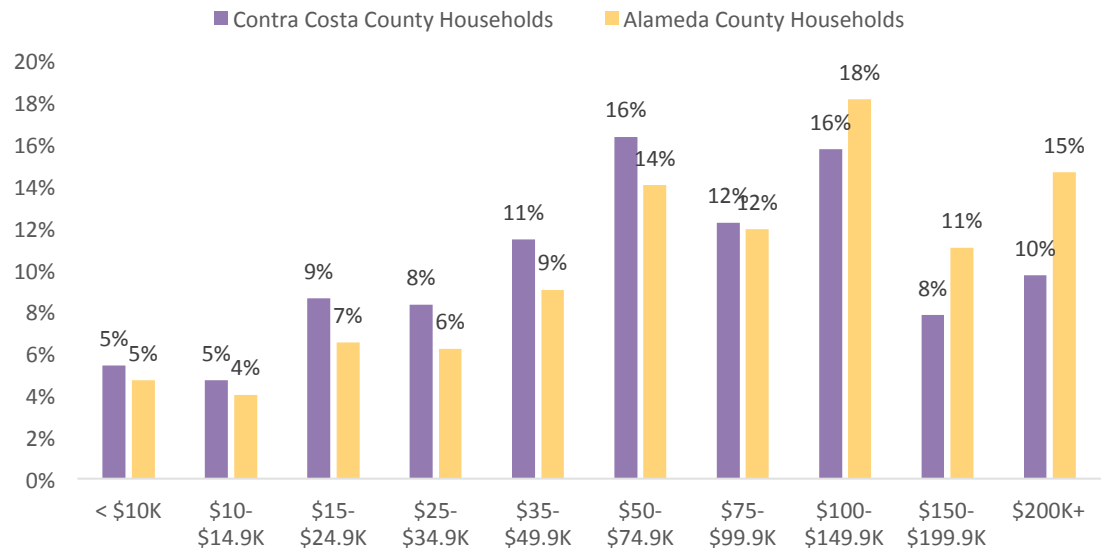
Two key social determinants, income and education, have a significant impact on health outcomes. The median household income in Alameda County is about $80,000, which is higher than California (about $66,000) but lower than neighboring Contra Costa County ($83,000).[8]

As displayed in the following chart, median incomes in Alameda and Contra Costa counties differ at the high and low ends. Nearly 45% of people in Alameda County live in households with incomes of $100,000 or more, compared with about 35% in Contra Costa County. More than 30% of the population in both counties have household incomes below $50,000, and the rest are in the middle, with household incomes between $50,000 and $100,000.[9] By comparison, the

[8] U.S. Census Bureau. (2016). American Community Survey, 5-Year Estimates, 2012–2016.
[9] U.S. Census Bureau. (2016). American Community Survey, 5-Year Estimates, 2012–2016.

2018 Self-Sufficiency Standard for a two-adult family with two children was about $98,300 in Alameda County and about $102,900 in Contra Costa County.[10]

HOUSEHOLD INCOME RANGE BY COUNTY



Source: U.S. Census Bureau. American Community Survey, 5-Year Estimates (2013-17). Table S1901.

Despite the fact that over a third of households in each county earn more than $100,000 per year, nearly 6% of TV/C-CCC residents live below the federal poverty level.[11] Nearly 6% of people in the TV/C-CCC area are uninsured.[12]

Housing costs are high. In Alameda County, the 2018 median home price was about $881,000, and the median rent is $3,157. In Contra Costa County, the median home price is about $624,000, and the median rent is $2,749.[13]

Nearly 6% of adults in the TV/C-CCC area do not have a high school diploma.

[10] The Insight Center for Community Economic Development. (2018). Self-Sufficiency Standard Tool. Retrieved December 2018 from https://insightcced.org/tools-metrics/self-sufficiency-standard-tool-for-california/
[11] U.S. Census Bureau. (2017). American Community Survey, 5-Year Estimates, 2013–2017.
[12] U.S. Census Bureau. (2016). American Community Survey, 5-Year Estimates, 2012–2016.
[13] Zillow, data through November 2018, https://www.zillow.com/contra-costa-county-ca/home-values/

4. Process and Methods

COMMUNITY ASSESSMENT TEAM: HOSPITALS AND OTHER PARTNERS

Community benefit managers from 14 local hospitals in Alameda and Contra Costa counties ("the Hospitals") contracted with Actionable Insights to conduct the 2019 Community Health Needs Assessment. The Hospitals that partnered with Stanford Health Care - ValleyCare were:

- John Muir Health and its joint venture partner, San Ramon Regional Medical Center
- Kaiser Permanente–Diablo Area
  (Antioch and Walnut Creek Kaiser Foundation Hospitals)
- Kaiser Permanente–East Bay Area
  (Oakland and Richmond Kaiser Foundation Hospitals)
- Kaiser Permanente–Greater Southern Alameda Area
  (Fremont and San Leandro Kaiser Foundation Hospitals)
- St. Rose Hospital
- Sutter Health Bay Area
  (Alta Bates Summit Medical Center and Herrick Campus, Delta Medical Center, and Eden Medical Center)
- UCSF Benioff Children's Hospital Oakland
- Washington Hospital Healthcare System

IDENTITY AND QUALIFICATIONS OF CONSULTANTS

Actionable Insights (AI), LLC, an independent local research firm, completed the 2019 Community Health Needs Assessment. To do so, AI assisted with CHNA planning, conducted primary research, collected secondary data, synthesized primary and secondary data, facilitated the process of identifying community assets and health needs, assisted with determining the prioritization of health needs, and documented the processes and findings in this report.

The project managers were Jennifer van Stelle, PhD, and Melanie Espino, the co-founders and principals of Actionable Insights. They were assisted by Robin Dean, MA, MPH; Alexandra Fiona Dixon; Rebecca Smith Hurd; Franklin Hysten; Jenjii Hysten; Heather Imboden, MCP; Susana Morales, MA; Olivia Murillo; Kit Strong, MPH, MSW; and Margaret Tamisiea.

Actionable Insights helps organizations discover and act on data-driven insights. The firm specializes in research and evaluation in the areas of health, STEM (science, technology, engineering, and math) education, youth development, and community collaboration efforts. AI conducted community health needs assessments for over 25 hospitals during the 2018–19 CHNA cycle. More information about Actionable Insights is available on its website.[14]

[14] http://actionablellc.com/

CHNA PROCESS AND METHODS

The Hospitals collaborated on the primary and secondary data requirements of the CHNA. The CHNA data collection process took place over seven months in 2018 and culminated in this report, written in early 2019. The phases of the process are depicted below.

SECONDARY DATA COLLECTION

AI analyzed more than 140 quantitative health indicators to assist the Hospitals in understanding the health needs and assessing their priority in the community. AI collected data from existing sources using the CHNA.org[15] and other online data platforms, such as the California Department of Public Health and the U.S. Census Bureau websites. The decision to include these additional data was made, and these data were collected, by the Hospitals. The Hospitals, as a group, determined that these additional data would bring greater depth to the CHNA in their communities. SHC - VC separately directed AI to gather secondary statistical data specific to its service area. When data by ethnicity were available, they were reviewed to enhance understanding of the issue(s).

As a further framework for the assessment, SHC - VC and the Hospitals requested that AI address the following questions in its analysis:

- How do these indicators perform against accepted benchmarks (Healthy People 2020 objectives and statewide averages)?
- Are there disparate outcomes and conditions for people in the community?

Healthy People is an endeavor of the U.S. Department of Health and Human Services that has provided 10-year national objectives for improving the health of Americans based on scientific data spanning 30 years. Healthy People sets national objectives or targets for improvement. The most recent set of objectives are for the year 2020 (HP2020). Year 2030 objectives are currently under development.[16]

For further details on the sources of data used, see Attachment 1: Secondary Data Indicators.

[15] http://www.chna.org is a web-based resource funded by Kaiser Permanente as a way to support community health needs assessments and community collaboration. The platform includes a focused set of community health indicators that allow users to understand what is driving health outcomes in certain neighborhoods. The platform provides the capacity to view, map, and analyze these indicators, as well as to understand ethnic disparities and compare local indicators with state and national benchmarks.

[16] U.S. Department of Health and Human Services, Healthy People 2020. http://www.healthypeople.gov

PRIMARY DATA COLLECTION (COMMUNITY INPUT)

Actionable Insights (AI) conducted the primary research for this assessment. AI used three strategies for collecting community input: key informant interviews with health experts, focus groups with professionals, and focus groups with residents.

Primary research protocols generated by AI in collaboration with the Hospitals were based on facilitated discussion among the group's members about what they wished to learn during the 2019 CHNA. The Hospitals sought to build upon prior CHNAs by focusing the primary research on the community's perception of mental health (identified as a major health need in the 2016 CHNA) and their experience with health care access and delivery (also identified as a major health need in 2016). Relatively little timely quantitative data exist on these subjects.

AI recorded each interview and focus group as a stand-alone piece of data. Recordings were transcribed, and then the team used qualitative research software tools to analyze the transcripts for common themes. AI also tabulated how many times health needs had been prioritized by each of the focus groups or described as a priority in a key informant interview. The Hospitals used this tabulation to help assess community health priorities.

Across the key informant interviews and focus groups, AI solicited input from nearly 20 community leaders and representatives of various organizations and sectors. These representatives either work in the health field or in community-based organizations that focus on improving health and quality of life conditions by serving those from IRS-identified high-need target populations.[17]

See Attachment 2: Community Leaders, Representatives, and Members Consulted for the names, titles, and expertise of these leaders and representatives along with the date and mode of consultation (focus group or key informant interview). See Attachment 4: Qualitative Research Protocols for protocols and questions.

INPUT FROM PROFESSIONALS AND COMMUNITY LEADERS

Between July and October 2018, AI conducted primary research via interviews with eight local and/or regional experts from various organizations. These key informants included individuals from the public health department, community clinic managers, and clinicians. Interviews were conducted in person or by telephone for approximately one hour. AI asked informants:

- What are the most important/pressing health needs in the local area?
- What drivers or barriers are impacting the top health needs?
- To what extent is health care access a need in the community?
- To what extent is mental health a need in the community?
- What policies or resources are needed to impact health needs?

[17] The IRS requires that community input include the low-income, minority, and medically underserved populations.

A focus group was conducted in August 2018 at Axis Community Health with five professionals who serve Latinx and/or low-income individuals. The questions were the same as those used with key informants.

DETAILS OF FOCUS GROUPS

Population	Focus Group Host/Partner	Date	Number of Participants
Individuals experiencing homelessness or housing instability	Open Heart Kitchen	7/31/2018	7
Professionals who serve Latinx and/or low-income individuals	Axis Community Health	8/7/2018	5
Families with elementary-school-age children	Marylin Elementary School	9/6/2018	11

INPUT FROM RESIDENTS

AI conducted two resident focus groups with a total of 18 residents in July and September 2018. The discussions revolved around the same five questions as those with the key informants, which AI modified appropriately for each audience. (See Attachment 4: Qualitative Research Protocols for detailed focus group protocols.)

Nonprofit hosts recruited participants for the focus groups. To provide a voice to the community it serves, and in alignment with IRS regulations, the focus groups targeted residents of the Tri-Valley area who are medically underserved, low-income, or of a minority population.

DEMOGRAPHICS OF RESIDENT FOCUS GROUPS

AI asked all 18 residents who participated in the focus groups to fill out an anonymous demographic survey, which showed:

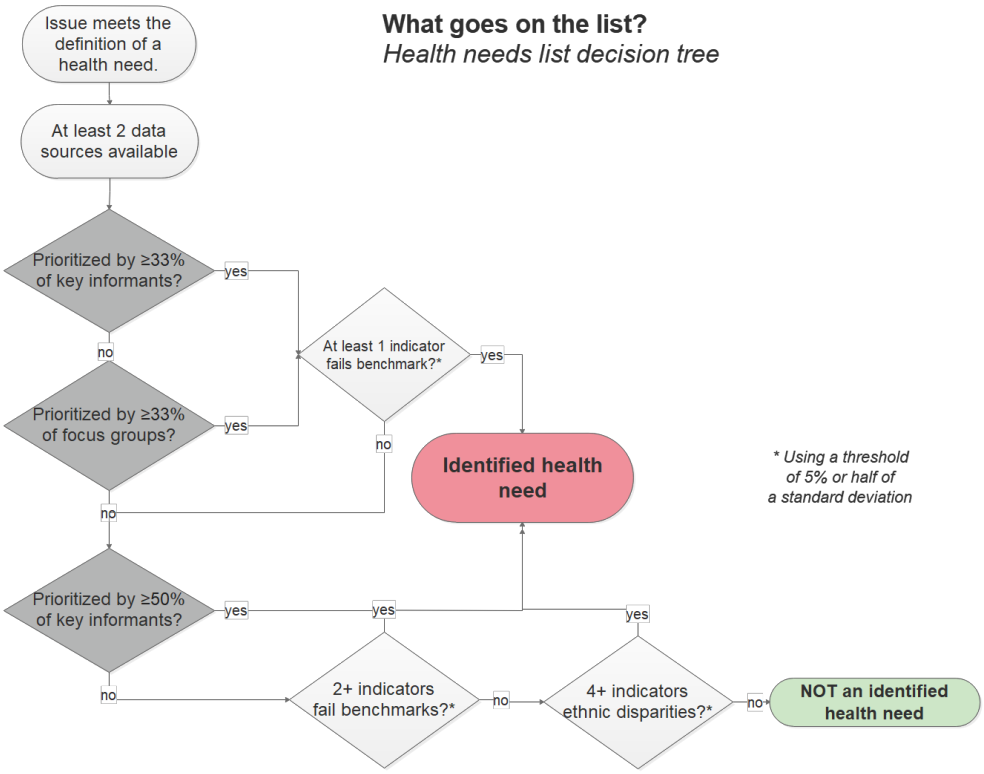
- 89% of respondents were female, and 11% were male.
- 94% of respondents were between ages 25 and 64; the rest were older adults.
- 59% of respondents were Latinx, and the rest were relatively evenly distributed among other ethnicities (e.g., White, Asian, Native American).
- All but one participant resided in Livermore.
- 89% had some form of medical insurance; of these, 13% had Medicare. In addition, 44% of insured participants had Medi-Cal, 19% had HealthPAC, and the rest were covered by employer-based policies, private insurance, the Veterans Health Administration, or other plans.
- Among adult participants, 71% had a high school diploma or less education. Only one participant had a four-year college degree (BA/BS) or higher.

- 93% reported an annual household income below $49,000, which is lower than the 2018 California Self-Sufficiency Standard[18] for Alameda County for two adults with no children ($50,478). Sixty percent were low-income (that is, Medi-Cal eligible[19] or earning less than $25,000). This demonstrates a high level of need among participants in an area where the cost of living is extremely high compared with other areas of California.

Note: Not every person answered every question.

DATA SYNTHESIS

In the analysis of quantitative and qualitative data, many health issues surfaced. In order to be identified as one of the community's prioritized health needs, an issue had to meet certain criteria. These criteria are depicted in the diagram below; for terms and definitions, see Key Terms and Definitions on the next page.



[18] The Insight Center for Community Economic Development. (2018). *Self-Sufficiency Standard Tool for California*. Retrieved from http://www.insightcced.org/tools-metrics/self-sufficiency-standard-tool-for-california/

[19] Earned below 138% of the Federal Poverty Level ($16,753 for an individual, $22,108 for two adults, $34,638 for a family of four). California Department of Health Services. Medi-Cal Eligibility, 2018. Retrieved from https://www.dhcs.ca.gov/services/medical/Pages/DoYouQualifyForMedi-Cal.aspx

KEY TERMS

- A "data source" is either a statistical data set, such as those found throughout the California Cancer Registry, or a qualitative data set, such as the material resulting from the interviews and focus groups Actionable Insights conducted for the hospitals.
- A "direct indicator" is a statistic that explicitly measures a health need. For example, the lung cancer incidence rate is a direct indicator of the cancer health need, while the percentage of the population that currently smokes cigarettes is not a direct indicator of the cancer health need.
- A "benchmark" is either the California state average or the Healthy People 2020 aspirational goal (when available), whichever is more stringent.

DETAILS OF CRITERIA

1. Meets the definition of a "health need" (see Definitions box at right).
2. At least two data sources were consulted.
3. a. Prioritized by ≥ 33% of key informants or focus groups and at least one direct indicator fails the benchmark by ≥5% or ≥0.5 standard deviations.
   b. If not (a), prioritized by ≥ 50% of key informants or focus groups.
   c. If not (b), two or more direct indicators fail the benchmark by ≥5% or ≥0.5 standard deviations.
   d. If not (c), four or more indicators must show ethnic disparities that fail the benchmark by ≥5% or ≥0.5 standard deviations.

DEFINITIONS

Health condition: A disease, impairment, or other state of physical or mental ill health that contributes to a poor health outcome.

Health driver: A behavioral, environmental, or clinical care factor, or a more upstream social or economic factor that impacts health. May be a social determinant of health.

Health need: A poor health *outcome* and its associated health *driver*, or a health driver associated with a poor health outcome where the outcome itself has not yet arisen as a need.

Health outcome: A snapshot of diseases in a community that can be described in terms of both morbidity (quality of life) and mortality.

Health indicator: A characteristic of an individual, population, or environment that is subject to measurement (directly or indirectly) and can be used to describe one or more aspects of the health of an individual or population.

Actionable Insights analyzed data on a variety of issues, including secondary data and qualitative data from focus groups and key informant interviews. AI then synthesized these data for each issue and applied the criteria listed above to evaluate whether each issue qualified as a prioritized health need. In 2019, this process led to the identification of 11 community health needs that fit all three criteria. The list of needs, in priority order, appears on page 21.

For further details about each health need, including statistical data, see pages 22-33, or contact Stanford Health Care - ValleyCare.

INFORMATION GAPS AND LIMITATIONS

A lack of secondary data limited Actionable Insights and the Hospitals in their ability to fully assess additional topics that were identified as community health needs. Statistical information related to these health issues was scarce:

- Adequacy of community infrastructure (sewerage, electrical grid, etc.)
- Adult use of illegal drugs and misuse/abuse of prescription medications (e.g., opioids)
- Alzheimer's disease and dementia diagnoses
- Breastfeeding practices at home
- Data broken out by Asian sub-groups
- Diabetes among children
- Experiences of discrimination among vulnerable populations
- Health of undocumented immigrants (who do not qualify for subsidized health insurance and may be underrepresented in survey data)
- Hepatitis C
- Mental health disorders
- Oral/dental health
- Suicide among LGBTQ youth

PRIORITIZATION OF HEALTH NEEDS

SHC - VC's Community Benefit Advisory Group (CBAG) met on February 27, 2019, at the hospital facility, 5575 W. Las Positas Blvd., in Pleasanton to review the health needs identified during the CHNA and to participate in the prioritization process.

The CBAG members who participated were:

- Tracey Lewis Taylor, Chief Operating Officer, Interim CEO
- Gina Teeples, Chief Nursing Officer
- David Svec, MD, Chief Medical Officer
- Denise Bouillerce, Director, Public Relations and Marketing
- Shelby Salonga, Manager, Public Relations and Marketing
- Denise Estrada, Manager, Women's Imaging and Cancer Services
- Marivic Paz, MBA, BSN, RN, Director of Utilization Management
- Mino Sastry, Executive Director, Support Services

The CBAG used these criteria to prioritize the list of health needs:

- **Community priority.** The frequency with which the community expressed concern over the health need (compared with others) during the CHNA primary data collection process.

- **Clear disparities or inequities.** The differences in health outcomes by subgroup. Subgroups may be based on geography, language, ethnicity, culture, citizenship status, economic status, sexual orientation, age, gender, or other factors.
- **Multiplier effect.** The potential a successful solution to the health need has to solve additional problems. (For example, if obesity rates drop, heart attack rates may do so as well.)
- **Magnitude.** The number of people affected by the health need.

Based on those criteria, the CBAG members reached consensus in ranking the 11 community health needs as follows. (See the Community Health Needs section or a summarized description of each need.)

1. **Behavioral Health**
2. **Health Care Access and Delivery**
3. **Housing and Homelessness**
4. **Healthy Eating/Active Living, Diabetes, and Obesity**
5. **Heart Disease and Stroke**
6. **Economic Stability**
7. **Community and Family Safety**
8. **Oral/Dental Health**
9. **Cancer**
10. **Climate and Natural Environment**
11. **Transportation and Traffic**

5. Community Health Needs

SUMMARIZED DESCRIPTIONS OF 2019 PRIORITIZED COMMUNITY HEALTH NEEDS

Summary descriptions of each health need appear on the following pages.

BEHAVIORAL HEALTH

More than half of East Bay focus groups and key informants prioritized behavioral health, including mental health and substance use, as a top health need. Depression and stress were the most common issues raised. Community members identified trauma and adverse childhood experiences (ACEs) as drivers of behavioral health problems. A number of participants described the impact of discrimination and institutionalized racism as generational trauma, which has contributed to inequitable health outcomes.

The Mayo Clinic estimates that in 2015, roughly 20% of the adult U.S. population was coping with a mental illness.[20] Mental health (or emotional and psychological well-being, along with the ability to cope with normal, daily life) is key to personal well-being, healthy relationships, and the ability to function in society.[21] Depression and anxiety can affect one's ability for self-care. Likewise, chronic diseases can lead to negative impacts on an individual's mental health.[22]

"Policy needs to be adjusted for how we treat mental health. It needs to be part of an office visit. It needs to be screened all the time. ACEs need to be taken into consideration when people go in to see their doctors, like they do in San Francisco."
—Key informant

The use of substances such as alcohol, tobacco, and legal and illegal drugs affects not only the individuals using them, but also their families and communities. Smoking cigarettes, for instance, can harm nearly every organ in the body and causes a variety of diseases, including heart disease.[23] Exposure to secondhand smoke can create health problems for nonsmokers.[24] Substance use can lead or contribute to other costly social, physical, mental, and public health problems, including domestic violence, child abuse, suicide, car accidents, and HIV/AIDS.[25]

In recent years, advances in research have resulted in a variety of effective evidence-based strategies to treat various addictions. Brain-imaging technology and the development of targeted medications have helped to shift the perspective of the research community with respect to

[20] Centers for Disease Control and Prevention. (2018). *Learn About Mental Health*.
[21] Office of Disease Prevention and Health Promotion. (2018). *Mental Health and Mental Disorders*.
[22] Lando, J. & Williams, S. (2006). *A Logic Model for the Integration of Mental Health Into Chronic Disease Prevention and Health Promotion in Preventing Chronic Disease.* 2006 Apr; *3*(2): A61.
[23] Centers for Disease Control and Prevention. (2018). *Health Effects of Cigarette Smoking*.
[24] American Lung Association. (2017). *Health Effects of Secondhand Smoke*.
[25] World Health Organization. (2018). *Management of Substance Abuse*.

substance use.[26] Increasingly, substance use is seen as a disorder that can develop into a chronic illness requiring lifelong treatment and monitoring.[26]

Focus group participants and key informants across the East Bay discussed the co-occurrence of mental health and substance use. With regard to substances, the data suggest that alcohol is an issue in the SHC - VC service area: The proportion of household expenditures for alcohol is significantly higher here than the state average, as is the rate for excessive alcohol consumption. The ratio of liquor stores per capita is slightly higher in the local area than the state average.

Domestic violence has negative impacts on the mental health of victims and their families.[27] Domestic violence hospitalizations are significantly higher in the local area than the state average.

HEALTH CARE ACCESS AND DELIVERY

Limited access to health care, and compromised health care delivery, negatively affects people's quality of life and ability to reach their full potential. Barriers to receiving care include lack of availability, high cost, lack of insurance coverage, and lack of cultural competence on the part of providers. These barriers lead to unmet health needs, delays in receiving appropriate care, and an inability to attain preventive services.

Tri-Valley community members conveyed many concerns about health care access and delivery. Focus group participants and key informants discussed issues related to health insurance access, affordability of care (including deductibles), and the lack of access to specialists (including geriatric care), especially for Medi-Cal patients. Access to behavioral health services was a major concern, particularly the size of the behavioral health workforce, which was deemed insufficient to adequately address demand. Lack of access to oral health services was also identified in the SHC - VC service area. The health care workforce overall was a topic frequently addressed by professionals, who cited low reimbursement rates for clinicians as a barrier to offering services to Medi-Cal patients.

The community also expressed alarm about barriers to access faced by immigrants who are either ineligible for Medi-Cal due to their immigration status or fearful of being deported if they access services for which they are eligible. With regard to health care delivery, the community identified the need for greater language support, culturally appropriate health care services, and whole-person care. Experts described the difficulty LGBTQ community members, especially transgender individuals, experience in finding medical professionals sensitive to their needs.

In terms of specialty care, Federally Qualified Health Centers (FQHCs) are the only organizations that receive a higher reimbursement rate for dental services. Statistics show, however, that the ratio of FQHCs to residents is significantly worse in the SHC - VC service area than the state. Further, the percentage of Medicare patients whose diabetes is not well-managed

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[26] Office of Disease Prevention and Health Promotion. (2018). *Substance Abuse.*
[27] City of Oakland. (2018). *Equity Indicators Report*.

is somewhat worse in the service area than the state. This suggests access and delivery issues with respect to preventive care.

"Older [immigrant] patients aren't able to go see the dentist because due to the politic[s]. …They aren't able to get Medi-Cal insurance, so they can't afford dental services, because they can't pay the out-of-pocket fees." —Service provider

Some access and delivery issues may be associated with inequitable health outcomes. The index of premature death based on ethnicity (i.e., premature death for non-Whites versus Whites) is significantly worse in the SHC - VC service area than the state. More people of "Other"[28] ethnicities are uninsured than any other group locally, followed by Pacific Islanders and Latinx residents. Preventable hospital events were highest for residents of African ancestry, and the rate of diabetes management in the service area is lowest among patients of African ancestry.

HOUSING AND HOMELESSNESS

The U.S. Department of Housing and Urban Development defines affordable housing as that which costs no more than 30% of a household's annual income. Spending greater sums can result in a household being unable to afford other necessities, such as food, clothing, transportation, and medical care.[29] The physical condition of a home, its neighborhood, and the cost of rent or mortgage are strongly associated with the health, well-being, educational achievement, and economic success of those who live inside.[30]

Homelessness is correlated with poor health in that either poor health can lead to homelessness or homelessness can lead to poor health.[31] People experiencing homelessness have been shown to have more health care issues, suffer from preventable illnesses at a greater rate, experience longer hospital stays, and have a higher risk of premature death than peers with housing.[32] A National Health Care for the Homeless study found that the average life expectancy for a person without permanent housing is at least 25 years less than that of the average U.S. citizen.[33]

The community identified maintaining safe and healthy housing as a top priority. Recent increases in housing costs especially affect renters and people with low and/or fixed incomes. Key informants and focus group participants strongly linked housing and mental health, indicating that the stress of maintaining housing negatively impacts families. The community also linked housing and physical health, stating that households spent less on food and medical care because of higher housing costs. The well-being of people experiencing homelessness, who are at greater risk of poor health outcomes, concerned a wide variety of experts and residents.

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[28] "Other" is a U.S. Census category for ethnicities not specifically called out in data sets.
[29] U.S. Department of Housing and Urban Development. (2018). *Affordable Housing.*
[30] Pew Trusts/Partnership for America's Economic Success. (2008). *The Hidden Costs of the Housing Crisis.* See also: The California Endowment. (2015). *Zip Code or Genetic Code: Which Is a Better Predictor of Health?*
[31] National Health Care for the Homeless Council. (2011). *Care for the Homeless: Comprehensive Services to Meet Complex Needs.*
[32] O'Connell, J.J. (2005). *Premature Mortality in Homeless Populations: A Review of the Literature.* Nashville, TN: National Health Care for the Homeless Council.
[33] National Coalition for the Homeless. (2009). *Health Care and Homelessness.*

Professionals and residents shared concerns about the increasing number of unstably housed individuals and the displacement of families in the East Bay, including families with children. Experts cited a lack of strong tenant protections—and a lack of knowledge about protections that may exist—in the community. Alameda County's public health expert expressed the need for strong tenant protections to keep residents from being displaced. Focus group participants suggested that the imbalance of jobs and housing (i.e., many new jobs but few new housing units) was a major driver of the housing crisis.

"We have an incredible challenge right now discharging people from hospital beds who came in homeless. Where does the system send them after they have had basic care?" —Local health expert

Limited quantitative data are available on housing and homelessness at the service-area level.

HEALTHY EATING/ACTIVE LIVING, DIABETES, AND OBESITY

The community prioritized healthy eating and active living (including access to food and recreation; food insecurity; nutrition, diet, and fitness), diabetes, and obesity as a health need.

ACCESS TO FOOD AND RECREATION

The U.S. Surgeon General's "Vision for a Healthy and Fit Nation 2010" described how different elements of a community can support residents' healthy lifestyles. The various components of the physical environment, including sidewalks, bike paths, parks, and fitness facilities that are "available, accessible, attractive and safe," all contribute to the extent and type of residents' physical activities.[34] Other community elements that support healthy lifestyles include local stores with fresh produce. Residents are more likely to experience food insecurity in communities where fewer supermarkets exist, grocery stores are farther away, and there are limited transportation/transit options.[35]

The CDC recommends policies and environments that support behaviors aimed at achieving and maintaining healthy weight in settings such as workplaces, educational institutions, health care facilities, and communities.[36] For example, the availability of healthy and affordable food in retail and cafeteria-style settings allows individuals to make better food choices throughout the day. Otherwise, people may settle for caloric foods of low nutritional value.[37]

Public health experts in Alameda County identified the lack of access to recreation and healthy food in certain areas (or "food deserts") as drivers of poor community health.

With regard to recreation, focus group participants cited a lack of safe public spaces and community centers where residents can engage in recreational activities and exercise. Some

[34] Centers for Disease Control and Prevention. (2009). *Healthy Places*.
[35] U.S. Department of Health and Human Services, Healthy People 2020. (2018). *Food Insecurity.*
[36] U.S. Department of Health and Human Services, Healthy People 2020. (2015). *Nutrition and Weight Status*.
[37] Centers for Disease Control and Prevention. (2015). *Healthy Food Environments*.

neighborhoods have parks, but many of them are not being used because residents fear becoming victims of crime. Some parks lack appropriate exercise equipment; others offer no programs to encourage or teach residents to exercise. Parents specifically mentioned the lack of free exercise and sports programs as a barrier to physical activity for children.

With regard to the food supply, residents described difficulty accessing grocery stores that carry fresh food, the abundance of fast food restaurants, and their dismay with the unhealthy food served at schools and provided by food banks. Local access to healthy food stores is significantly lower than the state average; service area residents have significantly less access to grocery stores and supermarkets than the average California resident. Finally, the ratio of fast food restaurants to residents is higher locally than the state average.

FOOD INSECURITY

Food insecurity is defined as the "lack of consistent access to enough food for an active, healthy life."[38] Hunger and food insecurity are related but distinct concepts; hunger is the physical discomfort related to "prolonged, involuntary lack of food," while food insecurity refers to a "lack of available financial resources for food at the household level."[39, 40] Measurements of various levels of food insecurity, from marginal to low or very low, include anxiety about food insufficiency, household food shortages, reduced "quality, variety, or desirability" of food, diminished nutritive intake, and "disrupted eating patterns."[40] In 2017, approximately one in eight Americans experienced food insecurity, of which more than one third were children.[39]

Individuals who are food-insecure may be more likely to experience various poor health outcomes/health disparities, including obesity. Children who experience food insecurity are also at greater risk for developmental complications and/or delays compared with children who are food-secure. Food insecurity may have a detrimental impact on children's mental health.[41]

Community members specifically mentioned food insecurity, and they often expressed the perception that healthy food is more expensive than fast food and packaged foods. Nearly half (47%) of the population in SHC - VC's service area lives in a Census tract identifed as a food desert (meaning a "substantial" share of residents has low access to a supermarket or grocery store); this compares with 27% statewide.

Ethnic disparities in food insecurity are evidenced by the differential statistics regarding SNAP benefits, with Pacific Islander, Native American, and "Other"[42] households accessing those benefits at rates higher than the state average and higher than the rates for other ethnic groups in the service area.

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[38] U.S. Department of Agriculture, Economic Research Service. (2018). *Food Security in the U.S.*
[39] Feeding America. (2018). *What Is Food Insecurity?*
[40] U.S. Department of Agriculture, Economic Research Service. (2018). *Definitions of Food Security.*
[41] U.S. Department of Health and Human Services, Healthy People 2020. (2018) *Food Insecurity.*
[42] "Other" is a U.S. Census category for ethnicities not specifically called out in data sets.

NUTRITION, DIET, AND FITNESS

The benefits of maintaining fitness and a healthy, nutritious diet are commonly known and well-documented, yet most people in the U.S. do not follow the recommended healthy food and exercise guidelines.

The community connected healthy eating and active living to good mental health. However, residents noted that the convenience and relatively low cost of fast food and unhealthy grocery items makes buying and preparing fresh food less likely for busy families. Experts discussed the fact that few people walk or bike to work because they have long commutes. In fact, workers from the SHC - VC service area have significantly longer commutes than the state average, driving over 60 minutes each way. This can affect the time they have available for physical activity and healthy cooking/eating. (See also Access to Food and Recreation.)

Residents talked about the lack of motivation and time to exercise, the expense of gym memberships and sports or exercise programs, and the inconvenient scheduling of exercise classes. Regarding physical activity, the community identified the increased use of screens (including video games) among youth as a driver of sedentary lifestyles.

The community frequently mentioned the Latinx population as one of particular concern. Latinx youth had the highest levels of physical inactivity in the SHC - VC service area. Specifically, a significantly smaller proportion of children and youth walk or bike to school than the state average. Local children 2 to 13 years old also consume significantly fewer fruits and vegetables than the state average for their age group.

DIABETES

The Centers for Disease Control and Prevention (CDC) estimates that 30 million people in the U.S. have diabetes, and that an additional 84 million U.S. adults are pre-diabetic. The more serious health complications of diabetes include heart disease, stroke, kidney failure, adult-onset blindness, and lower-extremity amputations.[43] Nine of 10 diagnosed cases of diabetes are type 2. Risk factors for type 2 diabetes include being physically inactive, being overweight, being age 45 or older, having a close family member with type 2 diabetes, and having pre-diabetes. Additionally, certain ethnic groups (African ancestry, Latinx, Native American, Pacific Islanders, and some Asian groups) are at a higher risk.[43]

The rate of diabetes management in the SHC - VC service area is somewhat lower than the state average—and lowest among patients of African ancestry. Most feedback from the community (focus group participants and key informants) identified the need for more public health education to increase healthy eating and active living, which would help prevent obesity, diabetes, high blood pressure, and other chronic diseases. Culturally appropriate health education may be lacking.

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[43] Centers for Disease Control and Prevention. (2018). *Diabetes Quick Facts.*

"For diabetes, I think that our patients are not educated, or at least when we try to educate them, it seems like they don't understand. For example, we say –like kind of a thing, referring to the rice, tortillas, carbs. They don't see it as, 'Oh, if I overeat this, this is going to make my blood sugar go up.' " —Service provider

OBESITY

Nearly one in five children and nearly two in five adults in the U.S. are obese.[44] Being obese or overweight increases an individual's risk for diabetes, hypertension, stroke, and cardiovascular disease. Obesity can also contribute to poor mental health (anxiety, depression, low self-esteem), stigma, and social isolation. Among children and youth, obesity can also increase the likelihood of bullying.[45] Further, food insecurity and obesity often co-exist because "both are consequences of economic and social disadvantage."[46]

Most focus group and key informant feedback pointed to the need for more community health education to increase healthy eating and active living, which would help prevent obesity and other chronic conditions. Culturally appropriate health education may be lacking, according to participants. Parents specifically discussed having difficulty encouraging their children to engage in healthy eating and active living practices to lose weight.

The proportion of the local adult population that is overweight is significantly higher compared to the state proportion. Locally, obesity is highest among Latinx youth and among African Ancestry adults.

HEART DISEASE AND STROKE

Nationally, some 84 million people suffer from a form of cardiovascular disease.[47] Heart disease is the #1 killer of both men and women,[48] and stroke is the fifth leading cause of death and a significant cause of serious disability for adults.[49] Recent research has established that ethnic disparities exist in cardiovascular health outcomes across the U.S.[50] While some risk factors for heart disease and stroke are not controllable (age, race, gender), others can be controlled (high blood pressure, high cholesterol, obesity, excessive alcohol consumption, smoking, an unhealthy diet, lack of physical activity).[48] Addressing risk factors early in life can help prevent chronic cardiovascular disease.[51]

Coronary heart disease mortality and stroke hospitalizations in the SHC - VC service area significantly exceed the state averages. Stroke prevalence is slightly higher. Local residents of

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[44] Centers for Disease Control and Prevention. (2018). *Overweight and Obesity*.
[45] Mayo Clinic. (2018). *Obesity*.
[46] Food Research and Action Center. (2015). *Food Insecurity and Obesity*.
[47] Johns Hopkins Medicine. (2018). *Cardiovascular Disease Statistics.*
[48] Centers for Disease Control and Prevention. (2017). *Heart Disease Facts.*
[49] Centers for Disease Control and Prevention. (2018). *Stroke.*
[50] Graham, G. (2015). Disparities in Cardiovascular Disease Risk in the United States. *Current Cardiology Reviews, 11*(3): 238–245.
[51] The Mayo Clinic. (2016). *Strategies to Prevent Heart Disease.*

African ancestry disproportionately die from stroke compared with neighbors of other ethnicities.

See also the Healthy Eating/Active Living, Diabetes, and Obesity health need descriptions.

ECONOMIC STABILITY

Numerous studies have found that access to economic security programs (SNAP, formerly referred to as food stamps) results in long-term better health and social outcomes,[52] and a link exists between higher income and/or social status and better health.[53] Childhood poverty has long-term effects: Even when economic and social environments later improve, childhood poverty still results in poorer long-term health outcomes.[54] Establishing policies that positively influence economic and social conditions can improve health for a large number of people in a sustainable fashion over time.[55]

Overall economic security was one of the top priorities of the community. With regard to this need, key informants and focus group participants discussed food insecurity, risk of homelessness, and employment. Residents emphasized that although there may be plenty of jobs in the Tri-Valley area, they do not pay enough, given the high cost of living.

The community connected poverty with poor health outcomes, suggesting that people with lower incomes may have a harder time accessing care. A number of CHNA participants observed that low-wage workers are among the people least able to afford missing work to attend to their health. Participants also cited the stress of economic instability as a major driver of poor mental health.

Statistics show that youth in the SHC - VC service area graduate from high school at somewhat lower rates than the state average. Food insecurity is slightly higher here than average. Significant ethnic disparities in economic security exist locally: The highest proportion of adults without a high school diploma is found with Pacific Islanders and people of ethnicities categorized as "Other."[56] For various age groups (children, older adults, overall), the highest proportion of residents living in poverty are individuals of African ancestry. More local residents of "Other" ethnicities than any other group are uninsured.

See also the Behavioral Health and Health Care Access and Delivery health needs descriptions.

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[52] Center on Budget and Policy Priorities. (2018). *Economic Security, Health Programs Reduce Poverty and Hardship, With Long-Term Benefits*.
[53] Community Commons. https://www.communitycommons.org/chna/
[54] Gupta, R.P., de Wit, M.L., & McKeown, D. (2007). The Impact of Poverty on the Current and Future Health Status of Children. *Pediatric Child Health*. *12*(8): 667-672.
[55] Office of Disease Prevention and Health Promotion. (2018). *Social Determinants of Health.*
[56] "Other" is a U.S. Census category for ethnicities not specifically called out in data sets.

COMMUNITY AND FAMILY SAFETY

Crime, violence, and intentional injury are related to poorer physical and mental health for the victims, the perpetrators, and the community at large.[57] As reported by the World Health Organization, even apart from any direct physical injury, victims of violence have been shown to suffer from a higher risk of depression, substance use, anxiety, reproductive health problems, and suicidal behavior.[58] Additionally, exposure to violence has been linked to negative effects on an individual's mental health, including post-traumatic stress disorder, as well as a greater propensity to exhibit violent behavior themselves.[59]

With regard to intentional injury, key informants and focus group attendees in the Tri-Valley most frequently talked about domestic violence. Qualitative research participants also discussed violent crime in general. Mental health, including trauma, was often mentioned in relation to crime and intentional injury. Some participants also described the impact of discrimination and racially motivated violence on mental health. Beyond that, the community recognized the connection between unsafe neighborhoods and the lack of outdoor play or other physical activities. In particular, concerns were raised for children and youth as victims of violence or bullying (online or in-person), as well as acting out trauma.

The rates of violent crimes, rapes, assaults, and domestic violence hospitalizations were significantly higher in the local area than the state average. Binge drinking is a factor in violence,[60] and excessive alcohol consumption is significantly higher here than the state average.

ORAL/DENTAL HEALTH

Maintaining oral/dental health depends on good self-care, including brushing with a fluoride toothpaste, flossing, and regularly receiving professional dental treatment.[61] Conversely, unhealthy behaviors such as substance use (including tobacco as well as drugs such as methamphetamines), poor dietary choices, and not brushing, flossing, or regularly seeing a dentist can result in conditions ranging from cavities to gum disease and cancer.[62]

As with other health needs, various factors can create barriers to accessing dental services for different ethnic, socioeconomic, and otherwise vulnerable groups. The primary factors are lack of insurance, low socioeconomic status, and fear of dental treatment.[63]

The community identified lack of access to oral health services as a need in the SHC - VC service area. Federally Qualified Health Centers (FQHCs) are the only organizations that receive a

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[57] Krug, E.G., Mercy, J.A., Dahlberg, L.L., & Zwi, A.B. (2002). The World Report on Violence and Health. *The Lancet*, *360*(9339), 1083–1088.
[58] World Health Organization. (2017). *10 Facts About Violence Prevention*.
[59] Ozer, E.J. & McDonald, K.L. (2006). Exposure to Violence and Mental Health Among Chinese American Urban Adolescents. *Journal of Adolescent Health, 39*(1), 73–79.
[60] Community Commons. https://www.communitycommons.org/chna/
[61] Mayo Clinic. (2016). *Oral Health: Brush Up on Dental Care Basics*.
[62] Office of Disease Prevention and Health Promotion. (2018). *Oral Health*.
[63] Centers for Disease Control and Prevention. (2017). *Disparities in Preventive Dental Care Among Children in Georgia*. See also: Harvard Health Publishing/Harvard Medical School. (2015). *Dental Fear? Our Readers Suggest Coping Techniques.*

higher reimbursement rate for dental services. Statistics show, however, that the ratio of FQHCs to residents is significantly worse in the local area than the state.

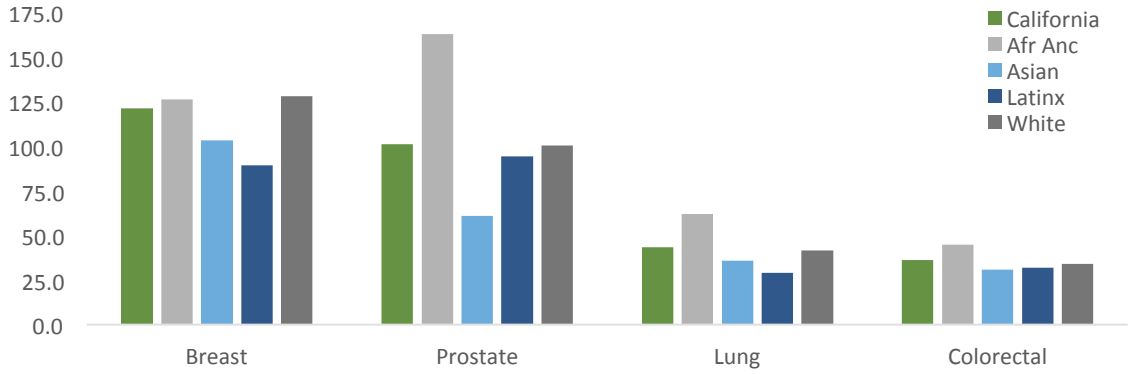
"I think because of economic issues parents don't take their children [to the dentist], and they don't understand the importance of doing so to maintain good dental hygiene." —Community expert

CANCER

Cancer is the second leading cause of death in the U.S., following heart disease.[64] High-quality screening can serve to reduce cancer rates, but various factors contribute to disparities in cancer incidence and death rates among different ethnic, socioeconomic, and otherwise vulnerable groups of people. The most important risk factors for cancer are lack of health insurance and low socioeconomic status.[65]

Incidence rates for breast, lung, and prostate cancers are worse in the SHC - VC service area than the state average. Cancer mortality is much higher than the state benchmark among residents of African ancestry and somewhat higher among residents who are White. Residents of African ancestry are less likely to have been screened for breast cancer (with a mammogram) than their White neighbors.

Selected Cancer Incidence Rates by Ethnicity, Alameda County



All rates per 100,000 population. Breast and cervical cancer incidence rates for females only. Prostate cancer incidence rates for males only. Source: State Cancer Profiles, 2010–2014.

[64] Centers for Disease Control and Prevention. (2017). *Leading Causes of Death*.
[65] National Cancer Institute. (2018). *Cancer Disparities*.

CLIMATE AND NATURAL ENVIRONMENT

The Office of Disease Prevention and Health Promotion reports that globally nearly 25% of all deaths and diseases can be attributed to environmental issues.[66] Those environmental issues include air, water, food, and soil contamination, as well as natural and technological disasters.[66] For those whose health is already compromised, exposure to negative environmental issues can compound their problems.[67]

Feedback from the community about the environment primarily concerned poor air quality, which was attributed to pollution. In the Tri-Valley area, community members identified poor air quality as a driver of asthma. Key informants and focus group participants also pointed to climate change as the cause of severe weather events and wildfires.

Asthma can be exacerbated by heat and pollution. Tree canopy cover in the SHC - VC service area is below the state average; trees are a protective factor against pollution and the impact of heat islands (e.g., from open expanses of asphalt). Compared with the state average, the service area has a significantly higher density of roads; although more miles of road per acre of land may be perceived as a good thing, pollution from traffic can contribute to asthma. A significantly greater proportion of area commuters than average drives alone to work over long distances, contributing to the traffic load on the roads. This correlates with greenhouse gas emissions from vehicles. Adult asthma prevalence is significantly worse in the service area than it is on average statewide.

Drinking water violations were also significantly higher than the state benchmark in the service area. Lack of access to clean drinking water affects physical health in different ways, including increasing the potential for acquiring communicable diseases and the likelihood of consuming sugar-sweetened beverages (which is associated with obesity and tooth decay).

See also the Transportation and Traffic health need description.

TRANSPORTATION AND TRAFFIC

In 2010, motor vehicle crashes killed nearly 33,000 people and injured 3.9 million more in the U.S. Major contributors to this were drunken driving, distracted driving, speeding, and not using seat belts.[68] Increased road use is correlated with increased motor vehicle accidents,[69] while more traffic (road congestion) causes travel delays, greater fuel consumption, and higher greenhouse gas emissions via vehicle exhaust.[68] Vehicle exhaust is a known risk factor for heart disease, stroke, asthma, and cancer. The benefits of eco-friendly alternative transport, such as walking or riding a bicycle, include improving health, saving money (no gas or car expenses),

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[66] Office of Disease Prevention and Health Promotion. (2018). *Environmental Health*.
[67] Morris, G. & Saunders, P. (2017). The Environment in Health and Well-Being, *Oxford Research Encyclopedias.*
[68] U.S. Department of Transportation, National Highway and Traffic Safety Administration. (2015). *The Economic and Societal Impact of Motor Vehicle Crashes, 2010 (Revised*), DOT HS 812 013. 2015 (revised). See also: Centers for Disease Control and Prevention. (2017). *Motor Vehicle Safety: Cost Data and Prevention Policies*, which suggests that the figures have not changed significantly since 2010.
[69] Cohen, P. (2014, October 8). *Miles Driven and Fatality Rate: U.S. States, 2012*. *Sociological Images* [web log].

and reducing impact on the environment. Combining alternative transport with traffic countermeasures can improve health and reduce traffic-related injuries in communities.

"Generally, public transportation doesn't function very well south of Oakland. Primarily it's a pretty stark system. So, if someone needs to get to a health care facility it can be several bus rides and long walks, and if they're immobile, it's pretty close to impossible." —Key informant

Many key informants and focus group participants discussed transportation as a barrier to seeing the doctor and getting to work. The community talked about the difficulty of using public transportation to reach East Bay locations because of poor reliability, limited bus and BART lines, long public transit travel times, and expensive fares (especially BART). Some participants said they feared becoming a crime victim at BART stations; others observed that access for disabled residents (such as working elevators) at BART stations is unreliable.

Compared with the state average, the SHC - VC service area has a significantly higher density of roads and a significantly greater proportion of area commuters drive alone to work over long distances (more than 60 minutes in each direction), contributing to the traffic load on the roads. Public transit access is worse for local residents than for the average Californian, with a smaller proportion of local residents living within half a mile of a transit stop.

The data suggests that driving under the influence may be an issue in the SHC - VC service area. The proportion of household expenditures for alcohol is significantly higher here than the average rate statewide, as is the rate for excessive alcohol consumption. The ratio of liquor stores to the population is slightly higher than average too.

See also the Climate and Natural Environment health need description.

6. Evaluation Findings from Implemented Strategies

SHC - VC 2016 PRIORITIZED HEALTH NEEDS

In 2015-16, Stanford Health Care - ValleyCare participated in a Community Health Needs Assessment similar to our collaborative 2019 effort. (Our 2016 CHNA report is posted on the Community Benefits Page of our public website.[70]) In 2016, SHC - VC's Community Benefits Advisory Group prioritized the following health needs and chose to address the top three in subsequent years through strategic initiatives:

1. Health Care Access and Delivery
2. Mental Health
3. Obesity, Diabetes, Healthy Eating/Active Living

SHC - VC and partner hospitals built upon the 2016 work for the 2019 Community Health Needs Assessment, using this list of identified needs and delving deeper into questions about health care access and delivery, barriers to care, and solutions. The Hospitals also specifically sought to understand how the full implementation of the Affordable Care Act in 2014 affected residents' access to health care, including affordability.

IMPLEMENTATION STRATEGIES FOR FISCAL YEARS 2017 AND 2018

The 2016 CHNA formed the foundation for SHC - VC's implementation strategies for fiscal years 2017 through 2019, which were initiated in fiscal year 2017 (FY17). The IRS requires hospitals to report on the impact of implementation strategies. The following sections describe the evaluation of community benefit programs put forth in the implementation strategies. Due to timing constraints that require the adoption and public posting of this report by the end of the fiscal year, evaluation results for FY19 (September 1, 2018–August 31, 2019) are not yet available for inclusion. For more information, see the Community Benefits Page of our public website.[71]

COMMUNITY BENEFIT INVESTMENTS IN FISCAL YEARS 2017 AND 2018

In FY17 and FY18, SHC - VC invested its community benefit funds in programs that help the larger community, such as health research, health education and training, serving vulnerable populations, charity care, and unreimbursed Medi-Cal and Medicare. These activities provide essential services for people in need in the Tri-Valley area. As part of our support for community partners and other community-based agencies, we conducted various activities for community members during FY17 and FY18, from education and support for people with chronic conditions.

[70] https://www.valleycare.com/about-community-benefits.aspx
[71] https://www.valleycare.com/about-community-benefits.aspx

EVALUATION FINDINGS FOR FISCAL YEARS 2017 AND 2018

This section describes the results of SHC - VC's community benefit investments in FY17 and FY18, based on its implementation strategies for the prioritized health needs of Health Care Access and Delivery, Behavioral Health, and Obesity, Diabetes, Healthy Eating/Active Living.

HEALTH CARE ACCESS AND DELIVERY

- During FY18, SHC - VC's funding allowed the **Senior Support Program of the Tri-Valley** to provide free preventive health screenings and exams to 324 low-income seniors. These screenings generally included blood pressure and diabetes checks, complete foot care, education about medication management, alcohol and drug education, as well as referrals, when appropriate. Some seniors also chose to receive colorectal cancer screenings and/or urine tests for infections and other toxicities. All participating seniors were encouraged to visit their physicians regularly.
- In FY18, SHC - VC staff conducted free **balance testing**, explained results, and gave a presentation about **fall risk factors and prevention** for Pleasanton Senior Support Services, open to the community. A total of 30 seniors attended.
- In FY18, SHC - VC provided funding to support the **Via Heart Project's Teen Heart Screening** event at Livermore Valley High School. Cardiac screenings—including health history review, blood pressure readings, EKGs and echocardiograms, and consultation with a cardiologist—were provided to students and other teens in the community. A total of 275 youth received EKGs and echocardiograms, with over 5% needing and receiving further follow-up. Of this 5%, approximately half had high-risk cardiac issues; the rest had low-risk cardiac issues.
- In FY17 and FY18, SHC - VC provided experts to assist uninsured, low-income patients research their health care options. Services provided at no cost by **MedData** involve helping individuals research eligibility requirements, identify appropriate health insurance programs, complete applications, compile required documentation, and follow up with county case managers. This service assists eligible patients in obtaining coverage for medical necessities, such as hospital care, prescription drugs, and home health care.
- For incoming residents of the **Tri-Valley Haven** shelter, SHC - VC offered TB screening tests and provided initial patient evaluation and follow-up diagnostic testing for any positive TB tests at no charge. SHC - VC provided 164 TB tests in FY17 and FY18.
- In FY18, the **SHC - VC Health Library** provided scientifically based health information to assist community members in making more informed decisions about their health and health care. The Health Library is open to the community and reaches out to the local population, as well as to anyone who uses the Internet. The library has an extensive collection of online health and wellness resources, including medical websites and full-text articles. It also includes conventional health and wellness resources, such as books, medical journals, periodicals, and videos. All informational and educational materials are available in English and Spanish.
- In FY17 and FY18, SHC - VC actively participated in the **Tri-Valley Health Initiative**. The initiative aims to increase access to health care for underserved youth and families through culturally relevant prevention services and to strengthen school-linked health

support throughout the Tri-Valley area. The initiative enabled us to collaborate with health officials in the local school districts regarding ongoing concerns, such as behavioral health.

- In FY17 and FY18, SHC - VC was also active in the **Tri-Valley Anti-Poverty Collaborative**. This collective impact initiative to end poverty involves partners from government, nonprofits, faith-based organizations, schools, philanthropic organizations, businesses, and the community at large. The Tri-Valley Anti-Poverty Collaborative supports a program in which struggling local residents can achieve a basic standard of living (health care, housing, nourishment, education, and sustainable financial resources).
- In the **Health Care Administration Internship Program**, SHC - VC staff supervised a total of 76 students in FY17 and FY18 as they learned and performed professional and technical tasks in all areas of the hospital. Student interns rotated through various hospital units with staff and administration/management.
- In FY17 and FY18, SHC - VC provided **clinical experience and preceptors for graduate nursing students**. Students received exposure to and experience in the positions of nurse practitioner, nursing administration, and clinical nurse specialist. SHC - VC registered nurses in multiple nursing units, including medical/surgical and Intensive Care Units, and provided direct supervision in a clinical environment to student nurses connected with Chabot College, Samuel Merritt University School of Nursing, Ohlone College, University of San Francisco, Grand Canyon University, and California State University, East Bay. Approximately 285 students participated during the reporting period.
- SHC - VC provided **clinical experience for emergency medical technician students** from Las Positas College, supervised by appropriate clinical personnel. Thirty-two students participated during FY17 and FY18. SHC - VC also provided education for 10 students from Las Positas College, Northern California Training Institute, and California State University, Sacramento, who were training to become paramedics.
- SHC - VC provided **surgical technology training for students** in the operating room, supervised by a surgical technologist and registered nurses. Seven students participated during the reporting period.
- Throughout FY17 and FY18, SHC - VC hosted 26 college student interns in physical and occupational therapy in varying affiliation periods. Students received **on-the-job instruction and hands-on treatment skill training** in the inpatient and/or outpatient setting in order to meet the requirements for their degrees and licensure.
- SHC - VC provided high school **Regional Occupation Program** students with valuable training, helping them to develop practical patient assessment and assistance skills. Students were permitted to observe and shadow health care staff in various areas of the hospital during a typical work day and, when appropriate, assist with simple projects for more hands-on experience. A total of 96 high school ROP students participated in FY17 and FY18.
- SHC - VC's **Medical Explorers program** invited students from middle school, high school, and junior college to learn more about the field of medicine. A different speaker each month talked to the students about their specific field, discussed educational

requirements, gave advice, answered questions, and shared what they know about the profession. During FY17 and FY18, the program served approximately 700 students.

- In FY17, SHC - VC had a data-sharing collaboration with ***Alameda Alliance*** to ensure that pediatric patients with asthma are offered educational and case management supports. SHC - VC ran periodic reports to identify any Alliance pediatric members who had an asthma-related emergency department (ED) visit. These pediatric patients with asthma made fewer ED and inpatient visits after the start of the program than before and substantially fewer than a control group.
- In FY17 and FY18, SHC - VC held **maternal and child education classes** to prepare parents for childbirth, convey the benefits of breastfeeding infants, and help siblings adjust to a new baby. The classes were offered to the community at large and were free to low-income parents. The SHC - VC New Mom Wellness Program offered by LifeStyleRx helped new mothers in the community increase their fitness and feel better while coping with a new baby. This comprehensive four-week program taught methods of gaining energy, living a healthy lifestyle, and becoming motivated to care for newly expanded families.

BEHAVIORAL HEALTH (MENTAL HEALTH AND SUBSTANCE USE)

- SHC - VC provided funds for a licensed Marriage and Family Therapist for **Axis Community Health**. The therapist, hired in December 2017, increased capacity to serve Tri-Valley residents at Axis's clinical site. The additional counselor has helped to alleviate the dire need for more mental health services in the community. In addition, wait times for mental health services appointments at the clinic have been reduced. From December 2017 to October 2018, a total of 763 mental health visits were provided to 117 unique patients, all of whom were uninsured.
- In FY18, SHC - VC provided funding to **Crisis Support Services of Alameda County's Healing Hearts 5K Walk/Run for Suicide Prevention**. The event, attended by 82 people, focused on raising awareness of the tragedy of suicide, reducing the stigma associated with depression and mental illness, educating the community about available services, supporting local suicide prevention programs, and providing a safe place to heal for those who have lost loved ones to suicide.

OBESITY, DIABETES, HEALTHY EATING/ACTIVE LIVING

- As obesity is a major health issue in the Tri-Valley area, **obesity and fitness education and prevention** is a top focus for SHC - VC. More than one in five fifth-graders in the Tri-Valley area are overweight or obese (21% in the Dublin School District, 24% in the Pleasanton School District, and 32% in the Livermore Valley Joint Unified School District). Fitness metrics suggest that 6% of Dublin Latinx fifth-graders, 19% of Pleasanton Latinx fifth-graders, and 24% of Livermore Latinx fifth-graders are experiencing health risks related to body composition (Body Mass Index). In FY17 and

FY18, SHC - VC conducted a variety of programs on healthy eating and physical fitness for the community.

- In FY17 and FY18, SHC - VC offered a monthly **diabetes support group** with occasional guest speakers. Additionally, SHC - VC held the annual Diabetes Education Seminar to educate Tri-Valley community members about healthy eating habits and prevention of pre-diabetes.
- LifeStyleRx is SHC - VC's 70,000-square-foot wellness center, which provides comprehensive, medical-based, high-quality education and fitness services to the public. The **LifeStyleRx Scholarship Program** provides low-income residents the opportunity to achieve their health, fitness, and well-being potential by funding their access to the wellness center. In FY17 and FY18, the Scholarship Program provided 35 LifeStyleRx memberships.
- In FY17 and FY18, SHC - VC funded a **physical education program at Marylin Avenue Elementary School** in Livermore, which enabled an instructor to conduct PE classes twice a week (75 minutes) during the school year. The project focused on improving scores for state testing, improving student physical health, educating the students on healthy living, and illustrating how to use exercise as a tool to help with focus in the classroom. In FY18, 123 students in fourth and fifth grades participated in PE classes. Overall, more than 90% of the fourth-graders who participated improved on at least two of four physical fitness tests, and 58% improved on three of the four. Average results for all four tests improved (mile average times shortened by almost one minute, push-ups increased by 10, curl-ups increased by 17, pacers increased by 2.25 laps). Nearly two-thirds (66%) of Marylin Avenue fifth-graders who participated improved on at least two of three physical fitness tests. Average results for all three tests improved (mile average times shortened by 6 minutes, push-ups increased by 4, curl-ups increased by 7.5). In FY17, 80% of the 66 Marilyn Avenue fifth-graders who improved on at least two of three physical fitness tests. Both years, teachers reported that students had better behavior, were more focused, and exhibited better teamwork with others in their classrooms.
- In FY17, SHC - VC supported the provision of **an educational workshop for Spanish-speaking parents** about enhancing their kindergarteners' success in school, and provided written resources (for example, handouts about sleep, literacy, cooking, and age-appropriate development) and fresh produce for 100 families. SHC - VC staff also provided education on healthy eating and physical activity at the **Marilyn Avenue Elementary School Health and Nutrition Fair**, which had over 100 attendees.
- In FY18, SHC - VC also provided funding to Marylin Avenue Elementary school in Livermore and Lydiksen Elementary School in Pleasanton for **equipment for physical education**.
- For **Meals on Wheels**, SHC - VC prepared more than 900 meals a day, five days a week, for homebound seniors in FY17 and FY18. Participating seniors were located in seven different Alameda County cities: Pleasanton, Livermore, Dublin, Sunol, Fremont, Newark, and Union City. These hot meal programs provide local seniors with the nutrition critical to their health and well-being. SHC - VC also provided office space to

Spectrum, the nonprofit organization in charge of organizing the Meals on Wheels program in the Tri-Valley area.

- In FY18, SHC - VC supported **Convoy of Hope Tri-Valley's "Day of Hope,"** attended by 922 low-income individuals. SHC - VC provided enough groceries to those in attendance to feed a small family for two weeks. Each family received approximately five bags of staple foods and nonperishable items. In addition, SHC - VC staff provided reusable grocery bags, water bottles, and nutrition information to event attendees; the nutrition information included healthy recipes, handouts on healthy eating, and healthy eating coloring books for children.
- Throughout FY17 and FY18, SHC - VC provided **Open Heart Kitchen** space on its Livermore campus free of charge. The local nonprofit organization, which serves free meals to the hungry, stored food and assembled box lunches in the space on campus.

7. Community Resources

Various hospitals and clinics, community-based organizations, government departments and agencies, and other resources are available in the Stanford Health Care - ValleyCare service area to respond to the community health needs identified in this assessment. Hospitals and clinics are listed below.

EXISTING HEALTH CARE FACILITIES

San Ramon Regional Medical Center	San Ramon
Stanford Health Care - ValleyCare	Pleasanton
UCSF Benioff Children's Hospital Oakland	Oakland
Axis Community Health (Federally Qualified Health Clinic)	Livermore and Pleasanton

Additional resources are listed in Attachment 3: Community Assets and Resources.

8. Conclusion

Stanford Health Care - ValleyCare worked with 13 other hospitals, pooling expertise and resources, to conduct the 2019 Community Health Needs Assessment. By gathering secondary data and conducting new primary research as a team, the Hospitals were able to understand the community's perception of health needs as well as prioritize health needs with consideration for how each compares against benchmarks. SHC - VC further prioritized health needs in its service area based on a set of defined criteria.

The 2019 CHNA meets federal and state requirements.

Next steps for SHC - VC:

- 2019 CHNA adopted by SHC - VC board and made publicly available on the hopsital's website by August 31, 2019.[72]
- Monitor community comments on CHNA reports (ongoing).
- Select priority health needs to address using a set of criteria.
- Develop strategies to address priority health needs (independently and/or by partnering with other local hospitals).
- Ensure strategies are adopted by the hospital board and filed with the IRS by January 15, 2020.

[72] https://www.valleycare.com/about-community-benefits.aspx

9. List of Attachments

1. Secondary Data Indicators List
2. Community Leaders, Representatives, and Members Consulted
3. Community Assets and Resources
4. Qualitative Research Protocols
5. IRS Checklist

Attachment 1. Secondary Data Indicators

Indicator	Health Needs	Description	Source	Year(s)
30-Day Readmissions	Health Care Access & Delivery	This indicator reports the percentage of Medicare fee-for-service beneficiaries readmitted to a hospital within 30 days of an initial hospitalization discharge. This indicator is relevant as a measure of quality of care.	Dartmouth Atlas of Health Care	2014, 2013, 2012, 2011, 2010
Adequate Fruit & Vegetable Consumption, Adults 18+ (SAE)	Cancers; Healthy Eating/Active Living	This indicator reports the percentage of adults age 18 and older who self-report consuming less than 5 servings of fruits and vegetables each day.	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the Health Indicators Warehouse. US Department of Health & Human Services, Health Indicators Warehouse.	2005-2009
Adequate Fruit & Vegetable Consumption, Children Age 2-13 (SAE)	Healthy Eating/Active Living	This indicator reports the percentage of children age 2 and older who are reported to consume less than five servings of fruits and vegetables each day.	California Health Interview Survey	2011-2012
Adults Needing Mental Health Care (SAE)	Behavioral Health (Mental Health)	This indicator reports the percentage of adults who self-report that there was ever a time during the past 12 months when they felt that they might need to see a professional because of problems with their mental health, emotions, nerves, or use of alcohol or drugs.	California Health Interview Survey	2013-2014
Adults with an Associate's Degree or Higher	Economic Security; Education & Literacy	This indicator reports the percentage of the population aged 25 years and older with an Associate's degree or higher. This indicator is relevant because educational attainment is an important determinant of health, influencing health knowledge and behaviors, employment and income, and social standing and social networks.	American Community Survey	2012-2016

Indicator	Health Needs	Description	Source	Year(s)
Adults with No High School Diploma (SAE)	Economic Security; Education & Literacy	This indicator reports the percentage of the population aged 25 years and older without at least a high school diploma or equivalent. This indicator is relevant as a measure of educational attainment, an important determinant of health and opportunity across a lifespan.	American Community Survey	2012-2016
Adults with Some Post-secondary Education	Economic Security; Education & Literacy	This indicator reports the percentage of adults aged 25 to 44 years with at least some post-secondary education. This indicator is relevant because educational attainment is an important determinant of health, influencing health knowledge and behaviors, employment and income, and social standing and social networks.	American Community Survey	2012-2016
Alcohol Expenditures (SAE)	Community & Family Safety; Behavioral Health (Substance Use/Tobacco)	This indicator reports estimated annual expenditures for alcoholic beverages purchased for at-home consumption, as a percentage of total household expenditures. This indicator is relevant because it is a measure of alcohol use; a leading cause of preventable death in the U.S., excessive alcohol use can also cause short- and long-term health impacts, including injuries, violence, risky sexual behavior, pregnancy complications and fetal alcohol spectrum disorders, certain cancers, heart and liver disease, and mental health, substance dependency and social problems.	Nielsen Demographic Data (PopFacts)	2014
Assault (Crime) (SAE)	Community & Family Safety	This indicator reports the rate of assault (reported by law enforcement) per 100,000 residents.	Federal Bureau of Investigation, FBI Uniform Crime Reports	2012-2014

Indicator	Health Needs	Description	Source	Year(s)
Asthma Hospitalizations (SAE)	Asthma; Climate/Natural Environment; Health Care Access & Delivery	This indicator reports the patient discharge rate per 10,000 total population for asthma and related complications. This indicator is relevant This indicator reports the patient discharge rate among Medicare-fee-for-service per 10,000 population for asthma and related complications. This indicator is relevant because it is a measure of the burden of asthma, a significant cause of morbidity among children and adults in the U.S. that is often exacerbated by poor air quality and other environmental conditions.	CMS_MMD Mapping Medicare Disparities Tool	2015
Asthma Prevalence, Adults (SAE)	Asthma; Climate/Natural Environment	This indicator reports the percentage of adults aged 18 and older who self-report that they have ever been told by a doctor, nurse, or other health professional that they had asthma.	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Additional data analysis by CARES.	2011-2012
Banking Institutions	Economic Security; Housing & Homelessness	This indicator reports the number of banking institutions (commercial banks, savings institutions and credit unions) per 10,000 population. This indicator is relevant because an adequate supply of financial institutions enables financial inclusion, empowering people with tools and services to realize financial health and wellbeing.	County Business Patterns	2015, 2014, 2013, 2012
Beer, Wine, and Liquor Stores	Community & Family Safety (Crime/Intentional Injury; Unintended Injury/Accidents); Behavioral Health (Substance Use/Tobacco); Housing & Homelessness; Transportation & Traffic	This indicator reports the number of beer, wine, and liquor stores per 10,000 population. This indicator is relevant because it measures alcohol outlet density which helps characterize policy and environmental factors that affect excessive alcohol use, a leading cause of preventable death in the U.S.	County Business Patterns	2015, 2012, 2014, 2013

Indicator	Health Needs	Description	Source	Year(s)
Breast Cancer Incidence (SAE)	Cancers	This indicator reports the age-adjusted incidence rate of breast cancer among females per 100,000 population per year. This indicator is relevant because it is a measure of the burden of breast cancer; this indicator may be useful for targeting interventions to prevent, screen for and treat breast cancer which is among the most common cancers affecting women.	State Cancer Profiles	2011-2015
Breast Cancer Screening (Mammogram) (SAE)	Cancers; Health Care Access & Delivery	This indicator reports the percentage of female Medicare enrollees, aged 67 and older, who have received one or more mammograms in the past two years. This indicator is relevant because breast cancer screening enables early detection and treatment; low levels of screening may suggest a lack of access to preventive care, lack of health knowledge, insufficient provider outreach, and existence of other barriers to utilization of services.	Dartmouth Atlas of Health Care	2015
Breastfeeding (Any) (SAE)	Maternal/Infant Health; Healthy Eating/Active Living	This indicator reports the percentage of mothers who breastfeed their infants at birth.	California Department of Public Health, Breastfeeding Statistics	2012
Breastfeeding (Exclusive) (SAE)	Maternal/Infant Health; Healthy Eating/Active Living	This indicator reports the percentage of mothers who exclusively breastfeed their infants during their post-partum hospital stay.	California Department of Public Health, Breastfeeding Statistics	2012
Cancer Mortality (SAE)	Cancers	This indicator reports the rate of death due to malignant neoplasm (cancer) per 100,000 population, age-adjusted to year 2000	University of Missouri, Center for Applied Research and Environmental Systems. California Department of Public Health, Death Public Use Data	2010-2012

Indicator	Health Needs	Description	Source	Year(s)
Cervical Cancer Screening (Pap Test) (SAE)	Cancers; Health Care Access & Delivery	This indicator reports the percentage of women age 18 and older who self-report that they have had a Pap test in the past three years.	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the Health Indicators Warehouse. US Department of Health & Human Services, Health Indicators Warehouse. 2006-12	2006-2012
Children Age 5-17 Walking, Biking, or Skating to School (SAE)	Healthy Eating/Active Living	This indicator reports the percentage of children and teens who reported that they walked, biked, or skated to school in the past week.	California Health Interview Survey	2011-2012
Children Below 100% FPL (SAE)	Economic Security	This indicator reports the percentage of children aged 0 to 17 years that live in households with incomes below the Federal Poverty Level (FPL). This indicator is relevant as a measure for the concentration of poverty, and because it highlights a group requiring special consideration, targeted services and outreach by providers.	American Community Survey	2012-2016
Chlamydia Incidence (SAE)	Sexually Transmitted Infections	This indicator reports incidence rate of chlamydia cases per 100,000 population per year. This indicator is relevant because it is a measure of the burden of chlamydia, a common sexually transmitted infection for which effective interventions for prevention and treatment exist.	National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention	2016
Climate-Related Mortality Impacts	Climate/Natural Environment	This indicator reports the median estimated economic impacts from changes in all-cause mortality rates, across all age groups, as a percentage of county GDP. This indicator is relevant because climate-change is a significant threat to public health for which interventions may exist to prevent or mitigate climate-related health impacts.	Climate Impact Lab	2016

Indicator	Health Needs	Description	Source	Year(s)
Colon and Rectum Cancer Incidence (SAE)	Cancers	This indicator reports the age-adjusted incidence rate of colon and rectum cancer cases per 100,000 population per year. This indicator is relevant because it is a measure of the burden of colon and rectum cancer; this indicator may be useful for targeting interventions to prevent, screen for and treat colorectal cancers.	State Cancer Profiles	2011-2015
Colon Cancer Screening (Sigmoid/Colonoscopy) (SAE)	Cancers; Health Care Access & Delivery	This indicator reports the percentage of adults age 50 and older who self-report that they have ever had a sigmoidoscopy or colonoscopy	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the Health Indicators Warehouse. US Department of Health & Human Services, Health Indicators Warehouse.	2006-2012
Cost Burdened Households	Economic Security; Housing & Homelessness	This indicator reports the percentage of households for which housing costs exceed 30% of total household income. This indicator is relevant because it offers a measure of housing affordability; affordable housing helps ensure individuals can financially meet their basic needs for health care, child care, food, transportation and other costs.	American Community Survey	2012-2016
Current Smokers	Cancers; Heart/Stroke; Healthy Eating/Active Living; Oral Health; Behavioral Health (Substance Use/Tobacco)	This indicator reports the percentage of adults aged 18 years and older that self-report smoking cigarettes some days, most days or every day, or that self-reporting having smoked at least 100 cigarettes in their lifetime. This indicator is relevant because current behaviors are determinants of future health; the leading cause of preventable death in the U.S., tobacco use can cause long-term health impacts, including cardiovascular diseases, respiratory diseases, and cancers.	California Health Interview Survey	2014

Indicator	Health Needs	Description	Source	Year(s)
Deaths by Suicide, Drug or Alcohol Poisoning	Behavioral Health (Mental Health; Substance Use/Tobacco)	This indicator reports the age-adjusted rate of death due to intentional self-harm (suicide), alcohol-related disease, and drug overdoses per 100,000 population. This indicator is relevant because high rates of death of despair may signal broader issues in the community related to mental health, and substance use.	National Vital Statistics System	2011-2015
Dentists (SAE)	Health Care Access & Delivery; Oral Health	This indicator reports the number of licensed dentists (including DDSs and DMDs) per 100,000 population. This indicator is relevant because an inadequate supply of dentists may limit access to dental care, a prerequisite for good oral health and overall health.	Area Health Resource File	2015
Depression Among Medicare Beneficiaries (SAE)	Behavioral Health (Mental Health)	This indicator reports the percentage of the Medicare fee-for-service population with depression. This indicator is relevant as a measure of the burden of depression, a leading cause of disability in the U.S.; depression both influences and is influenced by physical health, affecting individuals' participation in health-promoting behaviors and presenting with multiple chronic comorbidities.	Centers for Medicare and Medicaid Services	2015
Diabetes Management (Hemoglobin A1c Test) (SAE)	Heart/Stroke; Health Care Access & Delivery; Healthy Eating/Active Living	This indicator reports the percentage of diabetic Medicare patients who have had a hemoglobin A1c (hA1c) test of blood sugar levels administered by a health care professional in the past year. This indicator is relevant because blood sugar monitoring enables disease management and treatment of diabetes complications; low levels of testing may suggest a lack of access to preventive care, lack of health knowledge, insufficient provider outreach, and existence of other barriers to utilization of services.	Dartmouth Atlas of Health Care	2015
Diabetes Prevalence (SAE)	Healthy Eating/Active Living	This indicator reports the percentage of adults aged 20 and older who have ever been told by a doctor that they have diabetes. This	Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion.	2015

Indicator	Health Needs	Description	Source	Year(s)
Domestic Violence Hospitalizations	Community & Family Safety (Crime/Intentional Injury)	This indicator reports the rate of non-fatal emergency department visits for domestic violence incidents among females aged 10 years and older per 100,000 population. This indicator is relevant as a proxy measure of intimate partner and domestic violence, and may signal broader issues in the community, such as economic insecurity and substance misuse.	EPICENTER California EpiCenter	2013-2014
Drinking Water Violations	Climate/Natural Environment	This indicator reports the presence or absence of health-based violations in community water systems over a specified time frame. This indicator is relevant as a measure of drinking water safety, a prerequisite for good health.	Safe Drinking Water Information System	2015
Driving Alone to Work	Climate/Natural Environment; Healthy Eating/Active Living; Transportation & Traffic	This indicator reports the percentage of the civilian non-institutionalized population aged 16 years and older that commute alone to work by motor vehicle. This indicator is relevant as a measure of quality of the physical/built environment, and public transportation and active transportation systems.	American Community Survey	2012-2016
Driving Alone to Work, Long Distances	Climate/Natural Environment; Healthy Eating/Active Living; Transportation & Traffic	This indicator reports the percentage of the civilian non-institutionalized population with long commutes to work, over 60 minutes each direction. This indicator is relevant as a measure of quality of the physical/built environment, regional employment trends, and public transportation and active transportation systems.	American Community Survey	2012-2016
Drought Severity	Climate/Natural Environment	This indicator reports the population-weighted percentage of weeks in drought from January 1st, 2012 - December 31st, 2014. This indicator is relevant because it highlights communities vulnerable to the effects of drought, and associated health impacts.	US Drought Monitor	2012-2014

Indicator	Health Needs	Description	Source	Year(s)
Excessive Alcohol Consumption (SAE)	Cancers; Community & Family Safety; Heart/Stroke; Behavioral Health (Substance Use/Tobacco)	This indicator reports the percentage of adults age 18 and older who self-report heavy alcohol consumption (defined as more than two drinks per day on average for men and one drink per day on average for women).	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the Health Indicators Warehouse. US Department of Health & Human Services, Health Indicators Warehouse. 2006-12	2006-2012
Exercise Opportunities	Heart/Stroke; Healthy Eating/Active Living	This indicator reports the percentage of the population that live in close proximity to a park or recreational facility. This indicator is relevant because good access to parks and recreational facilities promotes physical activity and is associated long-term physical and mental health benefits.	County Health Rankings	2010; 2014
Expulsions (SAE)	Community & Family Safety; Economic Security	This indicator reports the rate of expulsions per 100 enrolled students.	California Department of Education	2014-2015
Fast Food Restaurants (SAE)	Healthy Eating/Active Living	This indicator reports the number of fast food restaurants per 100,000 population. Fast food restaurants are defined as limited-service establishments primarily engaged in providing food services (except snack and nonalcoholic beverage bars) where patrons generally order or select items and pay before eating.	US Census Bureau, County Business Patterns. Additional data analysis by CARES	2016
Federally Qualified Health Centers (SAE)	Health Care Access & Delivery	This indicator reports the rate of Federally Qualified Health Centers (FQHCs) per 100,000 total population within the service area. This indicator is relevant because FQHCs are community assets that provide health care to vulnerable populations, and receive federal funding to promote access to ambulatory care in medically underserved areas.	Provider of Services File	2018

Indicator	Health Needs	Description	Source	Year(s)
Flood Vulnerability	Climate/Natural Environment	This indicator reports the estimated percentage of housing units within the special flood hazard area (SFHA) per county. This indicator is relevant because it highlights communities vulnerable to flooding and associated health impacts.	National Flood Hazard Layer	2011
Food Desert Population (SAE)	Healthy Eating/Active Living	This indicator reports the percentage of the population living in areas designated as food deserts. A food desert is defined as a low-income census tract (where a substantial number or share of residents has low access to a supermarket or large grocery store.	US Department of Agriculture, Economic Research Service, USDA - Food Access Research Atlas	2015
Food Environment Index	Healthy Eating/Active Living	This indicator reports the food environment index score, a measure of affordable, close, and nutritious food retailers in a community, for which scores range between 0 (poorest food environment) and 10 (optimum food environment). This indicator is relevant because it highlights communities with lower access to healthy foods; good access to healthy food retailers promotes healthier eating behaviors and associated health benefits, including lower risk for obesity and related chronic diseases.	Food Environment Atlas (USDA) and Map the Meal Gap (Feeding America)	2014
Food Insecurity (SAE)	Healthy Eating/Active Living	This indicator reports the estimated percentage of the population that experienced food insecurity at some point during the report year. This indicator is relevant as a measure of community food security.	Feeding America	2014
Free and Reduced Price Lunch (SAE)	Economic Security; Healthy Eating/Active Living	This indicator reports the percentage of public school students eligible for free or reduced price lunches. This indicator is relevant because it provides a proxy measure for the concentration of low-income students within a school.	CCD NCES - Common Core of Data	2015-2016
Fruit/Vegetable Expenditures (SAE)	Cancers	This indicator reports estimated expenditures for fruits and vegetables purchased for in-home consumption, as a percentage of total food-at-home expenditures.	Nielsen SiteReports	2014
Gonorrhea Incidence (SAE)	Sexually Transmitted Infections	This indicator reports incidence rate of Gonorrhea cases per 100,000 population.	National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention	2016

Indicator	Health Needs	Description	Source	Year(s)
Grocery Stores (SAE)	Healthy Eating/Active Living	This indicator reports the number of grocery stores per 10,000 population. This indicator is relevant because it measures density of healthy food outlets which helps characterize policy and environmental factors that affect eating behaviors; healthy eating habits support overall health, and lower risk for obesity and related chronic diseases.	County Business Patterns	2016
Grocery Stores and Produce Vendors	Healthy Eating/Active Living	This indicator reports the number of grocery stores per 10,000 population. This indicator is relevant because it measures density of healthy food outlets which helps characterize policy and environmental factors that affect eating behaviors; healthy eating habits support overall health, and lower risk for obesity and related chronic diseases.	County Business Patterns	2015, 2014, 2013, 2012
Health Professional Shortage Area - Dental	Oral Health	This indicator reports the percentage of the population that lives in a designated Health Professional Shortage Area, defined as having a shortage of dental health professionals. This indicator is relevant because an inadequate supply of dental health professionals may limit access to dental care, a prerequisite for good oral health and overall health.	Health Resources and Services Administration	2016
Heart Disease (Medicare Population) (SAE)	Heart/Stroke; Healthy Eating/Active Living; Behavioral Health (Substance Use/Tobacco)	This indicator reports the percentage of the Medicare-fee-for-service population that self-report having been diagnosed with heart disease by a doctor.	Centers for Medicare & Medicaid Services	2015
Heart Disease Hospitalizations	Heart/Stroke; Healthy Eating/Active Living; Behavioral Health (Substance Use/Tobacco)	This indicator reports the hospitalization rate for coronary heart disease among Medicare beneficiaries aged 65 years and older for hospital stays occurring between 2012 and 2014, per 1,000 population. This indicator is relevant because it is a measure of the burden of heart disease, the leading cause of death in the U.S.	Interactive Atlas of Heart Disease and Stroke	2012-2014

Indicator	Health Needs	Description	Source	Year(s)
Heart Disease Mortality	Heart/Stroke; Healthy Eating/Active Living; Behavioral Health (Substance Use/Tobacco)	This indicator reports the age-adjusted rate of death due to coronary heart disease per 100,000 population. This indicator is relevant because it is a measure of the burden of heart disease, the leading cause of death in the U.S.	National Vital Statistics System	2011-2015
Heart Disease Prevalence (SAE)	Heart/Stroke; Behavioral Health (Substance Use/Tobacco); Healthy Eating/Active Living	This indicator reports the percentage of adults age 18 and older who have ever been told by a doctor that they have coronary heart disease or angina.	California Health Interview Survey	2011-2012
Heat Index	Climate/Natural Environment	This indicator reports the percentage of days per year with recorded heat index values (a measure of temperature and humidity) of over 100 degrees Fahrenheit. This indicator is relevant because it is a measure of exposure to extreme heat events which can trigger heat stress conditions and respiratory symptoms, increase death rates, and increase the risk of foodborne illness.	North America Land Data Assimilation System (NLDAS)	2013, 2012, 2011, 2010, 2009, 2008, 2007, 2006
High Blood Pressure – Unmanaged (SAE)	Heart/Stroke	This indicator reports the percentage of adults age 18 and older who self-report that they are not taking medication for their high blood pressure.	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System.	2006-2010
High Blood Pressure (Medicare Population) (SAE)	Heart/Stroke	This indicator shows the percentage of Medicare beneficiaries aged 65 years and older who have been told they have high blood pressure. Normal blood pressure should be less than 120/80 mm Hg for an adult. Blood pressure above this level (140/90 mm Hg or higher) is considered high (hypertension).	Centers for Medicare & Medicaid Services	2015
High School Graduation (SAE)	Economic Security	Percentage of public high school students who receive their high school diploma in 4 years.	US Department of Education, EDFacts. Accessed via DATA.GOV. Additional data analysis by CARES.	2015-2016

Indicator	Health Needs	Description	Source	Year(s)
High Speed Internet (SAE)	Economic Security; Education & Literacy	This indicator reports the percentage of population with access to high-speed internet. This indicator is relevant because internet access opens up opportunities for employment and education.	FCC Fixed Broadband Deployment Data	2016
HIV/AIDS Deaths	Sexually Transmitted Infections	This indicator reports the rate of death due to HIV and AIDS per 100,000 population. This indicator is relevant because it is a measure of the burden of HIV/AIDS, and may suggest the existence of barriers to accessing care.	National Vital Statistics System	2008-2014
HIV/AIDS Prevalence (SAE)	Sexually Transmitted Infections	This indicator reports prevalence of HIV infection per 100,000 population. This indicator is relevant because it is a measure of the burden of HIV/AIDS, a life-threatening chronic disease for which effective interventions for treatment and prevention exist.	National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention	2015
Homicide Mortality (SAE)	Community & Family Safety	This indicator reports the rate of death due to assault (homicide) per 100,000 population, age-adjusted to the year 2000 standard.	University of Missouri, Center for Applied Research and Environmental Systems. California Department of Public Health, Death Public Use Data	2010-2012
Housing Problems (SAE)	Housing & Homelessness	This indicator reports the percentage of households with one or more of the following housing problems: Housing unit lacks complete kitchen facilities; Housing unit lacks complete plumbing facilities; Housing unit is severely overcrowded (>1 person per room); or Household is severely cost burdened (all housing costs represent over >30% of monthly income). This indicator is relevant because it highlights communities wherein housing or quality of life is considered substandard.	American Community Survey	2012-2016
Impaired Driving Deaths	Community & Family Safety (Unintended Injury/Accidents); Behavioral Health (Substance	This indicator reports the percentage of motor vehicle crash deaths in which alcohol played a role. This indicator is relevant because alcohol is a leading cause of preventable death in the U.S., and impaired driving is the leading cause of alcohol-related deaths.	Fatality Analysis Reporting System	2011-2015

Indicator	Health Needs	Description	Source	Year(s)
	Use/Tobacco); Transportation & Traffic			
Income Inequality - 80/20 Ratio	Economic Security	This indicator reports the ratio of household income at the 80th percentile to household income at the 20th percentile. This indicator is relevant because it highlights communities with greater disparities between low- and high-income households; income inequality is a strong predictor of health status, health disparities, and social and environmental vulnerabilities.	American Community Survey	2012-2016
Infant Deaths	Maternal/Infant Health	This indicator reports the rate of death among infants less than 1 year of age per 1,000 births. This indicator is relevant because infant mortality is a proxy measure for community health status, poverty and socioeconomic status, and access to care.	Area Health Resource File	2006-2010
Injury Deaths	Community & Family Safety (Crime/Intentional Injury; Unintended Injury/Accidents)	This indicator reports the number of deaths from intentional and unintentional injuries per 100,000 population. This indicator is relevant because death from injury is a leading cause of death in the U.S., and the leading cause of death among those aged 1 to 44 years; high injury mortality may signal broader issues in the community.	National Vital Statistics System	2011-2015
Insufficient Social and Emotional Support (SAE)	Behavioral Health (Mental Health)	This indicator reports the percentage of adults aged 18 and older who self-report that they receive insufficient social and emotional support all or most of the time.	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the Health Indicators Warehouse. US Department of Health & Human Services, Health Indicators Warehouse.	2006-2012

Indicator	Health Needs	Description	Source	Year(s)
Ischemic Heart Disease Mortality (SAE)	Heart/Stroke	This indicator reports the rate of death due to coronary heart disease per 100,000 population, age-adjusted to year 2000 standard.	University of Missouri, Center for Applied Research and Environmental Systems. California Department of Public Health, Death Public Use Data	2010-2012
Lack of a Consistent Source of Primary Care (SAE)	Health Care Access & Delivery	This indicator reports the percentage of adults aged 18 and older who self-report that they do not have at least one person who they think of as their personal doctor or health care provider.	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System.	2011-2012
Lack of Affordability of Dental Care (Youth) (SAE)	Oral Health	This indicator reports the percentage of children and teens who self-report that during the past 12 months, there was any time when they needed dental care but could not afford it.	California Health Interview Survey	2009
Lack of Dental Insurance Coverage	Oral Health	This indicator reports the percentage of adults aged 18 and older who self-report that they do not have dental insurance (at the time of the interview). This indicator is relevant because having insurance enables access to dental care, a prerequisite for good oral health and overall health.	California Health Interview Survey	2015-2016
Lack of Dental Insurance Coverage (SAE)	Health Care Access & Delivery; Oral Health	This indicator reports the percentage of adults who self-report having no dental insurance for some or all of the past 12 months.	California Health Interview Survey	2009
Lack of Prenatal Care (SAE)	Maternal/Infant Health	This indicator reports the percentage of women who do not obtain prenatal care during their first or second trimesters of pregnancy.	California Department of Public Health, Birth Profiles by ZIP code	2011
Life Expectancy at Birth	Maternal/Infant Health; Overall Health	This indicator reports the average life expectancy at birth in years. This indicator is relevant as a measure of overall mortality across a population.	IHME_LE Institute for Health Metrics and Evaluation	2014
Liquor Store Access (SAE)	Community & Family Safety; Behavioral Health (Substance Use/Tobacco)	This indicator reports the number of beer, wine, and liquor stores per 100,000 population, as defined by North American Industry Classification System (NAICS) Code 445310.	US Census Bureau, County Business Patterns. Additional data analysis by CARES	2016

Indicator	Health Needs	Description	Source	Year(s)
Low Birth Weight	Maternal/Infant Health; Behavioral Health (Substance Use/Tobacco)	This indicator reports the percentage of total births that are low birthweight (under 2500 grams). This indicator is relevant because low birthweight is a proxy measure for community health status, poverty and socioeconomic status, and access to care.	National Vital Statistics System	2008-14
Low Access to Healthy Food Stores (SAE)	Economic Security; Maternal/Infant Health; Healthy Eating/Active Living	This indicator reports the percentage of the population with low food access. Low food access is defined as living more than 1⁄2 mile from the nearest supermarket, supercenter, or large grocery store.	US Department of Agriculture, Economic Research Service, USDA - Food Access Research Atlas	2015
Lung Cancer Incidence (SAE)	Cancers; Behavioral Health (Substance Use/Tobacco)	This indicator reports the age-adjusted incidence rate of lung cancer per 100,000 population. This indicator is relevant because it is a measure of the burden of lung cancer; this indicator may be useful for targeting interventions to prevent, screen for and treat lung cancer which is the leading cause of cancer deaths.	State Cancer Profiles	2011-2015
Medicaid/Public Insurance Enrollment	Economic Security; Health Care Access & Delivery	This indicator reports the percentage of the population that is enrolled in Medicaid or another public health insurance program. This indicator is relevant because Medicaid provides insurance coverage for groups with special health needs, including low-income children, adults and people with disabilities; when combined with poverty data, this indicator may help identify gaps in coverage and barriers access.	American Community Survey	2012-2016
Mental Health Providers	Health Care Access & Delivery; Behavioral Health (Mental Health)	This indicator reports the number of mental health care providers (including psychiatrists, psychologists, clinical social workers, and counsellors) per 100,000 population. This indicator is relevant because an inadequate supply of providers may limit access to mental health care.	Area Health Resource File	2016
Motor Vehicle Accident Mortality	Community & Family Safety (Unintended Injury/Accidents); Transportation & Traffic	This indicator reports the age-adjusted rate of death due to motor vehicle crashes per 100,000 population. This indicator is relevant because motor vehicle crashes are a leading cause of death in the U.S., and the leading cause of death among teens, despite being preventable.	National Vital Statistics System	2011-2015

Indicator	Health Needs	Description	Source	Year(s)
No HIV Screening (SAE)	Sexually Transmitted Infections	This indicator reports the percentage of adults age 18-70 who self-report that they have never been screened for HIV.	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System.	2011-2012
Obesity (Adult) (SAE)	Heart/Stroke; Healthy Eating/Active Living	This indicator reports the percentage of adults aged 18 years and older that self-report having a Body Mass Index (BMI) greater than 30.0 (the threshold for obesity).	Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion.	2015
Obesity (Youth)	Heart/Stroke; Healthy Eating/Active Living	This indicator reports the percentage of children in grades 5, 7, and 9 ranking within the "High Risk" category for body composition on the Fitnessgram physical fitness test. This indicator is relevant because it is a proxy measure of the burden of obesity among children; childhood obesity is linked with short- and long-term implications for health, including social and mental health impacts, diabetes, and heart disease.	Fitnessgram Physical Fitness Testing	2016-2017
On-Time High School Graduation	Education & Literacy	This indicator reports the on-time high school graduation rate per cohort. This indicator is relevant as a measure of educational attainment, an important determinant of health and opportunity across the lifespan.	California Department of Education	2014-2015
Opioid Prescription Drug Claims	Behavioral Health (Substance Use/Tobacco)	This indicator reports the number of Medicare Part D prescription claims for opiates as a percentage of total Medicare Part D prescription drug claims. This indicator is relevant as a proxy measure of opiate prescription drug use.	Centers for Medicare and Medicaid Services	2015
Opportunity Index	Economic Security	This indicator reports the opportunity index score, a measure of community well-being, for which scores range between 0 (indicating no opportunity) and 100 (indicating maximum opportunity). This indicator is relevant as a measure of economic, education, health and community factors that affect opportunity and well-being.	Opportunity Nation	2017

Indicator	Health Needs	Description	Source	Year(s)
Overweight (Adult) (SAE)	Asthma; Cancers; Heart/Stroke; Healthy Eating/Active Living	This indicator reports the percentage of adults age 18 and older who self-report that they have a Body Mass Index (BMI) between 25.0 and 30.0 (overweight).	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System.	2011-2012
Ozone Levels (SAE)	Asthma; Climate/Natural Environment	This indicator reports the percentage of days per year with Ozone (O3) levels above the National Ambient Air Quality Standard of 75 parts per billion (ppb). This indicator is relevant because it is a measure of exposure to O3 which can cause and exacerbate respiratory health issues, including onset of respiratory symptoms, decreased lung function, and aggravated asthma and lung diseases.	National Environmental Public Health Tracking Network	2014, 2013, 2012, 2011, 2010, 2009, 2008
Particulate Matter 2.5 (SAE)	Asthma; Cancers; Climate/Natural Environment	This indicator reports the percentage of days per year with fine particulate matter 2.5 (PM2.5) levels above the National Ambient Air Quality Standard of 35 micrograms per cubic meter. This indicator is relevant because it is a measure of exposure to PM2.5 which is linked with respiratory and cardiovascular health issues, including onset of respiratory symptoms, decreased lung function, and aggravated asthma, and heart and lung diseases.	National Environmental Public Health Tracking Network	2012
Pedestrian Accident Mortality	Community & Family Safety (Unintended Injury/Accidents); Transportation & Traffic	This indicator reports the rate of death due to pedestrian accident per 100,000 population. This indicator is relevant because high pedestrian mortality may signal issues within communities affecting the safety of streets and pedestrian infrastructure.	Fatality Analysis Reporting System	2011-2015
Physical Inactivity (Adult) (SAE)	Heart/Stroke; Healthy Eating/Active Living	This indicator reports the percentage of adults aged 20 years and older that self-report not participating in physical activities or exercise. This indicator is relevant because current behaviors are determinants of future health; physical inactivity increases risk for many adverse health conditions, including heart disease, diabetes, and certain cancers, and shortens life expectancy.	National Center for Chronic Disease Prevention and Health Promotion	2015

Indicator	Health Needs	Description	Source	Year(s)
Physical Inactivity (Youth)	Heart/Stroke; Healthy Eating/Active Living	This indicator reports the percentage of children in grades 5, 7, and 9 ranking within the "High Risk" or 'Needs Improvement' zones for aerobic capacity on the Fitnessgram physical fitness test. This indicator is relevant as a proxy measure of physical activity levels among children; regular physical activity in children can help improve fitness, build strong bones and muscles, control weight, reduce depression and anxiety, and reduce risk for chronic diseases.	Fitnessgram Physical Fitness Testing	2016-2017
Pneumonia Vaccinations Age 65+ (SAE)	Communicable Diseases (Not STIs)	This indicator reports the percentage of adults age 65 and older who self-report that they have ever received a pneumonia vaccine.	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the Health Indicators Warehouse. US Department of Health & Human Services, Health Indicators Warehouse.	2006-2012
Poor Dental Health	Oral Health	This indicator reports the percentage of adults that self-report having had all of their permanent teeth removed due to tooth decay, gum disease, or infection. This indicator is relevant because teeth loss is a measure of overall dental health and access to dental care. Data represent and are only available for the population of the 500 cities. See https://www.cdc.gov/500cities/ for more information.	Behavioral Risk Factor Surveillance System	2014

Indicator	Health Needs	Description	Source	Year(s)
Poor General Health (SAE)	Overall Health	This indicator reports the percentage of adults age 18 and older who self-report having poor or fair health.	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the Health Indicators Warehouse. US Department of Health & Human Services, Health Indicators Warehouse.	2006-2012
Poor Mental Health Days	Behavioral Health (Mental Health; Substance Use/Tobacco)	This indicator reports the age-adjusted average number of self-reported mentally unhealthy days per month among adults. This indicator is relevant because it provides a measure of mental health status and quality of life.	Behavioral Risk Factor Surveillance System	2015
Poor Mental Health Days (SAE)	Behavioral Health (Mental Health)	This indicator reports the average number of mentally unhealthy days (during past 30 days) among survey respondents age 18 and older	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the Health Indicators Warehouse. US Department of Health & Human Services, Health Indicators Warehouse.	2006-2012
Poor or Fair Health	Health Care Access & Delivery; Overall Health	This indicator reports the percentage of adults that self-report having poor or fair health. This indicator is relevant because it is a measure of general poor health status and quality of life.	Behavioral Risk Factor Surveillance System	2015
Poor Physical Health Days	Health Care Access & Delivery; Overall Health	This indicator reports the age-adjusted, average number of self-reported physically unhealthy days per month among adults. The indicator is relevant because it provides a measure of general physical health status and quality of life.	Behavioral Risk Factor Surveillance System	2015

Indicator	Health Needs	Description	Source	Year(s)
Population Below 100% FPL (SAE)	Economic Security	This indicator reports the percentage of the population living in households with incomes below the Federal Poverty Level (FPL). This indicator is relevant as a measure for the concentration of poverty, and because it highlights a group requiring special consideration, targeted services and outreach by providers.	American Community Survey	2012-2016
Population in Limited English Households (SAE)	Economic Security	This indicator reports the percentage of the population aged 5 and older living in Limited English speaking households. A "Limited English speaking household" is one in which no member 14 years old and over (1) speaks only English at home or (2) speaks a language other than English at home and speaks English "Very well."	American Community Survey	2012-2016
Population with Any Disability (SAE)	Overall Health	This indicator reports the percentage of the total non-institutionalized civilian population with a disability. This indicator is relevant as a measure of the burden due to disability, and because disabled individuals comprise a population with certain needs for targeted services and outreach by providers.	American Community Survey	2012-2016
Premature Death	Overall Health	This indicator reports the rate of death among those aged less than 75 years per 100,000 population. This indicator is relevant as a measure of the extent of premature mortality.	County Health Rankings	2012-2014
Premature Death, Racial/Ethnic Disparity Index	Health Care Access & Delivery	This indicator reports a summary measure of disparity (Index of Disparity) in premature death on the basis of race and ethnicity. This indicator is relevant as a measure of the extent to which premature mortality varies between racial and ethnic background groups.	National Vital Statistics System	2004-2010
Preschool Enrollment	Maternal/Infant Health; Education & Literacy	This indicator reports the percentage of the population aged 3 to 4 years that is enrolled in preschool. This indicator is relevant because early childhood education improves cognitive and social development of children, is a protective factor against disease and disability in adulthood, and may minimize gaps in school readiness between lesser and more economically advantaged children.	American Community Survey	2012-2016

Indicator	Health Needs	Description	Source	Year(s)
Pre-Term Births	Maternal/Infant Health	This indicator reports the percentage of total births that are pre-term (occurring before 37 weeks of pregnancy). This indicator is relevant because preterm birth is a proxy measure for community health status, poverty and socioeconomic status, and access to care.	Area Health Resource File	2012-2014
Preventable Hospital Events (SAE)	Health Care Access & Delivery	This indicator reports the patient discharge rate for conditions that are ambulatory care sensitive (e.g., pneumonia, dehydration, asthma, diabetes) per 1,000 population. This indicator is relevant as a measure of preventable hospital events, and demonstrates a possible 'return on investment' from interventions that reduce admissions, such as those that improve access to primary care resources.	Dartmouth Atlas of Health Care	2015
Primary Care Physicians (SAE)	Health Care Access & Delivery	This indicator reports the number of primary care physicians (including MDs and DOs practicing general family medicine and general practice, and MDs practicing general internal medicine and general pediatrics) per 100,000 population. This indicator is relevant because an inadequate supply of primary care physicians may limit access to preventive health care services.	Area Health Resource File	2014
Prostate Cancer Incidence (SAE)	Cancers	This indicator reports the age-adjusted incidence rate of prostate cancer among males per 100,000 population per year. This indicator is relevant because it is a measure of the burden of prostate cancer; this indicator may be useful for targeting interventions to prevent, screen for and treat prostate cancer which is among the most common cancers affecting men.	State Cancer Profiles	2011-2015
Public Transit Within 0.5 Miles (SAE)	Climate/Natural Environment	This indicator measures the proportion of the population living within 0.5 miles of a GTFS or fixed-guide way transit stop. Transit data is available from over 200 transit agencies across the United States, as well as all existing fixed-guide way transit service in the U.S. This includes rail, streetcars, ferries, trolleys, and some bus rapid transit systems.	Environmental Protection Agency, EPA Smart Location Database.	2011

Indicator	Health Needs	Description	Source	Year(s)
Rape (Crime) (SAE)	Community & Family Safety	This indicator reports the rate of rape (reported by law enforcement) per 100,000 residents.	Federal Bureau of Investigation, FBI Uniform Crime Reports	2012-2014
Reading Below Proficiency (4th Grade) (SAE)	Economic Security	This indicator reports the percentage of children in grade 4 whose reading skills tested below the "proficient" level for the English Language Arts portion of the state-specific standardized test.	US Department of Education, EDFacts. Accessed via DATA.GOV.	2014-2015
Recent Dental Exam (Youth)	Health Care Access & Delivery; Oral Health	This indicator reports the percentage of children aged 2 to 11 years with teeth that have visited a dentist in the past year. This indicator is relevant because it measures preventive dental care services utilization which contributes to good oral and overall health.	California Health Interview Survey	2014
Recent Dental Exam, Adult	Oral Health	This indicator reports the percentage of adults that self-report not visiting a dentist, dental hygienist or dental clinic within the past year. This indicator is relevant because it measures preventive dental care services utilization which contributes to good oral and overall health. Data represent and are only available for the population of the 500 cities. See https://www.cdc.gov/500cities/ for more information.	Behavioral Risk Factor Surveillance System	2014
Recent Primary Care Visit (SAE)	Health Care Access & Delivery	This indicator reports the percentage of adults aged 18 years and older that visited a primary care clinician at least once within the past year.	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the 500 Cities Data Portal.	2015
Recreation & Fitness Facility Access (SAE)	Heart/Stroke; Healthy Eating/Active Living	This indicator reports the number per 100,000 population of recreation and fitness facilities as defined by North American Industry Classification System (NAICS) Code 713940.	US Census Bureau, County Business Patterns. Additional data analysis by CARES.	2016

Indicator	Health Needs	Description	Source	Year(s)
Respiratory Hazard Index	Asthma; Climate/Natural Environment	This indicator reports the respiratory hazard index, for which scores greater than 1.0 mean respiratory pollutants are likely to increase risk of non-cancer adverse health effects over a lifetime. This indicator is relevant because it is a measure of exposure to respiratory hazards and risk for associated health impacts.	EPA National Air Toxics Assessment	2011
Road Network Density (SAE)	Climate/Natural Environment; Transportation & Traffic	This indicator reports road network density, or road miles per square mile. This indicator is relevant as a measure of connectivity, but also traffic density, vehicle emissions and air quality.	EPA Smart Location Database	2011
Robbery (Crime) (SAE)	Community & Family Safety	This indicator reports the rate of robbery (reported by law enforcement) per 100,000 residents.	Federal Bureau of Investigation, FBI Uniform Crime Reports	2012-2014
Segregation Index	Housing & Homelessness	This indicator reports the segregation index score, a measure of the spatial distribution or evenness of population demographic groups, for which index values range between 0.0 (indicating even distribution) and 1.0 (indicating maximum segregation). This indicator is relevant as a measure of residential segregation with implications affecting spatial and socioeconomic mobility.	Decennial Census	2010
Seriously Considered Suicide	Behavioral Health (Mental Health)	This indicator reports the percentage of adults aged 18 years and older that self-report having seriously thought about committing suicide. This indicator is relevant because suicide is a leading cause of preventable death among young people in the U.S.	California Health Interview Survey	2015-2016

Indicator	Health Needs	Description	Source	Year(s)
Severe Housing Problems	Housing & Homelessness	This indicator reports the percentage of households with one or more of the following housing problems: Housing unit lacks complete kitchen facilities; Housing unit lacks complete plumbing facilities; Housing unit is severely overcrowded (> 2 persons per room); or Household is severely cost burdened (all housing costs represent >50% of monthly income). This indicator is relevant because it highlights communities wherein housing or quality of life is considered substandard.	Consolidated Planning/CHAS Data	2011-2015
Single-Female Households with Children (SAE)	Economic Security	This indicator reports the total number and percentage of single-female households with children. According to the American Community Survey subject definitions, a family household is any housing unit in which the householder is living with one or more individuals related to him or her by birth, marriage, or adoption.	US Census Bureau, American Community Survey.	2012-16.
SNAP Benefits (SAE)	Economic Security; Healthy Eating/Active Living	This indicator reports the average percentage of the population receiving the Supplemental Nutrition Assistance Program (SNAP) benefits between the months of July 2014 and July 2015.	US Census Bureau, Small Area Income & Poverty Estimates.	2015
Social Associations	Behavioral Health (Mental Health)	This indicator reports the number of social associations (e.g. civic organizations, recreational clubs and facilities, political organizations, labor organizations, business associations, professional organizations) per 10,000 population. This indicator is relevant as a measure of community vitality.	County Business Patterns	2015, 2014, 2013, 2012
Soft Drink Consumption	Healthy Eating/Active Living; Oral Health	This indicator reports the percentage of adults that self-report drinking a soda or sugar sweetened beverage at least once daily. This indicator is relevant as a measure of soft drink consumption; drinking soft drinks increases risk for diabetes, heart disease, and other chronic diseases.	California Health Interview Survey	2014

Indicator	Health Needs	Description	Source	Year(s)
Stroke Hospitalizations	Heart/Stroke; Healthy Eating/Active Living	This indicator reports the hospitalization rate for Ischemic stroke among Medicare beneficiaries aged 65 years and older for hospital stays occurring between 2012 and 2014, per 1,000 population. This indicator is relevant because it is a measure of the burden of stroke, a leading cause of death and disability in the U.S.	Interactive Atlas of Heart Disease and Stroke	2012-2014
Stroke Mortality (SAE)	Heart/Stroke; Healthy Eating/Active Living	This indicator reports the age-adjusted rate of death due to cerebrovascular disease (stroke) per 100,000 population. This indicator is relevant because it is a measure of the burden of stroke, a leading cause of death and disability in the U.S.	National Vital Statistics System	2011-2015
Stroke Prevalence	Heart/Stroke; Healthy Eating/Active Living	This indicator reports the percentage of the Medicare fee-for-service population diagnosed with stroke. This indicator is relevant because it is a measure of the burden of stroke, a leading cause of death and disability in the U.S.	Centers for Medicare and Medicaid Services	2015, 2014, 2013, 2012, 2011, 2010
Suicide Mortality (SAE)	Behavioral Health (Mental Health)	This indicator reports the age-adjusted rate of death due to intentional self-harm (suicide) per 100,000 population. This indicator is relevant because it is a measure of burden of suicide, a leading cause of death in the U.S. Values are suppressed when the number of suicide deaths over the 5-year time period is less than 10.	National Vital Statistics System	2011-2015
Suspensions	Education & Literacy	This indicator reports the rate of suspensions per 100 enrolled students. This indicator is relevant because exclusionary school discipline policies, including suspensions and expulsions, are associated with lower educational attainment, higher dropout rates, engagement with the juvenile justice system, incarceration as an adult, decreased economic security as an adult, and poor mental health outcome, including experiences of stress and trauma.	California Department of Education	2016-2017

Indicator	Health Needs	Description	Source	Year(s)
Teen Births	Maternal/Infant Health; Education & Literacy	This indicator reports the number of births to women aged 15 to 19 years per 1,000 population. This indicator is relevant because social determinants such as low education and low income are associated with teen pregnancies, and it highlights communities in need of prevention and support services.	National Vital Statistics System	2008-14
Tobacco Expenditures (SAE)	Asthma; Oral Health; Behavioral Health (Substance Use/Tobacco)	This indicator reports estimated expenditures for cigarettes, as a percentage of total household expenditures.	Nielsen SiteReports	2014
Tobacco Usage (SAE)	Asthma; Cancers; Heart/Stroke; Healthy Eating/Active Living; Oral Health; Behavioral Health (Substance Use/Tobacco)	This indicator reports the percentage of adults age 18 and older who self-report currently smoking cigarettes some days or every day.	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the Health Indicators Warehouse. US Department of Health & Human Services, Health Indicators Warehouse.	2006-2012
Tree Canopy Cover (SAE)	Climate/Natural Environment	This indicator reports the percentage of land within the report area that is covered by tree canopy. This indicator is relevant as a measure of resilience against the health impacts of climate change; tree canopy coverage protects against air pollution, reduces heat island effects, reduces noise pollution, and provides ecosystem services.	National Land Cover Database 2011	2011

Indicator	Health Needs	Description	Source	Year(s)
Unemployment (SAE)	Economic Security	This indicator reports the percentage of the civilian non-institutionalized population aged 16 years and older that is unemployed but seeking work (non-seasonally adjusted). This indicator is relevant because unemployment is a measure of community stability and regional economic dynamism; at the individual level, unemployment creates financial instability and barriers to accessing insurance coverage, health services, healthy food, and other necessities that contribute to health status and quality of life.	Bureau of Labor Statistics	2018
Uninsured Children	Economic Security; Health Care Access & Delivery	This indicator reports the percentage of children aged less than 18 years of age without health insurance coverage. This indicator is relevant because lack of insurance is a primary barrier to health care access, including regular primary care, specialty care, and other health services, which contributes to poor health status and quality of health.	American Community Survey	2012-2016
Uninsured Population (SAE)	Economic Security; Health Care Access & Delivery	This indicator reports the percentage of the total civilian non-institutionalized population without health insurance coverage. This indicator is relevant because lack of insurance is a primary barrier to health care access, including regular primary care, specialty care, and other health services, which contributes to poor health status and quality of life.	American Community Survey	2012-2016
Violent Crimes (SAE)	Community & Family Safety (Crime/Intentional Injury)	This indicator reports the rate of violent crime offenses (including homicide, rape, robbery and aggravated assault) reported by law enforcement per 100,000 population. This indicator is relevant as a measure of community safety.	FBI Uniform Crime Reports	2012-14
Walkable Destinations	Heart/Stroke; Healthy Eating/Active Living; Transportation & Traffic	This indicator reports the percentage of the population that live in close proximity to a park, playground, library, museum or other destinations of interest. This indicator is relevant because good access to walkable destination promotes physical activity and is associated long-term physical and mental health benefits.	Center for Applied Research and Environmental Systems (CARES)	2012-2015

Indicator	Health Needs	Description	Source	Year(s)
Young People Not in School and Not Working (SAE)	Economic Security; Behavioral Health (Mental Health)	This indicator reports the percentage of youth aged 16 to 19 years who are not currently enrolled in school or employed. This indicator is relevant as a measure of youth disconnection which has short- and long-term implications for health, wellbeing and quality of life.	American Community Survey	2012-2016

Attachment 2. Community Leaders, Representatives, and Members Consulted

This list contains the names of the community leaders, representatives, and members who were consulted. Leaders were identified based on their professional expertise and knowledge of target groups, including low-income, minority, and medically underserved populations. The group included leaders from the county health systems, local government employees, clinicians, and nonprofit organizations. For a description of the residents who participated in focus groups, see Section 4: Process and Methods.

ID #	DATA COLLECTION METHOD	NAME, TITLE, AGENCY	TOPIC OR POPULATION	# OF PEOPLE	TARGET GROUP(S) REPRESENTED	ROLE IN TARGET GROUP (LEADER, REPRESENTATIVE, MEMBER)	DATE INPUT WAS GATHERED
Key Informant Interviews							
1	Interview	Kimi Watkins-Tartt, Deputy Director, Public Health, Alameda County Public Health Department	Public health	1	Health department representative	Leader	7/23/2018
2	Interview	Denah Nunes, LCSW, Director of Health & Wellness Alameda County, Abode Services	Needs of individuals experiencing homelessness	1	Low-income, Medically underserved	Leader	8/7/2018
3	Interview	Louis Chicoine, Executive Director, Abode Services	Needs of individuals experiencing homelessness	1	Low-income, Medically underserved	Leader	8/7/2018
4	Interview	Claudia Young, Human Services Programs Manager, Livermore Housing & Human Services	Government, health/human services	1	Low-income	Leader	7/26/2018
5	Interview	Sue Compton, Chief Executive Officer, Axis Community Health	Needs of low-income population	1	Low-income	Leader	8/3/2018
6	Interview	Robert Taylor, Executive Director, Senior Support Services of Tri-	Older adult needs	1	Low-income	Leader	8/8/2018

ID #	DATA COLLECTION METHOD	NAME, TITLE, AGENCY	TOPIC OR POPULATION	# OF PEOPLE	TARGET GROUP(S) REPRESENTED	ROLE IN TARGET GROUP (LEADER, REPRESENTATIVE, MEMBER)	DATE INPUT WAS GATHERED
		Valley					
7	Interview	Cat Arthur, School Nurse, Livermore Valley Joint Unified School District	K-12 student health	1	Medically underserved	Leader	10/2/2018
8	Interview	Cindy Leung, District Community Liaison, Dublin Unified School District	K-12 student health and education	1	Low-income, Minority	Leader	10/2/2018
9	Interview	Scott Vernoy, Director of Student Services, Livermore Valley Joint Unified School District	K-12 student health	1	Medically underserved	Leader	10/2/2018
10	Interview	Vicki Fukumae, District Nurse, Dublin Unified School District	K-12 student health	1	Medically underserved	Leader	10/2/2018
11	Interview	Ed Diolazo, Assistant Superintendent of Student Support Services, Pleasanton Unified School District	K-12 student health and education	1	Low-income, Minority	Leader	10/3/2018
12	Interview	Susan Han, RN, MSN, District Nurse, Pleasanton Unified School District	K-12 student health	1	Medically underserved	Leader	10/3/2018
Focus Groups							
13	Focus Group	**Host:** Axis Community Health **Attendees** below.	Needs of Latinx low-income individuals	5	Low-income, Medically underserved, Minority	(see below)	8/7/2018
13	Focus Group	Charon Emery, Enrollment, Axis Community Health	Needs of Latinx low-income individuals			Leader	
13	Focus Group	Cindy Nava, BHCC, Axis	Needs of Latinx			Leader	

ID #	DATA COLLECTION METHOD	NAME, TITLE, AGENCY	TOPIC OR POPULATION	# OF PEOPLE	TARGET GROUP(S) REPRESENTED	ROLE IN TARGET GROUP (LEADER, REPRESENTATIVE, MEMBER)	DATE INPUT WAS GATHERED
		Community Health	low-income individuals				
13	Focus Group	Eileen Esparza, CDCC, Axis Community Health	Needs of Latinx low-income individuals			Leader	
13	Focus Group	Maria Gonzalez, Clinic Manager, Axis Community Health	Needs of Latinx low-income individuals			Leader	
13	Focus Group	Pam Alfaro, Community Health Worker, Axis Community Health	Needs of Latinx low-income individuals			Leader	
14	Focus Group	**Host:** Open Heart Kitchen	Individuals experiencing homelessness or housing instability	7	Low-income, Medically underserved	Members	7/31/2018
15	Focus Group	**Host:** Marylin Elementary School	Families with elementary-school-age children	11	Low-income	Members	9/6/2018

Attachment 3. Community Asssets and Resources

Assets and resources available to meet identified community health needs are listed on the following pages. They include alliances, initiatives, campaigns, and general resources (such as public/government services, school-based services, community-based organizations, and hospitals and clinics).

Health Care Facilities and Agencies

The following health care facilities are available in or near the Tri-Valley. Many hospitals provide charity care and cover Medi-Cal shortfalls.

HOSPITALS	CITY
San Ramon Regional Medical Center	San Ramon
Stanford Health Care – ValleyCare	Pleasanton
UCSF Benioff Children's Hospital Oakland	Oakland

FEDERALLY QUALIFIED HEALTH CLINICS

Axis Community Health	Livermore and Pleasanton

Additional Assets and Resources

These are organized by identified community health need.

BEHAVIORAL HEALTH

- Adobe Services—HOPE Project Mobile Health Clinic
- Alameda County Health Care Services Agency
- Axis Community Health Adult Behavioral Health Services
- Center for Human Development
- Contra Costa Health Services
- John Muir Behavioral Health Center
- National Alliance on Mental Illness (NAMI)

CANCER

- American Cancer Society
- American Lung Association
- Bay Area Cancer Connections
- Northern California Cancer Center
- Sandra J. Wing Foundation

CLIMATE AND NATURAL ENVIRONMENT

- Alameda County Department of Environmental Health
- Bay Area Air Quality Management District Climate Protection Planning Program
- City of Livermore Environmental Services Division
- City of Pleasanton Environmental Services Division
- Dublin San Ramon Services District Environmental Health & Safety Program
- Sierra Club Tri-Valley Group

COMMUNITY AND FAMILY SAFETY

- Afghan Coalition
- First 5 Alameda County

EDUCATION AND LITERACY

- Alameda County Office of Education
- Dublin Union School District
- First 5 Alameda
- Livermore Valley Joint Union School District
- Pleasanton Union School District
- San Ramon Union School District

HEALTH CARE ACCESS AND DELIVERY

- Adobe Services—HOPE Project Mobile Health Clinic
- Alameda County Health Care Services Agency
- American Diabetes Association
- American Heart Association
- American Lung Association
- Axis Community Health
- DVC Community Dental Clinic
- Every Woman Counts
- Planned Parenthood
- Regional Asthma Management Program

HEALTHY EATING/ACTIVE LIVING

- Axis Community Health—WIC Program
- City of Dublin Parks and Community Services
- City of Livermore Recreation and Park District
- City of San Ramon Parks and Community Services
- East Bay Regional Parks
- Open Heart Kitchen

- Meals on Wheels of Alameda County
- Senior Support Program of the Tri-Valley
- Spectrum Community Services—Meals on Wheels, Senior Nutrition and Activities Program
- Tri-Valley Haven for Women—food pantry

HEART ATTACK/STROKE

- Alameda County Health Care Services Agency
- American Heart Association
- American Lung Association

HOUSING AND HOMELESSNESS

- Abode Services
- CityServe of the Tri-Valley
- Shepherd's Gate
- Tri-Valley Haven

ORAL HEALTH

- Axis Community Health

TRANSPORTATION AND TRAFFIC

- Alameda–Contra Costa Transit District (AC Transit)
- Bay Area Rapid Transit (BART)
- CountyConnection.com—trip planning
- Mobility Matters
- Paratransit

Attachment 4. Qualitative Research Protocols

Prior to key informant interviews, professionals were provided with the 2016 CHNA health needs list to consider.

Table 1, 2016 Health Needs List

Health Need	Examples
Asthma	
Cancer	
Heart Disease & Stroke	
Obesity, Diabetes, Fitness & Diet/Nutrition	Healthy eating, active living
Access to Food and Recreation	Safe food supply, access to fresh food, food security, places to recreate, exercise
Maternal & Infant Health	Premature births, infant mortality, prenatal care
Sexually-Transmitted Infections	Gonorrhea, chlamydia, HIV
Communicable Diseases	TB, flu, salmonella (separate from STIs)
Oral/Dental Health	
Unintended Injuries (accidents)	Car & pedestrian accidents, falls, drownings
Behavioral Health	Stress, depression, suicide, drug/alcohol/tobacco addiction
Community & Family Safety	Child/partner abuse, bullying, violent crime, human trafficking
Economic Security	Income, employment, education
Housing & Homelessness	Safe, clean and affordable housing
Climate & Natural Environment	Extreme weather, environmental contaminants
Transportation & Traffic	Safe, reliable, accessible
Healthcare Access & Delivery (both primary & specialty care)	Health insurance, costs of medicine, availability of providers, quality of care, getting appointments, patients being treated with respect

Key Informant Protocol – Professionals

Introduction – 5 min.

- Welcome and thanks
- What the project is about:
    - Identifying health needs in our community (called the Community Health Needs Assessment or CHNA)
    - Required of all nonprofit hospitals in the U.S. every three years
    - The hospitals who serve Alameda and Contra Costa County residents are working together to meet this requirement. Those hospitals include John Muir Health, Kaiser Permanente, St. Rose Hospital, Stanford Health Care - ValleyCare, Sutter Health, UCSF Benioff Children's Hospital Oakland, and Washington Hospital Healthcare System
    - Will inform investments that hospitals make to address community needs
- Today's questions:
    - Most important health needs in [geographic sub-area]
    - Your perspective on [expertise area]
    - Which populations may have different or worse needs or experiences
    - Your suggestions for improvement
- What we'll do with the information you tell us today:
    - Notes will go to hospitals
    - Hospitals will make decisions about which needs they can best address, and how they may collaborate/complement each other's community work
    - Would like to record so that we can get the most accurate record possible
    - Will not share the audio itself
    - Can keep anything confidential, even whole interview. Let me know any time.
    - Permission to record?
- Any questions before I begin? *[If interviewer does not have the answer, commit to finding it and sending later via email.]*

Health Needs Prioritization – 6-10 min.

Part of our task today is to find out which health needs you think are most important to the local population you serve. You may want to take a look at the list of health needs we sent you, many of which the community came up with when the hospitals did the Community Health Needs Assessment in this area in 2016. You can see that some of them are health conditions, and others reflect the social determinants of health (housing, education, cost of living, environment, etc.).

Thinking specifically about [geographic sub-area] …

1. **Are there any needs that should be added to the list?**
2. **Which three needs (2016 and others added) do you believe the local people you serve feel are the most *important* to address here in the next few years?** [See table above.]

Health Needs Discussion, Including Expertise Area – 20 min.

I am going to take you through a few questions about each of these needs.

3. **When you think about [health need 1]…**
    - What barriers exist to seeing better health in this area?

    Prompts for barriers if they are having trouble thinking of anything: Income, language, culture/stigma, lack of awareness/education, policies/laws, budget cuts, lack of community resources, transportation, housing, addiction, stress, being victims of abuse/ bullying/crime
    - What impact do these barriers have on people's health?
4. **Which groups, if any, are more affected by this health need than others?** Prompts if not already discussed: Differences by age, ethnicity, education level, sexual orientation, disability status, income (affecting housing and transportation), language, immigration status, etc.
5. **What trends, if any, have you seen in the last three years?**

    [Repeat 3-5 for each health need they prioritized.]

6. [Only if their expertise was not related to one or more of the needs chosen:] **You were invited to share your expertise/experience about [e.g., senior health]. Let's talk a little about that; how does it relate to the community's health needs?**

Only If Not Chosen as a Need: Access to Care – 5 min.

We know that access to care impacts all aspects of health. Access includes not only having insurance and being able to afford co-pays/premiums, but also having a primary care physician versus using urgent care or the ER, and being able to get timely appointments with various providers.

7. **Would you say that healthcare access [related to your specific expertise and/or population you serve] is sufficient or not? If not, what issues do you see?**
8. **What differences do you see, if any, among various groups in your work?**

Prompts if needed: Differences by age, ethnicity, education level, sexual orientation, disability status, income (affecting housing and transportation), language, immigration status, etc.

Only If Not Chosen as a Need: Behavioral Health – 5 min.

In recent assessments, behavioral health arose as a top health need. By behavioral health, we mean everything ranging from sub-clinical issues like stress to severe mental illness, and including substance use/addiction.

9. **Do you agree? In your opinion, what are the specific behavioral health needs in our community?**
   Prompts if needed: Stress, depression, addiction; suicide; stigma; behavioral health care access

10. **In what ways might people who are struggling with behavioral health issues be doing worse than others when it comes to health?**
    Prompt if needed: Behavioral health issues driving other health needs?

Suggestions/Improvements/Solutions – 5-10 min.

In addition to what we have already talked about…

11. **What are some existing assets, services, or strategies that are working well in the community to address these needs?**
    Prompts if needed: Particular community-based organizations, their programs/ services, hospitals & health care – specific offerings, specific social services

12. **What types of assets, services, or strategies does the community need more of to address these needs?**
    Prompts if needed*:* Preventive care? Deep-end services? Workforce changes? Are there any quick wins or low-hanging fruit?

13. **What new/revised policies or other public health approaches are needed, if any?**

[Time permitting] Additional comments

We thank you so much for answering our questions. In the few minutes we have left, is there anything else you would like us to add regarding community health needs?

Closing

OK, if anything occurs to you later that you would like to add to this interview, please just let us know. Thank you for contributing your expertise and experience to the CHNA. You can look for the hospital CHNAs to be made publicly available in 2019.

Focus Group Protocols

During focus groups, facilitators presented the 2016 CHNA List (**Table 1** of this attachment; note that at the recommendation of the Contra Costa County Public Health Officer, in focus groups with residents "Behavioral health" was called "Mental health"). Questions found in these protocols refer to that list.

Focus Groups with Professional or Community Representatives

Introduction – 6 min.

- Welcome and thanks
- Introductions (everyone says their name, role, and organization, incl. facilitators)
- What the project is about:
    - Nonprofit hospitals' Community Health Needs Assessment required by IRS. Hospitals collaborating on East Bay CHNA work include: John Muir Health, Kaiser Permanente, St. Rose Hospital, Stanford Health Care-ValleyCare, Sutter Health, UCSF Benioff Children's Hospital-Oakland, and Washington Hospital Healthcare System
    - Identifying important health needs in our community
    - Ultimately, to plan on how to address health needs now and in future
- Today's questions (refer to agenda flipchart page)
- Introductions (facilitators, participants: names and organizations)
- Confidentiality:
    - When we are finished with all of the focus groups, we will look at all of the transcripts and summarize the things we learn.
    - Would like to record so that we can be sure to get your words right.
    - Now that we have introduced ourselves, we will only use first names here to preserve your anonymity. However, if you want to keep a comment anonymous, you may not want to name your organization.
    - We also will pull out some quotes so that the hospitals can hear your own words. We will not use your name when we give them those quotes.
    - Transcripts will go to hospitals if that is OK with you.
    - Permission to record?
- What we'll do with the information you tell us today:
    - Hospitals will report the assessment to the IRS
    - Hospitals will use information for planning future investments
- Guidelines: It's OK to disagree, but be respectful. We want to hear from everyone. Really want your opinions and perspectives, even – especially! – if they aren't the same as everyone else's.

Health Needs Prioritization – 10 min.

You are here to share your experience as a professional serving [e.g., seniors, persons experiencing homelessness, young adults, etc.].

Part of our task today is to find out which health needs you think are most important to the local population you serve. This poster has a list of the health needs, many of which the community came up with when the hospitals did the Community Health Needs Assessment in this area in 2016.

[Read all of the needs aloud from flipchart and define where needed (e.g. "Access and Delivery" means insurance, having a primary care physician, preventive care instead of ED, being treated with dignity and respect, wait times, etc.).]

1. **Are there any that you think should be added to the list?**
2. **Please think about the three from the list you believe the local people you serve feel are the most important to address here in the next 3-4 years.**

   What we would like you to do is to take the three sticky dots you have there and use them to vote for three health needs that you think are the most important, to the local population you serve, to address in the next few years. We really want your perspective and opinion of the local population's feelings; it's totally OK if your opinion differs from others' in the room. Then we will discuss the results.

[When participants have voted, start audio recorder.]

3. **Summarize voting results.** [Explain that we will spend the rest of our time reflecting on these three top priorities.]

Health Needs Discussion, Including Expertise Area – 20 min.

4. **When you think about [health need1]…**
   - What barriers exist to seeing better health in this area?

   Prompts for barriers if they are having trouble thinking of anything: Income, language, culture/stigma, lack of awareness/education, policies/laws, budget cuts, lack of community resources, transportation, housing, addiction, stress, being victims of abuse/ bullying/crime
   - What impact do these barriers have on people's health?
5. **Which groups, if any, are more affected by this health need than others?** Prompts if not already discussed: Differences by age, ethnicity, education level, sexual orientation, disability status, income (affecting housing and transportation), language, immigration status, etc.

6. **What trends, if any, have you seen in the last three years?**

[Repeat questions 4-6 for each of the top health needs prioritized by the group.]

7. [Only if their expertise was not related to one or more of the needs chosen:] **You are here to share your expertise/experience about [e.g., senior health]. Let's talk a little about that; how does it relate to the community's health needs?**

Only If Not Voted a Top Need: Access to Care – 5 min.

We know that access to care impacts all aspects of health. Access includes not only having insurance and being able to afford co-pays/premiums, but also having a primary care physician versus using urgent care or the ER, and being able to get timely appointments with various providers.

8. **Would you say that healthcare access related to [the specific population you serve] is sufficient? Why or why not?**
9. **What differences do you see, if any, among various groups in your work?**
   Prompts: Differences by age, ethnicity, education level, sexual orientation, disability status, income (affecting housing and transportation), language, immigration status, etc.

Only If Not Voted a Top Need: Behavioral Health – 5 min.

In recent assessments, behavioral health arose as a top health need. By behavioral health, we mean everything ranging from stress to severe mental illness, and including substance use/addiction.

10. **Do you agree? In your opinion, what are the specific behavioral health needs in our community?**
    Prompts if needed: Stress, depression, addiction; suicide; stigma; behavioral health care access
11. **In what ways might people who are struggling with behavioral health issues be doing worse than others when it comes to health?**
    Prompt if needed: Behavioral health issues driving other health needs?

Suggestions/Improvements/Solutions – 5-10 min.

In addition to what we have already talked about…

12. **What are some existing assets, services, or strategies that are working well in the community to address these needs?**

Prompts if needed: Particular community-based organizations, their programs/ services, hospitals & health care – specific offerings, specific social services

13. **What types of assets, services, or strategies does the community need more of to address these needs?**
    Prompts if needed*:* Preventive care? Deep-end services? Workforce changes? Are there any quick wins or low-hanging fruit?

14. **What new/revised policies or other public health approaches are needed, if any?**

Closing – 5 min.

- Thank you
- Repeat - What we will do with the information
- Look for CHNA reports to be publicly available in 2019

Focus Groups with Local Residents (90 min.)

Introduction – 6 min.

- Welcome and thanks
- Introductions (all say name &, if comfortable, where they work, incl facilitators)
- What the project is about:
    - Nonprofit hospitals' Community Health Needs Assessment (CHNA) required by IRS. Hospitals collaborating on East Bay CHNA work include: John Muir Health, Kaiser Permanente, St. Rose Hospital, Stanford Health Care-ValleyCare, Sutter Health, UCSF Benioff Children's Hospital-Oakland, and Washington Hospital Healthcare System
    - Identifying important health needs in our community
    - Hospitals will plan how to address health needs now and in future
- Today's questions (refer to agenda flipchart page)
- Confidentiality:
    - Would like to record so that we can be sure to get your words right.
    - We will only use first names here – you will be anonymous.
    - Transcripts will go to hospitals if that is OK with you.
    - When we are finished with all of the focus groups, we will read all of the transcripts and summarize the things we learn. We will also use some quotes so that the hospitals can read your own words. We will not use your name when we give them those quotes.
    - Is anyone not OK with recording? [remember to start audio recorder!]
- What we'll do with the information you tell us today:
    - Hospitals will report the assessment to the IRS
    - Hospitals will use information for planning future investments
- Incentives – please sign the sheet
- Guidelines: It's OK to disagree, but be respectful. We want to hear from everyone. Really want your personal opinions and perspectives, even – especially! – if they aren't the same as everyone else's.

Imagining a Healthy Community – 5 min.

Take a moment to picture, in your mind, a healthy community. [Pause].

1. **When you imagine a healthy community, what does it look like?**

    Prompt if needed: What makes a community healthy?

Health Needs Prioritization – 10 min.

Part of our task today is to find out which health needs you think are most important. This poster has a list of the health needs, many of which the community came up with when the hospitals did the Community Health Needs Assessment in this area in 2016.

[Read all of the needs aloud from flipchart and define where needed (e.g. "Access and Delivery" means insurance, having a primary care physician, preventive care instead of ED, being treated with dignity and respect, wait times, etc.).]

2. **Are there any that should be added to the list?**
3. **Please think about the three from the list you <u>personally</u> believe are the most *<u>important</u>* to address here in the next few years.**

   What we would like you to do is to take the three sticky dots you have there and use them to vote for three health needs that you think are the most important to address in the next 3-4 years. We really want your personal perspective and opinion; it's totally OK if it's different from others' here in the room. Then we will discuss the results of your votes.

4. **Summarize voting results.** [Explain that we will spend the rest of our time reflecting on these three top priorities.]

Understanding the Needs – 15 min.

5. **When you think about [health need1]…**
   - What barriers exist to people getting healthy or staying healthy?

   Prompts for barriers if they are having trouble thinking of anything: Income, language, culture/stigma, lack of awareness/education, policies/laws, budget cuts, lack of community resources, transportation, housing, addiction, stress, being victims of abuse/ bullying/crime

   - What impact do these barriers have on people's health?
   - When you think about this need, are any groups of people worse off than others? If so, which groups?

   Prompts for groups if they are having trouble thinking of anything: Children, youth, adults, seniors; specific ethnicities [e.g., Latino, Southeast Asian, Pacific Islanders]; low-income; mono-lingual non-English speakers; LGBTQ

6. **Do you think that things have been getting better, stayed the same, or gotten worse, in the last three years or so? [If things have changed: How?]**

[Repeat questions 5-6 for each of the top health needs prioritized by the group.]

Only If Not Voted a Top Need: Access to Care – 5-10 min.

7. **What about healthcare access?**
    - Is everyone able to get health insurance for their needs?
    - Is everyone able to afford to pay for health services and medication?
    - Is everyone able to get to the doctors they need when they need to?
    - Do people mostly have a primary care doctor, or do they mostly use urgent care or the ER instead? [*If the latter:* Why?]
    - What about specialists? Are people able to see one when they need it?

Only If Not Voted a Top Need: Mental Health – 5-10 min.

8. **What about mental health?** Mental health was one of the top health needs last time. By mental health, we mean everything ranging from stress, substance use, and depression, to serious mental illness.

    a. **In your opinion, what are the specific mental health needs in our community?**

    Prompt if needed: Conditions like stress, depression, addiction; outcomes like suicide; concerns about stigma; access to mental health care

    b. **Do you think that people who are struggling with mental health issues are doing worse than others when it comes to these other health issues we have listed? If so, how?** [Elicit drivers.]

Equity & Cultural Humility – 15 min.

9. **Do you think that everyone in our community is getting the same health care, and has the same access to care? If not, what are the barriers for them?**
Prompt: Think about all of the people in our community… children, youth, adults, seniors… some have different ethnicities, languages, sexual orientations, and religions. They may be disabled or be low-income or be experiencing homelessness. It could also be people from different geographic parts of the community have different experiences.

Suggestions/Improvements/Solutions – 5-10 min.

In addition to what we have already talked about…

10. **What are some resources, services, or strategies that are working well in the community to address these needs?**

Prompts if needed: Certain community-based organizations or their programs/ services, specific hospitals &/or health care programs/services, specific social services

11. **What types of resources, services, or strategies, if any, does the community need more of to address these needs?**
    Prompt if needed: Preventive care? Deep-end services? Workforce changes?

12. **What kinds of changes could those in charge here in the community make to help all of us stay healthy?**

Closing – 5 min.

- Thank you
- Repeat - What we will do with the information
- Incentives – **after you turn in the demographic survey**

Attachment 5. IRS Checklist

Section §1.501(r)(3) of the Internal Revenue Service code describes the requirements of the CHNA.

Federal Requirements Checklist	Regulation Section Number	Report Reference
A. Activities Since Previous CHNA(s)		
Describes the written comments received on the hospital's most recently conducted CHNA and most recently adopted implementation strategy.	(b)(5)(C)	Section #2
Describes an evaluation of the impact of any actions that were taken, since the hospital facility finished conducting its immediately preceding CHNA, to address the significant health needs identified in the hospital facility's prior CHNA(s).	(b)(6)(F)	Section #6
B. Process & Methods		
Background Information		
Identifies any parties with whom the facility collaborated in preparing the CHNA(s).	(b)(6)(F)(ii)	Section #4
Identifies any third parties contracted to assist in conducting a CHNA.	(b)(6)(F)(ii)	Section #4
Defines the community it serves, which: • Must take into account all patients without regard to whether (or how much) they or their insurers pay for care or whether they are eligible for assistance. • May take into account all relevant circumstances including the geographic area served by the hospital, target population(s), and principal functions. • May *not* exclude medically underserved, low-income, or minority populations who live in the geographic areas from which the hospital draws its patients.	(b)(i) (b)(3) (b)(6)(i)(A)	Section #3
Describes how the community was determined.	(b)(6)(i)(A)	Section #3
Describes demographics and other descriptors of the hospital service area.		Section #3
Health Needs Data Collection		
Describes **data and other information** used in the assessment:	(b)(6)(ii)	
a. Cites external source material (rather than describe the method of collecting the data).	(b)(6)(F)(ii)	Attachment 1

Federal Requirements Checklist			Regulation Section Number	Report Reference
		b. Describes methods of collecting and analyzing the data and information.	(b)(6)(ii)	Section #4
		CHNA describes how it took into account input from persons who represent the broad interests of the community it serves in order to identify and prioritize health needs and identify resources potentially available to address those health needs.	(b)(1)(iii) (b)(5)(i) (b)(6)(F)(iii)	Section #4
		Describes the medically underserved, low-income, or minority populations being represented by organizations or individuals that provide input.	(b)(6)(F)(iii)	Section #4
		a. At least one state, local, tribal, or regional governmental public health department (or equivalent department or agency) or a State Office of Rural Health.	(b)(5)(i)(A)	Section #4 & Attachment 2
		b. Members of the following populations, or individuals serving or representing the interests of populations listed below. (Report includes the names of any organizations - names or other identifiers not required.)	(b)(5)(i)(B)	Section #4 & Attachment 2
		I. Medically underserved populations	(b)(5)(i)(B)	Section #4 & Attachment 2
		II. Low-income populations	(b)(5)(i)(B)	Section #4 & Attachment 2
		III. Minority populations	(b)(5)(i)(B)	Section #4 & Attachment 2
		c. Additional sources (optional) – (e.g. healthcare consumers, advocates, nonprofit and community-based organizations, elected officials, school districts, healthcare providers and community health centers).	(b)(5)(ii)	Section #4 & Attachment 2
		Describes how such input was provided (e.g., through focus groups, interviews or surveys).	(b)(6)(F)(iii)	Section #4 & Attachment 2
		Describes over what time period such input was provided and between what approximate dates.	(b)(6)(F)(iii)	Section #4 & Attachment 2
		Summarizes the nature and extent of the organizations' input.	(b)(6)(F)(iii)	Section #4

Federal Requirements Checklist	Regulation Section Number	Report Reference
C. CHNA Needs Description & Prioritization		
Health needs of a community include requisites for the improvement or maintenance of health status both in the community at large and in particular parts of the community (such as particular neighborhoods or populations experiencing health disparities).	(b)(4)	Sections #4 & #5
Prioritized description of significant health needs identified.	(b)(6)(i)(D)	Section #4
Description of process and criteria used to identify certain health needs as significant and prioritizing those significant health needs.	(b)(6)(i)(D)	Section #4
Description of the resources potentially available to address the significant health needs (such as organizations, facilities, and programs in the community, including those of the hospital facility.	(b)(4) (b)(6)(E)	Section #7 & Attachment 3
D. Finalizing the CHNA		
CHNA is conducted in such taxable year or in either of the two taxable years immediately preceding such taxable year.	(a)1	Section #2
CHNA is a written report that is adopted for the hospital facility by an authorized body of the hospital facility (authorized body defined in §1.501(r)-1(b)(4)).	(b)(iv)	Section #8
Final, complete, and current CHNA report has been made widely available to the public until the subsequent two CHNAs are made widely available to the public. “Widely available on a web site” is defined in §1.501(r)-1(b)(29).	(b)(7)(i)(A)	Date(s) on which a-f below were done:
a. May not be a copy marked “Draft.”	(b)(7)(ii)	
b. Posted conspicuously on website (either the hospital facility’s website or a conspicuously located link to a website established by another entity).	(b)(7)(i)(A)	
c. Instructions for accessing CHNA report are clear.	(b)(7)(i)(A)	
d. Individuals with Internet access can access and print reports without special software, without payment of a fee, and without creating an account.	(b)(7)(i)(A)	
e. Individuals requesting a copy of the report(s) are provided the URL.	(b)(7)(i)(A)	
f. Makes a paper copy available for public inspection upon request and without charge at the hospital facility.	(b)(7)(i)(B)	

Further IRS requirements available:

- §1.501(r)-3(b)(iv) and (v): separate and joint CHNA reports
- §1.501(r)-3(d): requirements that apply to new hospital facilities, transferred or terminated hospital facilities, and newly acquired hospital facilities
- §1.501(r)-3(a)(2) and (c): implementation strategy requirements