2019 Community Health Needs Assessment

Kaiser Foundation Hospital: Anaheim and Irvine

License number: #060000091

Approved by Kaiser Foundation Hospitals Board of Director's Community Health Committee

September 16, 2019

KAISER PERMANENTE®

Kaiser Permanente Southern California Region Community Benefit CHNA Report for KFH-Anaheim and Irvine

Contents

I. Introduction/background

A. About Kaiser Permanente (KP)

Founded in 1942 to serve employees of Kaiser Industries and opened to the public in 1945, Kaiser Permanente is recognized as one of America's leading health care providers and nonprofit health plans. We were created to meet the challenge of providing American workers with medical care during the Great Depression and World War II, when most people could not afford to go to a doctor. Since our beginnings, we have been committed to helping shape the future of health care. Among the innovations Kaiser Permanente has brought to U.S. health care are:

- Prepaid health plans, which spread the cost to make it more affordable
- A focus on preventing illness and disease as much as on caring for the sick
- An organized, coordinated system that puts as many services as possible under one roof—all connected by an electronic medical record

Kaiser Permanente is an integrated health care delivery system comprised of Kaiser Foundation Hospitals (KFH), Kaiser Foundation Health Plan (KFHP), and physicians in the Permanente Medical Groups. Today we serve more than 12 million members in nine states and the District of Columbia. Our mission is to provide high-quality, affordable health care services and to improve the health of our members and the communities we serve.

Care for members and patients is focused on their Total Health and guided by their personal physicians, specialists, and team of caregivers. Our expert and caring medical teams are empowered and supported by industry-leading technology advances and tools for health promotion, disease prevention, state-of-the-art care delivery, and world-class chronic disease management. Kaiser Permanente is dedicated to care innovations, clinical research, health education, and the support of community health.

B. About Kaiser Permanente Community Health

For more than 70 years, Kaiser Permanente has been dedicated to providing high-quality, affordable health care services and to improving the health of our members and the communities we serve. We believe good health is a fundamental right shared by all and we recognize that good health extends beyond the doctor's office and the hospital. It begins with healthy environments: fresh fruits and vegetables in neighborhood stores, successful schools, clean air, accessible parks, and safe playgrounds. Good health for the entire community requires equity and social and economic well-being. These are the vital signs of healthy communities.

Better health outcomes begin where health starts, in our communities. Like our approach to medicine, our work in the community takes a prevention-focused, evidence-based approach. We go beyond traditional corporate philanthropy or grantmaking to pair financial resources with medical research, physician expertise, and clinical practices. Our community health strategy focuses on three areas:

- Ensuring health access by providing individuals served at KP or by our safety net partners with integrated clinical and social services;
- Improving conditions for health and equity by engaging members, communities, and Kaiser Permanente's workforce and assets; and
- Advancing the future of community health by innovating with technology and social solutions.

For many years, we've worked side-by-side with other organizations to address serious public health issues such as obesity, access to care, and violence. And we've conducted Community Health Needs Assessments to better understand each community's unique needs and resources. The CHNA process informs our community investments and helps us develop strategies aimed at making long-term, sustainable change - and it allows us to deepen the strong relationships we have with other organizations that are working to improve community health.

C. Purpose of the Community Health Needs Assessment (CHNA) Report

The Patient Protection and Affordable Care Act (ACA), enacted on March 23rd, 2010, included new requirements for nonprofit hospitals in order to maintain their tax-exempt status. The provision was the subject of final regulations providing guidance on the requirements of section 501(r) of the Internal Revenue Code. Included in the new regulations is a requirement that all nonprofit hospitals must conduct a community health needs assessment (CHNA) and develop an implementation strategy (IS) every three years (http://www.gpo.gov/fdsys/pkg/FR-2014-12-31/pdf/2014-30525.pdf). The required written IS plan is set forth in a separate written document. Both the CHNA Report and the IS for each Kaiser Foundation Hospital facility are available publicly at https://www.kp.org/chna.

D. Kaiser Permanente's approach to Community Health Needs Assessment

Kaiser Permanente has conducted CHNAs for many years, often as part of long-standing community collaboratives. The new federal CHNA requirements have provided an opportunity to revisit our needs assessment and strategic planning processes with an eye toward enhanced compliance and transparency and leveraging emerging technologies. Our intention is to develop and implement a transparent, rigorous, and whenever possible, collaborative approach to understanding the needs and assets in our communities. From data collection and analysis to the identification of prioritized needs and the development of an implementation strategy, the intent was to develop a rigorous process that would yield meaningful results.

Kaiser Permanente's innovative approach to CHNAs includes the development of a free, web-based CHNA data platform that is available to the public. The data platform provides access to a core set of approximately 120 publicly available indicators to understand health through a framework that includes social and economic factors, health behaviors, physical environment, clinical care, and health outcomes. In addition, hospitals operating in the Southern California Region utilized the Southern California Public Health Alliance's Healthy Places Index Platform, which includes approximately 80 publicly available community health indicators with resolution at the census tract level.

In addition to reviewing and analyzing secondary data, each KFH facility, individually or with a collaborative, collected primary data through key informant interviews, focus groups, and surveys. Primary data collection consisted of reaching out to local public health experts, community leaders, and residents to identify issues that most impacted the health of the community. The CHNA process also included an identification of existing community assets and resources to address the health needs.

Each hospital/collaborative developed a set of criteria to determine what constitutes a health need in their community. Once all the community health needs were identified, they were prioritized, based on identified criteria. This process resulted in a complete list of prioritized community health needs. The process and the outcome of the CHNA are described in this report.

In conjunction with this report, KFH-Anaheim and Irvine will develop an implementation strategy for the priority health needs the hospital will address. These strategies will build on Kaiser Permanente's assets and resources, as well as evidence-based strategies, wherever possible. The Implementation Strategy will be filed with the Internal Revenue Service using Form 990 Schedule H. Both the CHNA and the Implementation Strategy, once they are finalized, will be posted publicly on our website, https://www.kp.org/chna.

II. Community served

A. Kaiser Permanente's definition of community served

Kaiser Permanente defines the community served by a hospital as those individuals residing within its hospital service area. A hospital service area includes all residents in a defined geographic area surrounding the hospital and does not exclude low-income or underserved populations. The KFH-Anaheim and KFH-Irvine hospitals serve distinct areas within Orange County under a single hospital license. Please see details below.

B. Maps and description of community served

i. Maps –

Figure A. KFH-Anaheim Service Area
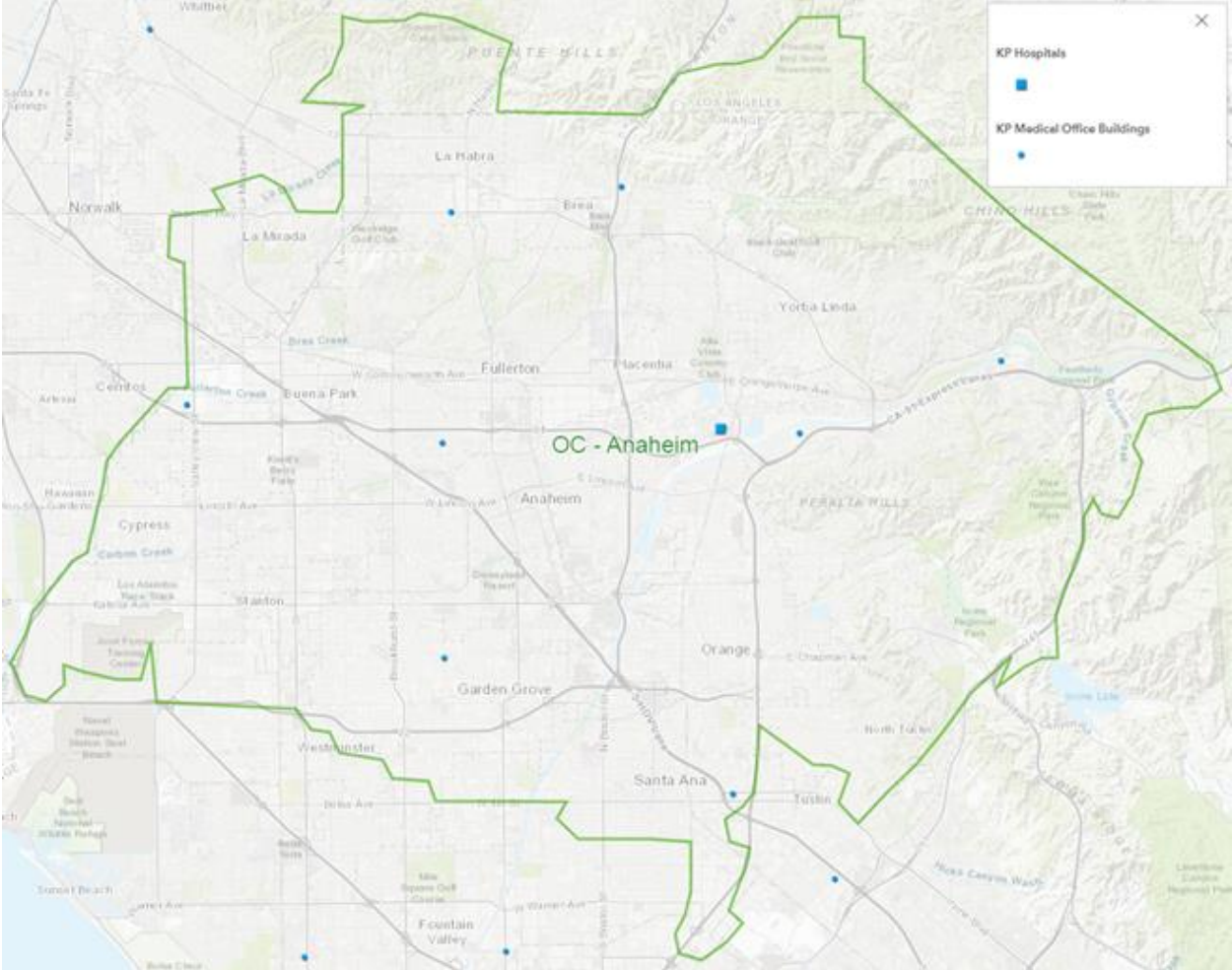
Figure B. KFH-Irvine Service Area
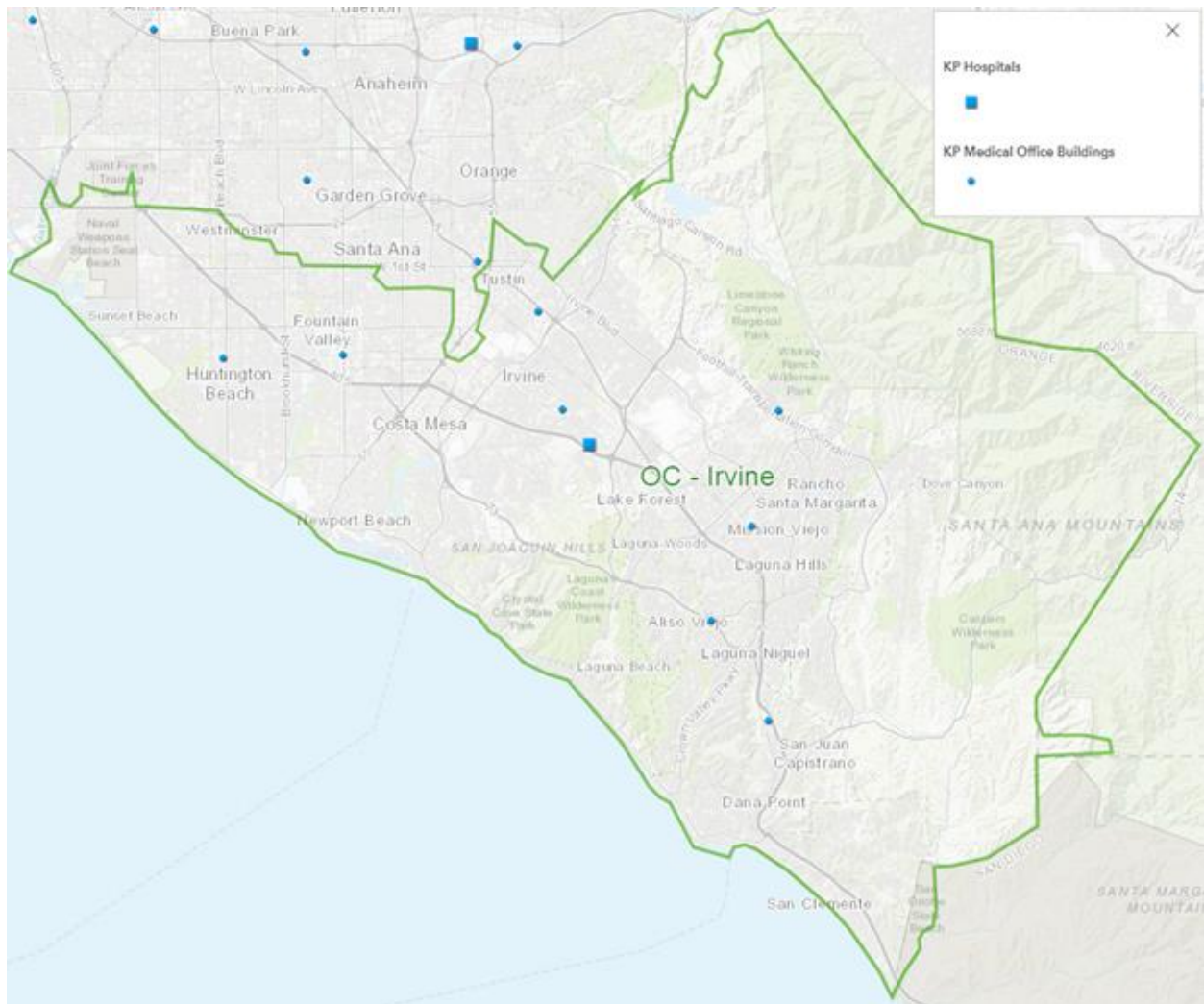
ii. Geographic description of the community served

Two Kaiser Permanente hospitals serve the Orange County area under a single license. The KFH-Anaheim service area includes the communities of Anaheim, Brea, Buena Park, Chino Hills, Cowan Heights, Cypress, El Modena, Fullerton, Garden Grove, La Habra, La Mirada, La Palma, Los Alamitos, Modjeska, Modjeska Canyon, North Tustin, Orange, Placentia, Santa Ana, Silverado, Stanton, Tustin, Villa Park, and Yorba Linda. The KFH-Irvine service area includes the communities of Aliso Viejo, Balboa Island, Capistrano Beach, Corona Del Mar, Costa Mesa, Coto de Caza, Dana Point, El Toro, Foothill Ranch, Fountain Valley, Huntington Beach, Irvine, Irvine Hills, Ladera Ranch, a section of Lake Elsinore, Laguna Beach, Laguna Hills, Laguna Niguel, Laguna Woods, Lake Forest, Midway City, Mission Viejo, Newport Beach, Newport Coast, Rancho Santa Margarita, San Clemente, San Juan Capistrano, Seal Beach, South Laguna, Sunset Beach, Trabuco Canyon, and Westminster.

iii. Demographic profile of the community served

The following table includes race, ethnicity, and additional socioeconomic data for the KFH-Anaheim and Irvine service areas. Please note that 'race' categories indicate 'non-Hispanic' population percentage for Asian, Black, Native American/Alaska Native, Pacific Islander/Native Hawaiian, Some Other Race, Multiple Races, and White. 'Hispanic/Latino' indicates total population percentage reporting as Hispanic/Latino.

Table 1. Demographic Profile: KFH-Anaheim[1]

Race/ethnicity		Socioeconomic Data	
Total Population	1,518,877	Living in poverty (<100% federal poverty level)	14.57%
Asian	19.72%	Children in poverty	21.42%
Black	1.76%	Unemployment	2.9%
Hispanic/Latino	44.94%	Uninsured population	14.96%
Native American/Alaska Native	0.22%	Adults with no high school diploma	20.70%
Pacific Islander/Native Hawaiian	0.29%		
Some other race	0.13%		
Multiple races	2.07%		
White	30.87%		

Table 2. Demographic Profile: KFH-Irvine[2]

Race/ethnicity		Socioeconomic Data	
Total Population	1,670,518	Living in poverty (<100% federal poverty level)	10.35%
Asian	18.49%	Children in poverty	12.09%
Black	1.34%	Unemployment	2.8%
Hispanic/Latino	24.57%	Uninsured population	9.82%
Native American/Alaska Native	0.19%	Adults with no high school diploma	10.80%
Pacific Islander/Native Hawaiian	0.27%		
Some other race	0.25%		
Multiple races	3.05%		
White	51.85%		

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[1] American Community Survey (2010-2016).
[2] Ibid.

iv. Severely under-resourced communities

Identifying disparities in the upstream factors that predict negative health outcomes is critical to Kaiser Permanente's community health mission. The map below displays the differences in opportunity for residents in the KFH-Anaheim and KFH-Irvine service areas to live a long and healthy life[3]. Areas in dark blue represent census tracts in the lowest quartile of health opportunity across California. These areas are severely under-resourced across multiple domains of the social predictors of health (e.g. economics, education, transportation, built environment, etc.).

Figure C. Under-Resourced Communities in KFH-Anaheim
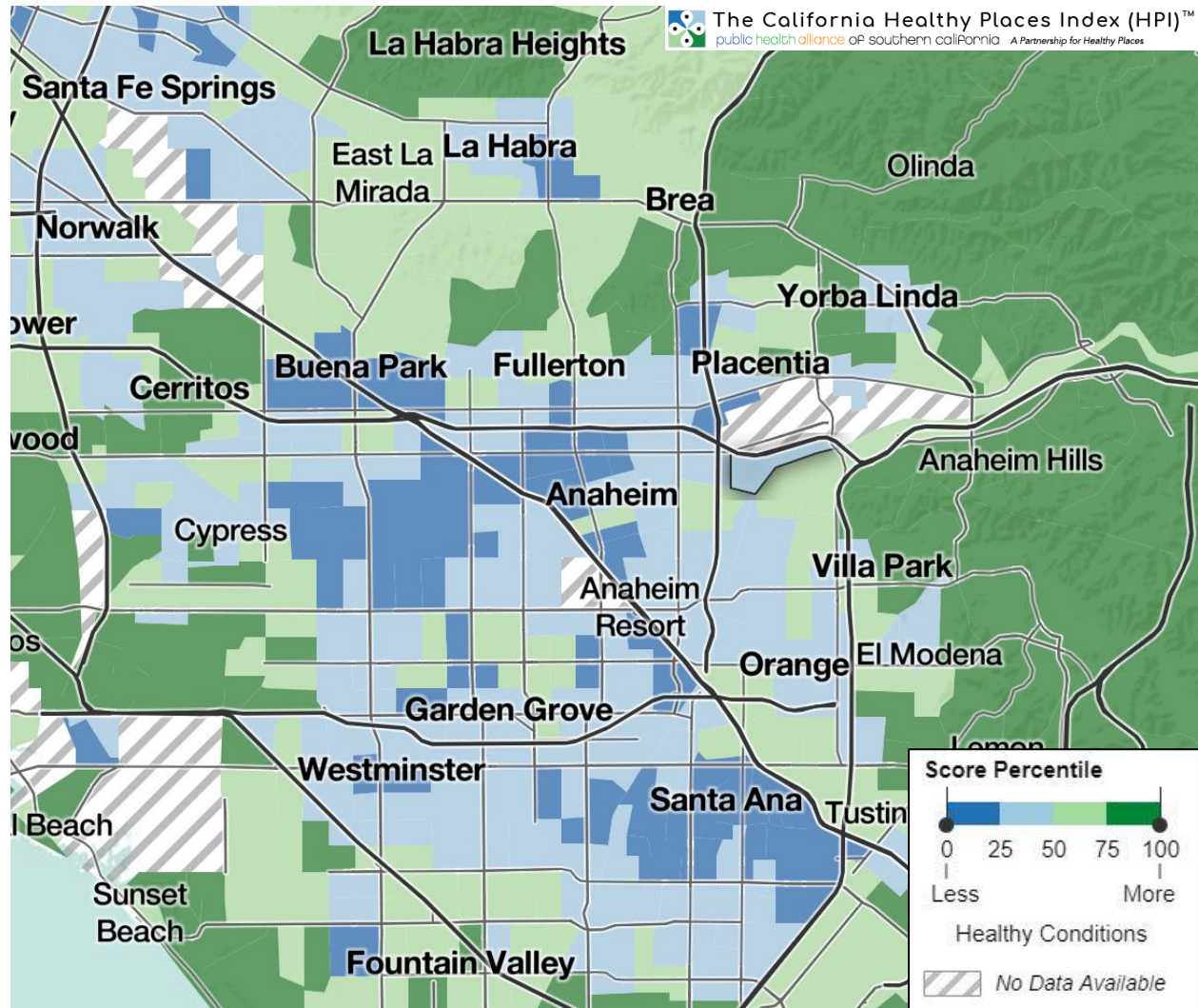
Source: The California Healthy Places Index, © 2018 Public Health Alliance of Southern California, http://healthyplacesindex.org/

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[3]As defined by the California Healthy Places Index (HPI). HPI scores combine 25 metrics of the social predictors of health (each weighted to life expectancy) to produce a single health opportunity score for each census tract in CA. For more detailed maps and additional information about HPI methodology, please visit http://healthyplacesindex.org.

Figure D. Under-Resourced Communities in KFH-Irvine
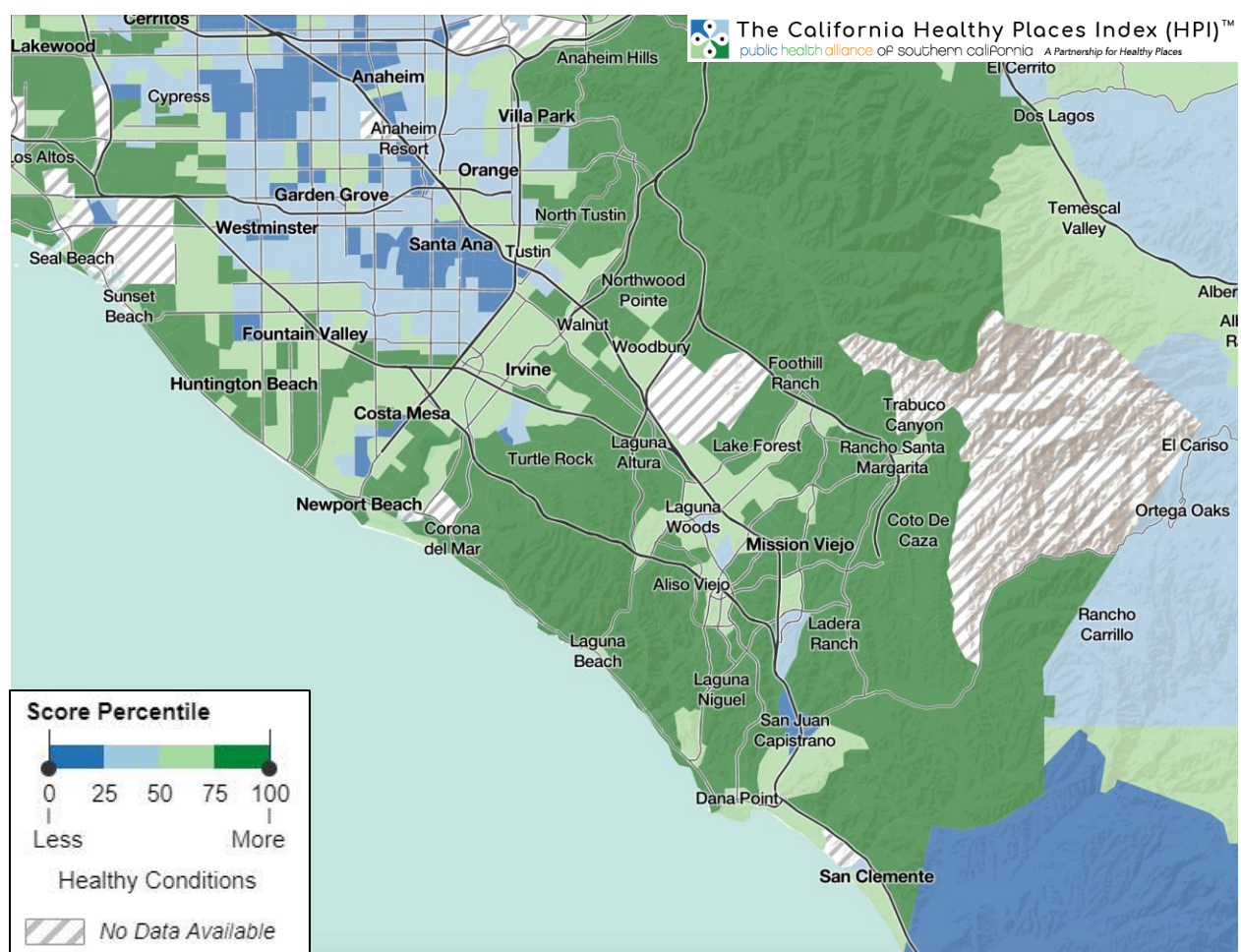
Source: The California Healthy Places Index, © 2018 Public Health Alliance of Southern California, http://healthyplacesindex.org/

Major under-resourced communities in the KFH-Anaheim and Irvine service areas:

- Santa Ana
- Anaheim
- Costa Mesa
- San Juan Capistrano

In aggregate, residents living in the **KFH-Anaheim service area** are in the **49th percentile** for health opportunity[4] among all California residents with approximately **284,475** people living in severely under-resourced census tracts. Residents living in the **KFH-Irvine service area** are in the **68th percentile** for health opportunity among all California residents with approximately **176,410** people living in severely under-resourced census tracts[5].

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[4] As described by the California Healthy Places Index.

[5] Calculations are estimates based on population-weighted HPI scores using the most recent US census data.

III. Who was involved in the assessment?

A. Identity of hospitals and other partner organizations that collaborated on the assessment

Collaborating Hospitals:
- Hoag Memorial Hospital
- St. Jude Medical Center
- St. Joseph Medical Center
- Mission Hospital
- CHOC Children's Hospital

B. Identity and qualifications of consultants used to conduct the assessment

Kaiser Permanente contracted with EVALCORP Research and Consulting to conduct the assessment within the Anaheim/Irvine service area. This consulting group was selected for its expertise and capacity to conduct large scale needs assessments and prioritization processes. All of EVALCORP's evaluation staff have Master's or Ph.D. level degrees in applied research, providing the firm with the necessary skill set and training to conduct this type of process that requires a need for both qualitative and quantitative data collection, coding, and analysis expertise. Staff working on the project have a cumulative total of over 50 years of evaluation and research experience and have engaged in over 20 needs assessment projects. EVALCORP employs a utilization-focused approach, meaning that staff first establish how clients intend to use the information (e.g. decision making, program operation improvements, documenting effectiveness, etc.) before designing or implementing data collection and reporting strategies. Additionally, staff is adept at crafting relevant questions to obtain the information required to address the issues at hand, then systematically compiling and organizing the information in a manner usable for the intended audience. Furthermore, EVALCORP has a reputation for gathering the most relevant information, then transforming the information gathered into meaningful and salient "stories" that appropriately convey the lived experiences and perceptions of the community.

IV. Process and methods used to conduct the CHNA

KFH-Anaheim and Irvine conducted the CHNA in a mixed-methods sequential explanatory assessment intended to produce the most accurate, vivid, and meaningful story of community health possible. Secondary data was analyzed to provide a bird's-eye view of the most pressing health issues across the service area and raise strategic lines of inquiry for community engagement. Findings from both the secondary and primary data collection processes were then combined to produce a robust story of community health needs (see Figure E below).

Figure E – Mixed-Method Assessment Approach to the CHNA

Secondary Data Analysis

- Provided a bird's eye view of community health needs.

- Conducted multi-dimensional health outcome comparisons.

- Conducted regression analyses of social predictors of health.

Findings analyzed to create relevant lines of inquiry for community engagement.

Primary Data Collection and Analysis

- Provided a deep-dive exploration of community needs.

- Employed strategic community sampling.

- Ensured authentic engagement through culturally-competent protocols.

Findings analyzed to lift community voice.

Synthesis and Reporting

- Provided meaningful understanding of lived experience, causes, disparities, and resources available to address health needs.

- Combined bird's eye view + deep-dive data to tell community story.

A. Secondary data

i. Sources and dates of secondary data used in the assessment

KFH-Anaheim and Irvine used the Kaiser Permanente CHNA Data Platform and the Southern California Public Health Alliance Healthy Places Index to review approximately 200 indicators from publicly available data sources. For details on specific sources and dates of the data used, including any data in addition to sources mentioned above, please see Appendix A.

ii. Methodology for collection, interpretation, and analysis of secondary data

Findings from secondary data analysis provided a bird's-eye view of the community health needs and created relevant lines of inquiry for community engagement. The driving purposes behind these analyses were to:

1. Determine the geographic footprint of the most under-resourced communities in the KFH service area.
2. Identify the top social predictors of health (upstream factors) linked to community health outcomes in the KFH service area.
3. Provide an initial ranked list of health needs that could inform community engagement planning and the health need prioritization process for the KFH service area.
4. Provide descriptive information about the demographic profile of the KFH service area and support understanding of key CHNA findings.

First, the most under-resourced geographic communities were identified utilizing the Public Health Alliance of Southern California's Healthy Places Index (HPI) mapping function. The

social predictors of health in this index include 25 indicators related to economic security, education, access to care, clean environment, housing, safety, transportation, and social support (please refer to Figure C and D to see these maps[6]).

Second, social predictors of health were used in multiple linear regression analyses to produce models identifying the social factors most predictive of negative health outcomes in KFH-Anaheim and Irvine service area census tracts. The results of these analyses found multiple social factors with statistically significant (p<.05) predictive relationships with important population health outcomes (please refer to Tables 3 & 4 to see results).

Third, health outcome indicators were analyzed across multiple dimensions including: absolute prevalence, relative service area prevalence to the state average, reduction of life expectancy (calculated through empirical literature on disability-adjusted life years), impact disparities across racial and ethnic groups, and alignment with county rankings of top causes of mortality (please refer to Tables 5 & 6 to see results).

Fourth, additional descriptive data were used to understand the demographics of the service area and provide context to findings from secondary and primary data analysis.
In sum, the use of secondary data in this CHNA process went beyond reporting publicly available descriptive data and generated new understandings of community health in the KFH service area. Secondary data analyses and visualization tools (a) synthesized a wide variety of available health outcome data to provide a bird's-eye view of the KFH service area needs and (b) provided a closer look at the impact of social factors that influence the opportunity of community residents in the service area to live long and healthy lives.

For further questions about the CHNA methodology and secondary data analyses, please contact CHNA-communications@kp.org.

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[6] Maps from the California Healthy Places Index captured in this report are © 2018 Public Health Alliance of Southern California, https://phasocal.org/.

Multiple linear regression models used nearly one dozen social indicators to predict each of the negative health outcomes below. An "X" indicates a statistically significant (p<.05) predictive relationship across all census tracts in the service area between a given social factor and a health outcome (e.g. "*service area census tracts reporting less health insurance also tended to report more heart attack ER visits, even when holding many other social factors constant*").

Table 3. Social Factors Linked to KFH-Anaheim Health Outcomes

	More Poor Mental Health Days	More Heart Attack ER Visits	Higher Asthma Prevalence	Higher Obesity Prevalence	More Diabetes Prevalence	More Strokes	Higher Cancer Prevalence	Higher Percentage of Babies Born with Low Birth Weight	Higher Smoking Prevalence	More Pedestrian Injuries	Number of Outcomes Affected
More Crowded Housing	X		X	X	X			X	X	X	7
Fewer Bachelor's Degrees	X	X	X	X	X				X		6
Less Health Insurance	X	X	X	X		X	X				6
Less Employment				X	X	X	X				4
Lower Income	X				X	X			X		4
Less Home Ownership	X		X						X		3
More Home Ownership					X	X					2
More Racial Segregation		X									1
Less Access to Supermarkets		X									1
Worse Air Quality				X							1
Less Crowded Housing							X				1

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Multiple linear regression models used nearly one dozen social indicators to predict each of the negative health outcomes below. An "X" indicates a statistically significant (p<.05) predictive relationship across all census tracts in the service area between a given social factor and a health outcome (e.g. "*service area census tracts reporting less health insurance also tended to report more heart attack ER visits, even when holding many other social factors constant*").

Table 4. Social Factors Linked to KFH-Irvine Health Outcomes

	More Poor Mental Health Days	Heart Attack ER Visits	Higher Asthma Prevalence	Higher Obesity Prevalence	Higher Diabetes Prevalence	Higher Stroke Prevalence	Higher Cancer Prevalence	Higher Percentage of Babies Born with Low Birth Weight	Higher Smoking Prevalence	More Pedestrian Injuries	Number of Outcomes Affected
Fewer Bachelor's Degrees	X	X	X	X					X		5
Less Health Insurance	X	X	X	X					X		5
Less Employment			X	X	X	X					4
Less Homeownership	X								X	X	3
Lower Income					X	X	X				3
More Homeownership					X	X	X				3
More Crowded Housing	X				X						2
Worse Air Quality			X	X							2
Less Beach/Park Access					X	X					2
Less Crowded Housing							X			X	2
More Racial Segregation							X	X			2
More Bachelor's Degrees							X				1

How do service area health needs compare based on Kaiser Permanente Community Health values? The following table ranks health needs based on several principle values: The prevalence of the health outcome compared to the California state average, the impact of the health outcome on length and quality of life, the disparity of disease prevalence across racial/ethnic groups, and the alignment with county rankings of top causes of mortality.[7]

Table 5. Health Outcome Comparison Table for KFH-Anaheim

Health Outcome Category Name	Prevalence in Service Area	Difference From State Average	Reduction in Life Expectancy	Worst Performing Race/Ethnicity vs. Average	Listed in Partner County Top 5 Cause of Death
Mental Health*	11.7%	-0.5% (Better than CA)	61.3% Reduction	53% Worse than Average	No
Stroke*	4.0%	0.3% (Worse than CA)	57% Reduction	19% Worse than Average	Yes
Asthma	13.9%	-0.9% (Better than CA)	13.3% Reduction	120% Worse than Average	Yes
HIV/AIDS/STD	0.3%	-0.1% (Better than CA)	58.2% Reduction	211% Worse than Average	No
Obesity	20.8%	-8.8% (Better than CA)	37% Reduction	64% Worse than Average	No
Cancer*	3.6%	0.29% (Worse than CA)	51% Reduction	11% Worse than Average	Yes
Substance/Tobacco Use	4.3%	-2.71% (Better than CA)	69.7% Reduction	48% Worse than Average	No
Diabetes*	8.5%	0.1% (Worse than CA)	24.1% Reduction	6% Worse than Average	No
CVD*	5.3%	-1.65% (Better than CA)	30% Reduction	15% Worse than Average	Yes
Maternal/Infant Health	6.4%	-0.4% (Better than CA)	17.9% Reduction	5% Worse than Average	No
Oral Health	8.6%	-2.7% (Better than CA)	2.8% Reduction	17% Worse than Average	No
Violence/Injury	0.0%	-0.01% (Better than CA)	13.2% Reduction	9% Worse than Average	No

[7]Indicators for prevalence and racial disparities are publicly available. Technical documentation and data dictionary for this table available upon request. Health need category names provided by Kaiser Permanente Program Office. Reduction in life expectancy estimated based on disability-adjusted life years research. "Mental Health" indicators refer to "poor mental health". "Violence/Injury" prevalence is rounded down, but not technically zero. "Yes" indicates health outcome is listed in the top five causes of death for the county covering the majority of this service area. If asthma is listed as "Yes", then chronic lower respiratory disease was listed in the county rankings. Asterisks are outcomes measured by Kaiser Permanente's Program Office.

How do service area health needs compare based on Kaiser Permanente community health values? The following table ranks health needs based on several principle values: The prevalence of the health outcome compared to the California state average, the impact of the health outcome on length and quality of life, the disparity of disease prevalence across racial/ethnic groups, and the alignment with county rankings of top causes of mortality.[8]

Table 6. Health Outcome Comparison Table for KFH-Irvine

Health Outcome Category Name	Prevalence in Service area	Difference From State Average	Reduction in Life Expectancy	Worst Performing Race/Ethnicity vs. Average	Listed in Partner County Top 5 Cause of Death
Asthma	14.7%	-0.10% Better than CA	13.3% Reduction	541% Worse than Average	Yes
Mental Health*	11.7%	-0.50% Better than CA	61.3% Reduction	52% Worse than Average	No
Stroke*	4.0%	0.30% Worse than CA	57.0% Reduction	15% Worse than Average	Yes
Cancer*	5.6%	0.40% Worse than CA	51.0% Reduction	12% Worse than Average	Yes
HIV/AIDS/STD	0.3%	-0.11% Better than CA	58.2% Reduction	211% Worse than Average	No
Obesity	16.6%	-5.8% Better than CA	37.0% Reduction	53% Worse than Average	No
CVD*	5.9%	-1.05% Better than CA	30.0% Reduction	13% Worse than Average	Yes
Substance/Tobacco Use	3.9%	-3.13% Better than CA	69.7% Reduction	48% Worse than Average	No
Diabetes*	6.7%	-1.70% Better than CA	24.1% Reduction	0% Worse than Average	No
Maternal/Infant Health	6.4%	-0.40% Better than CA	17.9% Reduction	5% Worse than Average	No
Oral Health	8.5%	-2.80% Better than CA	2.8% Reduction	17% Worse than Average	No
Violence/Injury	2.5%	-2.40% Better than CA	13.2% Reduction	8% Worse than Average	No

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[8]Indicators for prevalence and racial disparities are publicly available. Technical documentation and data dictionary for this table available upon request. Health need category names provided by Kaiser Permanente Program Office. Reduction in life expectancy estimated based on disability-adjusted life years research. "Mental Health" indicators refer to "poor mental health". "Violence/Injury" prevalence is rounded down, but not technically zero. "Yes" indicates health outcome is listed in the top five causes of death for the county covering the majority of this service area. If asthma is listed as "Yes", then chronic lower respiratory disease was listed in the county rankings. Asterisks are outcomes measured by Kaiser Permanente's Program Office.
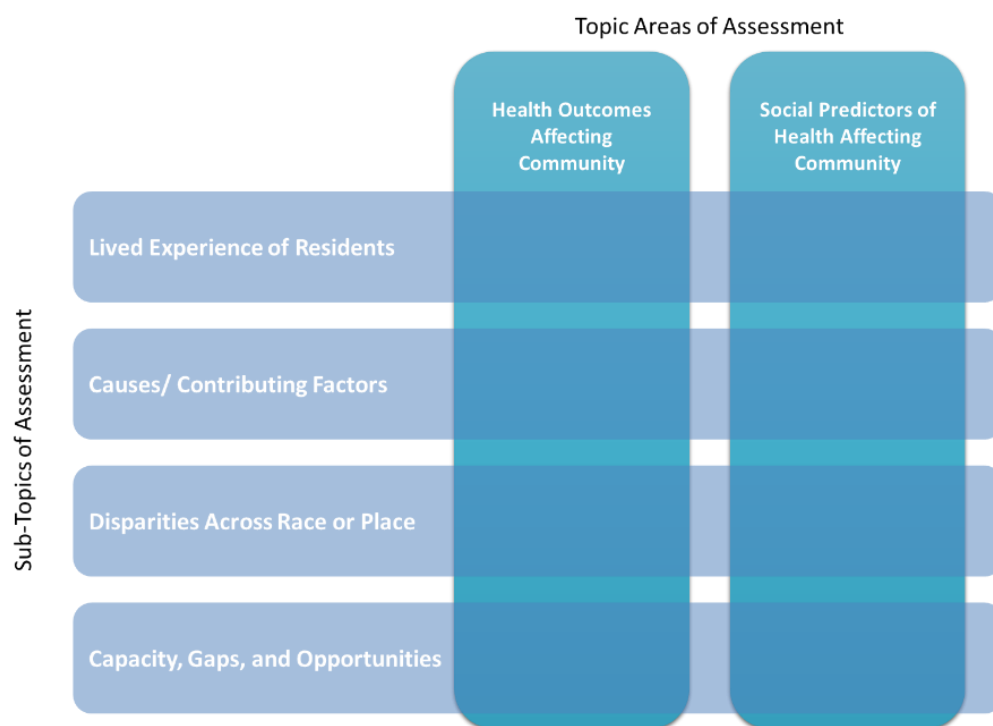
B. Community input

Secondary data analyses produced high-level findings about community health needs. These findings were used to create targeted lines of inquiry intended to learn more about the story of community health by exploring the lived experience of community members, the causes of health needs, the racial or geographic disparities in health needs, and the community resources available to address health needs. These lines of inquiry were guided by the following strategic learning questions (see Appendix E for more details about how these questions were developed):

1. How does crowded housing impact health outcomes?
2. How does housing insecurity impact health outcomes?
3. What is driving the high rate of asthma for the black population in the service area?
4. What does food security look like in the service area?
5. What is contributing to the higher rates of death from stroke for the black population in the service area?
6. How does the social determinant of low-income impact stroke outcomes?
7. What is the lived experience of teens who have attempted/are considering suicide?
8. What is the lived experience of those with a mental health diagnosis and their families? (suicide; gaps)
9. What are the unmet oral health needs in the service area?
10. What challenges do older adults face in the service area that compromise health outcomes?

The community engagement plan and the community's answers to these questions (primary data) were organized and analyzed using the CHNA Community Engagement Framework (see Figure F below).

Figure F. Community Engagement Framework

Topic Areas of Assessment

	Health Outcomes Affecting Community	Social Predictors of Health Affecting Community
Lived Experience of Residents		
Causes/ Contributing Factors		
Disparities Across Race or Place		
Capacity, Gaps, and Opportunities		

Sub-Topics of Assessment

i. Description of who was consulted

Residents, community leaders, and government and public health department representatives were selected for the CHNA sample. Selection criteria across these groups included (a) those best able to respond in rich detail to the strategic learning questions, (b) those who had expertise in local health needs, (c) those who resided and/or provided services in an under-resourced or medically underserved community, and (d) those able to represent the health needs of a given racial or ethnic minority group. Given the large size of the KFH-Anaheim and Irvine service areas, community engagement efforts set out to target those geographies most under-resourced and where health outcomes were the poorest (see Figure C & D for maps referencing the most underserved areas of KFH-Anaheim and Irvine). Once selected for engagement, participants were provided the opportunity to share their perspective on targeted health needs and raise any additional health needs outside the strategic lines of inquiry. For a complete list of individuals who provided input on this CHNA, see Appendix B.

ii. Methodology for collection and interpretation

In seeking information to help answer strategic lines of inquiry, primary data was collected through the following methods: surveys, key stakeholder interviews, and focus groups. Kaiser Permanente and EVALCORP engaged 424 individuals from October 2018 through January 2019, gathering primary data by administering a resident well-being survey and conducting 18 key stakeholder interviews, and 11 community resident focus groups.

The purpose of the key stakeholder interviews was to identify predominant trends and assets related to health outcomes and social predictors, providing a comprehensive sketch of the community conditions and factors that have the greatest impacts on health outcomes. The resident well-being survey allowed individuals from medically underserved populations, low-income, and under-resourced communities to rank health concerns and provide information on access to care, available resources, the conditions of their lived environments, and demographics. The focus groups were designed to facilitate deeper inquiry into residents' lived experiences with one or more identified health needs, gathering information on perceptions of community assets, barriers to accessing resources, and solutions to address gaps in care.

The majority of key stakeholders (79%) represented the non-profit service sector, with the additional representation from higher education (11%) and county agencies (11%). The majority of survey respondents (93%) represent households with incomes of less than $35,000 per year.

Qualitative data analysis was designed to identify emergent themes in answer to strategic lines of questioning about specific community health needs, as well as open-ended questions about health needs more broadly. Data from community engagement was coded and organized within the SCAL CHNA Learning Framework to generate themes useful for answering strategic learning questions and ultimately informing an implementation strategy plan (see Figure F).

The list of individuals that provided input via community engagement may be found in Appendix B. Community input methodology is described in detail in Appendix E**.**

C. Written comments

Kaiser Permanente provided the public an opportunity to submit written comments on the facility's previous CHNA Report through CHNA-communications@kp.org. This email will continue to allow for written community input on the facility's most recently conducted CHNA Report.

As of the time of this CHNA report development, KFH-Anaheim and KFH-Irvine had not received written comments about previous CHNA Reports. Kaiser Permanente will continue to track any submitted written comments and ensure that relevant submissions will be considered and addressed by the appropriate facility staff.

D. Data limitations and information gaps

As with any community needs assessment process, the data available for use is limited. For example, some data in the KP CHNA data platform were only available at a county level, making an accurate translation to neighborhood-level health needs challenging. In the Healthy Places Index platform, census tracts with very low populations were represented as missing data (to reduce unreliability of measurement). This caused under-sampling of rural areas. In both platforms, disaggregated data around age, ethnicity, race, and gender were not available for many indicators, which limited the ability to examine disparities of health within the community. Additionally, data in both platforms were not often collected on a yearly basis and therefore may not represent 2018 values.

V. Identification and prioritization of the community's health needs

A. Identifying community health needs

i. Definition of "health need"

For the purposes of the CHNA, Kaiser Permanente defines a "health need" as a health outcome and/or the related conditions that contribute to a defined health need. Health needs are identified by the comprehensive identification, interpretation, and analysis of a robust set of primary and secondary data.

ii. Criteria and analytical methods used to identify the community health needs

To identify community health needs, EVALCORP reviewed secondary data reports prepared by Kaiser Permanente Regional analysts. These reports drew from over 200 indicators and presented analyses specific to the census tracts and zip codes within the service area. These reports acted as a starting point for identification by revealing a bird's-eye view of the many health needs in the service area. EVALCORP also undertook an extensive community engagement process (see Appendix B) which provided community stakeholders and residents the opportunity to surface additional health needs.

B. Process and criteria used for prioritization of health needs

The prioritization of health needs in KFH-Anaheim and Irvine occurred through a multi-phased process that relied on several fundamental weighted criteria in addition to community input. Initially, we examined secondary data representing the social predictors of health. Those upstream factors predictive of the most health outcomes moved forward in the prioritization process. We then assessed health outcomes based on several criteria, with the severity, magnitude, and scale of the need receiving the highest weights. Clear disparities/inequities among demographic subgroups for each need were also weighted. Health outcomes that did not score highly across the severity, magnitude, scale, and impact disparity criteria were removed from consideration as a priority health need.

In the next phase of prioritization, we went into the community to gather input about the identified health needs through interviews, surveys, and focus groups. The social predictors of health and health outcomes identified as high priority by community members moved into the final stage of prioritization. The final criteria applied to the list of health needs was the extent to which attention or assets were currently dedicated to the issue (both at Kaiser Permanente and among collaborative community partners).

C. Prioritized description of all the community needs identified through the CHNA

Access to Health Care. Access to comprehensive quality health care is important for the achievement of health equity and for increasing the quality of life for everyone. Limited access to health care can dramatically impact people's health outcomes. Health insurance, is one of many mechanisms that enable people to access necessary care. In Orange County, only 80%

of residents aged 18-64 are insured. During the community engagement process, residents also identified transportation, long wait times, and economic insecurity as barriers to accessing care.

Economic Security. Economic insecurity exists in both the Anaheim and Irvine service areas. Secondary data indicates that the experience of economic insecurity impacts health needs locally, including poor mental health, obesity, diabetes, stroke, and cancer. In the Anaheim service area for example, on average, 15% of the population lives below the poverty level. Some subgroups in the service area, such as Latinos, experience higher levels of poverty (20%). Additionally, community engagement revealed that the lack of economic security impacts resident's lives in various ways. Housing insecurity, homelessness, high costs of living, little availability of affordable housing, and food insecurity were just some of the many ways residents had experienced economic insecurity.

Mental Health. Mental health is an important component of a person's overall health and well-being. According to secondary data, poor mental health can result in a 61% reduction in life expectancy if left untreated. In the Irvine service area, white residents report having 3-4 poor mental health days a month. Through the community engagement process, residents indicated that youth and young adults are turning to substances like marijuana, vaping, and misuse of prescription drugs as a coping mechanism to address daily stressors. Additionally, residents reported experiencing the following barriers to accessing mental health care: stigma, language barriers, fears around the political environment, insufficient providers and inpatient beds, and cost. Resident surveys collected through the engagement process indicated that 64% were concerned about mental health.

Stroke. Stroke is a serious health outcome that can result in a 57% reduction in life expectancy and is listed as a top five cause of death in Orange County. Stroke, like other chronic diseases, is experienced disproportionately among Black residents. For example, in the Anaheim service area, Black residents experience rates of stroke at 19% above average when compared to other residents. During community engagement, stroke survivors in the service area expressed great concern regarding the lack of awareness and education about stroke risk and survival rates and the lack of long-term follow-up care available locally.

Suicide. Suicide impacts individuals, their families, and the community at-large. Available data suggests White residents in both the Anaheim and Irvine service areas are disproportionally impacted and die by suicide at a rate nearly 53% above the service area average. Community engagement activities identified barriers to adequate preventative care, including the availability of local psychiatric beds for both children and adults, stigma and misinformation, and no primary care screening for mental health and suicide.

D. Community resources potentially available to respond to the identified health needs

The service areas for KFH-Anaheim and Irvine contain community-based organizations, government departments and agencies, hospital and clinic partners, and other community

members and organizations engaged in addressing many of the health needs identified by this assessment. Key resources available to respond to the identified health needs of the community are listed in Appendix D.

VI. KFH Anaheim and Irvine 2016 Implementation Strategy evaluation of impact

A. Purpose of 2016 Implementation Strategy evaluation of impact

KFH-Anaheim and Irvine's 2016 Implementation Strategy Report was developed to identify activities to address the health needs identified in the 2016 CHNA. This section of the CHNA Report describes and assesses the impact of those activities. For more information on the KFH-Anaheim and Irvine's Implementation Strategy Report, including the health needs identified in the facility's 2016 service area, the health needs the facility chose to address, and the process and criteria used for developing Implementation Strategies, please visit: https://about.kaiserpermanente.org/content/dam/internet/kp/comms/import/uploads/2013/10/KFH-Anahiem-and-Irvine-IS-Report.pdf.

For reference, the list below includes the 2016 CHNA health needs that were prioritized to be addressed by KFH-Anaheim and Irvine in the 2016 Implementation Strategy Report.

1. Access to Care
2. Economic Security
3. Mental and Behavioral Health
4. Obesity/HEAL/Diabetes

KFH-Anaheim and Irvine is monitoring and evaluating progress to date on its 2016 Implementation Strategies for the purpose of tracking the implementation and documenting the impact of those strategies in addressing selected CHNA health needs. Tracking metrics for each prioritized health need include the number of grants made, the number of dollars spent, the number of people reached/served, collaborations and partnerships, and KFH in-kind resources. In addition, KFH-Anaheim and Irvine track outcomes, including behavior and health outcomes, as appropriate and where available.

The impacts detailed below are part of a comprehensive measurement strategy for Community Health. Kaiser Permanente's measurement framework provides a way to 1) represent our collective work, 2) monitor the health status of our communities and track the impact of our work, and 3) facilitate shared accountability. We seek to empirically understand two questions 1) how healthy are Kaiser Permanente communities and 2) how does Kaiser Permanente contribute to community health? The Community Health Needs Assessment can help inform our comprehensive community health strategy and can help highlight areas where a particular focus is needed and support discussions about strategies aimed at addressing those health needs. As of the documentation of this CHNA Report in March 2019, KFH-Anaheim and Irvine had evaluation of impact information on activities from 2017 and 2018. These data help us monitor progress toward improving the health of the communities we serve. While not reflected in this

report, KFH-Anaheim and Irvine will continue to monitor the impact of strategies implemented in 2019.

B. 2016 Implementation Strategy evaluation of impact overview

In the 2016 IS process, all KFH hospital facilities planned for and drew on a broad array of resources and strategies to improve the health of our communities and vulnerable populations, such as grantmaking, in-kind resources, collaborations and partnerships, as well as several internal KFH programs, including charitable health coverage programs, future health professional training programs, and research. Based on years 2017 and 2018, an overall summary of these strategies is below, followed by tables highlighting a subset of activities used to address each prioritized health need.

KFH programs: From 2017-2018, KFH supported several health care and coverage, workforce training, and research programs to increase access to appropriate and effective health care services and address a wide range of specific community health needs, particularly impacting vulnerable populations. These programs included:

- Medicaid: Medicaid is a federal and state health coverage program for families and individuals with low incomes and limited financial resources. KFH provided services for Medicaid beneficiaries, both members and non-members.
- Medical Financial Assistance: The Medical Financial Assistance (MFA) program provides financial assistance for emergency and medically necessary services, medications, and supplies to patients with a demonstrated financial need. Eligibility is based on prescribed levels of income and expenses.
- Charitable Health Coverage: Charitable Health Coverage (CHC) programs provide health care coverage to low-income individuals and families who have no access to public or private health coverage programs.
- Workforce Training: Supporting a well-trained, culturally competent, and diverse health care workforce helps ensure access to high-quality care. This activity is also essential to making progress in the reduction of health care disparities that persist in most of our communities.
- Research: Deploying a wide range of research methods contributes to building general knowledge for improving health and health care services, including clinical research, health care services research, and epidemiological and translational studies on health care that are generalizable and broadly shared. Conducting high-quality health research and disseminating findings increases awareness of the changing health needs of diverse communities, addresses health disparities, and improves effective health care delivery and health outcomes.

Grantmaking: For 70 years, Kaiser Permanente has shown its commitment to improving community health through a variety of grants for charitable and community-based organizations. Successful grant applicants fit within funding priorities with work that examines social predictors of health and/or addresses the elimination of health disparities and inequities. From 2017-2018, Kaiser Permanente paid 53 grants amounting to a total of $3,267,817 in service of KFH-Anaheim 2016 health needs. Additionally, Kaiser Permanente has funded significant

contributions to the California Community Foundation in the interest of funding effective long-term, strategic community benefit initiatives within KFH Anaheim. During 2017-2018, a portion of money managed by this foundation was used to pay 25 grants totaling $3,978,669 in service of 2016 health needs. From 2017-2018, Kaiser Permanente paid 44 grants amounting to a total of $2,652,267 in service of KFH-Irvine 2016 health needs. Additionally, Kaiser Permanente has funded significant contributions to California Community Foundation in the interest of funding effective long-term, strategic community benefit initiatives within the Irvine service area. During 2017-2018, a portion of money managed by this foundation was used to pay 15 grants totaling $2,227,222 in service of 2016 health needs.

In-kind resources: In addition to our significant community health investments, Kaiser Permanente is aware of the significant impact that our organization has on the economic vitality of our communities as a consequence of our business practices, including hiring, purchasing, building or improving facilities, and environmental stewardship. We will continue to explore opportunities to align our hiring practices, our purchasing, our building design and services and our environmental stewardship efforts with the goal of improving the conditions that contribute to health in our communities. From 2017-2018, KFH-Anaheim and Irvine leveraged significant organizational assets in service of 2016 Implementation Strategies and health needs. See table below for illustrative examples.

Collaborations and partnerships: Kaiser Permanente has a long legacy of sharing its most valuable resources: its knowledge and talented professionals. By working together with partners (including nonprofit organizations, government entities, and academic institutions), these collaborations and partnerships can make a difference in promoting thriving communities that produce healthier, happier, and more productive people. From 2017-2018, KFH-Anaheim and Irvine engaged in several partnerships and collaborations in service of 2016 Implementation Strategies and health needs, including:
- United to End Homelessness
- Waste Not OC Coalition
- Health Funders Partnership of Orange County
- Be Well Orange County.

C. 2016 Implementation Strategy evaluation of impact by health need

KFH-Anaheim and Irvine Priority Health Needs

Need	Summary of impact	Examples of most impactful efforts
Mental and Behavioral Health	*During 2017 and 2018, Kaiser Permanente paid 13 grants, totaling $834,500 addressing the priority health need in the KFH-Anaheim service area. In addition, a portion of money managed by a donor advised fund at California Community Foundation was used to pay 3 grants, totaling $240,000 that address this need.* *During 2017 and 2018, Kaiser Permanente paid 11 grants, totaling $750,400 addressing the priority health need in the Irvine service area. In addition, a portion of money managed by a donor advised fund at California Community Foundation was used to pay 1 grant, totaling $40,000 that addresses this need.*	**Strengthening Mental Health Policies and Practices in Schools~** Children Now educates policymakers, school district leaders, and other key stakeholders about best practices and policy solutions to address suspension and expulsion policies that disproportionately impact students of color, improve school climate, and increase students' access to mental health services. Over two years (2017-2018), Kaiser Permanente paid $150,000 to Children Now to: • Inform over 200 key legislators and stakeholders. • Support the California Department of Education in the development of the Whole Child Resource Map. • Lead committees for both the State School Attendance Review Board and the Superintendent's Mental Health Policy Workgroup. **Improving Services for Human Trafficking Survivors~** The Coalition to Abolish Slavery and Trafficking (CAST) expands services to improve health outcomes for trafficking victims in Los Angeles County. CAST coordinates a continuum of care for trafficking victims by combining social, medical, and legal services with leadership and advocacy. In 2018, Kaiser Permanente paid $75,000 to CAST to: • Coordinate Whole Person Care services, including housing, food, medical, mental health, legal, education, and employment for 100 human trafficking survivors. • Educate and advocate with policymakers, county officials, and community leaders on how to expand or improve access to emergency and permanent housing for victims. **Reducing Mental Health Stigma in Schools*** The National Alliance on Mental Illness (NAMI) Orange County reduces mental health stigma and improves resilience in Orange County schools with its Mental Health Education Initiative for OC Schools Project. In 2018, Kaiser Permanente paid $40,000 to NAMI to: • Offer four programs in up to 15 middle/high schools: 1) Mental Health 101 2) NAMI Basics 3) Ending the Silence and 4) NAMI on Campus that focus on prevention, early intervention and stigma reduction for students. • Train new Mental Health 101 facilitators. **Transforming Mental Health and Wellness** Be Well Orange County is an initiative that aims to improve mental health service deliver in Orange County. Be Well OC brings together a robust, community-based cross-sector strategy to create a community-wide, coordinated ecosystem to support optimal mental health. Over two years (2017-2018), Kaiser Permanente partnered with Be Well OC to: • Collaborate with local stakeholders including, University of California, Irvine; Providence St. Joseph Health; Hoag Hospital; Orange County United Way; NAMI Orange County; Chapman University; Cal State University, Fullerton; Saddleback Church; Roman Catholic Diocese of Orange; Orange County Sheriff; Anaheim Fire and Rescue;

		CHOC; Memorial Medical Center; Orange County Behavioral Health Services; and others.
		• Create a transformed mental health and wellness network. Mark Costa, senior vice president and area manager for Kaiser Permanente Orange County, is part of the backbone leadership and has been working to establish community wellness hubs along with the County and other hospital systems. https://bewelloc.org/
Obesity/ Healthy Eating Active Living/ Diabetes	*During 2017 and 2018, Kaiser Permanente paid 13 grants, totaling $885,000 addressing the priority health need in the KFH-Anaheim service area. In addition, a portion of money managed by a donor advised fund at California Community Foundation was used to pay 15 grants, totaling $2,514,722 that address this need.*	**Improving Access to Nutritious Foods~*** California Food Policy Advocates (CFPA) is a statewide policy and advocacy organization that aims to improve the health and well-being of low-income Californians by increasing their access to nutritious, affordable food and reducing food insecurity. In 2018, KP paid $212,500 to CFPA to: • Lead the implementation workgroup for the Supplemental Drinking Water EBT benefit for approximately 40,000 Cal-Fresh households in Kern County. • Lead the implementation workgroup for the Cal-Fresh Fruit and Vegetable EBT pilot project for Southern California retailers.
	During 2017 and 2018, Kaiser Permanente paid 12 grants, totaling $790,400 addressing the priority health need in the Irvine service area. In addition, a portion of money managed by a donor advised fund at California Community Foundation was used to pay 8 grants, totaling $1,222,222 that address this need.	**Advocating for Maternal, Infant, and Child Health~** The California WIC Association (CWA) supports efforts to increase local WIC agencies' capacity, increase state and federal decision makers' understanding of WIC services, and increase the capacity of community health centers to build a breastfeeding continuum of care in low-income communities Over two years (2017-2018), Kaiser Permanente paid $100,000 to CWA to: • Pilot two video conferencing projects increasing awareness and consideration within the CA WIC community. • Collaborate with health centers to share WIC staff for nutrition and breastfeeding counseling (Watts Health Care and clinics in San Diego). • Work to strengthen ties with CPCA and present at CPCA's annual conference. • Visit all CA legislators with 44 appointments and drop-in visits. • Provide extensive information to legislators on nutrition and breastfeeding counseling, food benefits, local economic impacts to grocers, health outcomes, access to Farmers markets, and updates on immigration threats. • Participate in Capitol WIC Education Day in Sacramento with 50 attendees from 30 WIC agencies from all over the state.
		Fighting Food Insecurity~ California Association of Food Banks' (CAFB) Farm to Family program's goal is to improve health food access by providing fresh produce to food banks, CalFresh outreach and enrollment, advocacy to support anti-hunger policies, and technical assistance to members. In 2018, Kaiser Permanente paid $95,000 to CAFB to: • Distribute 250,000 pounds of subsidized fresh fruits and vegetables to 11-member food banks. • Maintain the State Emergency Food Assistance Program to provide food and funding of emergency food to food banks.
		Building Healthy School Communities This is a collaborative between Kid Healthy and the Orange County Department of Education (OCDE) and it represents a new method to deliver physical activity tools centered on Mindful

Moving. The applications for parents and students on the playground has the ability to make a significant impact on reducing stress, anxiety, and helping students become better prepared to head back to class. Over two years (2017-2018), Kaiser Permanente paid $80,000 to Kid Healthy to:

- Support Mindful Movement training will take place on February 26, led by Chris Corliss, Coordinator, Physical Activity & Physical Education, at the Orange County Department of Education (OCDE). At this time 50 (22 school volunteer coordinators (VC's), 22 parent volunteers and 6 KH regional staff) will learn program overview, benefits, and "how to" implement the tools on the playground.
- Provide training on Run4Fun activities on October 30th and November 13, also led by Chris and held at OCDE. 47 VC's have been trained or provided a refresher training of Run4Fun activities. 12 kits were distributed to schools who did not receive the kit last year or are new to the program.
- 30 schools to implement Run4Fun programming during lunch recess
- Teach at 15 parent meetings, reaching an additional 175 trained parents.

Eliminating Hunger and Reducing Food Waste
Waste Not OC is a public-private coalition formed with the goal of eliminating hunger and reducing food waste by facilitating the donation of wholesome surplus food from permitted food facilities to local pantries. The overall vision of the coalition is to end hunger in Orange County using a three-step approach: Redirecting unwanted wholesome food to local pantries; Identifying individuals impacted by food insecurity; and, connecting those individuals to sources of food. Over two years (2017-2018), Kaiser Permanente partnered with Waste Not OC to:

- Recover 30.6 million pounds of food, which is equivalent to 25 million meals.
- Develop and disseminate a food insecurity flyer available at both medical center locations to direct members and visitors to local food pantries and are asking the food insecurity questions in all our pediatric departments.

| Economic Security | *During 2017 and 2018, Kaiser Permanente paid 9 grants, totaling $289,000 addressing the priority health need in the KFH-Anaheim service area. In addition, a portion of money managed by a donor advised fund at California Community Foundation was used to pay 1 grant, totaling $258,947 that addresses this need.*

During 2017 and 2018, Kaiser Permanente paid 7 grants, totaling $209,400 addressing the priority health need in the Irvine service area. | **Contracting Social Enterprises**
Social enterprises are competitive, revenue-generating businesses with a clear social mission to hire and provide training to people who are striving to overcome employment barriers including homelessness, incarceration, substance abuse, mental illness, and limited education. Social enterprises provide a real paying job and often provide wraparound services that help employees build skills and stabilize their lives. Kaiser Permanente supports these businesses by identifying and creating contractual relationships. Over two years (2017-2018), KFH-Anaheim and Irvine contracted with the following social enterprise(s):
- Monkey Business Café for food catering.
- Doing Good Works for promotional materials.

Increasing Latino Medical School Applicants in California~
The Latino Physicians of California (LPOC)/MiMentor Partnership supports current and future Latino physicians through education, advocacy, and health policy. This is a culturally responsive mentoring program to increase underrepresented in medicine (UIM) applicants in California. |

LPOC will expand the Medical School Ready Program to increase the medical school readiness of UIM students through a year-long mentorship workshop series, supporting applicants through the entire medical school application process. In 2018, Kaiser Permanente paid $25,000 to LPOC to:

- Enroll 45 UIM undergraduate and post-graduate students from Southern California into the Medical School Ready Series.
- Enroll and train 45 physician mentors/coaches/advisors to mentor UIM medical school applicants.

Raising Awareness of the California Earned Income Tax Credit~

Golden State Opportunity (GSO) leads and supports efforts related to economic security such as job creation, community development, and distribution of benefits. In 2018, Kaiser Permanente paid $75,000 to GSO to:

- Support GSO's efforts to expand its innovative California Earned Income Tax Credit (Cal EITC) outreach and education.
- Inform 250,000 low-income workers on Cal EITC eligibility and benefits through digital advertising, peer-to-peer text messaging, and grassroots outreach.
- Train 25 community partners on smart digital targeting, community messaging, and peer-to-peer text messaging to outreach and engage in the Cal EITC campaign.

Implementing Integrated Solutions to End Homelessness

A community-wide initiative led by Orange County United Way, will work to ensure integrated and sustainable solutions are implemented for people suffering from homelessness in Orange County. Over two years (2017-2018), Kaiser Permanente partnered with OC United Way to:

- Provide long-term housing with supportive care to those who need it the most homelessness in Orange County.
- Identify locations at which homeless individuals can be permanently housed, while addressing the underlying challenges that led them to live on the streets in the first place. Mark Costa, Kaiser Permanente Orange County senior vice president and area manager is a member of the leadership council for the United to End Homelessness.

Building Primary Care Capacity~

The California Primary Care Association (CPCA) provides education, training, and advocacy to their member community health centers to best serve their low-income, underserved, and diverse patients. In 2018, Kaiser Permanente paid $126,666 to CPCA to:

- Hold statewide convenings and conferences and topic-specific peer networks to support over 1,200 California community health centers.
- Provide 90 in-person and web-based trainings to over 4,400 attendees and 2,890 individual instances of technical assistance.

Practicing Food Recovery and Redistribution

Kaiser Permanente envisions foodservices not only as the source of nutritious meals for their patients, staff and guests, but as a resource for local communities. Over two years (2017-2018), Kaiser Permanente partnered with Food Finders to:

- Recover 15,180 lbs of food and distribute to organizations serving individuals in the KFH-Anaheim and Irvine region who face food insecurity.

Access to Care	*During 2017 and 2018, Kaiser Permanente paid 18 grants, totaling $1,259,317 addressing the priority health need in the KFH-Anaheim service area. In addition, a portion of money managed by a donor advised fund at California Community Foundation was used to pay 6 grants, totaling $965,000 that address this need.*	**Providing Affordable Healthcare** Over two years (2017-2018), KFH-Anaheim provided $42,089,815 in medical care services to 56,793 Medi-Cal recipients (both health plan members and non-members) and $17,572,620 in medical financial assistance (MFA) for 19,197 beneficiaries. Over two years (2017-2018), KFH-Irvine provided $24,969,450 in medical care services to 34,534 Medi-Cal recipients (both health plan members and non-members) and $1,088,921 in medical financial assistance (MFA) for 5,537 beneficiaries.
	During 2017 and 2018, Kaiser Permanente paid 14 grants, totaling $902,067 addressing the priority health need in the Irvine service area. In addition, a portion of money managed by a donor advised fund at California Community Foundation was used to pay 6 grants, totaling $965,000 that address this need.	**Preserving and Expanding California Coverage Gains~** Insure the Uninsured Project (ITUP) works to preserve and expand access to health care and coverage in California and to reduce access barriers for uninsured and underinsured populations. Over two years (2017-2018), Kaiser Permanente paid $150,000 to ITUP to: • Conduct and disseminate health policy research. • Convene 13 regional statewide work groups. • Provide technical assistance to safety net providers and other stakeholders navigating health reform challenges. • Serve as a bridge between health policy and the health care sector to reach 19 million Californians.

		Increasing Breast Health Care Knowledge
		Susan G Komen, an important stakeholder, strengthens breast health care knowledge at shelters and temporary housing organizations to reach, educate and enable homeless women to have access to clinical breast exams and mammography. Over two years (2017-2018), Kaiser Permanente paid Susan G Komen $40,400 to:
		• Hold screenings in key community locations close to homeless shelters or community organizations that provide food baskets in key cities.
		    o 66 women received an appointment. The outreach for sign ups was done at the shelter but primarily at food pantry locations and family resource centers.
		    o 100 women have received effective education at shelters and family resource centers.
		    o Through efforts at the 8 key locations – 206 women received free clinical breast exams, screening mammograms and where navigate do diagnostic care if needed. These women where below the 200% FPL and were enrolled in Every Woman Counts Program or had Medi-Cal.
		    o 78 breast cancer survivors received financial assistance and mental health services.

		Transforming the Healthcare Delivery Model of OC Community Health Clinics Live Healthy OC is an integrative health initiative among funders, academia, and nonprofits whose goal is to help support the transformation of the healthcare delivery model of Orange County Community Health Clinics from a disease-focused delivery model to a focus on prevention and wellness. Over two years (2017-2018), Kaiser Permanente's public affairs' staff assisted HFPOC to:

		• Share institutional best practices from the medical care and funders perspective
		• Serve more than 33,000 patients at seven clinics per year, of which 68% are Medi-Cal recipients and 47% of patients are below 100% of the FPL. The prevalent chronic diseases addressed include diabetes, obesity, and hypertension.

VII. Appendices

Appendix A. Secondary data sources and dates

i. Secondary sources from the KP CHNA Data Platform

	Source	Dates
1.	American Community Survey	2012-2016
2.	American Housing Survey	2011-2013
3.	Area Health Resource File	2006-2016
4.	Behavioral Risk Factor Surveillance System	2006-2015
5.	Bureau of Labor Statistics	2016
6.	California Department of Education	2014-2017
7.	California EpiCenter	2013-2014
8.	California Health Interview Survey	2014-2016
9.	Center for Applied Research and Environmental Systems	2012-2015
10.	Centers for Medicare and Medicaid Services	2015
11.	Climate Impact Lab	2016
12.	County Business Patterns	2015
13.	County Health Rankings	2012-2014
14.	Dartmouth Atlas of Health Care	2012-2014
15.	Decennial Census	2010
16.	EPA National Air Toxics Assessment	2011
17.	EPA Smart Location Database	2011-2013
18.	Fatality Analysis Reporting System	2011-2015
19.	FBI Uniform Crime Reports	2012-2014
20.	FCC Fixed Broadband Deployment Data	2016
21.	Feeding America	2014
22.	FITNESSGRAM® Physical Fitness Testing	2016-2017
23.	Food Environment Atlas (USDA) & Map the Meal Gap (Feeding America)	2014
24.	Health Resources and Services Administration	2016
25.	Institute for Health Metrics and Evaluation	2014
26.	Interactive Atlas of Heart Disease and Stroke	2012-2014
27.	Mapping Medicare Disparities Tool	2015
28.	National Center for Chronic Disease Prevention and Health Promotion	2013
29.	National Center for Education Statistics-Common Core of Data	2015-2016
30.	National Center for Education Statistics-EDFacts	2014-2015
31.	National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention	2013-2014
32.	National Environmental Public Health Tracking Network	2014
33.	National Flood Hazard Layer	2011

34.	National Land Cover Database 2011	2011
35.	National Survey of Children's Health	2016
36.	National Vital Statistics System	2004-2015
37.	Nielsen Demographic Data (PopFacts)	2014
38.	North America Land Data Assimilation System	2006-2013
39.	Opportunity Nation	2017
40.	Safe Drinking Water Information System	2015
41.	State Cancer Profiles	2010-2014
42.	US Drought Monitor	2012-2014
43.	USDA - Food Access Research Atlas	2014

ii. Additional sources

	Source	Dates
1.	California Department of Public Health	2016
2.	California Healthy Places Index	2018
3.	California HIV Surveillance Report	2015
4.	Office of Environmental Health Hazard Assessment	2011-2013
5.	American Foundation for Suicide Prevention	2018
6.	Assembly Bill 1436	2018
7.	CalOptima Mental Health Needs Assessment	2018
8.	Early Childhood Mental Health Collaborative	2017
9.	Ethnic Disparities in the Burden and Treatment of Asthma	2005
10.	Homelessness in Orange County: The Costs to Our Community	2017
11.	Income Disparities in Asthma Burden and Care in California	2010
12.	Jamboree Housing Resident Survey	2017
13.	Jamboree Housing Corporation Resident Needs Assessment	2018
14.	Kaiser Health News – Asthma Sending More Kids to California ERs	2015
15.	Kaiser Permanente Orange County Mental Health Report	2017
16.	Kennedy Commission: Health and Housing Affordability	2018
17.	Orange County Community Indicators	2018
18.	Orange County Conditions of Children	2018
19.	Orange County Healthcare Agency Strategic Plan	2018
20.	Orange County Healthier Together	2018
21.	Operation Deep Dive	2018
22.	Out of Reach: The High Cost of Housing	2018
23.	Race, Ethnicity, and Social Class and the Complex Etiologies of Asthma	2008
24.	Regional Asthma Management and Prevention (RAMP)	2017-2018
25.	Social Determinants: Taking the Social Context of Asthma Seriously	2009
26.	Study of Students Basic Needs (CSU)	2018
27.	United States Department of Health and Human Services: Asthma and African Americans	2019

Appendix B. Community Input Tracking Form

	Data collection method	Title/name	Number	Target group(s) represented	Role in target group	Date input was gathered
Organizations						
1	Interview	President and CEO; 2-1-1 Orange County	1	Minority, medically underserved, low income	Content Expert	10/31/18
2	Interview	Executive Director; Alzheimer's Orange County	1	Minority, medically underserved, low income	Content Expert	10/25/18
3	Interview	Public Policy Chair and Treasurer; American Foundation for Suicide Prevention (AFSP) – Orange County	1	Minority, medically underserved, low income	Content Expert	11/12/18
4	Interview	Professor/Director, Stroke Boot Camp; Chapman University, co-founder, Orange County Stroke Rehab Network	1	Minority, medically underserved, low income	Content Expert	11/13/18
5	Interview	President and CEO; Council on Aging	1	Medically underserved, low income	Content Expert	11/13/18
6	Interview	Operations Manager; Healthy Smiles for Kids of Orange County	1	Minority, medically underserved, low income	Content Expert	12/3/18
7	Interview	CEO and Founder; Illumination Foundation	1	Minority, medically underserved, low income	Content Expert	11/27/18
8	Interview	Executive Director; Kennedy Commission	1	Minority, medically underserved, low income	Content Expert	12/5/18
9	Interview	Executive Director; Orange County Congregation Community Organizers (OCCCO)	1	Minority, medically underserved, low income	Content Expert	11/16/18
10	Interview	Coordinator, Student Mental Health; Orange County Department of Education	1	Minority, medically underserved, low income	Content Expert	10/30/18
11	Interview	Programs Specialist; Orange County Fair Housing Council	1	Minority, medically underserved, low income	Content Expert	12/10/18
12	Interview	Executive Director; Orange County Food Access Coalition	1	Minority, medically underserved, low income	Content Expert	12/18/18
13	Interview	Public Health Officer; Orange County Health Care Agency	1	Minority, medically underserved, low income	Content Expert	12/17/18
14	Interview	Associate Director; Regional Asthma Management & Prevention (RAMP)	1	Minority, medically underserved, low income	Content Expert	11/7/18
15	Interview	Executive Director; San Clemente Wellness and Prevention Center	1	Minority, medically underserved, low income	Content Expert	10/31/18

	Data collection method	Title/name	Number	Target group(s) represented	Role in target group	Date input was gathered
16	Interview	Vice President; Home and Care Services, SeniorServ	1	Medically underserved, low income	Content Expert	10/10/18
17	Interview	Professor/Associate Director; Institute for Clinical and Translational Science, UCI School of Medicine, co-founder, OC Stroke Rehab Network	1	Minority, medically underserved, low income	Content Expert	11/13/18
18	Interview	Associate Clinical Director; Western Youth Services (WYS),	1	Minority, medically underserved, low income	Content Expert	12/12/18

Community residents

	Data collection method	Title/name	Number	Target group(s) represented	Role in target group	Date input was gathered
19	Survey	Resident Survey	271	Minority, medically underserved, low income	Representative Members	Close date: 1/30/19
20	Focus Group	Stroke Survivors and Caregivers Focus Group	18	Minority, medically underserved, low income	Representative Members	10/26/18
21	Focus Group	Senior Resident Focus Group	10	Medically underserved, low income	Representative Members	11/20/18
22	Focus Group	Youth Mental Health (Latino parents) Focus Group	7	Minority, medically underserved, low income	Representative Members	11/19/18
23	Focus Group	Center for Health Neighborhoods Focus Group	17	Minority, medically underserved, low income	Representative Members	11/26/18
24	Focus Group	Youth Mental Health (school staff) Focus Group	12	Minority, medically underserved	Representative Members	11/28/18
25	Focus Group	Youth Mental Health (students) Focus Group	16	Minority, medically underserved	Representative Members	11/28/18
26	Focus Group	Permanent Supportive Housing Residents Focus Group (Anaheim)	8	Minority, medically underserved, low income	Representative Members	11/28/18
27	Focus Group	Permanent Supportive Housing Residents Focus Group (Anaheim)	10	Minority, medically underserved, low income	Representative Members	11/28/18
28	Focus Group	Permanent Supportive Housing Residents Focus Group (Midway City)	7	Minority, medically underserved, low income	Representative Members	11/29/18
29	Focus Group	Mental Health (Suicide) Focus Group	12	Minority, medically underserved	Representative Members	12/4/18
30	Focus Group	Community Residents Focus Group	14	Minority, medically underserved, low income	Representative Members	12/14 /18

Appendix C. Health Need Profiles

I. Health Need Profile: Access to Health Care

Anaheim and Irvine Medical Center Service Areas
Local Issue: Access to Health Care

Residents are Forced to Choose Housing Over Health Care

Veronica's Story... Veronica lives in Anaheim and has to choose paying her rent over buying health insurance. Since she does not have health insurance, Veronica and her family do not get treated when they are sick. This leads to a variety of cascading impacts on the life of the family. For example, Veronica goes to the emergency room only after weeks of battling a cough which leads to more expensive treatments. When her daughter's school suspects that her daughter might have ADHD, Veronica has trouble getting her properly diagnosed and her daughter continues to struggle. Veronica's story reflects the struggles of community residents, gathered through a series of focus groups and surveys, as well as interviews conducted with local subject matter experts.

"

"Insurance is not accessible, or MediCal, so we don't go. If we know something is going to cost us, we put off going."
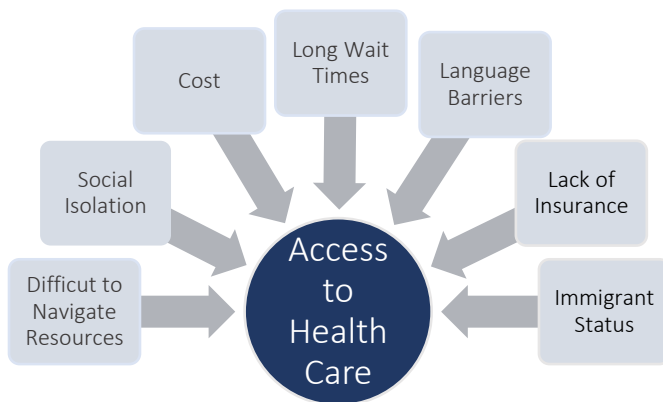
- Focus Group Member, Fullerton

"

"Covered California is very expensive. After you pay your mortgage or rent, and you have two people working to afford it, you can't pay for insurance. So, many people don't take their child to the doctor."

- Focus Group Member, Fullerton

Identified Causes & Contributing Factors

Various Factors Affect Access to Health Care

Cost

Long Wait Times

Language Barriers

Social Isolation

Lack of Insurance

Difficut to Navigate Resources

Access to Health Care

Immigrant Status

Reliance on the ER

24% of respondents to a resident survey indicated that they would go to the ER if they were feeling sick. **46% had visited the ER** in the last year. Of those who had visited the ER, **19% had visited the ER two times or more** in the last year and **26% did not have insurance.**

Specialized Care Has Additional Barriers

Access to Oral Health Care
Secondary data shows that the majority of OC residents surveyed reported that oral health is a concern. Less than 1 in 3 OC residents have visited a dentist in the past year. Reasons reported include cost, a lack of awareness that MediCal covers dental, and difficulty finding a dentist.

Secondary Data Shows Barriers in Accessing Mental Health Care

North Orange County residents with mental health needs are among those **least likely to see a mental health specialist.**

Korean-speaking residents with mental health needs are the **least likely to see a specialist**, followed by **Farsi, Arabic, and Spanish-speaking residents**. These groups are impacted by both language barriers and **shame and stigma.**

People Most in Need of Access to Care

Individuals Experiencing Homelessness

- "There has always been difficulty with accessing healthcare. You and I can usually walk in and get an appointment rapidly. The fact is that our clients don't use traditional clinics, because they have the barriers of not having a phone, not having transportation, not having a place to recover. If those things are not there, the healthcare might as well not be there either." -Subject Matter Expert

Older Adults

- "Lower income seniors are more affected and they don't know where to turn. This permeates all ethnicities and if you don't have a support system to help you get to the doctor or help you get your medication, it is difficult...To be able to survive, they are choosing between buying food and buying medication." -Subject Matter Expert
- "There are not a lot of dental health resources for low income seniors. The health care facilities in OC that do provide free or low-cost dental are struggling to keep on top of it." -Subject Matter Expert

Children

- "We had one patient who had insurance, but it didn't cover dental. He ended up in the emergency room. When he opened his mouth, his entire mouth was full of cavities. No one had ever brushed his teeth. He gets fed through a feeding tube and he can't brush his own teeth." -Subject Matter Expert
- "DentiCal has recently re-branded as 'MediCal's Dental Program.' In Orange County, one in ten dentists—take DentiCal. So for those who rely on DentiCal, it is really hard to find dentist." -Subject Matter Expert

Residents with Low Socioeconomic Status

- "People have to choose between their medication or their dinner. And that is a larger systemic problem. Sometimes the good medicines cost more than these people could earn in a month. They come to us uneducated about basic medical facts."
  -Subject Matter Expert

Quick Fact: While tooth decay is declining overall, Hispanic and Latino, Black, and Asian children have higher rates of periodontal disease.

Resources to Address the Issue

Sample of Current Resources

Interviewees and participants identified the following existing resources and agencies that address lack of access to health care:

- Lestonnac Free Clinic (free medical/dental care)
- Share Our Selves (dental/behavioral health/ medical care for the uninsured and underinsured)
- Hurtt Family Clinic (same as above)
- SeniorServ
- OC Council on Aging
- Illumination Foundation Recuperative Care
- OC Healthy Smiles Teledentistry
- OC Health Care Agency: Strategic Plan for Oral Health

Gaps and Needs

Participants and interviewees provided the following recommendations for addressing lack of access to health care:

1. Increase preventative care and education
2. Co-locate medical and dental services
3. Integrate dental care with primary care
4. Regular and systematic data collection and evaluation regarding dental health needs
5. Place mental health care workers in primary care offices
6. More mental health workers in schools
7. Greater parent and public education immigrant protections

II. Health Need Profile: Economic, Housing, and Food Insecurity

Anaheim and Irvine Medical Center Service Areas
Local Issues: Economic, Housing, and Food Insecurity

Rising Housing Costs Challenge Low Wage Families

Why we Care… Orange County has one of the highest costs of living in the nation. An abundance of well-paying jobs for some residents has led to high housing demand and costs, leaving low wage earners and those in the service sector unable to keep up with rent increases. Such families are stretched so thin economically that they are forgoing basic nutrition and health maintenance. Others remain chronically homeless, facing harsh conditions that contribute to poor health outcomes. To understand the impact of economic insecurity in the Anaheim and Irvine Medical Center area, community member focus groups and interviews with local subject matter experts were conducted.

"

"I rent out rooms in my house. Because I need to be able to pay the rent. It is a lot of pressure and a lot of stress."

- Focus Group Member, Costa Mesa

"

"I lost my job, and we moved into an apartment that was roach infested. The rent was due and I couldn't pay it. They evicted me [and my daughters]. I had nowhere to go and did not know where to get help…We did the motel thing. It was so expensive. We had to leave after 28 days… I got a full-size blow-up mattress and all three of us slept on the mattress in the car. It was awful. I joined a gym and we showered there."

- Focus Group Member, Anaheim

Identified Causes & Contributing Factors

Reported Barriers to Accessing Affordable Housing

| Long Waitlists | Narrow Criteria | Low Stock | NIMBYism |

In a survey of over 200 residents, respondents reported:

41% of residents did not know where they were going to sleep at least once this year

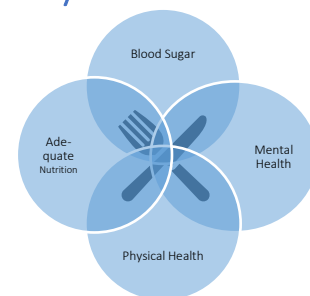**40%** experienced a rent/mortgage increase that made it difficult to pay

35% moved in with other people because of financial problems

35% reported being hungry and not eating due to lacking money for food

Food Insecurity Drives Poor Health Outcomes

Blood Sugar

Adequate Nutrition

Mental Health

Physical Health

Local residents and experts alike highlighted the intersection of **food insecurity and health outcomes.** Experts noted the effect of chronic malnutrition and inadequate nutrition on blood sugar, which subsequently impacts **mental health, particularly depression and ADHD,** as well as **diabetes, obesity, stroke, and heart disease.**

Quick Fact: There are **approximately 84,000 people** on the waiting list for Housing Assistance in Orange County. Recently approved CA Props 1 and 2 and AB 4833 will increase local funding streams to address the mounting demand.

Housing Programs Can Improve Healthcare

A critical source of economic insecurity, community members and experts cited specific housing programs that improve health outcomes:

- **Affordable Housing-** no more than 30% of monthly income for low-wage earners
- **Transitional Housing-** temporary, coupled with crisis and case management

- **Permanent Supportive Housing-** affordable housing and supportive services for the chronically homeless
- **Housing Code Enforcement-** ensures housing conditions that protect and support residents' health
- **Health Plan Home Visit Programs-** improve asthma outcomes, save money, lower hospitalization rates and address disparities

Housing and Asthma Triggers

In the Anaheim and Irvine service areas, low-income individuals responding to a survey were more likely than other groups to report having been exposed to mold where they live. Low-income, homeless individuals were more likely to report exposure to asthma triggers, including: mold, cockroaches, dust, and tobacco smoke where they live.

People Most Affected by Economic Insecurity

Children

"It's horrible, especially for the children. They have no place to do their homework. The kitchen is crowded...they don't have any privacy. The kids and the parents are all in one room."
- Community Resident

Underskilled Workers

"We work with the rapidly rehoused – not just to get a job, but to increase their financial stability long term. We are strategic in the types of jobs we're targeting, such as IT and healthcare, career opportunities that have a high hiring need and a good wage so that people can stay and thrive in Orange County." - Subject Matter Expert

Low Socioeconomic Status Families

"f you are making minimum wage and you're take home is $2,000 a month and you're paying $1,500 in rent, then you don't have much more for basic needs, health, education, transportation and other needs." - Subject Matter Expert

Previously Incarcerated

" I'm a felon. That's why I went homeless right after I got out of prison. That's the exact reason right there. I couldn't find any shelter because I was a convicted felon." - Community Resident

Resources to Address the Issue

Sample of Current Resources

Interviewees and participants identified the following existing resources and agencies that address economic insecurity:

- Kennedy Commission and Jamboree Housing
- OC Fair Housing Council
- OC Waste Not, Want Not
- Upskill OC, Trellis, Taller San Jose, and Chrysalis
- OC Food Access Coalition, CalFresh, and SeniorServ
- Illumination Foundation, Mercy House, and Isaiah House

Gaps and Needs

Participants and interviewees provided the following recommendations for addressing economic insecurity:

1. Participation from all 34 OC city governments
2. Increase stock of permanent supportive housing
3. Public awareness campaigns on the cost of homelessness
4. Greater protections for undocumented immigrants
5. Being more proactive with home inspections
6. Improve financial literacy in K-12 curriculum
7. Provide financial coaching for adults
8. Build more emergency shelters (transitional housing)

III. Health Need Profile: Mental Health and Substance Abuse

Anaheim and Irvine Medical Center Service Areas
Local Issues: Mental Health and Substance Abuse

Social Isolation, Daily Pressures Drive Substance Abuse

Why we Care…Orange County residents report unprecedented rates of depression, stress, and anxiety. Mental health clinicians are overwhelmed by the ever-increasing demand for services, particularly for children and teens. Hospitalizations for suicidality and opioid overdoses are at an all-time high and experts and residents alike point to increased social isolation and disconnectedness, as well as the pervasiveness of technology and rising costs of housing. To understand how mental health and substance abuse impact the lives of residents within the Anaheim and Irvine Medical Center areas, a series of community member focus groups and interviews with local subject matter experts were conducted.

"
"It is really physically and mentally stressful every day in our communities. And it is difficult to manage. I see men turning to alcohol to deal with the stress. People feel powerless and hopeless. And it is a problem for the entire family."

- Focus Group Member, Santa Ana

"
"My daughter has anxiety and I as a mom do not know how to support her emotions about school and socially."

- Focus Group Member, San Clemente

"
"I've been suffering from headaches due to stress for over a year. It is affecting my memory. There are many physical and mental effects from the constant stress."

- Focus Group Member, Anaheim

Identified Causes & Contributing Factors

Mental Health: Residents' Primary Health Concern

In a resident survey, **mental health** surpassed diabetes, heart disease, and cancer as the **primary health concern** in Orange County. **64% of respondents** said they were concerned about **mental health and mood disorders.**

Substance Abuse Concern

Secondary data shows that **alcohol and opioids a**re the leading contributors to substance-related hospitalizations in Orange County

27% of residents surveyed said they were concerned about substance abuse

Quick Fact: Drug/alcohol overdoses have resulted in over 5,500 hospitalizations and nearly 700 deaths among Orange County residents each year over the past 12 years.

"We've been working with public health, behavioral health, and our community partners and it's tied to a lack of social connection."
-Subject Matter Expert

Logistical Barriers Interfere with Access to Mental Health Care

Lack of Integration with Primary Care

Cost

Difficulty Navigating Covered Care

Other reported barriers include: stigma, immigrant status, language barriers, MHSA funding limitations, and insufficient number of mental health clinicians on school campuses.

Teens and Vaping

Through focus groups and interviews, teachers, counselors, and mental health workers have noted an increase in vaping on high school campuses and an uptick in anxiety in teens as a result of dependence on these items.

People Most Affected by Mental Health and Substance Abuse

Older Adults

"The high cost of living in Orange County is driving families away from the region, so older adults are often left here isolated." -Subject Matter Expert

"21% of individuals over 65 in OC are living alone. And as you get older the risk of isolation increases." -Subject Matter Expert

Teens and Young Adults

"I've noticed more and more students who are incapable of coming to school because they are so anxiety ridden." - Community Resident

"They're self-medicating. It's not for recreation. They don't know how to cope with all these emotions they are dealing with..." - Community Resident

Children of Undocumented Immigrants

"Within immigrant families, there is a real fear...of being deported if they reach out for any government services. So, people who should be engaged in the treatment of their children have an understandable resistance to seek out help. If a child senses that kind of anxiety in their household, that you have to keep things to yourself and you can't form a support system in your community, you don't ask for help." - Subject Matter Expert

Resources to Address the Issue

Sample of Current Resources

Interviewees and participants identified the following existing resources and agencies that address mental health and substance abuse issues:

- Safe Rx OC
- Be Well OC
- OC Council on Aging
- San Clemente Wellness and Prevention Center
- Western Youth Services
- Illumination Foundation
- SeniorServ

Gaps and Needs

Participants and interviewees provided the following recommendations for addressing mental health and substance abuse issues:

1. Provide prevention education to those prescribed opioids
2. Have therapists on-site at primary care offices
3. Implement pediatric mental health check-ups
4. Increase public private partnerships between schools and mental health care providers
5. Increase funding for mental health care
6. Provide paid time for teacher trainings on prevention and early intervention

IV. Health Need Profile: Stroke

Anaheim and Irvine Medical Center Service Areas
Local Issue: Stroke

Stroke Devastates the Lives of Residents, Family Members

Luke's Story... He was a mechanical engineer with only 10 years until retirement when he suffered a debilitating stroke. Due to decreased motor and speech function, Luke can no longer work. His wife, Carol, was thrust into the role of primary caretaker and medical advocate, while now also serving as their family's primary breadwinner. She has struggled to find long-term care and support for Luke while also managing her own struggles with anxiety. To understand how stroke impacts the lives of residents like Luke and Carol, a community member focus group and surveys were conducted with local residents, as well as interviews with local subject matter experts.

> "Most programs are for people who just had a stroke. I would like to see more groups that are designed for people who have been dealing with this for a long time."
>
> - Stroke Survivor

> "Insurance coverage for rehabilitative therapy stops after six months. They just say, 'We've done all we can do for you.' Instead of saying, 'Your insurance is running out, but here are other resources.' What we hear is, 'You're never going to get better.'"
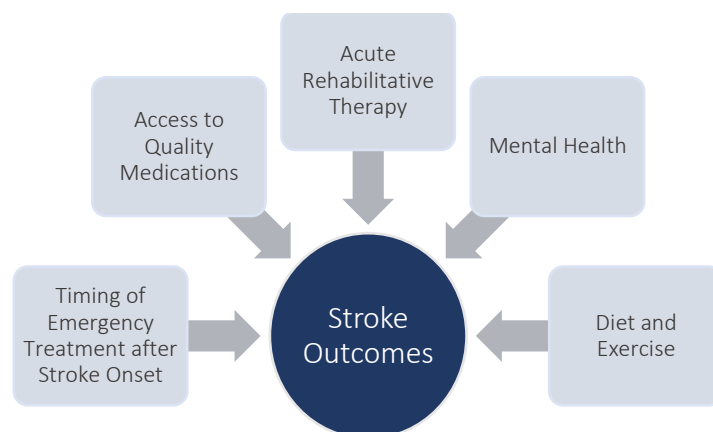>
> - Stroke Survivor

Identified Causes & Contributing Factors

Residents Are Worried About Stroke

About **half of all community members and residents** surveyed said they were concerned about heart diseases, including stroke

Many Factors Affect Health Outcomes After Stroke

- Access to Quality Medications
- Acute Rehabilitative Therapy
- Mental Health
- Timing of Emergency Treatment after Stroke Onset
- Diet and Exercise

Stroke Outcomes

Reported Barriers to Accessing Stroke Rehabilitative Care

- Insurance Coverage
- Location
- Lack of Follow-up Care

Stroke and Mental Health
Focus groups and interviews with residents and experts described how stroke survivors and caregivers experience high rates of depression and anxiety. For survivors, brain changes from a stroke can impact mental health, in addition to situational factors.

> "We need to come up with a model that puts available services in geographically desirable areas that are accessible and affordable and interdisciplinary including: a nutritionist, pelvic health care, physicians, mental health therapists, occupational therapists."
>
> - Subject Matter Expert

People Most Affected by Stroke

Black/African American Residents

- "Historically, [African Americans] have more risk factor management issues. They historically live in more difficult environmental situations that interact with risk factors. Persons of African American heritage have a higher risk of hyper tension that is harder to treat. It is a combination of genetic and environmental factors." - Subject Matter Expert

Residents with Low Socioeconomic Status

- "If someone from a poor neighborhood is having stroke symptoms, the time is greater for an ambulance to get from the poor neighborhood to a hospital than it is from a wealthy neighborhood. With stroke, timing is key for survival and outcomes....and sometimes the good medicines are more than [a low-income person] could earn in one month." - Subject Matter Expert

Residents with Diabetes and Obesity

- "Less money, less education, and less access to healthy foods and so there is increased malnutrition. Malnutrition can lead to or worsen diabetes. Because of the potential for high blood glucose levels, diabetes itself is a risk factor for stroke. Reliance on cheap food increases the possibility of obesity. And obesity can increase the risk of stroke due to inflammation caused by excess fatty tissue. These are known risk factors for stroke." - Subject Matter Expert

Caregivers of Stroke Survivors

- "Caregivers have a super high rate of anxiety depression and PTSD and they tend not to get a lot of services. If you can pump up the caregiver that increases outcomes for both the stroke survivor and their caregiver." - Subject Matter Expert

"Intensive acute therapy is critical to improving stroke survivor outcomes."
-Subject Matter Expert

2x "African-Americans have double the risk and higher mortality rates from stroke."
-Subject Matter Expert

Adverse Childhood Experiences (ACES)
ACES are linked to health outcomes such as obesity, diabetes, and stroke. The medical and public health experts interviewed noted ACES as one piece of the puzzle regarding racial disparities and stroke outcomes. Black children are more likely to have experienced one or more ACE.

Resources to Address the Issue

Sample of Current Resources

Interviewees and participants identified the following existing resources and agencies that address the needs of stroke patients, survivors, and caregivers:

- OC Stroke Rehabilitative Network
- Chapman University Stroke Boot Camp
- Goodwill Fitness Center (adaptive gym)
- Telerehab (game-based rehabilitation)
- Emergency responder stroke training (OC Health Care Agency/UCI)

Gaps and Needs

Participants and interviewees provided several recommendations for addressing stroke outcomes:

1. Increase patient education about managing the condition and resources available in the community
2. Integration of follow-up and long-term care
3. Expand public awareness about the scale, scope, and nature of stroke and its lifestyle effects
4. Improve opportunities for social connection, emotional support and stress management

V. Health Need Profile: Suicide

Anaheim and Irvine Medical Center Service Areas
Local Issue: Suicide

As Suicide Rates Climb, Gaps in Care Leave Families Helpless

Why we Care... Suicide affects individuals of all ages in Orange County, including those as young as 10 years old. It is the second leading cause of death for individuals aged 10 to 34, far surpassing influenza deaths. Too many community members are being lost at an early age to a preventable public health problem.

Families and loved ones are left with agonizing questions about "why" and face shame, stigma, and blame due to rampant misinformation about suicide. Finding care after hospitalization and preventing future suicide attempts is difficult. Privacy laws, while critical to protecting individual rights, place limitations on people's ability to help those at-risk. With the passing of AB1261, AB89, and AB1436 schools, mental health clinicians, and first responders are better equipped to prevent, but there are still significant gaps.

To understand how suicide impacts the lives of residents, a series of community member focus groups with community residents and interviews with local subject matter experts were conducted.

> "I wish I had had more information or had been more aware of what to say. And when it happened, I was really blind sighted. We all were. He was so bright and so funny."
> - Survivor of Suicide Loss

> "There was this trauma with his death of not having help and not having a way out of it [was difficult]."
> - Survivor of Suicide Loss

Understanding the Terminology

Suicidality – Suicidal ideation, suicide plans, and suicide attempts
Suicidal Ideation – Serious thoughts about taking one's life
Survivors of Suicide Attempts– Those who have attempted suicide
Survivors of Suicide Loss – Those who have lost a family member or loved one to suicide

Connection to Opioid Use and Abuse?
Secondary data shows that half of all opioid-related deaths among people aged 65 and older in Orange County between 2014 and 2016 were ruled suicides

Reported Barriers to Prevention, Intervention, and Postvention

Serious Shortage of Beds	HIPAA and FERPA	Stigma and Misinformation	Lack of Screening in Primary Care

"It's not only the response to the person that is attempting suicide, but also, it's how to treat the families impacted."
– Survivor of Suicide Loss

The Cost of Suicide

- Emotional toll on survivors of suicide loss
- Trauma, PTSD, anxiety, depression, suicide contagion, and suicide clusters for those acquainted
- $60 million in hospitalization costs for suicidality in Orange County each year
- Loss of human capital

> "Suicide costs billions of dollars in medical treatments and lost productivity. **Every $1 spent on psychotherapeutic interventions and [increased coordination] among care providers saves $2.50**."
> – Subject Matter Expert

Wide Range of Causes & Contributing Factors Identified by Local Experts

Factors Impacting Suicidality

- Impulse control and ADHD
- Access to firearms
- Anxiety, depression, and PTSD
- Psychosis
- Loneliness and isolation
- Substance intoxication and disorders
- Being a victim or perpetrator of bullying
- Perfectionism
- Self-harm and cutting
- Job or relationship loss
- Pathologic internet use (>5 hours a day)

> "I made a funny video and I had probably fifty comments saying things like, 'Kill yourself, you're disgusting, what is this thing.'"
>
> - Survivor of Suicide Attempt

> "The mix of someone who is depressed and alcohol is catastrophic. I feel so upset that he felt the need to turn to alcohol."
>
> - Survivor of Suicide Loss

Quick Fact: Orange County's rise in suicides is the largest among major US counties (18% increase over ten years).

> "This school year, so far, we are seeing two kids per week with suicidal ideation. And one to two patient hospitalizations per week."
> – Subject Matter Expert

The Role of Smartphones and Social Media

Changes in the brain's reward system

Increased anxiety

A platform for bullying
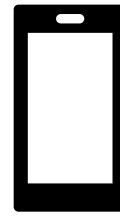
Decreased attention span

Increased feelings of loneliness

Increased impulsivity

Nearly all residents noted the role of smartphones and social media in suicide risk, particularly in rising rates of teen suicide. Counselors and teachers reported addiction and withdrawal-like behavior, decreased focus and attention, and increased irritability and anxiety on high school campuses. Emphasis was placed on the "like" feature on social media platforms and its impact on the developing teenage brain.

Others believe these tools represent a unique opportunity for increased prevention and community education. Most notably is the Interactive Screening Program (ISP), a safe and confidential web platform with brief screenings for stress, depression, and other mental health conditions. Individuals receive a personal response from a program counselor within the mental health services available to them.

Suicide and the Community

Suicide affects people from All Backgrounds and Walks of Life

The following quotes were from community members who shared stories about the victims of suicide in their lives:

"I think my brother masked his depression with being the class clown, being the likable guy. He always went out of his way to please everybody but himself."

"She walked around with her shoulders back. Totally confident. And after she passed, everybody tells us about these funny things she would tell them."

"My brother always recognized that he had depression, but he was never able to talk about it, voice it, find somewhere to change it. He knew that he was depressed."

"My father was a real pleasure to be around. We had no clue."

"There were no known mental health concerns... It was a lot of personal loss prior to his death. Job, school, he was going to lose his apartment, the girl. It was all that."

"He never showed any signs of mental illness. He was popular in school. He had a lot of friends."

Race and ethnicity are not protective factors

Females are 4x more likely to attempt

Males are 4x more likely to complete

Populations of Concern

- Teens (14-18)
- White males (25-64)
- All individuals 65+
- LGBTQ+ youth

Sample of Current Resources

- CHOC: 12 new psychiatric beds
- American Foundation for Suicide Prevention (AFSP) OC
- OC Links, TIP, CAT
- Be Well OC
- Saddleback Church Suicide Loss and Prevention initiatives
- OCDE Student Mental Health

Gaps and Needs

1. More psychiatric beds and follow-up care
2. Preventative screening in primary care, "Check-ups from the neck up"
3. Implement text notifications
4. More training for educators, mental health, and medical professionals
5. Workplace prevention programs

Promising Practices

-EMDR therapy
-Group therapy
-Teen facilitated prevention efforts
-ISP
-AB 1436

Appendix D. Community Resources

Identified need	Resource provider name	Summary description
Access to care	*SeniorServ*	Meals on Wheels and lunch programs make sure parents, grandparents and isolated others are cared for and have good nutrition. Case management and friendly visitors keeps a watchful eye and makes access to supportive service easier.
	Cal State University Fullerton Center for Healthy Neighborhoods	Together with community residents and other stakeholders, the Center aims to alleviate education and health disparities, revitalize neighborhoods, and reduce the cycle of poverty for low income children and families. Goals of the Center are to increase access for bilingual/bicultural healthcare, health promotion, and medical prevention services – especially marginalized families/individuals; improve coordination of healthcare and social services; improve emotional/mental health for children of all ages; and provide college student internships and practicum experiences to help increase bilingual and bicultural workforce development in healthcare and social service professionals.
Economic Security	*Jamboree Housing*	Jamboree works with community leaders to provide resident services that enhance neighborhoods and transform the lives of low-income families, seniors on fixed incomes, formerly homeless children and adults, and those living with a mental health diagnosis.
	Orangewood Foundation	Orangewood Foundation meets a broad array of needs: from groceries and a hot meal, to transitional housing, to life skills workshops and employment leads, to their innovative Samueli Academy charter high school and scholarships for college and graduate school.
Mental health	*NAMI Orange County*	NAMI Orange County a volunteer based non-profit organization, is the leading self-help organization in the County for families and friends of those suffering from serious mental disorders. Founded in 1980, NAMI Orange County offers family support groups, advocates for legislation, supports research efforts and works to educate the public to reduce stigma.
	Mental Health Association (MHA) of Orange County	The Mental Health Association (MHA) of Orange County is dedicated to improving the quality of life of Orange County residents impacted by mental illness through direct service, advocacy, education and information dissemination. MHA currently operates from four service centers. All programs serve adults with severe and persistent psychiatric disorders.

Stroke	*Easter Seals*	Easterseals Senior Day Service supports older adults with cognitive impairments and/or physical disabilities. People using this service receive supervision, increased social opportunities and assistance with personal care or other daily living activities. Easterseals Senior Day Service enables individuals to stay in their home longer by providing additional help and support they need during the day.
	American Heart Association	We are fighting heart diseases and stroke, the No. 1 and No. 5 killers of all Americans, by making the places we live, learn, work, play, pray and heal healthier. We advocate for policies that prevent cardiovascular diseases, improve the quality of and access to care, increase research funding and expand rehabilitation services.
Suicide	*American Foundation for Suicide Prevention*	The American Foundation for Suicide Prevention (AFSP) is a voluntary health organization that gives those affected by suicide a nationwide community empowered by research, education and advocacy to act against this leading cause of death.
	With Hope Foundation – The Amber Craig Memorial Foundation	With Hope, the Amber Craig Memorial Foundation is dedicated to suicide prevention through improving mental health awareness and education in our schools and throughout our community. We have pledged to make available, speakers, materials, resources, support services, to schools and throughout communities.

Appendix E. Strategic Lines of Inquiry for Community Engagement

Southern California Kaiser Permanente's approach to the 2019 CHNA employed a mixed-methods sequential explanatory assessment design intended to produce the most accurate, vivid, and meaningful story of community health possible. This appendix reports an overview of the assessment design.

Overview of Question Design Process

- Secondary data from over 200 relevant indicators were analyzed by Kaiser Permanente Regional analysts to provide a bird's-eye view of the most pressing health issues across the service area.
- These analyses were reviewed and discussed by Kaiser Permanente clinicians, experts, and hospital leaders who had knowledge of the local community. These discussions helped provide additional context to findings and identify targeted strategic lines of inquiry that provided the foundation of a relevant community engagement plan. For example, Kaiser Permanente social workers might review the data during this phase and provide their perspective that immigration policies could be influencing Hispanic/Latino residents' willingness to access care.
- Across these internal sensemaking sessions, strategic lines of inquiry were synthesized by consultants and re-framed to work as a driving force behind community engagement planning. These strategic questions were also designed to be answerable by human beings (not more secondary data). Strategic questions targeted the root causes of health needs, racial/ethnic disparities in impact, community lived experience, or the resources available to address a health need (e.g. *to what extent are current immigration policies inhibiting resident willingness to access healthcare and other community resources and how can these obstacles be overcome?*).
- Strategic questions were not asked *directly* of engagement participants but were instead used to build a sampling frame and culturally competent in-person engagement protocols. For example, a question asking about the impact of immigration policies on resident willingness to access health care would lead to: a) recruitment of community residents and experts who could provide rich answers to the question and b) tailored interview and focus group protocols for engaging participants that would conversationally surface the answer in a manner consistent with best practices in qualitative data collection.
- By using a series of strategic questions in this way, primary data collection allowed for authentic community engagements with residents and stakeholders that could "dive deep" on issues relevant to the community (and ground truth their relevance).
- Regardless of the strategic focus of the engagements, however, they also provided the opportunity for the community to raise any other health needs not targeted through the strategic lines of inquiry and these data were also included primary data analysis.

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