A Community Health Needs Assessment

of the

Alta Bates Summit Medical Center Service Area

Three Campuses:

Alta Bates Campus
2450 Ashby Avenue
Berkeley, CA 94705

Herrick Campus
2001 Dwight Way
Berkeley, CA 94704

Summit Campus
350 Hawthorne Avenue
Oakland, CA 94609

Conducted by:

May 2016

Acknowledgements

We are deeply grateful to all those who contributed to the community health needs assessment conducted on behalf of Alta Bates Summit Medical Center. First, many dedicated community health experts and members of various social service organizations serving the most vulnerable members of the Alta Bates Summit Medical Center community gave their time and expertise as key informants to help guide and inform the findings of the assessment. Many community residents also participated and volunteered their time to tell us what it was like to live in the Alta Bates Summit Medical Center hospital service area with limited or no access to healthcare and the basic resources needed to live a healthy life. To everyone that supported this important work we extend our deepest heartfelt gratitude.

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Table of Contents

List of Tables

List of Figures

Report Summary

Introduction

Both state and federal law require that nonprofit hospitals conduct a community health needs assessment (CHNA) every three years to identify and prioritize the significant health needs of the communities they serve. The results of the CHNA guide the development of implementation plans aimed at addressing identified health needs. Federal regulations define a *health need* accordingly: "…health needs include requisites for the improvement or maintenance of health status in both the community at large and in particular parts of the community (such as particular neighborhoods or populations experiencing health disparities)" (p. 78963).[1]

This report documents the processes, methods, and findings of a CHNA conducted on behalf of Alta Bates Summit Medical Center (ABSMC), a Sutter Health affiliate hospital located in the Berkeley/Oakland area of California. The CHNA was conducted over a period of eight months, beginning in May 2015, and concluding in December 2015. Specifically, the objective of the 2016 CHNA was to:

> *Building on the 2013 CHNA, identify and prioritize the requisites (or basic provisions and conditions needed), for the improvement and/or maintenance of health status within a defined hospital service area (HSA), and in particular within neighborhoods and/or populations in the service area experiencing health disparities (the "Communities of Concern.")*

Processes and Methods

The data used to conduct the CHNA were both identified and organized using the widely recognized County Health Rankings model (see Appendix A for a detailed data dictionary). This model of population health includes the many factors that impact and account for individual health and wellbeing. Further, to guide the overall process of conducting the assessment, a defined set of data collection and analytic stages was developed. These served as the roadmap as the research team went about the work of the CHNA (for a detailed description of the processes followed in conducting the CHNA, see Appendix B).

Data collected and analyzed included both primary or qualitative data, and secondary or quantitative data. Primary data included 15 interviews with 24 community health experts as well as six focus groups conducted with 71 community residents (see Appendices F and G). Secondary data included health outcome and health factor indicators. Health outcome indicators included measures of both mortality and morbidity such as mortality rates, emergency department visit and hospitalization rates, and primary reasons why community residents sought primary care. Health factor indicators included measures of 1) health behaviors such as diet and exercise, tobacco, alcohol, and drug use; 2) clinical care, including access and quality of care; 3) social and economic factors such as race/ethnicity, income, educational attainment, employment, and others; and 4) physical environmental measures such as air and water quality, housing stability, and transit and mobility resources. In all 114 different health outcome and factor indicators were collected for each of the 24 ZIP codes included in the assessment.

Data were analyzed to identify Communities of Concern within the HSA. These are defined as geographic areas (ZIP codes) and populations within the HSA that have the greatest concentration of

[1] *Federal Register*, Vol. 79, No. 250, (Wednesday, December 31, 2014). Department of the Treasury, Internal Revenue Service.

poor health outcomes and are home to more medically underserved, low income and diverse populations at greater risk for poorer health. Communities of Concern were important to the overall CHNA methodology because, after assessing the HSA more broadly, they allowed for a focus on those portions of the HSA likely experiencing the greatest health disparities.

The Alta Bates Summit Medical Center is located in Alameda County, CA. The community served by ABSMC, or the hospital service area (HSA), was defined by 24 ZIP codes noted in the table that follows. This area was identified as the HSA because most of ABSMC's patients resided in these ZIP codes. The HSA was home to over 500 thousand community residents, and was rich in diversity in a number of dimensions.

ZIP Code	Population	Median Age	Median Income	Percent Minority
94601	49,279	31.9	$38,305	92.0
94602	28,553	41.9	$71,510	60.0
94603	32,977	30.1	$40,927	95.2
94605	42,639	38.1	$56,944	83.9
94606	36,214	35.5	$38,363	83.3
94607	25,107	34.9	$32,856	83.6
94608	26,288	36.4	$52,787	65.9
94609	21,210	35.4	$52,400	61.0
94610	29,978	38.8	$72,848	46.8
94611	36,676	42.9	$104,967	35.1
94612	13,816	40.4	$26,054	76.2
94613	861	19.7	--	70.4
94618	17,226	42.3	$116,604	34.8
94619	22,809	40.6	$75,963	67.6
94621	31,833	27.6	$31,082	97.7
94702	16,324	39.6	$57,457	51.3
94703	21,281	34.9	$55,554	47.1
94704	24,906	21.7	$31,116	55.9
94705	12,979	44.1	$94,750	26.3
94707	12,324	50.4	$138,144	21.7
94708	11,073	52.0	$140,611	19.5
94709	12,360	29.8	$57,433	44.1
94710	6,478	35.7	$63,125	60.2
94720	3,026	19.3	$23,304	68.1
Total HSA Population	**536,217**			
Alameda County		36.8	*$72,112*	*66.3%*
CA State		35.4	*$61,094*	*60.0%*

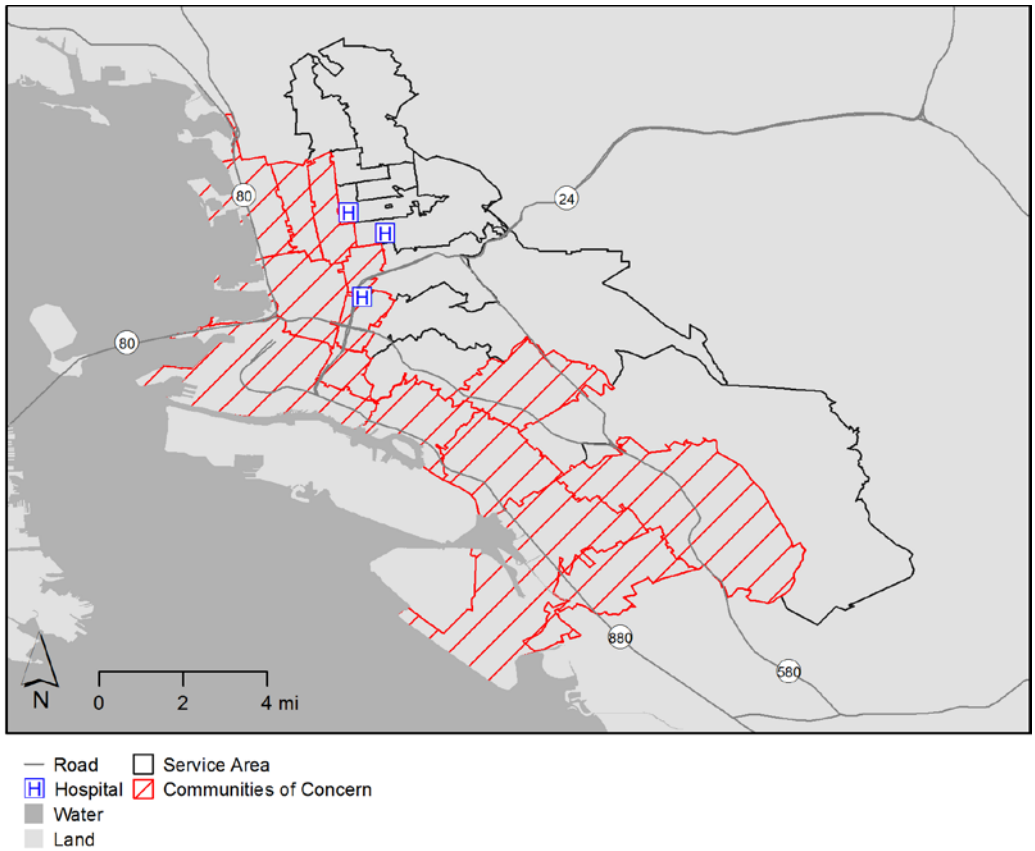
Findings

Analysis of both primary and secondary data revealed 13 ZIP codes that met the criteria to be classified as a Community of Concern. These are noted in the table that follows, with the census population provided for each. These are also described in the following figure.

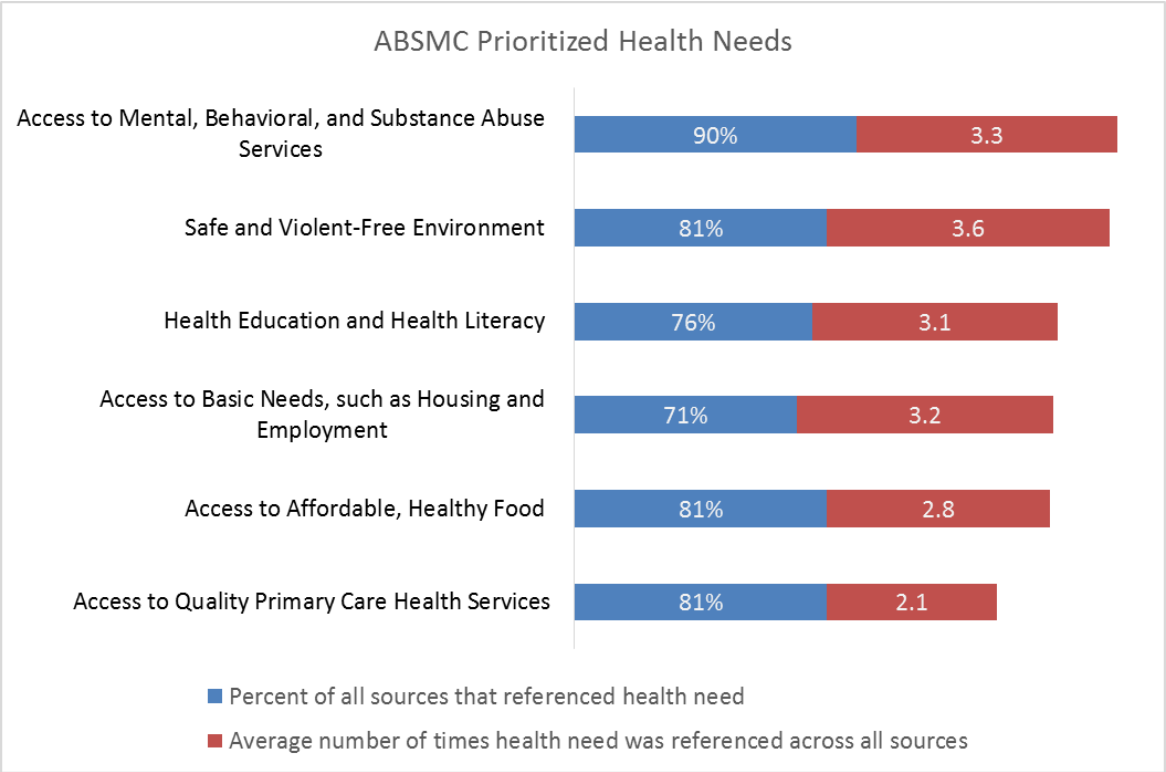
ZIP Code	Community/Area*	Population
94601	East Oakland/Fruitvale	49,279
94602	Oakland/Glenview	28,553
94603	East Oakland/Brookefield	32,977
94605	East Hills Oakland/Zoo	42,639
94606	Oakland/Cleveland Heights	36,214
94607	West Oakland/Jack London	25,107
94608	Emeryville	26,288
94609	Oakland/MLK	21,210
94612	Downtown Oakland	13,816
94621	East Oakland	31,833
94702	Northwest Berkeley	16,324
94703	Northwest Berkeley	21,281
94710	West Berkeley/Marina	6,478
Total Population in Communities of Concern		**351,999**
Total Population in the HSA		**536,217**
Percent of the HSA		**65.6%**

(Source: US Census, 2013)

* ZIP code and community area name is approximate here and throughout the report.



Primary and secondary data were also analyzed to identify and prioritize the significant health needs within the ABSMC Communities of Concern. This included identifying 10 potential health needs (PHN) that could be identified in these communities. These potential health needs were those identified in the previously conducted CHNA for ABSMC (conducted in 2013). Data were analyzed to discover which, if any, of the PHNs were present in the ABSMC Communities of Concern. In all, six of the 10 PHNs were identified as significant health needs. After these were identified, PHNs were prioritized based on an analysis of primary data sources that discussed the PHN as a significant health need. These are displayed in the figure that follows. The length of the bar denotes prioritization. In the figure, the blue portion of the bar represents the percentage of primary data sources referenced the PHN as a current, significant health need. This was combined with the average number of times that each potential health need was referenced among all primary data sources, shown in the red portion of the bar.



The identified significant health needs for the ABSMC Communities of Concern are listed in prioritized order. Secondary data indicators that had undesirable rates in at least 75% of the Communities of Concern are listed in the table below each significant health need. Qualitative themes that emerged during analysis are also provided in the table.

1. Access to Mental, Behavioral, and Substance Abuse Services

The highest priority significant health need for the ABSMC HSA was access to mental, behavioral, and substance abuse services. Individual health and well-being are inseparable from individual mental and emotional outlook. Coping with daily life stressors is challenging for many people, especially when other social, familial, and economic challenges also occur. Adequate access to mental, behavioral, and substance abuse services helps community members to obtain additional support when needed.

Quantitative Indicators	Qualitative Themes
• Mental health ED visits • Mental health hospitalizations • Substance abuse ED visits • Substance abuse hospitalizations • Self-injury ED visits • Health Professional Shortage Area--Mental Health	• Exposure to violence in the home and community • Trauma related to exposure to violence leads to behavior issues in school. • Need for trauma informed care in all health-related services • Prescription drug abuse • Individual stress collectively adds to create community stress • Extreme financial hardship makes coping difficult, especially in high-cost areas • Community norms of substance use for self-medication • Depression and substance abuse commonly mentioned • Culturally competent mental health treatment needed for victims of violence and homeless populations

2. Safe and Violence-Free Environment

The second highest priority significant health need for the ABSMC HSA was safe and violence-free environments. Feeling safe in one's home and community are fundamental to overall health. Next to having basic needs met (food, shelter, clothing) is physical safety. Feeling unsafe affects the way people act and react to everyday life occurrences.

Quantitative Indicators	Qualitative Themes
• Mental health ED visits • Mental health hospitalizations • Substance abuse ED visits • Substance abuse hospitalizations • Assault ED visits • Assault hospitalizations • Fatal traffic accidents • Major crime	• Frequent exposure to violence in the family and community, especially for youth • Need for trauma-informed care in youth services • Need for providers who are trained to care for people traumatized by violence in their homes and community. • Lack of walkable community spaces due to safety concerns • Unsafe places to play like parks and open areas • Lack of engagement in outdoor physical activity in the community and at local parks due to safety concerns

3. Access to Affordable, Healthy Food

The third highest priority significant health need for the ABSMC HSA was access to affordable, healthy foods. Eating a healthy diet is extremely important for one's overall health and well-being. When access to healthy foods is challenging for community residents, many turn to unhealthy foods that are convenient, affordable, and readily available. Communities experiencing social vulnerability and poor health outcomes often are overloaded with fast food and other establishments where unhealthy food is sold.

Quantitative Indicators	Qualitative Themes
• Diabetes ED visits • Heart disease ED visits • Hypertension ED visits • Hypertension hospitalizations • Kidney disease ED visits • Kidney disease hospitalizations • Stroke ED visits • Stroke hospitalizations • USDA-defined food deserts	• Lack of access to healthy affordable foods in the community • More liquor stores than grocery stores • Eating unhealthy food affects mental health and daily coping mechanisms • Knowledge on how to make healthier choices and prepare healthier foods is vital • Need transportation to get to grocery stores selling healthy food • Many grocery stores in low income communities are culturally specific • Feeling unsafe in your community means less traveling to the grocery store for healthy food, and rely on what is close and convenient • Healthy food in schools important • Garden programs and farm-to-school programs work

4. Health Education and Health Literacy

The fourth highest priority significant health need for the ABSMC HSA was access to health education and health literacy. Knowledge is important for individual health and well-being, and health education interventions are powerful tools to improve community health. When community residents lack adequate information on how to prevent, manage, and control their health conditions, those conditions tend to worsen. Health education around infectious disease control (e.g. STI prevention, influenza shots) and intensive health promotion and education strategies around the management of chronic diseases (e.g. diabetes, hypertension, obesity, and heart disease) are important for community health improvement. Health literacy pertains to the extent that people have the knowledge and ability to obtain, process and understand health information and services needed to make appropriate health decisions[2]. 2 Health knowledge and education is important, but equally important is health literacy where the people have the knowledge and ability to understand such health information and are able to navigate the health care system.

[2] Almader-Douglas, D. (2013). Health Literacy. National Network of Libraries of Medicine. Retrieved from https://nnlm.gov/outreach/consumer/hlthlit.html

Quantitative Indicators	Qualitative Themes
• Smoking rates - County • HIV/AIDS ED visits • HIV/AIDS hospitalizations • STI ED visits • STI hospitalizations • Unintentional injuries ED visits • Unintentional injuries hospitalizations • Diabetes ED visits • Heart disease ED visits • Hypertension ED visits • Hypertension hospitalizations • Kidney disease ED visits • Kidney disease hospitalizations • Stroke ED visits • Stroke hospitalizations	• Diabetes and high cholesterol may be preventable with healthy lifestyles • Education on how to cook healthy foods • People need information, education and skills for self-care • Health education and health literacy on how to navigate the health care system • Alternative approaches to health education are important

5. Access to Basic Needs, such as ~~H~~ousing and Employment

The fifth highest priority significant health need for the ABSMC HSA was access to basic needs such as housing and jobs. Access to affordable and clean housing, stable employment, quality education, and adequate food for health maintenance are vital for survival. Maslow's Hierarchy of Needs[3] says that only when members of a society have their basic physiological and safety needs met can they then become engaged members of society and self-actualize or live to their fullest potential, including their health.

Quantitative Indicators	Qualitative Themes
• Life expectancy at birth • Median household income • Percent below federal poverty level • Percent renting	• Stress of poverty • Housing stability is crucial for the HSA • Housing in the area is expensive • Many families moving out of the area due to rising cost of housing • Employment and job security is vitally important for health • Homelessness as a public health issue • Homelessness costs the healthcare system • Poverty is at the root of poor health outcomes • Residents with lower earning jobs are more vulnerable to shifts in the economy • Highest county foreclosure rates among Latinos and African-Americans

6. Access to Quality Primary Care Health Services

[3] McLeod, S. (2014). *Maslow's Hierarchy of Needs*. Retrieved from: http://www.simplypsychology.org/maslow.html

The sixth highest priority significant health need for the ABSMC was access to quality primary care health services. Primary care resources include community clinics, pediatricians, family practice physicians, internists, nurse practitioners, pharmacists, telephone advice nurses, and similar. Primary care services are typically the first point of contact when an individual seeks healthcare. These services are the front line in the prevention and treatment of common diseases and injuries in a community.

Quantitative Indicators	Qualitative Themes
• Total ED visits (utilization) • Total hospitalizations (utilization) • Percent uninsured	• Long wait times for a primary care appointment • Insurance coverage does not equate access to care • Not enough providers to cover the newly-insured • Lack of transportation to primary care providers • Need for more racially and ethnically diverse healthcare workers • Need to recruit providers to work in community clinics • Issues of quality of care in the primary care setting

Limitations

Study limitations included challenges obtaining secondary data and assuring community representation via primary data collection. Most data used in this assessment were not available by race/ethnicity. In addition, data on behavioral issues and conditions like obesity were both difficult to obtain at the sub-county level and were not available by race and ethnicity; therefore, county rates were used. Data timeliness was also a challenge, because some data represent different years. However, these are clearly noted to allow for proper data comparison.

Conclusion

Nonprofit hospitals play a vital role in the communities they serve. In addition to the delivery of newborns and the treatment of disease, these important institutions work with and alongside other organizations to improve community health and well-being by working to prevent disease, improve access to healthcare, promote health education, eliminate health disparities, and achieve other goals. CHNAs play an important role in helping nonprofit hospitals, as well as other community organizations, determine where to focus community benefit and improvement efforts, including geographic locations and specific populations living in their service areas.

Introduction

Both state and federal law (California AB697 and The Patient Protection and Affordable Healthcare Act of 2010 (ACA) require nonprofit hospitals to conduct community health needs assessment (CHNA) every three years. These assessments identify and prioritize the significant health needs of the communities served by hospitals. Based on the results, nonprofit hospitals develop implementation plans to address particular, significant health needs. Specifically, the ACA requires that nonprofit hospitals:

- Define the community they serve
- Assess the health needs of the community, taking into account input from persons representing the broad interests of the community, including those with expertise in public health
- Identify and prioritize significant health needs
- Identify resources within each community available to meet health needs
- Evaluate the impact of actions taken by the hospital since its previous CHNA
- Document the CHNA and make it widely available to the public

The Department of Treasury, Internal Revenue Service, issued final regulations effective December 29, 2014, that specify the requirements regarding nonprofit or charitable hospitals conducting a CHNA. These regulations define a health need accordingly: "…health needs include requisites for the improvement or maintenance of health status in both the community at large and in particular parts of the community (such as particular neighborhoods or populations experiencing health disparities)"[4]. The proposed regulations go on to describe requisites for the improvement or maintenance of health status, and indicate that these include "…not only the need to address financial and other barriers to care but also the need to prevent illness, to ensure adequate nutrition, or to address social, behavior, and environment factors that influence health in the community" (p. 78963). Further, the final regulations specify that nonprofit hospitals may build upon a previously conducted CHNA, rather than create a new CHNA every three years.

This report documents the processes, methods, and findings of a CHNA conducted on behalf of the Alta Bates Summit Medical Center (ABSMC), a Sutter Health affiliate medical center located in the Berkeley/Oakland area of California. This report covers the ABSMC campuses of Alta Bates, Summit, and Herrick. The CHNA was conducted over a period of eight months, beginning in May 2015, and concluding in December 2015. Building on federal and state requirements, the objective of the 2016 CHNA was to:

> *Building on the 2013 CHNA, identify and prioritize the requisites (or basic provisions and conditions needed), for the improvement and/or maintenance of health status within a defined hospital service area (HSA), and in particular within neighborhoods and/or populations in the service area experiencing health disparities (the "Communities of Concern.")*

From this objective the following questions were used to guide the 2016 CHNA:

1. What are the "Communities of Concern" as identified in the 2013 CHNA?
2. What is the current health status of these communities?
3. Who within the community (subgroups) is/are experiencing disparities?
4. What factors are contributing to the health status of those experiencing disparities?

[4] *Federal Register*, Vol. 79, No. 250, (Wednesday, December 31, 2014). Department of the Treasury, Internal Revenue Service.

5. What are the potential resources (programs, organizations, and facilities) available in the community to address health needs?
6. What are the significant health needs, and the priorities among these, for the community served by the hospital, and specifically the "Communities of Concern" as identified in the 2013 CHNA?
7. What is required (the requisites) to improve and/or maintain the health status of residents within these communities?
8. What is the impact of actions taken since the last CHNA?

Community Health Insights (www.communityhealthinsights.com) conducted the CHNA on the behalf of the ABSMC. Community Health Insights is a Sacramento-based research-oriented consulting firm dedicated to improving the health and well-being of communities across Northern California. Collectively, the managing partners of Community Health Insights have conducted multiple CHNAs over the previous nine years.

Organization of this Report

Following federal guidelines issued on how to document a CHNA, this report is organized accordingly: First, the community served by the ABSMC and how the community was identified is described. Second, the methods used to conduct the CHNA are described, including how data were collected and analyzed, and a listing of all parties with which the ABSMC collaborated to conduct the assessment is provided. Third, a description of how the ABSMC solicited and considered the input received from persons who represented the broad interests of the community served follows, including a summary of the input received, the time period in which it was received, and a listing of organizations that provided input, including the populations represented by the organization. Following, the prioritized listing of significant health needs identified through the CHNA is described, along with a description of the process and criteria used in identifying and prioritizing these needs. Next, both health outcome and health factor indicators are reviewed in detail for specific areas of the ASBMC HSA. Resources potentially available to meet these needs are identified and described next, followed by a summary of the impact of actions taken by ABSMC to address significant health needs identified in its previous CHNA, which was conducted in 2013.

Definition of the Community Served by Alta Bates Summit Medical Center

The ABSMC is located in the East Bay area of the San Francisco Bay. The three campuses primarily exist in the major metropolitan areas of Berkeley, Oakland, and Emeryville, California, located in Alameda County. The larger community served by the ABSMC was defined using ZIP code boundaries. The hospital service area (HSA) included a geographic area comprised of 24 ZIP codes. The majority of patients served by the ABSMC reside within these ZIP codes. The ABSMC HSA is depicted in Figure 1. As shown in the legend, black lines denote ZIP code boundaries that are included in the ABSMC HSA. The San Francisco Bay borders the western boundary of the HSA.

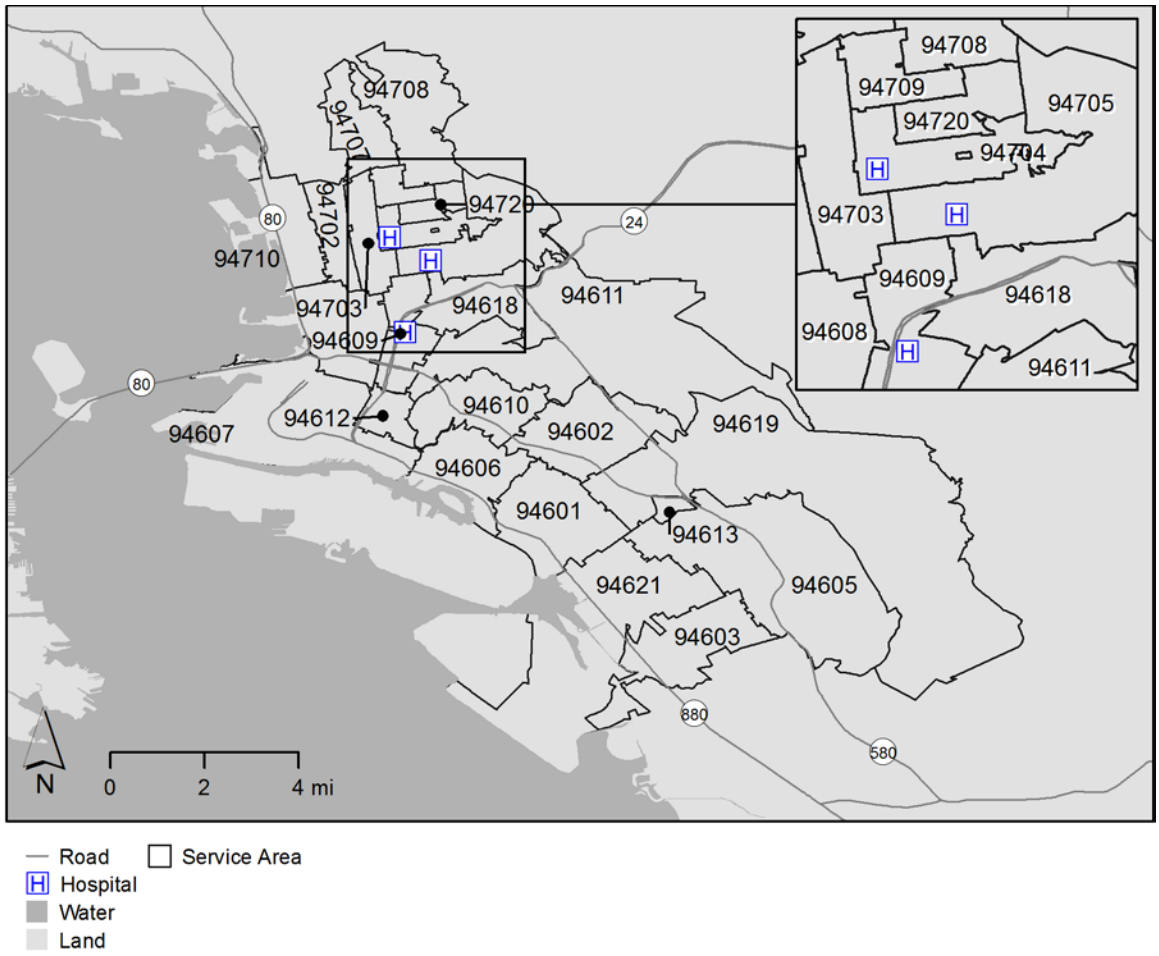


Figure 1: ABSMC HSA

General Overview of the Community

Population characteristics for each ZIP code that comprises the HSA are presented in Table 1.

As seen in Table 1, there was a wide variation between HSA residents in terms of median income, age, and diversity. The HSA was rich with diversity and home to over 500,000 community residents. Median age ranged greatly in the HSA, with ZIP codes 94613 (Mills College) 94720, and 94704 (ZIP codes around the UC Berkeley campus) having the lowest median age at around 20 years; this is in contrast to ZIP codes 94707 (Albany/Kensington) and 94705 (Claremont Canyon/Berkeley Hills) with a median age of more than double that at 50.4 and 52 years respectively. Median income also differed in the HSA area from $26,054 for ZIP code 94612 (Downtown Oakland) residents, to $140,611 for 94708 (Albany Hills). Diversity also varied greatly in the various ZIP codes, with 97% of residents in 94612 (Downtown Oakland) self-identifying as minority (Hispanic and non-White) compared to only 21.7% identifying as part of a minority group in the ZIP code 94707 (Albany/Kensington).

Table 1: Population, median age, median income and percent minority for all ZIP codes in the ABSMC HSA

ZIP Code	Population	Median Age	Median Income	Percent Minority
94601	49,279	31.9	$38,305	92
94602	28,553	41.9	$71,510	60
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Total HSA Population	**536,217**			
Alameda County		36.8	*$72,112*	*66.3%*
CA State		35.4	*$61,094*	*60.0%*

(Source: US Census, 2013)

Further examination of racial and ethnic diversity in the HSA is examined in Figure 1. Areas with index values closer to 1 indicate a population more evenly divided between race and ethnic groups. In the figure, census tracts within each ZIP code in the HSA are highlighted with different colors to show different values of the diversity index. Darker colored census tracts have a higher diversity index, and thus more diverse populations.

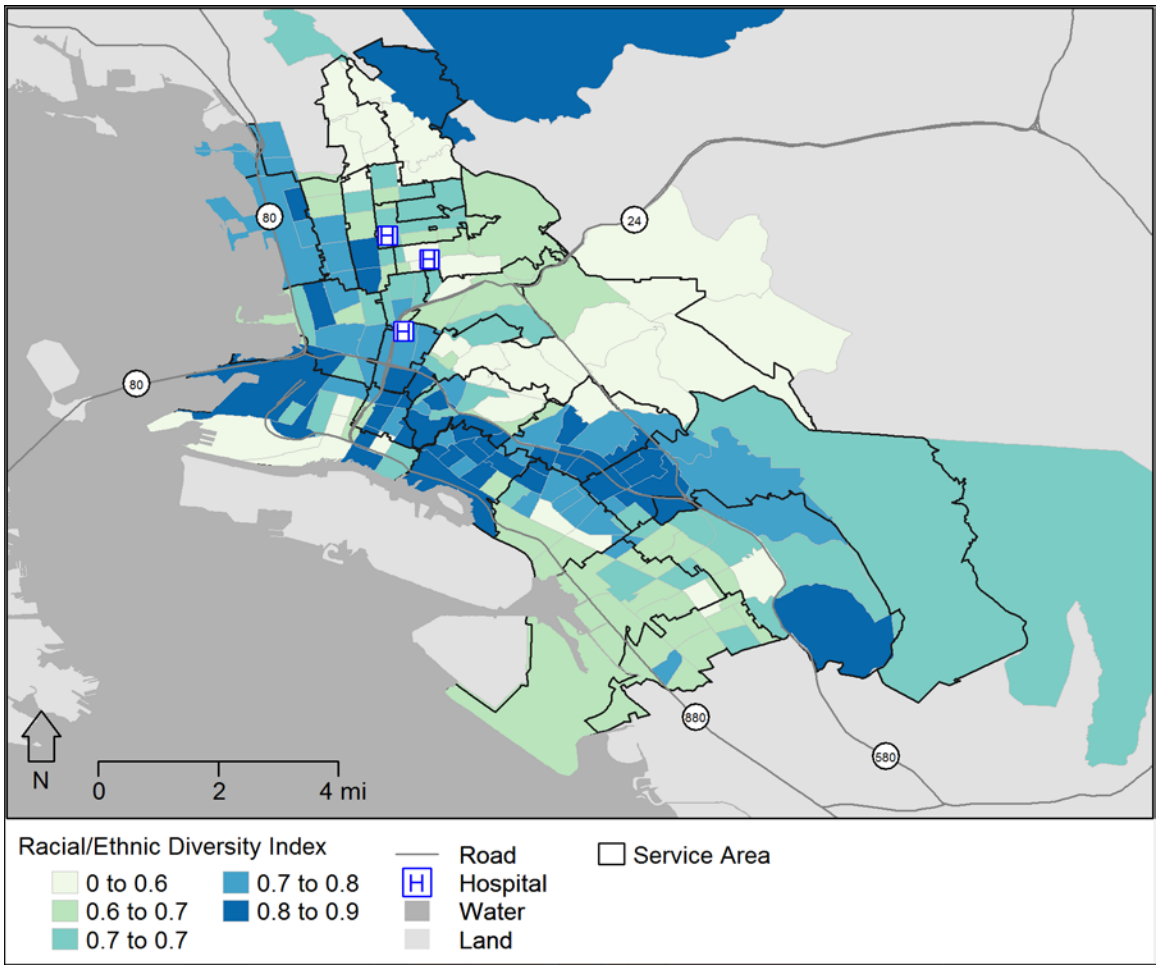

Figure 2: Diversity Index for the ABSMC HSA

Figure 2 shows that most of the ABSMC HSA is highly diverse, especially the areas of West and South Berkeley, Emeryville, West and East Oakland.

Processes and Methods

Determination of Health Status-Conceptual Model

The conceptual model used to support and organize this CHNA was based on a model of population health that is inclusive of the many factors that impact individual health and well-being. Building on the work of America's Health Rankings, the model was developed by the University of Wisconsin's Population Health Institute and is used in the Robert Wood Johnson Foundation's widely known County Health Rankings.[5] The model includes health indicators organized into Health Outcomes and Health Factors, and then further organized into smaller categories such as Morbidity and Mortality, Health Behaviors, Clinical Care, Social and Economic Factors, and the Physical Environment. Counties across the nation are then ranked based on each of the indicators in the model in an attempt to compare the health status of one county over the other. The creators of the model write:

[5] Robert Wood Johnson. (2015). *Our Approach: County Health Rankings*. Retrieved from http://www.countyhealthrankings.org/our-approach

Helping communities become healthier places to live, learn, work, and play means attending to many interrelated factors. These include health factors such as access to clinical care and improvements in healthy behaviors, such as diet and exercise, but also social and economic factors, such as neighborhood safety, employment, housing, and transit. By monitoring these factors, we can identify avenues to create and implement evidence-informed policies and programs that improve community well-being and health.[6]

The conceptual model presented in Figure 3 is a slightly modified version of the County Health Rankings Model that allowed for the organization of data for this community health assessment (for a detailed description of this organization, see Appendix A).

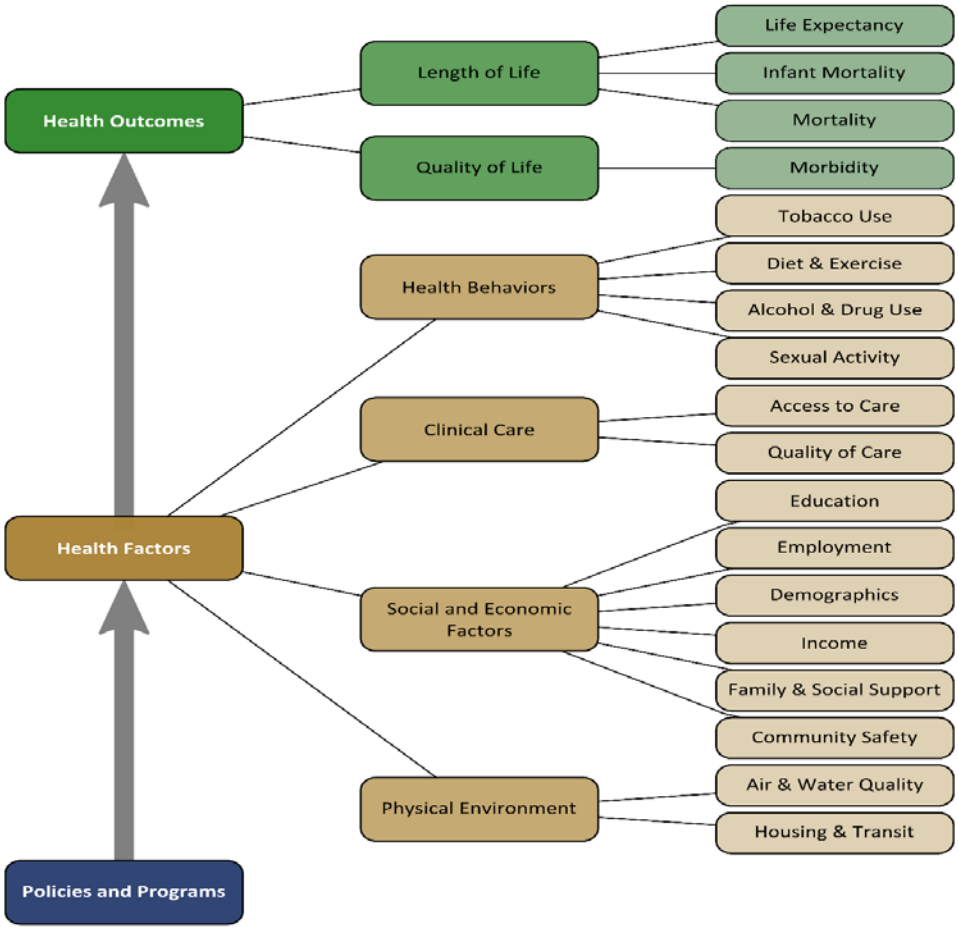

Figure 3: ABSMC Community Health Assessment Conceptual Model as modified from the County Health Rankings Model, RWJF and the University of Wisconsin, 2015.

Community Health Assessment Process Model

As illustrated in Figure 4, the project was conducted using a series of data collection and analytical stages. The project began with a definition of the HSA based on the definition used for the previous 2013 Community Health Needs Assessment. Area-wide primary and secondary data were collected for the defined HSA. Primary data were collected through interviews with area-wide service

[6] Catlin, B. (2014). The County Health Rankings: *A Treasure Trove of Data.*

providers. Secondary data included health factor and health outcome indicators described in detail in Appendix A, a list of Communities of Concern (areas experiencing disparities) identified for the HSA in the 2013 CHNA, as well as the Community Health Vulnerability Index (CHVI) values for each census tract in the HSA.

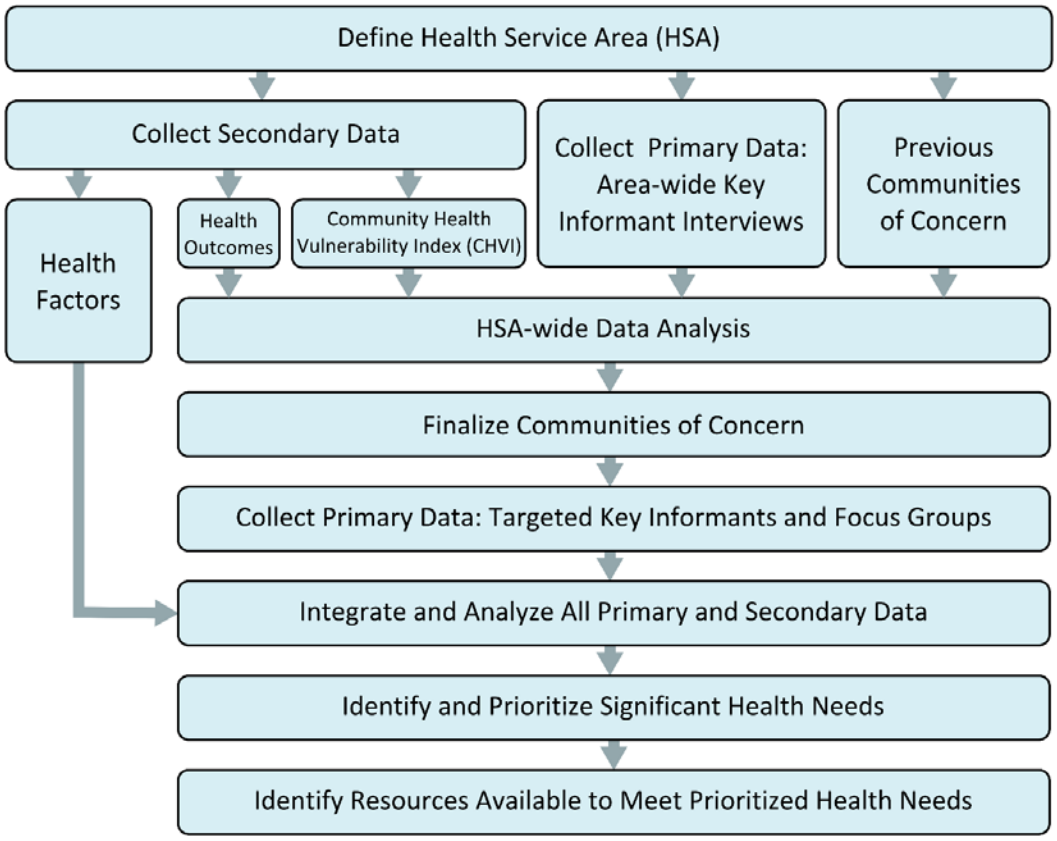

Figure 4: 2016 CHNA Process Model

Using this approach, 2016 ABSMC ZIP code Communities of Concern were defined following an analysis of secondary health outcome indicators, CHVI values, and key informant or health expert input; next focus group interviews were conducted in the ZIP code Communities' of Concern. Overall primary and secondary data for the Communities of Concern were then integrated to identify the significant health needs for the HSA. Significant health needs were then prioritized based on analysis of the primary data. Finally, resources available within the HSA to address health needs were identified.

Methods of Primary Data Collection and Processing

Input from the community was collected through two main mechanisms: key Informant interviews with community health experts and service providers and focus group discussions with community members. Instruments used in primary data collection included a participant informed consent, an interview question guide, a project summary sheet, and a reflection sheet. All participants were given an informed consent form prior to their participation, which provided information about the project, asked for permission to record the interview, and listed the potential benefits and risks for involvement in the interview (Appendix C). The interview question guide was used for both the key informant and focus group interviews (Appendix D). The project summary sheet (Appendix E) was given

to participants to provide them with information about the project as well as contact information for the CHNA staff. After the interview or focus group was conducted the facilitator captured the main findings in a reflection sheet.

Collecting Primary Data

Primary data were collected between June 2015 and October 2015.

Key informant Interviews

Key informant interviews were conducted with area service providers and experts representing the broad interests of the community who were familiar with the populations in the HSA. Primary data collection began by interviewing area-wide service providers with knowledge of the ABSMC HSA, including input from the Alameda County Public Health Department and the Berkeley City Public Health Department. Findings from the area-wide informants were combined with quantitative data showing locations of populations experiencing disparities, to identify and interview key informants with knowledge about these specific populations and locations. These targeted primary data sources were selected based on their knowledge of the needs of particular geographic locations and/or subgroups experiencing disparities. A total of 15 key informant interviews were done with 24 service providers which are listed on Appendix F. The key informant interviews were used to identity additional key service providers to include in the assessment, as well as identify specific populations that should be included in the focus group interviews.

Focus Group Interviews

Focus group interviews were conducted with community members living in geographic areas of the HSA identified as locations where residents experience a disparate amount of poor socioeconomic conditions and poor health outcomes (see Appendix X). Recruitment consisted of referrals from designated service providers representing vulnerable populations in the ABSMC HSA, as well as direct outreach from CHI to acquire input for a special population group. A total of six focus group discussions were conducted with a total of 71 community members and are listed in Appendix G.

Processing Primary Data

After each interview was completed, the interview recording was sent to a transcription service; content analysis was done on the transcriptions using NVIVO 10 Qualitative Analytical Software. Content analysis included thematic coding to potential health need categories, identification of special populations experiencing health issues, and identification of resources, as well as additional coding in accordance to the interview question guide. Results were aggregated to inform the determination of prioritized significant health needs and are presented later in this report.

Methods of Secondary Data Collection and Processing

This section serves as a brief overview of the general secondary data collection and processing approaches used to support the CHNA. Interested readers are referred to Appendix A and B for a more detailed description of the secondary data collection and processing and overall project methodology. Here, a brief overview of secondary data collection is given, followed by a general overview of several key project methodologies.

Secondary Data Collection

The conceptual model shown previously in Figure 3 was used to organize secondary data collection, which was particularly focused on identifying indicators that would illuminate those concepts organized under the health outcomes and health factor categories. A number of general principles guided the selection of secondary indicators to represent these concepts. First, only indicators associated with categories in the conceptual model were included in the analysis. Second, indicators available at a sub-county level (such as at a ZIP code or smaller level) were preferred for their utility in revealing variations within the HSA. Third, indicators were only collected from data sources deemed reliable and reputable. Finally, indicators were only collected if they were possible to acquire at a reasonable cost. Based on these criteria, the following indicators were selected.

Health Outcomes

The majority of health outcome indicators can be divided between mortality data, primarily obtained from the California Department of Public Health (CDPH), and morbidity data, primarily obtained from the California Office of Statewide Health Planning and Development (OSHPD). These input data were processed using methods described in detail in Appendix A to result in a set of specific health outcome indicators. Input CDPH data were used to develop mortality rates and broader measures of health status for each ZIP code in the HSA. Input OSHPD data were used to develop hospitalization (H) and emergency department (ED) discharge rates, as well as prevention quality indicators (PQIs), for each ZIP code in the HSA. Tables 2 and 3 list the specific indicators derived from these data sources[7].

Table 2: CDPH-derived health outcome indicators

By Cause Mortality:	Life Expectancy at Birth
Alzheimer's Disease	Years Potential Life Lost (75)
Cerebrovascular Disease (Stroke)	Age-Adjusted All-Cause Mortality
Chronic Liver Disease and Cirrhosis	Infant Mortality Rate
Chronic Lower Respiratory Disease	Low Birth Weight
Diabetes Mellitus	Female Mortality Rate
Diseases of the Heart	Male Mortality Rate
Essential Hypertension & Hypertensive Renal Disease	Teen Birth Rate*
Influenza and Pneumonia	
Intentional Self Harm (Suicide)	
Malignant Neoplasms (Cancer)	
Nephritis, Nephrotic Syndrome and Nephrosis (Kidney Disease)	
Unintentional Injuries (Accidents)	
All Other Causes	

*Indicator was not treated as a health outcome, but was included because it was derived from the same data source.

[7] Due to space constraints not all indicators that were available for analysis will be mentioned in this report.

Table 3: OSHPD-derived health outcome indicators (hospitalization and ED visits)

Breast Cancer (H/ED)	Assault (H/ED)
Colorectal Cancer (H/ED)	Self-Inflicted Injury (H/ED)
Lung Cancer (H/ED)	Unintentional Injury (H/ED)
Prostate Cancer (H/ED)	Mental Health (H/ED)
Diabetes (H/ED)	Mental Health, Substance Abuse (H/ED)*
Heart Disease (H/ED)	Asthma (H/ED)
Hypertension (H/ED)	Chronic Obstructive Pulmonary Disease (COPD) (H/ED)
Nephritis, Nephrotic Syndrome and Nephrosis (Kidney Disease) (H/ED)	Hip Fractures (H/ED)
Stroke (H/ED)	Oral Cavity/Dental (H/ED)
HIV/AIDS (H/ED)	Total ED Discharge Rate (H/ED)
STI (H/ED)	Total H Discharge Rate (H/ED)
Tuberculosis (H/ED)	PQI (H)*

*Indicator was not treated as a health outcome, but was included because it was derived from the same data source.

Morbidity indicators also included data from The Alameda County Health Consortium (ACHC). The ACHC is a private, non-profit regional association of community health centers in Alameda County serving low-income vulnerable community residents. ACHA members included eight federally qualified, independently operated non-profit community health centers that provided primary medical, behavioral health, dental care and supportive services to more than 175,000 patients throughout Alameda County. These health centers operate more than 70 clinic sites. Data included a ranked order of the principle diagnoses for all clinic encounters by residents residing in ABSMC Communities of Concern for 2014. Individual diagnoses from each encounter were aggregated to determine a total count for each ZIP code. The total number of encounters by community residents and the total corresponding primary diagnoses is listed in Table 4. By understanding the reasons HSA residents sought primary care, one can better understand the overall health conditions of residents living in Communities of Concern.

Table 4: ACHA total number of encounters for ABSMC Communities of Concern, total number of unique diagnoses, and average number of encounters per unique diagnosis

ZIP Code	Total Number of ACHC Encounters	Total Number of Unique Diagnoses	Average No. of Encounters due to a Unique Diagnosis
94602	11,395	443	25.7
94603	27,811	544	51.1
94605	20,748	537	38.6
94606	36,259	579	62.6
94607	24,360	529	46.0
94608	12,166	479	25.4
94609	7,077	409	17.3
94612	14,865	483	30.8
94621	33,471	570	58.7
94702	8,231	419	19.6
94703	8,491	422	20.1
94710	5,430	391	13.9

Health Factors

The majority of health factor indicators used in the report were obtained from the US Census Bureau. These indicators primarily focus on the sociodemographic and housing characteristics of the population within the HSA, and are listed in Table 5. Additional health factor indicators were collected from a variety of other sources, and are listed in Table 6. Interested readers are referred to Appendix A for further details as to the sources and processing steps applied to these indicators.

Table 5: U.S. Census Bureau-derived health factor indicators

Total Population	Percent Civilian Noninstitutionalized Population with a Disability
Percent Asian (not Hispanic)	Percent Over 18 Who are Civilian Veterans
Percent Black (not Hispanic)	Percent 25 or Older Without a High School Diploma
Percent Hispanic (any race)	Percent Single Female-Headed Households
Percent American Indian (not Hispanic)	Percent Unemployed
Percent Pacific Islander (not Hispanic)	Percent Uninsured
Percent White (not Hispanic)	GINI Coefficient
Percent Other Race or Two or More Races (not Hispanic)	Median Income
Percent Minority (Hispanic or non-White)	Percent Families with Children in Poverty
Racial/Ethnic Diversity Index	Percent Households 65 years or Older in Poverty
Population 5 Years or Older Who Speak Limited English	Percent Single Female-Headed Households in Poverty
Population by Age Group: 0-4, 5-14, 15-24, 25-34,45-54, 55-64, 65-74, 75-84, and 85 and over	Percent on Public Assistance
Median Age	Percent with Income Less Then Federal Poverty Level
Percent Non-Citizen	Average Population per Housing Unit
Percent Female	Percent Renter-Occupied Housing Units
Percent Foreign Born	Percent Vacant Housing Units
Percent Male	Percent Households with No Vehicle

Table 6: Remaining health factor indicators

Population Living Near a Transit Stop	Modified Retail Food Environment Index (mRFEI)
Pollution Burden	Park Access
Current Smokers	Health Professional Shortage Areas (Primary Care, Dental, Mental Health)
Binge Drinking	Major Crime Rate
Obesity	Traffic Accidents Resulting in Fatalities
Food Deserts	

Community Health Vulnerability Index (CHVI)

A subset of the demographic Health Factor indicators (shown in Table 7) was also used to create the Community Health Vulnerability Index (CHVI), a composite index used to help understand the distribution of health disparities within the HSA. Like the *Community Needs Index (CNI)*[8] on which it was based, the CHVI combines multiple sociodemographic and housing indicators to help identify those locations experiencing greater health disparities. The CHVI differs from the CNI in the manner in which its indicators are combined. Higher CHVI values indicate a greater concentration of groups supported in the literature as being more likely to experience disparities. Interested readers are referred to Appendix A for further details as to its construction.

Table 7: Indicators included in the CHVI

Percent Minority (Hispanic or non-White)	Percent Families with Children in Poverty
Population 5 Years or Older who speak Limited English	Percent Households 65 years or Older in Poverty
Percent 25 or Older Without a High School Diploma	Percent Single Female-Headed Households in Poverty
Percent Unemployed	Percent Renter-Occupied Housing Units
Percent Uninsured	

Report Processes

The analytical processes for this CHNA were designed with care to allow for a tight integration of both qualitative and quantitative data sources. This integration allowed the strength of each approach to buttress the weakness in the other. Secondary quantitative data is useful because it provides a broad and consistently defined view of conditions within the HSA. But its use is limited based on data availability; also, because it lacks the context necessary to provide true understanding, and because its collection is planned ahead of time, it is less useful in identifying emerging trends. While primary qualitative data can sometimes be anecdotal and strongly influenced by the sources from which it is derived, when done well it excels in providing needed context, an understanding of lived experiences, and an ability to detect new, unanticipated trends or concepts. The sections that follow describe how qualitative and quantitative data were integrated in key CHNA processes -- identifying Communities of Concern, and identifying and prioritizing significant health needs.

Identifying Communities of Concern

A key element of the CHNA methodology is the identification of Communities of Concern, geographic areas or population sub-groups within the HSA that have the greatest concentration of poor health outcomes and are home to more medically underserved, low income and diverse populations at greater risk for poorer health. Communities of Concern are important to the overall CHNA methodology because, after assessing the HSA more broadly, they allow for a focus on those portions of the HSA likely experiencing the greatest health disparities.

Geographic Communities of Concern were identified using a combination of primary and secondary data sources. A general description of this process is provided here; interested readers are referred to Appendix B for a more in-depth description. Four secondary data factors were considered in determining if ZIP codes within the HSA would be identified as geographic Communities of Concern:

[8] Barsi, E. and Roth, R. (2005) The Community Needs Index. *Health Progress*, Vol. 86, No. 4, pp. 32-38.

whether or not they were included as Communities of Concern identified in the 2013 CHNA; if they intersected Census tracts with CHVI scores within the highest 20% in the HSA; and if they consistently had among the highest morbidity and mortality indicator values in the HSA. ZIP codes that met at least two of these four criteria were combined with the list of geographic locations consistently mentioned in initial area-wide primary data to result in a final set of geographic Communities of Concern. Population subgroups of concern were identified solely based on the results of primary data.

Identifying Significant Health Needs

A major requirement of the CHNA was the identification of significant health needs. A general description of the process used in this report is given here; interested readers are referred to Appendix B for a more detailed description.

Significant health needs were identified through an integration of both qualitative and quantitative data. The process began by generating a broad list of 10 potential health needs that could exist within the HSA. This list was based on health needs identified in previous Sutter East Bay reports during the 2013 CHNA process, as well as a preliminary review of primary data. Once this list was created, both quantitative and qualitative indicators associated with each potential health need were identified in a crosswalk table. While all of these needs exist within the HSA to a greater or lesser extent, the purpose here was to identify those which were most significant.

Rates for those secondary indicators associated with the potential health needs were reviewed for each Community of Concern to determine which indicators were consistently problematic within the HSA. Next, this set of problematic indicators was compared, via the crosswalk table, to the potential health needs to select a subset of potential health needs for consideration as significant health needs. Primary data sources were also analyzed using the crosswalk table to identify potential health needs for consideration as significant health needs. The results from the primary and secondary potential health needs analyses were then merged to create a final set of significant health needs. (For a more detailed explanation of the processes used to identify significant health needs see Appendix B).

Prioritizing Significant Health Needs

Once significant health needs were identified through the process described above, they were prioritized based on an analysis of primary data. The percent of all primary data sources that referenced each health need and the average number of times health need was mentioned by all sources were measured, and the significant health needs were ranked based on a combination of these measures. The significant health need with the highest combined value was identified as having the highest priority, that with the second highest value, the second priority, and so on to the significant health need with the lowest combined values given the lowest priority.

Findings

Communities of Concern

Analysis of both primary and secondary data revealed 13 ZIP codes that met the criteria to be classified as a Community of Concern. These are noted in Table 8, with the census population provided for each, and are further displayed in Figure 5.

Table 8: Identified Communities of Concern for the ABSMC HSA

ZIP Code	***Community/Area****	***Population***
94601	East Oakland/Fruitvale	49,279
94602	Oakland/Glenview	28,553
94603	East Oakland/Brookefield	32,977
94605	East Hills Oakland/Zoo	42,639
94606	Oakland/Cleveland Heights	36,214
94607	West Oakland/Jack London	25,107
94608	Emeryville	26,288
94609	Oakland/MLK	21,210
94612	Downtown Oakland	13,816
94621	East Oakland	31,833
94702	Northwest Berkeley	16,324
94703	Northwest Berkeley	21,281
94710	West Berkeley/Marina	6,478
Total Population in Communities of Concern		**351,999**
Total Population in the HSA		**536,217**
Percent of the HSA		**65.6%**

(Source: US Census, 2013)

* ZIP code and community area name is approximate here and throughout the report.

Interviews with community health experts agreed with the findings of these secondary data. When asked to identify areas within the HSA with significant, unmet health needs, almost 60% of key informants identified East Oakland, West Oakland, South and East Berkeley, and Emeryville as geographical areas with extensive health disparities and social needs. Experts referred to these areas as the “flatlands.”

Figure 5 displays the ABSMC ZIP code Communities of Concern with diagonal hash marks denoting them from the rest of the HSA area.

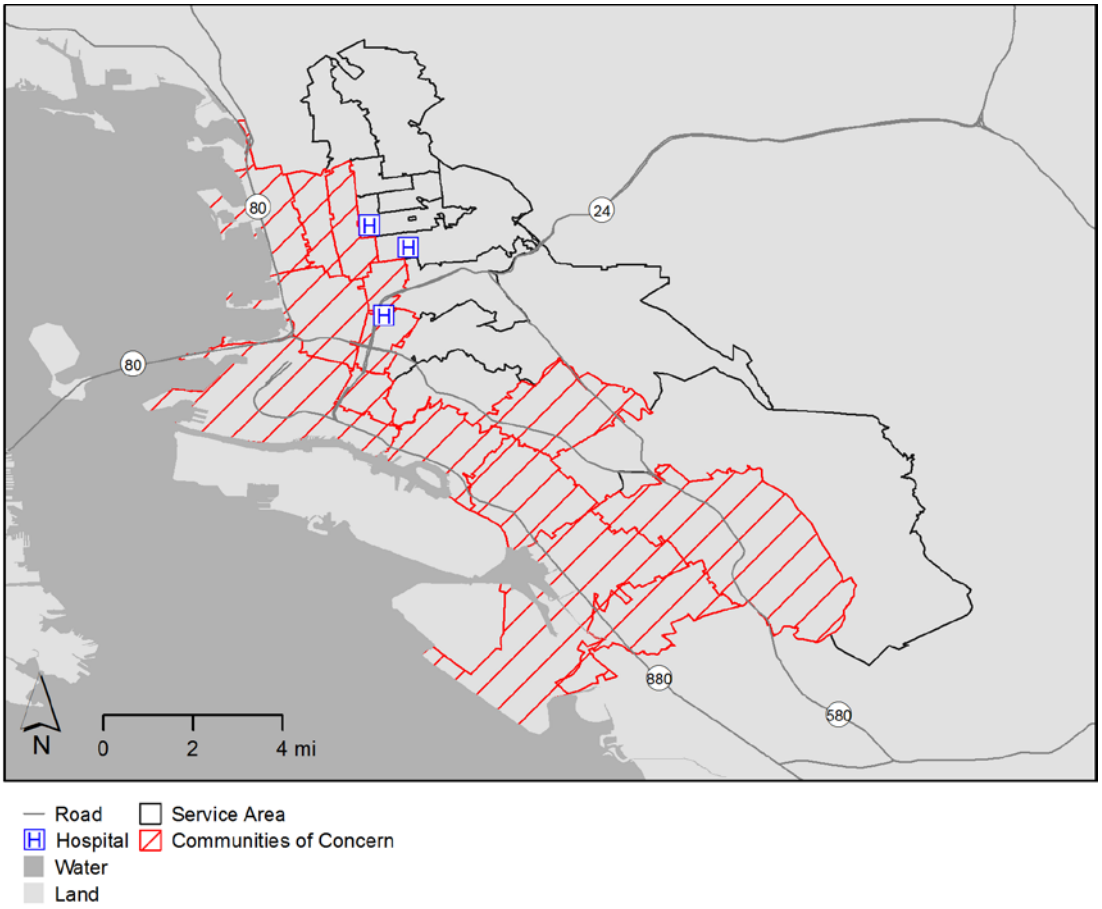

Figure 5: Communities of Concern in the ABSMC HSA

The Community Health Vulnerability Index for Communities of Concern

As described previously in this report, the CHVI assists in the identification of geographical areas through the HSA that may be experiencing health disparities based on socioeconomic drivers of poor health outcomes. The CHVI results for the ABSMC HSA are presented in Figure 6 with the identified Communities of Concern denoted by the diagonal lines.

Examination of vulnerability within the HSA showed drastic differences between census tracts. As can be seen clearly in Figure 6, many ZIP codes contained census tracts in the "most vulnerable" category of the CHVI ranking[9]. This was especially true for the ZIP code areas of 94607 (West Oakland/Jack London), 94608 (Emeryville), 94606 (Oakland/Cleveland Heights), 94601 (East Oakland/Fruitvale), 94621 (East Oakland), and 94612 (Downtown Oakland). All ZIP codes containing census tracts with high CHVI index values will be examined in this report as an ABSMC ZIP code Community of Concern.

[9] The CHVI is calculated so that its values represent relative levels of vulnerability, and its numbers vary based on the areas for which it is calculated. What is most important in interpreting the CHVI is not the actual numbers, but their relative ranking, where higher values are associated with higher "vulnerability" (or disadvantage), and lower values with lower vulnerability.

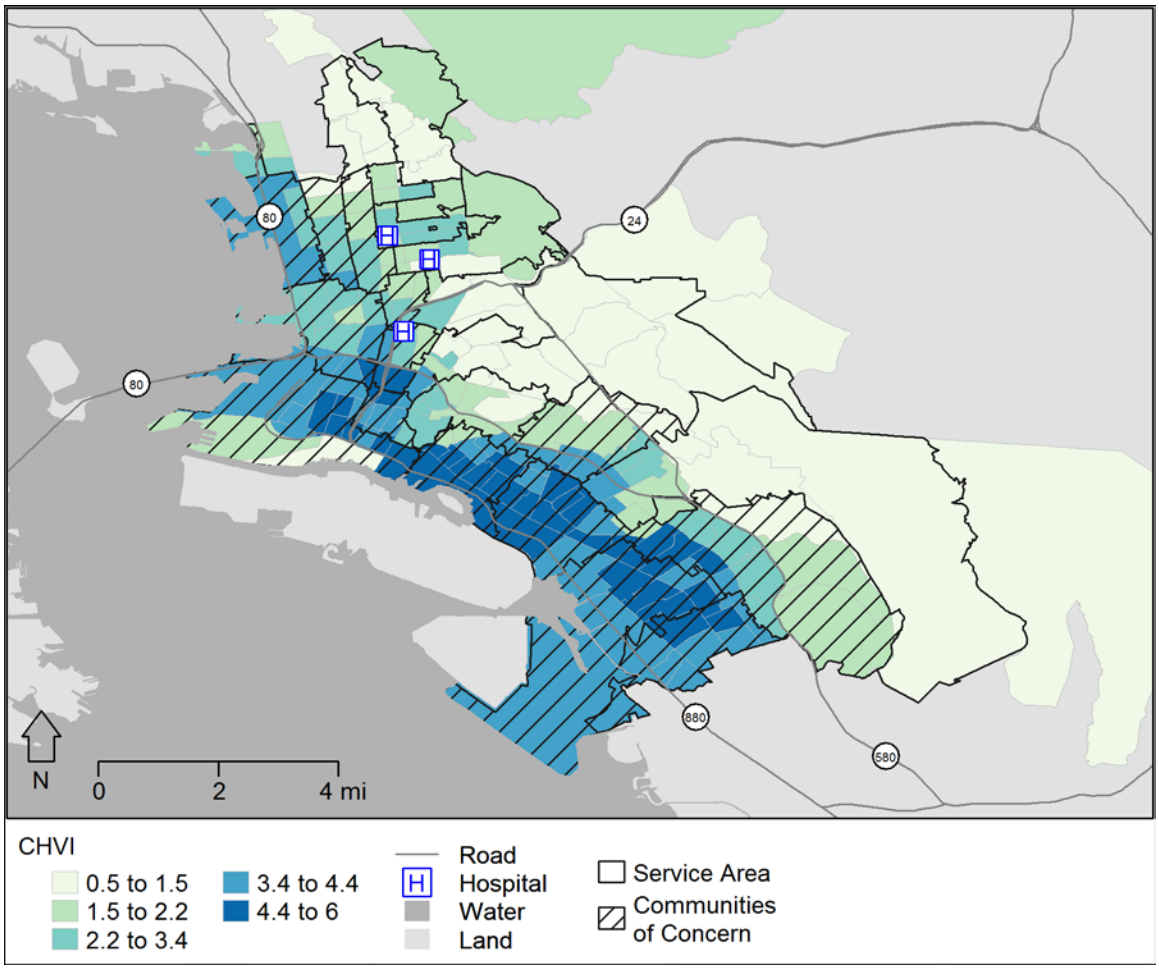

Figure 6: CHVI for the ABSMC HSA

Specific Populations Experiencing Disparities in Communities of Concern

When community health experts were asked to identify specific populations residing in communities experiencing health disparities, they consistently cited Hispanic/Latino and African American residents. Among these groups, African Americans were consistently noted as the group experiencing the most significant health disparities. One key informant put it succinctly: *"African Americans top most of our indicators in terms of poor health"* (KI_2). Results also indicated that participants specifically noted West and East Oakland, and South and East Berkeley as geographical areas with extensive social needs and health disparities.

Prioritized, Significant Health Needs in Communities of Concern

Figure 7 displays the six significant health needs for the HSA in prioritized order. Prioritization was based on a combination the percent of all primary data sources that referenced the PHN as a current, significant health need, shown by the blue portion of the bar, and the average number of times the PHN was referenced across all primary data sources, shown in the red portion of the bar.

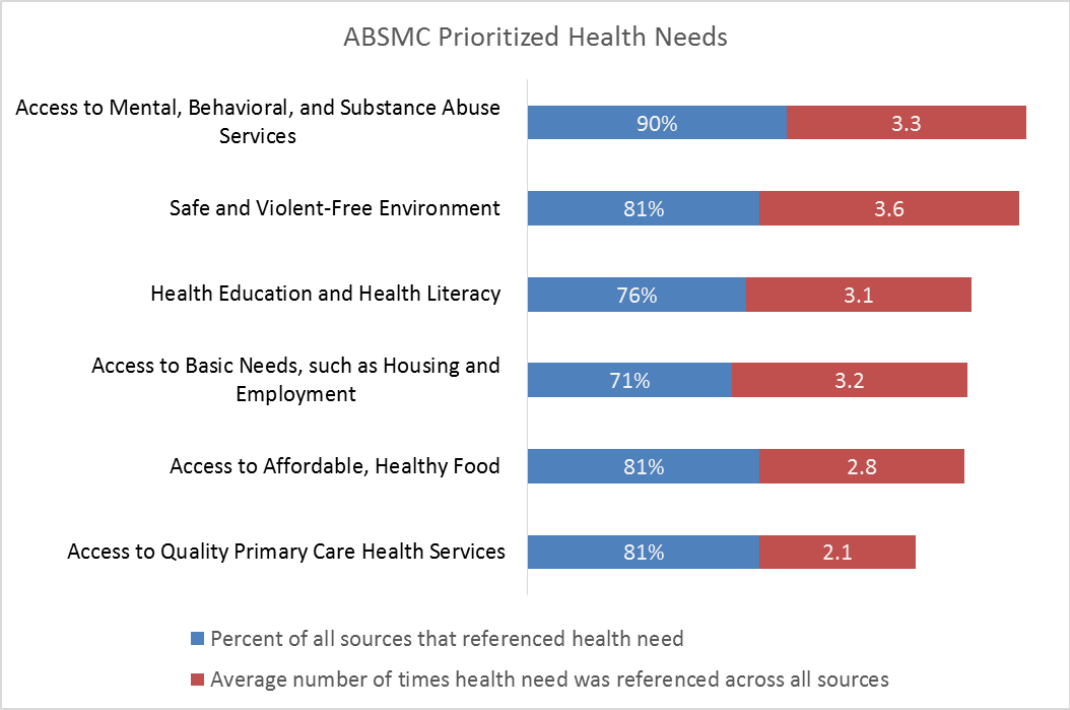

Figure 7: Prioritized significant health needs for ABSMC Communities of Concern

Each SHN is described in greater detail below. Quantitative indicators that had undesirable rates in at least 75% of the Communities of Concern are listed below, each corresponding to a significant health need. Qualitative themes that emerged under each SHN are also provided.

1. Access to Mental, Behavioral, and Substance Abuse Services

The highest priority significant health need for the ABSMC HSA was access to mental, behavioral, and substance abuse services. Individual health and well-being are inseparable from individual mental and emotional outlook. Coping with daily life stressors is challenging for many people, especially when other social, familial, and economic challenges also occur. Adequate access to mental, behavioral, and substance abuse services helps community members to obtain additional support when needed.

Quantitative Indicators	Qualitative Themes
• Mental health ED visits • Mental health hospitalizations • Substance abuse ED visits • Substance abuse hospitalizations • Self-injury ED visits • Health Professional Shortage Area--Mental Health	• Exposure to violence in the home and community • Trauma related to exposure to violence leads to behavior issues in school. • Need for trauma informed care in all health related services • Prescription drug abuse • Individual stress collectively adds to create community stress • Extreme financial hardship makes coping difficult, especially in high-cost areas • Community norms of substance use for self-medication • Depression and substance abuse commonly mentioned • Culturally competent mental health treatment needed for victims of violence and homeless populations

2. Safe and Violent-Free Environment

The second highest priority significant health need for the ABSMC HSA was safe and violence-free environments. Feeling safe in one's home and community are fundamental to overall health. Next to having basic needs met (food, shelter, clothing) is physical safety. Feeling unsafe affects the way people act and react to everyday life occurrences.

Quantitative Indicators	Qualitative Themes
• Mental health ED visits • Mental health hospitalizations • Substance abuse ED visits • Substance abuse hospitalizations • Assault ED visits • Assault hospitalizations • Fatal traffic accidents • Major crime	• Frequent exposure to violence in the family and community, especially for youth • Need for trauma-informed care in youth services • Need for providers who are trained to care for people traumatized by violence in their homes and community. • Lack of walkable community spaces due to safety concerns • Unsafe places to play like parks and open areas • Lack of engagement in outdoor physical activity in the community and at local parks due to safety concerns

3. Access to Affordable, Healthy Food

The third highest priority significant health need for the ABSMC HSA was access to affordable, healthy foods. Eating a healthy diet is extremely important for one's overall health and well-being. When access to healthy foods is challenging for community residents, many turn to unhealthy foods that are convenient, affordable, and readily available. Communities experiencing social vulnerability and poor health outcomes often are overloaded with fast food and other establishments where unhealthy food is sold.

Quantitative Indicators	Qualitative Themes
• Diabetes ED visits • Heart disease ED visits • Hypertension ED visits • Hypertension hospitalizations • Kidney disease ED visits • Kidney disease hospitalizations • Stroke ED visits • Stroke hospitalizations • USDA-defined food deserts	• Lack of access to healthy affordable foods in the community • More liquor stores than grocery stores • Eating unhealthy food affects mental health and daily coping mechanisms • Knowledge on how to make healthier choices and prepare healthier foods is vital • Need transportation to get to grocery stores selling healthy food • Many grocery stores in low income communities are culturally specific • Feeling unsafe in your community means less traveling to the grocery store for healthy food, and rely on what is close and convenient • Healthy food in schools important • Garden programs and farm-to-school programs work

4. Health Education and Health Literacy

The fourth highest priority significant health need for the ABSMC HSA was access to health education and health literacy. Knowledge is important for individual health and well-being, and health education interventions are powerful tools to improve community health. When community residents lack adequate information on how to prevent, manage, and control their health conditions, those conditions

tend to worsen. Health education around infectious disease control (e.g. STI prevention, influenza shots) and intensive health promotion and education strategies around the management of chronic diseases (e.g. diabetes, hypertension, obesity, and heart disease) are important for community health improvement. Health literacy pertains to the extent that people have the knowledge and ability to obtain, process and understand health information and services needed to make appropriate health decisions.[10] 2 Health knowledge and education is important, but equally important is health literacy where the people have the knowledge and ability to understand such health information and are able to navigate the health care system.

Quantitative Indicators	Qualitative Themes
• Smoking rates - County • HIV/AIDS ED visits • HIV/AIDS hospitalizations • STI ED visits • STI hospitalizations • Unintentional injuries ED visits • Unintentional injuries hospitalizations • Diabetes ED visits • Heart disease ED visits • Hypertension ED visits • Hypertension hospitalizations • Kidney disease ED visits • Kidney disease hospitalizations • Stroke ED visits • Stroke hospitalizations	• Diabetes and high cholesterol may be preventable with healthy lifestyles • Education on how to cook healthy foods • People need information, education and skills for self-care • Health education and health literacy on how to navigate the health care system • Alternative approaches to health education are important

5. Access to Basic Needs, such as ~~H~~ousing and Employment

The fifth highest priority significant health need for the ABSMC HSA was access to basic needs such as housing and jobs. Access to affordable and clean housing, stable employment, quality education, and adequate food for health maintenance are vital for survival. Maslow's Hierarchy of Needs[11] states that only when members of a society have their basic physiological and safety needs met can they then become engaged members of society and self-actualize or live to their fullest potential, including their health.

[10] Almader-Douglas, D. (2013). Health Literacy. National Network of Libraries of Medicine. Retrieved from https://nnlm.gov/outreach/consumer/hlthlit.html

[11] McLeod, S. (2014). *Maslow's Hierarchy of Needs*. Retrieved from: http://www.simplypsychology.org/maslow.html

Quantitative Indicators	Qualitative Themes
• Life expectancy at birth • Median household income • Percent below federal poverty level • Percent renting	• Stress of poverty • Housing stability is crucial for the HSA • Housing in the area is expensive • Gentrification of the area pushing families out of the area • Employment and job security is vitally important for health • Homelessness as a public health issue • Homelessness costs the healthcare system • Poverty is at the root of poor health outcomes • Lower income jobs more vulnerable to shifts in the economy • Highest county foreclosure rates among Latinos and African-Americans

6. Access to Quality Primary Care Health Services

The sixth highest priority significant health need for the ABSMC was access to quality primary care health services. Primary care resources include community clinics, pediatricians, family practice physicians, internists, nurse practitioners, pharmacists, telephone advice nurses, and similar. Primary care services are typically the first point of contact when an individual seeks healthcare. These services are the front line in the prevention and treatment of common diseases and injuries in a community.

Quantitative Indicators	Qualitative Themes
• Total ED visits (utilization) • Total hospitalizations (utilization) • Percent uninsured	• Long wait times for a primary care appointment • Insurance coverage does not equate access to care • Not enough providers to cover the newly-insured • Lack of transportation to primary care providers • Need for more racially and ethnically diverse healthcare workers • Need to recruit providers to work in community clinics • Issues of quality of care in the primary care setting

Health Outcomes in Communities of Concern -- Length of Life and Quality of Life

Examination of health outcomes in the assessment included measures of morbidity and mortality. The conditions examined included the major categories of chronic disease, mental health, unintentional injury, cancer, respiratory health and dental health. In addition, all-cause mortality, infant mortality and life expectancy at birth are also detailed. Data examined includes CDPH mortality data by ZIP code, OSHPD ED visits and hospitalizations by condition, and primary care visits by ZIP code from the Alameda Health Consortium Clinics (8 members and 70 clinic sites).

Overall Health Status (Age-Adjusted Morality, Infant Mortality, and Life Expectancy at Birth)

Various quantitative indicators help to provide information about what it feels like to live in a community on an everyday basis. Though specific measures of mortality tell us how community members suffered related to specific conditions, in which interventions are designed to focus specifically on the prevention and/or treatment for that cause, overall health status indicators communicate length of life, quality of life, socioeconomic factors and the intersection of the environment and personal behaviors. Table 9 examines three common overall health status indicators: age-adjusted all-cause

mortality, infant mortality, and life expectancy at birth for each of the ABSMC Communities of Concern. NOTE: In this table, and all that follow, any indicator that exceeded any benchmark is highlighted.

Table 9: Overall health status indicators: Age-adjusted all-cause mortality, infant mortality, and life expectancy at birth compared to county, state, national and Healthy People 2020 benchmarks.

	ZIP Code	Age-Adjusted All-Cause Mortality (per 10,000 pop)	Infant Mortality Rate (per 1,000 live births)	Life Expectancy at Birth (years)
Overall Health Status Indicators	94601	73.6	4.9	78.0
	94602	63.4	5.1	81.3
	94603	74.4	4.7	76.6
	94605	75.3	5.3	78.5
	94606	61.9	4.7	80.7
	94607	75.8	4.9	78.0
	94608	63.0	4.6	77.9
	94609	71.2	4.7	78.8
	94612	68.7	4.6	79.5
	94621	87.0	6.5	75.7
	94702	61.5	4.5	80.5
	94703	63.0	4.3	81.2
	94710	65.0	--	80.0
	Alameda County	*61.6*	*4.5*	*81.3*
	CA State	*64.6*	*4.9*	*80.5*
	National 2013			*78.8*[12]
	Healthy People 2020 Target		*6.0*[13]	

(Source: CDPH, 2010-2012)

Examination of the overall status indicators showed that ZIP code 94621 (East Oakland) had the poorest rates of any other Community of Concern in the ABSMC HSA. These ZIP codes' rate for age-adjusted, all-cause mortality sits clearly above the other ZIP codes at 87.03 deaths per 10,000 -- drastically higher than the next highest rate of 75.78 deaths per 10,000 in ZIP code 94607 (West Oakland/Jack London), the county benchmark at 61.63 deaths per 10,000, and the state benchmark at 64.59 deaths per 10,000. Twelve of the 13 ZIP codes showed rates above the county benchmark and eight of 13 had rates above the state benchmark.

Additionally, the infant mortality rate for 94621 (East Oakland) sits at 6.52 deaths per 1,000 live births -- over the county, state and Healthy People 2020 Targeted benchmarks. Eleven of the 13 ZIP

[12] Centers for Disease Control and Prevention. (2015). *Deaths: Final data for 2013*. Retrieved from: http://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64_02.pdf

[13] Office of Disease Prevention and Health Promotion. (2014). *Maternal, Infant and Child Health*. Retrieved from: https://www.healthypeople.gov/2020/leading-health-indicators/2020-lhi-topics/Maternal-Infant-and-Child-Health/data

codes have rates above the county benchmark for infant mortality, though only 94621 is above the Healthy People 2020 Target.

Life expectancy at birth has gained notoriety in recent "place matters" campaigns.[14] These campaigns note that where someone lives can be a predictor of length of life. Life expectancy at the national level currently sits at 78.8 years, both the California state rate and Alameda County rate for life expectancy are better than the national level. However, seven of the 13 ZIP codes had rates lower than the national benchmark, meaning people live fewer years in these areas than the national average. ZIP code 94621 (East Oakland) had a life expectancy rate of 75.69, about three fewer years than the national average.

Chronic Diseases (Diabetes, Heart Disease, Stroke, Hypertension, and Kidney Disease)

Chronic diseases, specifically diabetes, heart disease, stroke, hypertension, and kidney disease are among the top leading causes of death in the nation[15]. These were commonly mentioned as health conditions that ABSMC residents struggled with. An evaluation of quantitative data also revealed clear geographical disparities for these outcomes. Data for these conditions in the Communities of Concern is provided.

Diabetes

Table 10 displays rates of mortality, ED visits, and hospitalizations due to diabetes, as well as primary care community clinic data rankings for each Community of Concern. The ACHA rank shows the ranking among all reasons community residents of each ZIP code visited a consortium clinic during 2014, where a ranking of one indicates the top reason (diagnosis) among all diagnoses and two, the second most common diagnosis from that ZIP code, and so on.

Nine of the 13 Communities of Concern had mortality rates at or above the state benchmark for mortality due to diabetes. ZIP code 94606 (Oakland/Cleveland Heights) had a mortality rate of 3.0, more than one and one-half times the county and state rate. Moreover, all 13 ZIP codes had rates of ED visits due to diabetes that exceeded the state benchmark. ZIP code 94612 (Downtown Oakland) had a rate of 632.9, more than three times the state rate of 210.9. Lastly, 10 of the 13 Communities of Concern had rates that exceeded the county benchmark for hospitalizations due to diabetes, with the highest rate in 94612 (Downtown Oakland) at 310.8 hospitalizations per 10,000 people.

Data from the Alameda Health Consortium clinics (eight partners and 70 clinics) showed that diabetes is a primary reason why residents in three of the 13 Communities of Concern sought care. For the rest of the ZIP codes, diabetes was the second or third reason for visiting a consortium clinic.

[14] Policy Link. (2007) *Why Place Matters: Building a Movement for Healthy Communities*. Retrieved from: http://www.policylink.org/sites/default/files/WHYPLACEMATTERS_FINAL.PDF

[15] Centers for Disease Control and Prevention. (2015). *Leading causes of death*. Retrieved from: http://www.cdc.gov/nchs/fastats/leading-causes-of-death.htm

Table 10: Mortality, ED visit, and hospitalization rates for diabetes compared to county, state, and Healthy People 2020 benchmarks (rates per 10,000 population) and ACHA rank

	ZIP Code	Mortality	ED Visits	Hospitalizations	ACHA Rank
Diabetes	94601	2.8	393.8	230.1	2
	94602	2.7	286.7	179.2	3
	94603	2.0	450	251.7	3
	94605	2.8	478.5	252.6	1
	94606	3.0	301.5	177.9	3
	94607	2.2	432.6	237.8	2
	94608	2.0	414.1	219.1	2
	94609	2.5	356.5	212.8	2
	94612	2.9	632.9	310.8	2
	94621	2.5	510.6	277.4	3
	94702	1.7	386.8	187.2	2
	94703	2.6	267.7	149.1	1
	94710	--	366.3	176.1	1
	Alameda County	*2.3*	*273.1*	*178.4*	
	CA State	*2.1*	*210.9*	*194.0*	
	Healthy People 2020	*6.6*	--	--	

(Sources: Mortality: CDPH, 2012; ED visits and hospitalizations: OSHPD, 2011-2013; ACHA rank: ACHC, 2014)

Key informants and community members consistently mentioned diabetes as a main health condition among community members. Service providers stated that community members present with pre-diabetes, gestational diabetes, or diabetes, and struggle with how to manage their condition. Some participants also stressed that community residents need more health education about how to manage their diabetes saying, "*Any patient that comes in I feel that they are not getting educated by their primary care physicians" (KI_4).*

Heart Disease

Heart disease is the leading cause of death in the nation for individuals under the age of 85; it includes a number of different types of heart-related conditions, with coronary heart disease the most common and a major cause of heart attacks. More than 600,000 people die of heart disease each year. [16] Key informants and community members mentioned heart disease and high cholesterol as common conditions for area residents. Table 11 examines rates for mortality, ED visits, and hospitalizations due to heart disease.

All 13 Communities of Concern exceeded Healthy People 2020 benchmarks for mortality due to heart disease. Nine of the 13 ZIP codes had mortality rates above the county benchmark at 12.3. The mortality rate in 94612 (Downtown Oakland) was drastically higher than all three benchmarks. All 13 ZIP code rates of ED visits due to heart disease were above the state benchmark, and ten ZIP codes had rates higher than the county rate. ZIP code 94612 (Downtown Oakland) had the highest rate at 169.6 ED visits, versus the state rate of 70.8 and the county rate of 95.4 visits. Further, four of the 13 ZIP codes

[16] Centers for Disease Control and Prevention. (2015). *Heart Disease Facts*. Retrieved from: http://www.cdc.gov/heartdisease/facts.htm

rates exceeded both county and state benchmarks for hospitalizations due to heart disease, with ZIP code 94612 (Downtown Oakland) the highest with a rate of 306.8.

Table 11: Mortality, ED visit and hospitalization rates for heart disease compared to county, state, and Healthy People 2020 benchmarks (rates per 10,000 population)

	ZIP Code	Mortality	ED Visits	Hospitalizations
Heart Disease	94601	10.3	80.0	106.3
	94602	18.6	96.3	124.0
	94603	10.6	98.1	131.6
	94605	18.6	121.6	148.7
	94606	14.3	89.8	100.2
	94607	19.0	100.4	117.7
	94608	14.4	130.6	136.4
	94609	10.6	109.3	122.6
	94612	25.0	169.6	306.8
	94621	14.1	102.4	131.4
	94702	17.0	147.6	141.9
	94703	12.6	81.8	95.2
	94710	14.3	150.2	119.3
	Alameda County	*13.2*	*95.4*	*132.2*
	CA State	*15.8*	*70.8*	*143.0*
	Healthy People 2020	*10.1*	--	--

(Sources: Mortality: CDPH, 2012; ED visits and hospitalizations: OSHPD, 2011-2013)

Stroke, Hypertension and Kidney Disease

Stroke was the fifth leading cause of death at the national level in 2013.[17] Approximately 800,000 people have a stroke each year, with the most common type those which restrict blood flow to the brain.[18] Tobacco smoking and hypertension drastically increase risk for stroke. Hypertension is common in approximately 1 out of every 3 adults.[19] Both stroke and hypertension are discussed together here. Hypertension also increases risk for kidney diseases, along with heart disease and diabetes. Tables 12, 13, and 14 examine mortality, ED visits, and hospitalizations related to stroke, hypertension, and kidney disease.

[17] Centers for Disease Control and Prevention. (2015). *Leading Causes of Death*. Retrieved from: http://www.cdc.gov/nchs/fastats/leading-causes-of-death.htm

[18] Centers for Disease Control and Prevention. (2015). *Stroke Facts*. Retrieved from: http://www.cdc.gov/stroke/facts.htm

[19] Centers for Disease Control and Prevention. (2015). *Blood Pressure Facts*. Retrieved from: http://www.cdc.gov/bloodpressure/facts.htm

Table 12: Mortality, ED visit, and hospitalization rates for stroke compared to county, state, and Healthy People 2020 benchmarks (rates per 10,000 population)

	ZIP Code	Mortality	ED Visits	Hospitalizations
Stroke	94601	3.2	34.4	69.3
	94602	4.0	46.0	73.1
	94603	2.2	39.9	75.1
	94605	5.0	52.5	87.0
	94606	2.6	37.2	67.4
	94607	5.2	43.17	91.8
	94608	4.0	53.8	78.9
	94609	4.7	42.5	83.3
	94612	4.4	60.1	118.6
	94621	3.3	43.2	81.4
	94702	3.9	40.2	75.8
	94703	2.9	31.4	55.7
	94710	4.0	35.5	68.6
	Alameda County	*3.8*	*34.5*	*62.1*
	CA State	*3.6*	*20.3*	*56.1*
	Healthy People 2020	*3.4*	--	--

(Sources: Mortality: CDPH, 2012; ED visits and hospitalizations: OSHPD, 2011-2013)

When examining mortality due to stroke, eight of the 13 Communities of Concern exceeded county, state, and Healthy People 2020 benchmarks. All Communities of Concern exceeded the state benchmarks for ED visits and hospitalizations due to stroke, and 11 of the 13 also exceeded the county benchmark. ZIP code 94612 (Downtown Oakland) had the highest rate for both ED visits and hospitalizations of any of the ZIPS, with rates almost twice the state benchmarks.

Table 13: Mortality, ED visit and hospitalization rates for hypertension compared to county and state benchmarks (rates per 10,000 population) and ACHC rank

	ZIP Code	Mortality	ED Visits	Hospitalizations	ACHC Rank
Hypertension	94601	1.5	704.9	413.2	4
	94602	1.5	685.6	403.5	1
	94603	1.6	876.9	483.6	4
	94605	1.5	1,029.6	534.9	3
	94606	1.4	682.4	365.0	1
	94607	2.2	1,012.5	518.8	1
	94608	1.5	989.5	464.2	1
	94609	1.5	818.7	437.8	1
	94612	2.1	1,499.2	743.4	1
	94621	1.5	901.5	472.7	4
	94702	1.1	795.0	419.1	1
	94703	1.1	586.1	312.3	2
	94710	1.3	916.3	366.0	2
	Alameda County	--	*581.6*	*365.9*	
	CA State	*1.2*	*412.6*	*387.2*	

(Sources: Mortality: CDPH, 2012; ED visits and hospitalizations: OSHPD, 2011-2013; ACHC rank: ACHC, 2014)

Eleven out of the 13 ZIP code Communities of Concern had rates that exceeded the state mortality benchmark. All 13 ZIP code Communities of Concern had rates drastically higher than both the county and state benchmarks for ED visits, with the highest rates in 94612 (Downtown Oakland) at 1,499.2 visits and in 94605 (East Oakland/Oakland Zoo), with 1,029.6 visits; these are three and two times higher than the benchmarks, respectively. Twelve of the 13 ZIP code Communities of Concern had rates above the county and state benchmarks, with the highest rate also in 94612 (Downtown Oakland) at 743.4 hospitalizations per 10,000.

Data from the Alameda Health Consortium clinics showed that hypertension (high blood pressure) was a primary reason why residents in seven of the 13 Communities of Concern sought care. For the rest of the ZIP codes, hypertension was the second, third or fourth most common reason for visiting a consortium clinic. These data clearly show that many visits to clinics in the consortium were due to hypertension-related illness.

Qualitative data findings support the data presented above. Many key informants and residents discussed the need to control hypertension in the community. Community members suggested increased health education information about how to lower and prevent hypertension, along with opportunities for regular blood pressure screenings in the community that are easily accessible for residents.

Table 14 examines mortality, ED visits, and hospitalization rates due to kidney diseases.

Table 14: Mortality, ED visit and hospitalization rates for kidney diseases compared to county and state benchmarks (rates per 10,000 population)

	ZIP Code	Mortality Nephritis	ED Visits*	Hospitalizations*
Kidney Disease	94601	0.6	118.9	205.8
	94602	0.8	108.6	196.7
	94603	0.8	187.1	273.2
	94605	1.4	182.0	257.7
	94606	0.6	112.5	179.4
	94607	0.9	142.4	247.8
	94608	0.6	161.0	240.2
	94609	0.7	123.9	227.7
	94612	0.8	182.8	350.6
	94621	0.7	127.9	241.1
	94702	0.7	134.3	201.9
	94703	0.8	103.9	148.9
	94710	0.8	139.7	165.5
	Alameda County	--	*104.4*	*167.2*
	CA State	*0.7*	*57.6*	*161.5*

(Sources: Mortality: CDPH, 2012; ED visits and hospitalizations: OSHPD, 2011-2013)
*OSHPD data includes data for nephritis, nephrotic syndrome, and nephrosis

Seven of the 13 ZIP code Communities of Concern had rates of kidney disease that exceeded the state mortality benchmark rate, with the highest rate in 94605 (East Oakland/Oakland Zoo). All 13 ZIP code Communities of Concern had rates higher than the county benchmark and drastically higher than the state benchmark for ED visits. The highest rate was found in ZIP code 94603 (East Oakland/Brookefield), at more than three times the state rate. Eleven of the 13 ZIP code Communities of Concern had rates above the county and state benchmarks, with the highest rate in 94612 (Downtown Oakland) at 350.6 hospitalizations per 10,000, twice the county and state rates.

Mental Health and Self Inflected Injury

The lack of access to mental health services and the number of community members who struggle to cope with mental illness and substance abuse was a main finding of this community health assessment. Area experts and community members consistently reported the great difficulty service area residents had in maintaining positive mental health and accessing treatment for mental illness. As mentioned previously in this report, access to mental health and substance abuse treatment was the number one prioritized significant health need for the ABSMC HSA. Included in this section of the report are ED visits and hospitalizations related to mental health conditions, substance abuse, and suicide/self-inflicted injury.

Mental Health

Table 15 provides data on ED visits and hospitalization related to mental illness as well as primary care rankings.

Table 15: ED visit and hospitalization rates due to mental health issues compared to county and state benchmarks (rates per 10,000 population) and ACHC rank

	ZIP Code	ED Visits	Hospitalizations	ACHC Rank*
Mental Health (Overall)	94601	243.9	213.2	30
	94602	240.9	214.8	15
	94603	259.0	197.0	31
	94605	339.0	218.6	23
	94606	228.8	178.4	25
	94607	305.3	233.2	14
	94608	375.7	236.1	10
	94609	346.6	277.8	7
	94612	713.2	442.8	17
	94621	294.7	212.4	23
	94702	317.8	280.4	10
	94703	246.2	199.2	10
	94710	327.9	250.1	13
	Alameda County	*232.3*	*182.0*	
	CA State	*153.6*	*188.6*	

(Source: OSHPD, 2011-2013; ACHC rank: ACHC, 2014)
*ACHA diagnosis included code 300 (disorders of anxiety, dissociative/somatoform)

All Communities of Concern rates exceeded the state and county benchmarks for ED visits, and all but one exceeded the state benchmarks for hospitalizations due to mental health issues. Specifically, ZIP code 94612 (Downtown Oakland) had the highest rates for both ED visits at 713.2 and

hospitalizations, at 442.8 of all other Communities of Concern. These rates were more than twice the state benchmarks of 153.6 and 188.6 per 10,000, respectively. Data from the Alameda Health Consortium Clinics indicated that in eight of the 13 ZIP codes anxiety was one of the top 20 reasons for visiting the clinic.

Key informants and community members consistently spoke of the lack of mental health and substance abuse treatment services available for HSA residents. Mental health was talked about by our participants as a large category, saying that many residents of the community struggle with a range of mental health issues from advanced psychosis to needing help coping with everyday life stressors. Participants reported the difficulties accessing mental health care when needed, especially difficulties navigating the care system. One community member stated:

> *One thing I just want to say is cut down the paperwork and take action. I mean, you go into a clinic or wherever, you got this stack to fill out. Gosh, I mean, it's bad enough you are going in there [and don't feel well], then you have this stack to fill out. They need to cut down on all that paperwork where they can still ask the same information and get the right answers and take care of the customer. (FG_2)*

Another consistent and prevailing theme in the primary data was the need for mental health services for people exposed to violence in their community and their families. Participants stressed the need for "trauma-informed care" in all services, especially care for youth who have witnessed violence. Key informants also expressed the concern that the current care system is not adequate to meet the demand. One key informant said*, "None of these healthcare systems have the mental health capacity needed for this sort of severity of what's going on in the community. And that's, that's a bummer right, I mean basically we have the walking wounded out there."(KI_14).* Another informant talked about how the exposure to violence effects youth in the school system:

> *I mean students who have experience either every day or have been part of certain isolated incidents that cause them trauma, so I'm witnessing certain things or just kind of neighborhood or family life that they're a part of which will prevent them from succeeding in school, like you can't ignore where our kids are coming from or any experiences they've had and just sort of expect them to site in a new building and forget all of that and just focus and learn. So it's like I think we know we have to deal with those things in a variety of ways in order to create a school environment that's going to work for them. So that's for sure #1 I would say. (KI_12)*

Another service provider added that exposure to such violence in the community makes it hard to cope with basic life activities like sleeping, *"Just not sleeping at all. Just awful sleep. Just night sweats, nightmares, too basically scared to sleep at night but sort of….. I didn't feel comfortable sleeping while it was dark" (KI_14).* Another service provider expressed a concern that many community residents who have been exposed to violence go untreated because their symptoms are not severe enough, saying, "*So, also coming from the mental health perspective where they are not seriously and persistently mentally ill, but they have this trauma that even in the high school kids is really negatively impacting their ability to move forward in life."(KI_5).*

Suicide and Self-Inflicted Injury

Table 16 displays mortality rates due to suicide, and ED visits and hospitalizations due to self-inflicted injury for the 13 Communities of Concern.

Table 16: Mortality rates due to suicide and ED visits and hospitalization rates due to self-inflicted injury compared to county, state, and Healthy People 2020 benchmarks (rates per 10,000 population)

	ZIP Code	Mortality	ED Visits	Hospitalizations
Suicide/Self-Inflicted Injury	94601	0.6	10.5	3.4
	94602	1.0	8.3	4.4
	94603	1.0	11.1	2.7
	94605	0.7	12.2	2.7
	94606	0	8.4	3.1
	94607	1.3	11.0	3.6
	94608	1.9	11.8	4.2
	94609	1.0	11.1	2.9
	94612	0	16.8	5.9
	94621	0.7	14.4	4.1
	94702	0.0	10.0	4.1
	94703	0.8	6.2	5.3
	94710	1.40	12.6	--
	Alameda County	*0.9*	*8.6*	*2.9*
	CA State	*1.0*	*8.2*	*4.4*
	Healthy People 2020	*1.0*	--	--

(Sources: Mortality: CDPH, 2012; ED visits and hospitalizations: OSHPD, 2011-2013)

Four of the 12 ZIP code Communities of Concern had rates which exceeded the state and HP 2020 benchmarks for mortality due to suicide/self-inflicted injury. All but one ZIP code had rates that exceeded the state benchmark for ED visits due to self-inflicted injury, and nine of the 13 ZIP codes had rates that exceeded benchmarks for hospitalizations; the highest rate in ZIP code 94612 (Downtown Oakland) at 5.9, was almost twice the county benchmark.

Unintentional Injury

Unintentional injury is the fourth leading cause of death in the nation and the leading cause of death for children and teens.[20] [21] National data show that most deaths related to unintentional injuries for young people result from motor vehicle accidents, followed by drowning, fire, falls, and poisoning. Included in this section of the report is ED visits and hospitalizations related to unintentional injuries. In the health factors section of the report data on fatal traffic accidents, major crimes, and assault are detailed. Table 17 examines mortality, ED visits, and hospitalizations related to unintentional injuries.

[20] US National Library of Medicine: MedlinePlus. (2016). *Death among children and adults*. Retrieved from: https://www.nlm.nih.gov/medlineplus/ency/article/001915.htm

[21] Centers for Disease Control and Prevention. (2015). *Leading Causes of Death*. Retrieved from: http://www.cdc.gov/nchs/fastats/leading-causes-of-death.htm

Table 17: Mortality, ED visit and hospitalization rates due to unintentional injury compared to county, state and Healthy People 2020 benchmarks (rates per 10,000 population)

	ZIP Code	Mortality	ED Visits	Hospitalizations
Unintentional Injury	94601	3.2	960.0	181.8
	94602	3.1	785.2	174.5
	94603	2.3	1,102.2	199.9
	94605	3.3	1,068.5	208.1
	94606	2.0	788.6	153.0
	94607	4.0	1,099.6	209.3
	94608	2.7	1,059.6	193.2
	94609	2.8	926.0	179.0
	94612	5.2	1,377.0	291.2
	94621	3.5	1,127.5	203.6
	94702	1.6	811.8	169.5
	94703	2.9	705.7	140.3
	94710	3.0	1,080.9	178.4
	Alameda County	*2.3*	*727.3*	*152.0*
	CA State	*2.9*	*671.3*	*155.5*
	Healthy People 2020	*3.4*	--	--

(Sources: Mortality: CDPH, 2012; ED visits and hospitalizations: OSHPD, 2011-2013)

Both Alameda County and the California state rates fell below the Healthy People 2020 benchmark for mortality due to unintentional injury. Three of the 13 ZIP code Communities of Concern had mortality rates above the Healthy People 2020 benchmark. All of the Communities of Concern for the ABSMC HSA exceeded the state benchmark for the rate of ED visits related to unintentional injury. Twelve of the 13 ZIP code rates exceeded the county benchmark for ED visits. The highest rate was in the ZIP code 94612 (Downtown Oakland) at 1,377.0, compared to the state rate of 671.3. This ZIP code had the highest rate for hospitalizations at 291.2, compared to the state benchmark of 155.5

Cancers

Cancer is one of the leading causes of death in the nation, with more than 8% of the population receiving a cancer diagnosis at least once in their lifetime[22]. In an attempt to gain a better understanding of how the Communities of Concern are affected by cancer, the assessment included the examination of cancer incidence at the county level, as well as cancer mortality and ED visits and hospitalizations for specific causes of cancer. County level all-cause cancer incidence and mortality data were used. ZIP code level incidence for all-cause cancer and specific cancers were not available for this assessment. ZIP code level data on ED visits and hospitalizations due to lung cancer, colorectal cancer, prostate cancer, and female breast cancer were selected for the assessment and are also detailed. These specific cancers were chosen for this assessment because they are among the leading causes of new cases and/or of deaths of cancer among Americans today.

Cancer Incidence

Cancer incidence helps to communicate risk for cancer within the HSA, but data is hard to acquire at the sub county level. Rates of new cases of cancer for the years 2008 through 2012 for both

[22] Centers for Disease Control and Prevention. (2015). *Cancer*. Retrieved from: http://www.cdc.gov/nchs/fastats/cancer.htm

Alameda and Contra Costa County are listed in Table 18. Rates are compared to a regional incidence rate and state rate.

Table 18: Age adjusted Incidence rates of cancer (invasive) for Alameda County and Contra Costa County compared to state and regional benchmarks (rates per 10,000)

Indicator	Rate per 10,000
Alameda County all cause cancer incidence	41.3
Contra Costa County all cause cancer incidence	**45.6**
Bay Area Region all cause cancer incidence	43.6
CA State all cause cancer incidence[+]	**42.5**

(Source: CA Cancer Registry, 2008-2012[23])

Incidence rates of all-cause cancer were lower in Alameda County than neighboring Contra Costa County and both the East Bay regional and California state rates.

All-Cause Mortality and Lung Cancer

An all-cause cancer mortality rate shows the overall effect of cancer as an illness across the ABSMC Communities of Concern.[24] Unfortunately, death data due to specific cancers is not available at the sub county level, and therefore is not included in this assessment. However, ED visits and hospitalization rates due to lung cancer are reported in Table 19, followed by rates for colorectal, prostate and female breast cancer in Table 20.

Seven of the 13 ZIP code communities exceeded the county benchmark for mortality due to all-cause cancer. Six ZIP codes also exceeded the Healthy People 2020 benchmarks set at 16.1, with the highest rate in ZIP code 94612 (Downtown Oakland) at 20.7. Twelve of the 13 ZIP code Communities of Concern had a rate for ED visits due to lung cancer that was higher than the state benchmark at 2.7 visits per 10,000. Eleven of the 13 ZIP codes had lung cancer related hospitalization rates above both the county and state benchmarks.

[23] *Age-Adjusted Invasive Cancer Incidence Rates by County in California, 2008 - 2012*. Based on November 2014 Extract (Released November 21, 2014). California Cancer Registry. Cancer-Rates.info. Retrieved Jan 19, 2016, from http://cancer-rates.info/ca/

[24] American Cancer Society. (2014). *Cancer Facts and Figures 2014*. Retrieved from: http://www.cancer.org/acs/groups/content/@research/documents/webcontent/acspc-042151.pdf

Table 19: Mortality rates for all-cause cancer, and ED visits and hospitalization rates for lung cancer compared to county, state, and Healthy People 2020 benchmarks (rates per 10,000 population)

ZIP Code	Mortality All-Cause Cancer	ED Visits Lung Cancer	Hospitalizations Lung Cancer
94601	15.3	5.7	10.5
94602	16.6	4.9	9.2
94603	14.4	3.4	8.4
94605	18.0	5.1	13.5
94606	14.8	3.3	10.0
94607	17.0	4.7	14.9
94608	15.4	5.2	11.1
94609	19.9	6.5	8.8
94612	20.7	7.9	16.2
94621	17.2	5.1	10.1
94702	13.1	3.1	10.0
94703	14.6	2.8	7.0
94710	12.6	--	7.9
Alameda County	*15.3*	*3.7*	*8.3*
CA State	*15.4*	*2.7*	*8.0*
Healthy People 2020	*16.1*	--	--

(Source: Mortality: CDPH, 2012; ED visits: OSHPD, 2011-2013)

Cancer -- Female Breast, Colorectal, and Prostate

A lack of access to primary health care greatly effects a community's risk of late diagnosis of cancer, especially those cancers for which early diagnosis and prevention are vital to reducing increased related morbidity and mortality. Table 20 examines ED visit and hospitalizations related to female breast cancer, colorectal cancer (male and female) and prostate cancer.

Examination of ED visits and hospitalizations related to breast cancer in females revealed that 10 ZIP codes had rates above the state benchmark and five ZIP codes had rates greater than the county benchmark. The highest rates were found in ZIP code 94710 (West Berkeley /Marina) at 18.54 visits, almost twice the rate of ED visits for the county at 9.83 visits. Rates for ED visits and hospitalizations related to colorectal cancer showed that eight ZIP codes had rates above the state benchmark and four above the county for ED visits, while seven ZIP codes of the 13 Communities of Concern had higher rates than both the county and state rates for hospitalizations. ED visit rates for prostate cancer were higher than the state rate in 12 of the 13 ZIP code Communities of Concern, and higher than the county benchmark in six of the ZIP codes. Hospitalization rates for prostate cancer exceeded the county benchmark in 12 of the 13 ZIP codes, and exceeded the state rate in 10 of the 13 ZIP codes. The highest hospitalization rates were seen in ZIP codes 94609 (Oakland/Martin Luther King) and 94703 (Northwest Berkeley).

Table 20: Rates of ED visits and hospitalizations for female breast cancer, colorectal cancer, and prostate cancer (rates per 10,000 population)

ZIP Code	ED visits Female Breast Cancer	Hospitalizations Female Breast Cancer	ED visits Colorectal Cancer	Hospitalizations Colorectal Cancer	ED visits Prostate Cancer	Hospitalizations Prostate Cancer
94601	8.8	11.3	1.4	6.7	10.1	12.2
94602	9.4	13.8	1.9	4.7	10.5	13.0
94603	10.0	9.86	2.9	5.9	10.3	14.8
94605	11.7	12.5	2.6	8.7	15.6	16.0
94606	8.7	9.61	2.4	6.4	8.9	12.6
94607	6.5	10.8	4.3	7.9	7.4	9.1
94608	6.3	12.1	2.2	6.1	11.8	12.4
94609	8.0	11.3	--	6.5	10.3	18.2
94612	--	12.8	2.4	7.1	--	11.5
94621	7.3	10.63	1.42	4.5	10.8	15.7
94702	10.9	13.0	2.8	7.1	11.7	15.0
94703	11.1	9.3	--	3.8	11.6	17.4
94710	18.5	18.6	--	6.2	17.4	13.6
Alameda County	*9.8*	*10.9*	*2.5*	*6.4*	*10.6*	*11.8*
CA State	*6.6*	*11.1*	*1.9*	*6.5*	*5.8*	*12.4*

(Source: OSHPD, 2011-2013)

Respiratory Health -- Chronic Obstructive Pulmonary Disease and Asthma

Chronic Obstructive Pulmonary Disease (COPD)

COPD is a progressive lung disease that makes it very hard to breathe and refers to the two main conditions of emphysema and chronic bronchitis.[25] Tobacco smoking is the biggest risk factor for COPD. As many as 6.8 million people have COPD at the national level. In an effort to understand the impact of respiratory illness in the Communities of Concern, mortality rates for chronic lower respiratory disease (CLRD) are presented here along with rates of ED visits and hospitalizations related to COPD. Rates of ED visits and hospitalization due specifically to asthma are examined independently in Table 21.

Nine of the 13 ZIP code Communities of Concern had morality rates due to CLRD above the county benchmark. The Alameda county benchmark rate is lower than the state rate. All 13 ZIP codes had rates above both the county and state benchmarks for ED visits due to COPD, with the highest rate in 94612 (Downtown Oakland) at 204.7, almost three times the benchmark rates. This same ZIP code 94612 had the highest rate of hospitalizations due to COPD at 154.0, compared to the county rate of 69.8 per 10,000. All ZIP code Communities of Concern had rates for ED visits and hospitalization due to COPD that exceed the Healthy People 2020 benchmarks.

[25] National Heart, Lung and Blood Institute. (2013). *What is COPD?* Retrieved from: http://www.nhlbi.nih.gov/health/health-topics/topics/copd

Table 21: Morality rates due to chronic lower respiratory disease, ED visits and hospitalization rates due to COPD compared to county, state and Healthy People 2020 benchmarks (rates per 10,000 population)

	ZIP Code	Mortality CLRD	ED Visits COPD	Hospitalizations COPD
Chronic Lower Respiratory Disease (CLRD) & Chronic Obstructive Pulmonary Disease (COPD)	94601	2.3	87.0	76.0
	94602	2.7	78.1	76.9
	94603	2.6	125.0	86.8
	94605	4.0	119.9	94.7
	94606	3.6	76.4	63.3
	94607	3.7	151.1	104.2
	94608	3.7	145.5	94.1
	94609	3.3	100.7	106.0
	94612	6.8	204.7	154.0
	94621	3.7	148.8	102.2
	94702	4.0	108.3	78.9
	94703	2.4	90.7	55.9
	94710	3.4	98.0	65.5
	Alameda County	*2.8*	*72.9*	*69.8*
	CA State	*3.5*	*74.6*	*89.1*
	Healthy People 2020	--	*56.8*	*50.1*

(Source: Mortality: CDPH, 2012; ED visits: OSHPD, 2011-2013)

Asthma

Asthma is a major health issue in the nation. National data indicates that one in 12 adults and one in 11 children have asthma.[26] Table 22 examines ED visits and hospitalizations due to asthma (all ages), as well as how the condition ranks in terms of encounters at the ACHC.

Rates for ED visits due to asthma were elevated compared to the state benchmark in all of the 13 ZIP code Communities of Concern. The highest rates of asthma-related ED visits were found in 94612 (Downtown Oakland) at 509.9 visits, compared to the state rate of 149.1 visits. All 13 ZIP codes had rates for hospitalizations due to asthma that exceed the state benchmark of 68.7. The rates were highest in ZIP codes 94603 (East Oakland/Brookefield) at 145.7 and 94612 (Downtown Oakland) at 144.5, both more than twice the state rate.

Data from the Alameda Health Consortium Clinics indicated that asthma was a main reason that many residents in the 13 Communities of Concern visited an Alameda Consortium Clinic. This was especially true for ZIP codes 94601 (East Oakland/Fruitvale), 94603 (East Oakland/Brookefield), and 94607 (West Oakland/Jack London), where it ranked as the ninth most frequent reason for a clinic visit.

[26] Centers for Disease Control and Prevention. (n.d.) *Asthma Fact Sheet*. Retrieved from: http://www.cdc.gov/asthma/impacts_nation/asthmafactsheet.pdf

Table 22: ED visit and hospitalization rates due to asthma compared to county and state (rates per 10,000 population) and ACHC ranking

	ZIP Code	ED Visits	Hospitalizations	ACHC Rank
Asthma	94601	322.7	103.1	9
	94602	274.6	91.7	10
	94603	454.3	145.7	9
	94605	480.2	137.0	11
	94606	262.3	84.9	13
	94607	510.6	142.9	9
	94608	465.6	126.1	11
	94609	328.2	102.6	20
	94612	509.9	144.5	21
	94621	456.5	140.1	10
	94702	278.8	106.8	14
	94703	236.0	76.8	16
	94710	405.9	113.1	15
	Alameda County	*252.9*	*86.7*	
	CA State	*149.1*	*68.7*	

(Source: OSHPD, 2011-2013; ACHC rank: ACHC, 2014)

Key informants and community members indicated that asthma is common for many residents in the HSA. One key informant in Berkeley indicated that asthma in the area is prevalent, as evidenced by data on hospitalizations due to asthma. This key informant said:

> *Asthma was another, especially asthma in childhood and asthma hospitalizations in very young children, the hospitalizations, as opposed to the diagnosis, show huge differences and don't meet Healthy People 2020 objectives. (KI_5)*

Dental Health

Dental health is very important for the overall health of an individual. Though dental insurance was re-instated in 2014 under Medicaid, the data presented here is from 2013. Clear disparities among the ZIP code Communities of Concern in comparison to the benchmarks is seen here. Table 23 provides data on ED visits and hospitalizations related to dental issues.

All 13 ZIP code Communities of Concern had rates above the county and state benchmarks for ED visits related to dental issues. The highest rate was in ZIP code 94612 (Downtown Oakland) at 116.8, more than twice the state and county rates. Twelve of the 13 ZIP code Communities of Concern had rates above the county and state benchmarks for hospitalizations related to dental health issues, with the highest rate in 94621 (East Oakland) at 11.5 hospitalizations per 10,000.

Table 23: ED visit and hospitalization rates due to dental issues compared to county and state benchmarks (rates per 10,000 population)

	ZIP Code	ED Visits	Hospitalizations
Dental	94601	86.9	8.5
	94602	54.2	8.6
	94603	101.0	10.6
	94605	95.8	11.3
	94606	70.7	7.5
	94607	108.7	10.7
	94608	87.8	10.3
	94609	78.8	8.0
	94612	116.8	10.7
	94621	106.6	11.5
	94702	63.1	9.7
	94703	45.9	8.5
	94710	88.9	10.0
	Alameda County	47.6	7.9
	CA State	41.8	7.9

(Source: OSHPD, 2011-2013)

Health Factors in Communities of Concern -- Health Behaviors, Clinical Care, Social and Economic Factors, and the Physical Environment

Health factors are those that intersect with people in their everyday lives. Multiple health factors interconnect to increase risk for a single health outcome, or multiple health outcomes as presented in the previous section. Health factors can be seen as the drivers upstream that must be changed to improve downstream health outcomes that affect the community. Much like the Health Outcomes section of this report, health factors presented in this section are organized in accordance with the theoretical model as presented previously.

Health Behaviors -- Tobacco Use, Diet and Exercise, Alcohol and Drug Use, and Sexual Activity

Tobacco Use

Tobacco use is a risk behavior that is commonly addressed through educational interventions, and a major contributor to many leading causes of death in America, especially heart disease, COPD, asthma, and cancer. Though smoking rates are not available for the ABSMC service area, data from the California Health Interview Survey showed that 11.5% of county residents were current smokers, compared to the state rate of 10.8%. Tobacco use was also mentioned by key informant and focus group participants as a common behavior for many area residents.

Diet and Exercise -- Obesity, USDA defined Food Deserts, mRFEI, and Park Access

Obesity

Consideration of diet and exercise data for this health assessment also includes an examination of obesity data. Though obesity is a clear outcome of poor dietary choices and a lack of adequate

exercise, it is also a contributor to most of the morbidity and mortality health conditions mentioned in the previous sections of the report. Table 24 displays the percentage of adults overweight and obese for Alameda County as compared to the state. Table 25 displays the ranking of encounters due to "overweight/obesity and hyperalimentation."

Table 24: Self-reported BMI for the determination of percent overweight and obese for Alameda County in comparison to the state benchmark rate

Indicator	Percent Overweight	Percent Obese
Alameda County	35%	19.8%
CA State	**36%**	**27%**

(California Health Interview Survey, 2014).

As the data presented in Table 24 indicates, the percent overweight and obese was slightly lower in Alameda County in comparison to the state and neighboring county benchmarks. Unfortunately, overweight and obesity data is seldom available at the sub-county level in order to examine how rates compare within the county and ABSMC HSA.

Table 25: ACHC rankings of encounters due to obesity*

	ZIP Code	ACHC Rank
Overweight/Obesity	94601	10
	94602	17
	94603	10
	94605	9
	94606	19
	94607	21
	94608	23
	94609	22
	94612	25
	94621	9
	94702	44
	94703	34
	94710	27

(Source: ACHC, 2014)*Obesity related encounters included diagnostic code 278 (overweight/obesity/other hyperalimentation)

As seen in Table 25, obesity consistently ranked among the top reasons for visiting an Alameda Consortium Clinic for most of the 13 Communities of Concern. Many key informants and community members mentioned obesity as a health issue for area residents. Most discussions about obesity focused on the need for better access to healthy and affordable food in the area, coupled with the need for health education about how to prepare such foods given social and economic constraints.

Food Deserts

The USDA defines a food desert as: "urban neighborhoods and rural towns without ready access to fresh, healthy, and affordable food. Instead of supermarkets and grocery stores, these communities may have no food access or are served only by fast food restaurants and convenience stores that offer

few healthy, affordable food options."[27] The lack of access to healthy food results in a poor diet and can lead to higher levels of obesity and other diet-related diseases, such as diabetes and heart disease. The USDA further describes a food desert as "a census tract with a substantial share of residents who live in low-income areas that have low levels of access to a grocery store or healthy, affordable food retail outlet."[28] Figure 8 identifies the food deserts for the ABSMC Communities of Concern.

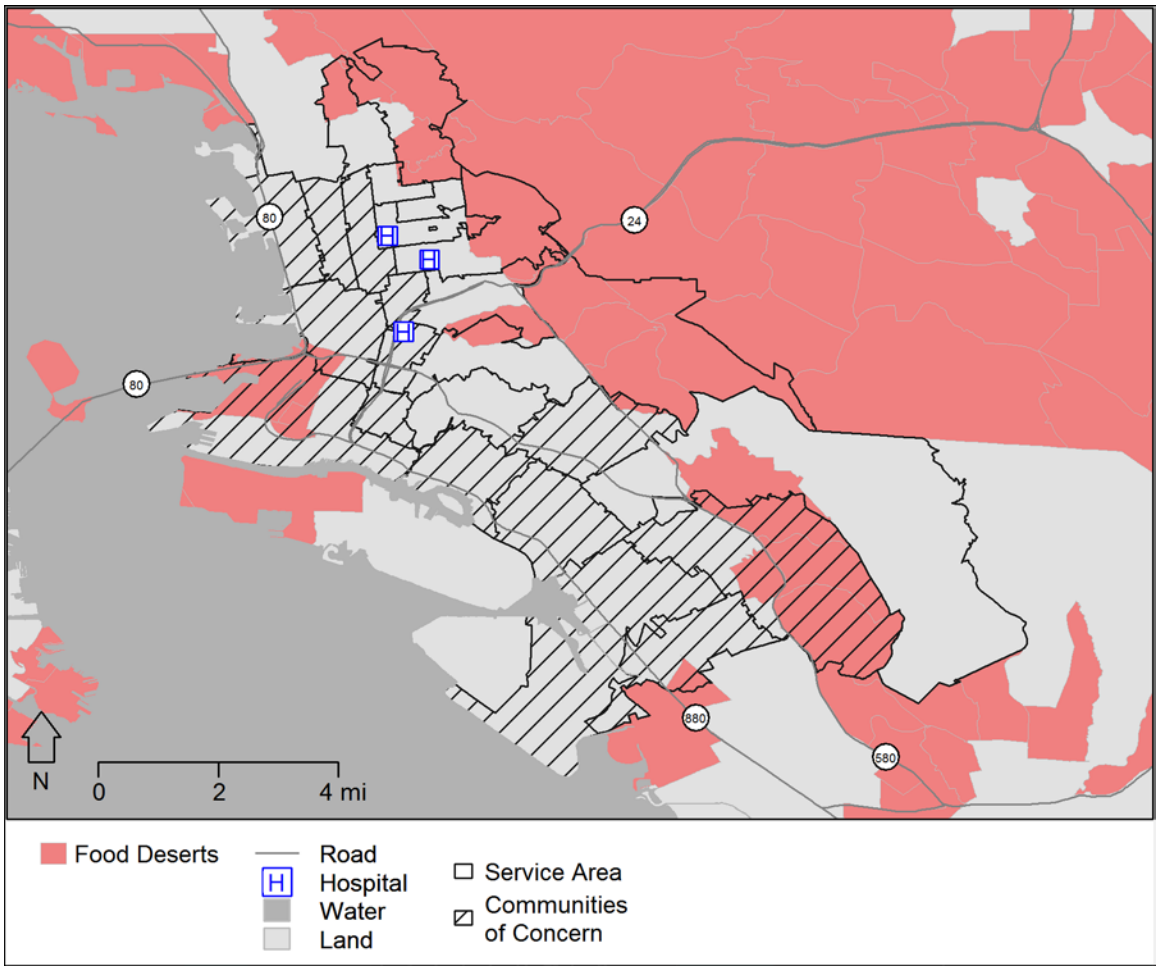

Figure 8: USDA defined food deserts for ABSMC Communities of Concern

As shown in Figure 8, portions of five ZIP code Communities of Concern contain census tracts defined as USDA food deserts. Most notably is the large portion of ZIP code 94605 (East Oakland Hills/Oakland Zoo area). Also, the western portion of the 94607 ZIP code (West Oakland/Jack London Square area) contains a census tract defined as a food desert. Other ZIP codes include 94602 (Oakland/Glenview), 94603 (East Oakland/Brookefield), and 94609 (Oakland/Martin Luther King). Many participants indicated that areas throughout the ABSMC lack access to healthy foods. Detailed qualitative findings about this topic are found in the next section.

[27] US Department of Agriculture. (n.d.) *Food Deserts*. Retrieved from: https://apps.ams.usda.gov/fooddeserts/fooddeserts.aspx
[28] Ibid.

Modified Retail Food Environment Index (mRFEI)

The modified Retail Food Environment Index (mRFEI) represents two aspects of food availability: both the presence of food outlets within a ZIP, as well as the relative abundance of healthier food outlets. Negative mRFEI values occur in areas with no food outlets. All other values report the percentage of healthier food outlets, from among all food outlets, in the ZIP code. Figure 9 shows the mRFEI for the ABSMC HSA. Lighter areas indicate poor or no access to healthy food outlets and darker areas indicate greater access to healthy food outlets.

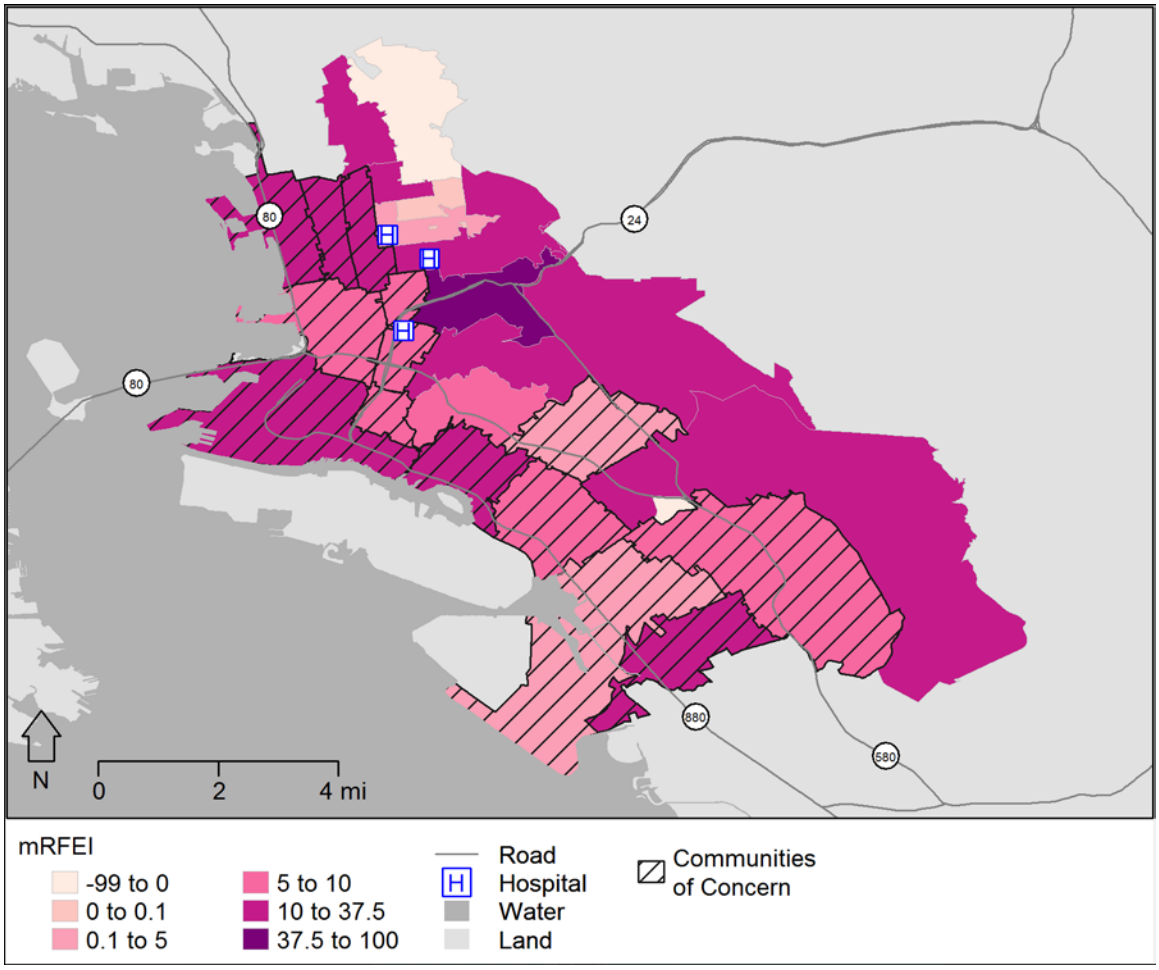

Figure 9: Modified Retail Food Environment Index (mRFEI) for the ABSMC HSA

As shown in Figure 9, some ZIP code Communities of Concern had lower mRFEI scores, indicating poor or no access to healthy foods, than the remainder of the HSA. Specific mention were the ZIP code areas of 94602 (Oakland/Glenview) and 94621 (East Oakland).

Key informants and community members stressed the importance of healthy eating for area residents and the challenge to access healthy foods in the Communities of Concern. As one community member said in a focus group interview, *"I know in our area [West Oakland] there's not too many grocery stores. We have McDonalds and KFC which are not a real good quality food but that's all we have. We utilize those two as our groceries. (FG_3)"* Another participant elaborated, saying, *"There's*

more liquor stores on each corner than there are grocery stores. If there is a grocery store it's way too far. You can't walk because you are also afraid you're going to get shot. (FG_3)"

Participants also mentioned that access to health food is important, but it is equally important that food be affordable and community residents be provided with information about which foods are healthy and how to prepare those foods in healthy ways. The key informant said:

> *You have so many corner stores but very few supermarkets in this area. And for those that are able to go to supermarkets what kind of resources do they have to buy really healthy foods? Even as an adult myself, healthy food is not cheap. And so to be intentional and to be deliberate about getting healthy food when the reality is you have about 5 or 6 mouths to feed so you have to buy something to make it stretch. It's like what do I choose, and I think that contributes to a lot of the health factors- diabetes, cancer, obesity. As a result of not having access to the food. Also, not being informed or educated what healthy food is. (KI_15)*

Another key informant stressed the importance of health education around nutrition:

> *I think that there is some needs for nutritional education and that's one of the things that we address too and I kind of want to validate why I said there is some needs for nutrition because when we are talking about having good nutrition, some of the ladies are surprised…ah, ah…like they never looked at it that way and how important it is to eat the vegetables and the fruits, how many fruits a day and drink more water and less soda. It has been a challenge for them because they didn't know that was important and so…and then, hearing them come back and saying that they have lesson in how many sodas that they drink versus water or it speaks to us how important it is to have this education piece of nutrition. (KI_6)*

Also worth noting, key informants stressed that health education in the local school districts (e.g. Oakland Unified School District) is lacking due to a lack of financial resources to pay for health teachers through the various grade levels.

Park Access

Access to recreational areas contributes to whether or not people will be physically active. Figure 10 shows the percent of the population by ZIP code in the service area that live within one-half mile of a recreational park. The lighter colors denote fewer residents with nearby park access and darker colors show more residents living within one-half mile of a park.

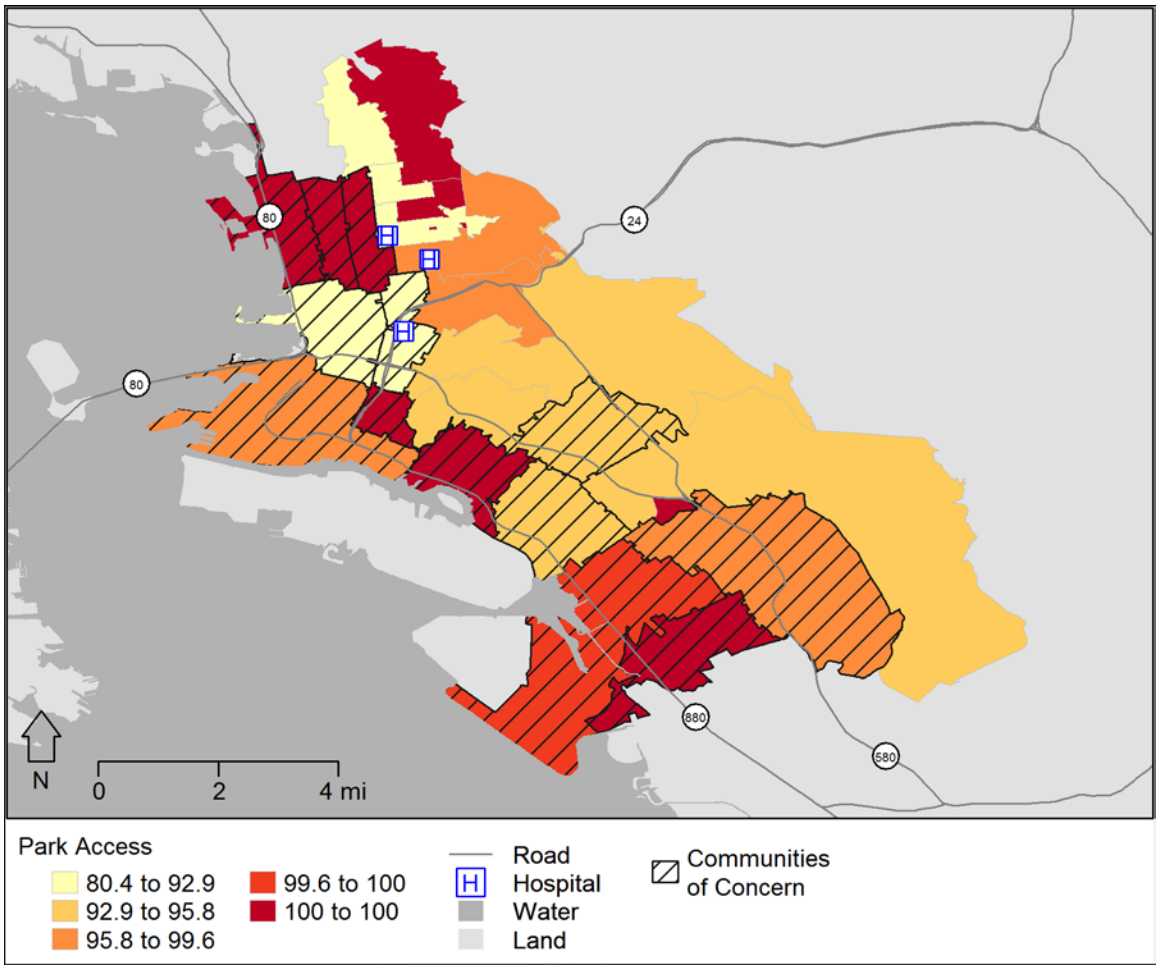

Figure 10: Percent of population with ZIP code that live within one-half mile of a park.

As displayed in Figure 10, access to a park varied drastically among the Communities of Concern. ZIP codes 94608 (Emeryville) and 94609 (Oakland/Martin Luther King) had the lowest park access in the HSA, followed by 94601 (East Oakland/Fruitvale) and 94602 (Oakland/Glenview).

Though data presented here suggests that park access may not be a major barrier to a large part of the ABSMC HSA, key informant and community members reported feeling that many parks in the area were unsafe. As one key informant said, *"This is where violence comes in. It's not safe to have kids walk to the park" (KI_11).* Another key informant said that providers should consider safety issues when encouraging parents to allow their children to play at parks in the HSA. She said *"Just think about the other parents who have been there, who are not using the park because they are afraid of the gun shooting that is happening around there" (KI_6).* Mentioned previously in this report, the effects of violence modified the behavior of the community in many ways. Another key informant made this point,

> *if you live in a violent community you don't leave your house. I mean literally our young people will just stay inside and play video games because it's safer. And so these are good kids who are getting zero exercise or going out to the store because they know it's not safe. Ya know and they wanna stay out of trouble. So I mean this is kind of one of the ways that violence is actually ya know again connected to a lot of other health issues (KI_14).*

Alcohol & Drug Use

Adult Binge Drinking

Reported rates of binge drinking are not available at the sub-county level for the ABSMC. However, CHIS data indicates that the percentage of respondents reporting binge drinking at the county level was below the 2013 binge drinking level for the state. The Alameda county rate was 23.9% of adult respondents reporting engaging in binge drinking in the past years, compared to the state percentage of 32.6%.

Table 26: Self-reported adult binge drinking in the past year

Indicator	Percent Binge Drinking
Alameda County	23.9%
CA State	**32.6%**

(Source: California Health Interview Survey, 2014)

Substance Abuse

The issue of substance abuse and the lack of treatment options for the condition were mentioned by key informant and community members as a common struggle for many area residents. Rates of ED visits and hospitalizations related to substance abuse are not direct measures of substance abuse prevalence in the Communities of Concern ZIP codes, but rather provide insight into the problem across the HSA. As shown in Table 27, rates of substance abuse-related ED visits and hospitalizations were clearly elevated in the Communities of Concern compared to county and state benchmarks.

Table 27: ED visit and hospitalization rates due to substance abuse issues compared to county and state benchmarks (rates per 10,000 population)

	ZIP Code	ED Visits	Hospitalizations
Mental Health-Substance Abuse	94601	581.7	190.5
	94602	474.4	157.2
	94603	625.3	242.6
	94605	709.2	236.2
	94606	519.6	151.4
	94607	1,006.0	277.2
	94608	807.7	225.9
	94609	719.3	207.9
	94612	1,368.3	395.5
	94621	724.4	252.8
	94702	563.8	182.1
	94703	432.0	139.2
	94710	755.8	221.9
	Alameda County	*370.7*	*128.1*
	CA State	*256.3*	*145.8*

(Source: OSHPD, 2011-2013)

All Communities of Concern ZIP codes exceeded both county and state benchmarks for ED visits due to substance abuse issues. All ZIP codes exceeded the county benchmark for hospitalizations, and 12 of the 13 ZIP codes exceeded the state benchmark. It is notable that the rate for Alameda County was

one and one-half times that of the state. ZIP code 94612 (Downtown Oakland) had the highest rate of substance abuse-related ED visits and hospitalizations in the service area. These rates were more than three to four times the county and state benchmarks, a notable difference.

Key informants discussed drug and alcohol use in the community and how easy they are to acquire. As one community member said, *"You got a lot of people smoking blunts and stuff like that so you got a lot of drug influence. Like you have people smoking a lot of weed on the streets, you can see like Zig Zags and all these Swishers on the floor so it's not really that hard for kids to like know these kind of things" (FG_5).*

Sexual Activity -- Teen Birth Rate and STI Rates (including chlamydia, gonorrhea, and HIV/AIDS)

Teen Birth Rate

The teen birth rate (births to women under the age of 20) is an indicator used in this assessment to examine sexual behavior throughout the HSA. Data from 2013 indicates that the national rate for teen births (age 15-19) currently sits at 26.5 per 1,000 live births. [29] Teen mothers, especially single mothers, are more likely to have dropped out of high school and are less able to support themselves; a high percentage end up on public assistance. In fact, half of all current welfare recipients had their first child as a teenager.[30] Figure 11 shows the teen birth rate for the ABSMC HSA.

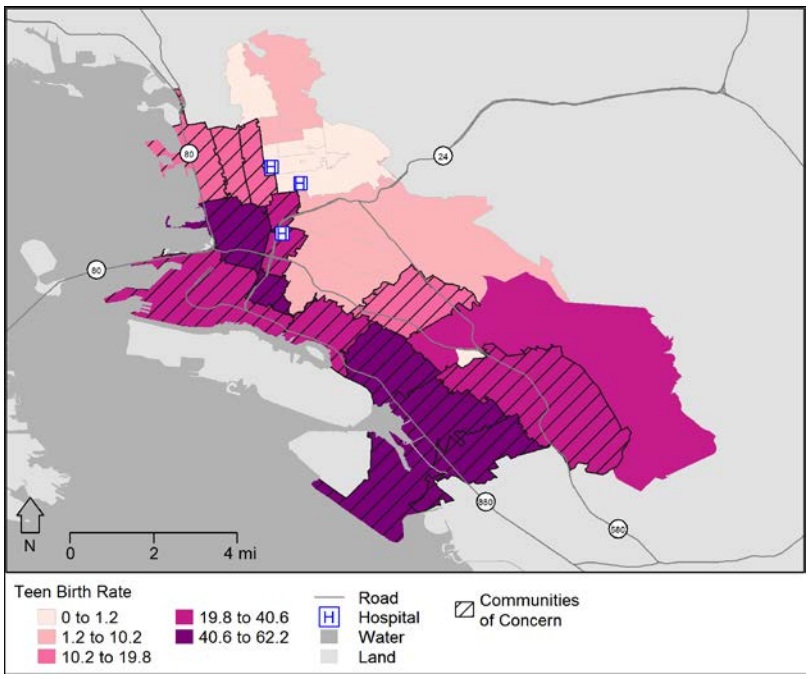

Figure 11: Teen birth rate for 15-19 year olds per 1,000 live births

[29] Centers for Disease Control and Prevention. (2015). *Teen Births*. Retrieved from: http://www.cdc.gov/nchs/fastats/teen-births.htm

[30] Sawhill, I.V. (2001). *What can be done to reduce teen pregnancy and out of wedlock births*? Retrieved from: http://www.brookings.edu/research/papers/2001/10/childrenfamilies-sawhill

Compared to the national, state, and county benchmarks discussed above, many ZIP codes in the HSA had drastically high teen birth rates. Specially ZIP codes 94621 (East Oakland), 94603 (East Oakland/Brookefield), 94601 (East Oakland/Fruitvale), 94612 (Downtown Oakland), and 94608 (Emeryville) had rates double and triple state and county benchmarks. Focus groups with teens confirmed these findings, saying that teen pregnancy was common for many teens in their community.

Sexually Transmitted Infections (STI) and HIV/AIDS

Rates of STIs, including chlamydia, gonorrhea, and HIV, illustrate the prevalence of risky sexual behavior in the Communities of Concern. Since STIs are largely preventable, knowing where community members are infected by STIs helps with targeting interventions for treatment and prevention. Table 28 displays prevalence rates for chlamydia and gonorrhea among 10-19 year olds in Alameda County compared to the state benchmark. Table 29 shows ED visits and hospitalizations related to STIs, as well as those specific to HIV/AIDS. As the data illustrates, rates for both conditions were clearly above the state comparative benchmark for Alameda County.

Table 28: Prevalence of chlamydia and gonorrhea among 10-19 year olds in Alameda County compared to the state rate (per 10,000)

STI Rates[31]	Chlamydia Rate	Gonorrhea Rate
Alameda County	78.8	21.0
CA State	68.4	11.2

(Sources: CDPH, 2010- 2014

Table 29: ED visit and hospitalization rates due to STIs and HIV/AIDS compared to county and state benchmarks (rates per 10,000 population)

	ZIP Code	ED visits STIs	Hospitalizations STIs	ED visits HIV/AIDS*	Hospitalizations HIV/AIDS*
Sexually Transmitted Infections	94601	24.5	9.4	13.2	6.4
	94602	16.1	6.7	9.3	5.2
	94603	27.4	10.0	15.5	12.2
	94605	32.2	14.8	15.9	11.6
	94606	26.5	13.0	15.3	11.1
	94607	48.6	22.8	30.4	20.6
	94608	37.3	18.5	21.3	16.9
	94609	32.1	12.5	20.6	9.9
	94612	73.8	31.6	53.1	28.2
	94621	44.6	17.7	25.9	15.0
	94702	27.5	8.8	22.0	5.9
	94703	16.6	9.4	10.9	8.0
	94710	14.5	12.0	9.2	10.4
	Alameda	*11.8*	*6.1*	*7.0*	*4.8*
	CA State	*3.2*	*4.6*	*2.0*	*3.4*

(Source: OSHPD, 2011-2013)*HIV/AIDS is considered a subcategory of STIs in the ICD 9 diagnostic codes.

[31]Lucile Packard Foundation for Children's Health. (n.d.). *Sexually Transmitted Infections, by Age Group from the California Department of Public Health – 2010-2014.* Retrieved from: http://www.kidsdata.org

Table 29 indicates that rates of ED visits and hospitalizations were much higher in Alameda County compared to state benchmarks. For ED visits due to STIs, and the subcategory of HIV/AIDS, the Alameda County rate was more than three times the state rate of 3.2 per 10,000. Every ZIP code in Communities of Concern had higher ED visit and hospitalization rates for both STIs and HIV/AIDS. ZIP code 94612 (Downtown Oakland) had the highest rates of any other ZIP codes, with ED visit rates for STIs at 23 times the state rate and six times the county rate.

Clinical Care -- Access to Care and Quality of Care

Health Professional Shortage Areas

Health Professional Shortage Areas (HPSAs) are designated by the US Government Health Resources and Services Administration (HRSA) as having shortages of primary medical, dental, or mental health providers; these shortages may be geographic (e.g., a county or service area), demographic (e.g., a low income population) or institutional (e.g., comprehensive health center, federally qualified health center, or other public facility).[32]

Health Professional Shortage Area -- Primary Care and Mental Health Care

Data indicated that the ABSMC HSA had no federally designated HPSAs for primary care access. However, key informant and community residents noted many challenges when accessing primary care in the area. Many key informants and community members reported issues with accessing primary care services in the ABSMC HSA. The main barriers to access included: timeliness in appointment scheduling, a lack of primary care providers in the area, and health literacy, i.e., knowing how to navigate the health care system. Though many community residents may have received coverage through the Affordable Care Act, participants stated that insurance coverage alone does not guarantee improved access to care. As one provider said:

> *We've seen more people I think being now eligible (for Medi-Cal) because of the expansion. So, that's a good thing, but eligibility and enrollment are one thing, actually getting the service is another. So, that's why I'm sort of cautious about answering, how to answer that question. But, yeah, I mean, we've seen more people now that have health insurance and they know where they're supposed to go, but do they get in in a timely manner and what's really needed for them is a whole other story and I don't think we have a good handle on that (KI_2).*

Another key informant said lack of access to care contributes to a large number of community residents seeking treatment at local emergency departments. One key informant said *"they have to wait months….literally months and that's not the way to keep somebody out of an emergency room or out of the hospital" (KI_4).* Multiple service providers indicated that more providers, including providers with diverse backgrounds, are needed in the ABSMC to meet the need for primary care among newly insured community members.

Health literacy, or knowing how to navigate the health care system, was also mentioned by participants. As one key informant said: exuall

[32] Health Resources and Services Administration. (n.d.). *Primary Medical Care HPSA: Designation Overview*. Retrieved from: http://bhpr.hrsa.gov/shortage/hpsas/designationcriteria/primarycarehpsaoverview.html

So kind of navigating the system, Can you get a person when you call in or even understanding what your insurance covers is? So that whole piece also is really difficult the knowing when your card expires and then, there is an in-between time and then, Medi-Cal is really backed up and so it leaves gaps of when they can get their care, in the meantime, their child…it's urgent and it needs to be seen now, so where can they go? So knowing how to navigate the system and what their coverage is and still being confused about the Affordable Care Act. So I think maybe more sessions to help families and individuals to understand just the whole system of care, of…from the point of getting covered and what you can get by your insurance, now having insurance too, like how to get an appointment and then follow up care after that. (KI_8)

Figure 12 shows federally designated mental health HPSAs within the ABSMC HSA.

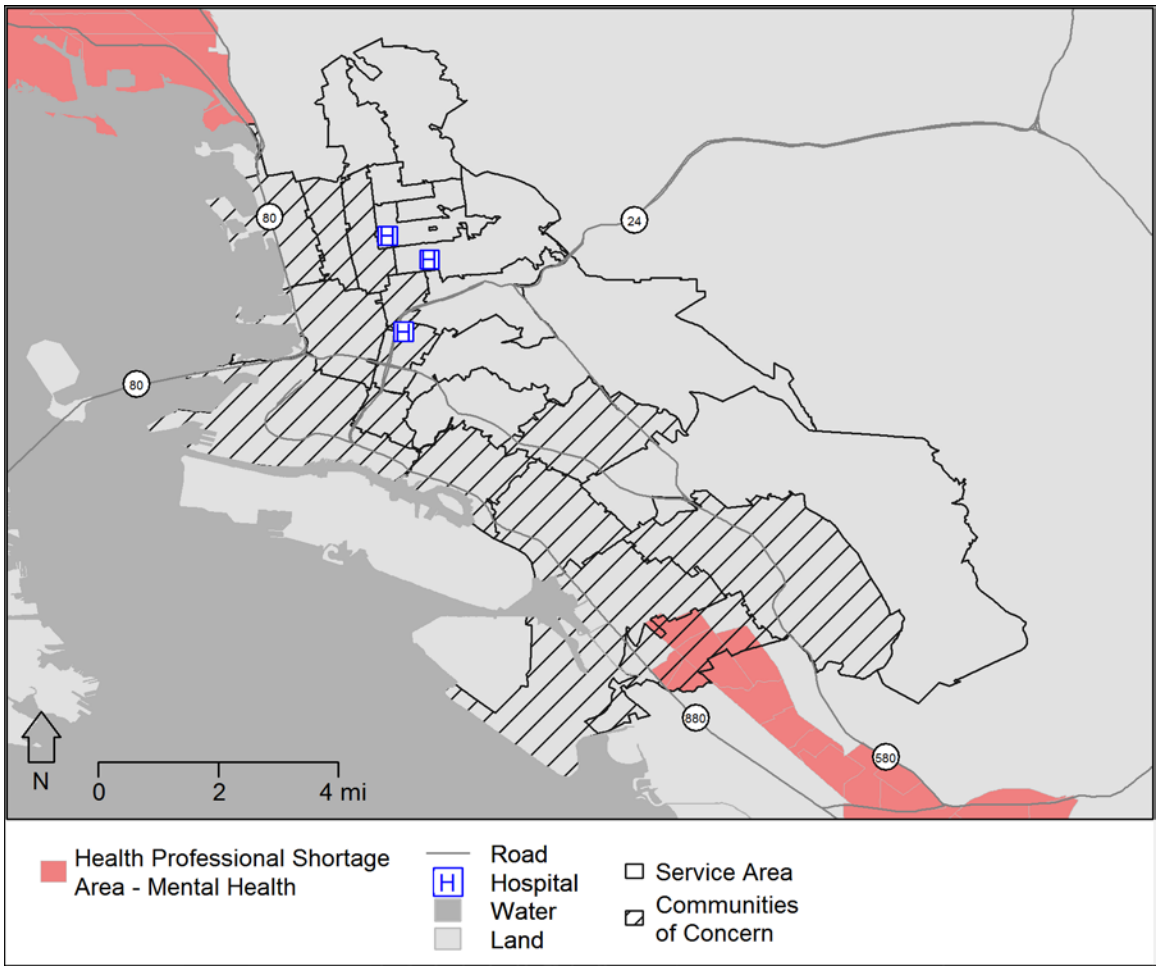

Figure 12: Mental health HPSAs for the ABSMC HSA

Only ZIP code 94603 (East Oakland/Brookefield) showed a federally defined HPSA for mental health providers. However, virtually every service provider and community member included in this assessment indicated that mental health and substance abuse services were the number one priority significant health need for the entire ABSMC service area.

Health Professional Shortage Area -- Dental Care

Much like primary care, there are no federally designated HPSAs for dental care in the ABSMC HSA. ED visits and hospitalizations (2013) related to dental care were provided in this report previously, and clear geographic disparities were seen. However, as mentioned previously, these data were prior to reinstatement of dental services under Medicaid. The HPSA Dental Area data presented here are from 2015, post reinstatement of coverage. In addition, very few participants indicated that dental health issues were a significant challenge in the HSA, except for one provider, who stated the need to meet the demand now that more people have coverage. HPSA data does not show which providers are accepting new patients, which was the biggest concern expressed by key informant and community members in the primary data.

Health Insurance Status

Insurance status is an important indicator of health, including access to care and economic stability. With the passage of the ACA, the overall number of Californians without health insurance of any type has decreased. However, many residents within the ABSMC remain uninsured. Table 30 contains the percent uninsured for each ABSMC Community of Concern.

Table 30: Percent uninsured by ZIP code compared to county and state benchmarks

	ZIP Code	Percent Uninsured
Uninsured	94601	28.1
	94602	9.5
	94603	21.3
	94605	15
	94606	21.4
	94607	19.5
	94608	19.2
	94609	15.4
	94612	22.7
	94621	24.9
	94702	11.1
	94703	11.6
	94710	17.8
	Alameda County	*12.6*
	CA State	*17.8*

(Source: US Census, 2013)

Ten of the 13 Communities of Concern had a higher percentage of the uninsured population compared to the Alameda County benchmark of 12.6%, The ZIP code with the highest percent of the uninsured population was 94601 (East Oakland/Fruitvale), at more than twice that of Alameda County. An examination of insurance coverage status both before and after the Affordable Care Act indicates that fewer people report being uninsured. The above data is from 2013, the most recent available during the preparation of this report. As stated earlier, though insurance status among area residents has improved, access to care remains an issue because the area lacks a sufficient number of providers to meet community need.

Quality of Care -- Total ED and Hospitalization Utilization and Prevention Quality Indicators

Emergency Department and Hospitalization Utilization

Total hospitalization and ED visit rates can help illuminate the overall health status of a community and describe the state of the healthcare system, including access to primary healthcare services. In some instances, community residents are unable to obtain care in an ambulatory setting. Some residents obtain primary care in local hospital EDs, and others may allow a health condition to become acute and then seek care in the ED. Residents are sometimes hospitalized for these conditions.

Figures 13 and 14 show higher total ED visit and hospitalization rates (for all causes) in the Communities of Concern compared to other ZIP code areas in the HSA. The ZIP codes with the highest rates of ED visits and hospitalizations per 10,000 were found in 94607 (West Oakland/Jack London Square), 94612 (Downtown Oakland), 94621 (East Oakland), 94603 (East Oakland/Brookefield), and 94605 (East Oakland/Oakland Zoo).

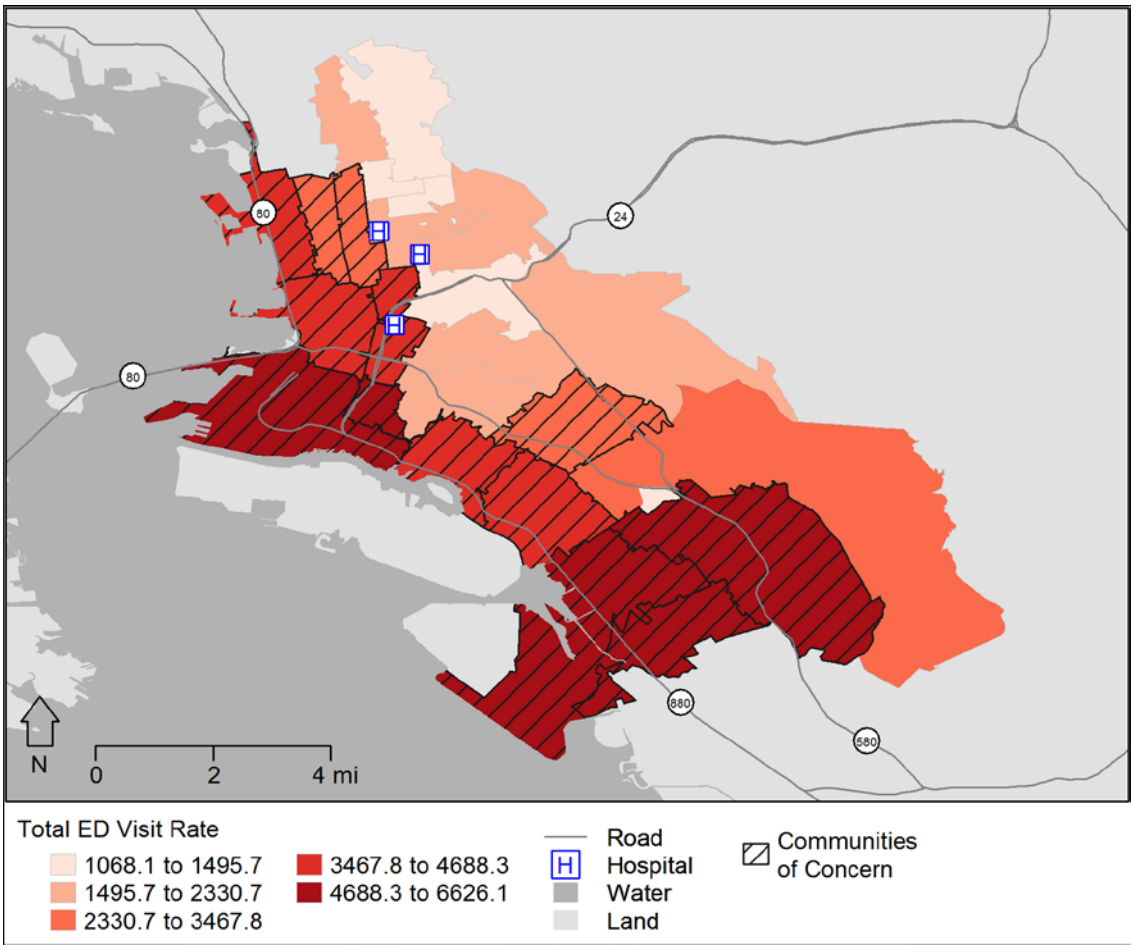

Figure 13: Total ED visit rate for the ABSMC HSA

The rate of total ED visits in these six ZIP codes were 1.5 to 2.0 times greater than the county benchmark at 2955.84 ED visits and the state benchmark at 2756.38 ED visits.

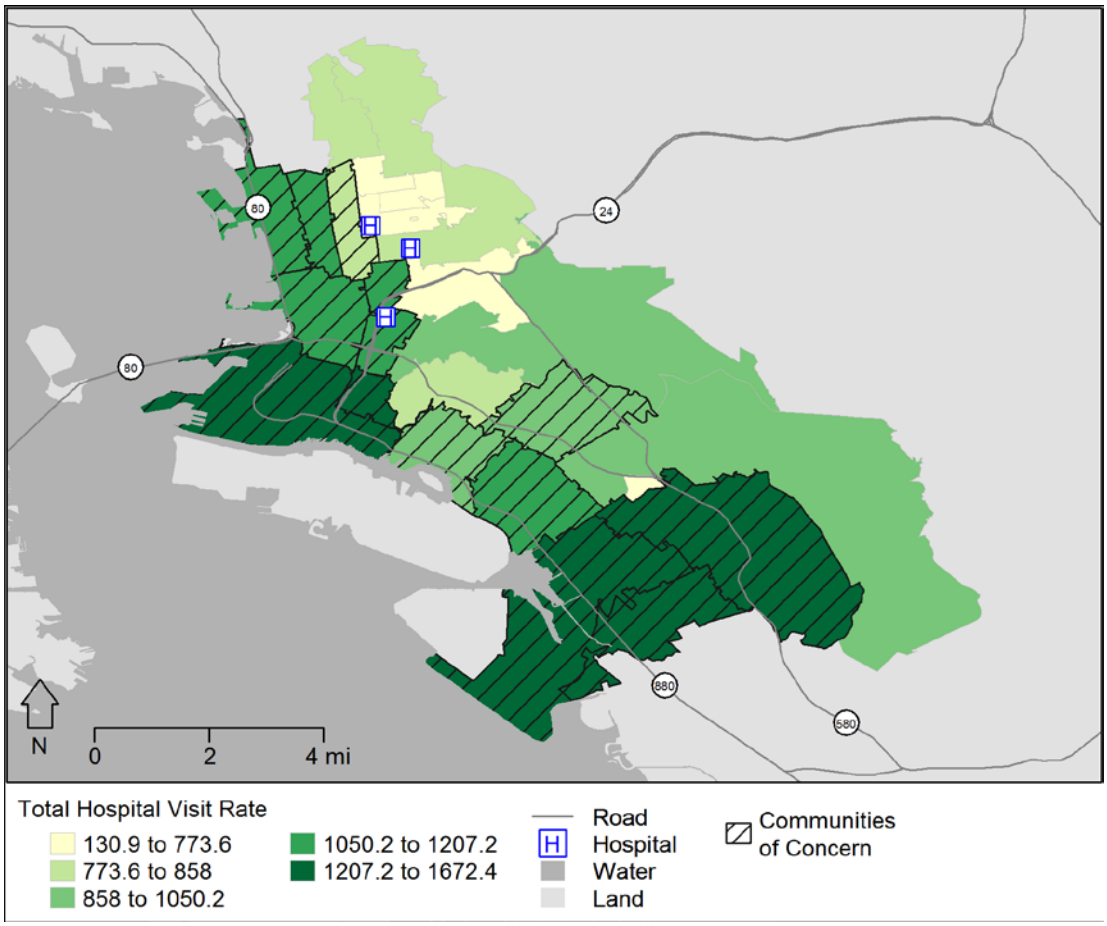

Figure 14: Total hospitalizations for the ABSMC HSA

The rate of total hospitalizations in these six ZIP codes was greater than the county benchmark, at 954.02 hospitalizations and the state benchmark, at 1020.26 hospitalizations.

Preventable Hospitalizations -- Prevention Quality Indicators

The Prevention Quality Indicators (PQIs) were developed by the Agency for Healthcare Research and Quality (AHRQ). The 13 identified PQIs are used to assess the quality of care for conditions for which good outpatient care could prevent the need for hospitalization, or when early intervention could prevent complications or decrease disease severity. These conditions are also known as ambulatory-sensitive conditions (ASCs) and are sometimes referred to as preventable hospitalizations.[33] Based on hospitalization rates, these indicators provide insight on the community health care system or services outside the hospital setting, such as access to quality healthcare and related services. The PQI indicators for each Community of Concern are noted in Table 32. Rates that exceeded any benchmark are highlighted.

Table 31: PQI number with corresponding diagnosis

PQI #	Indicator

[33] Agency for Healthcare Research and Quality. (n.d.) *Prevention quality indicators overview*. Retrieved from: http://qualityindicators.ahrq.gov/modules/pqi_resources.aspx

PQI1	Diabetes short-term complications
PQI2	Perforated appendix
PQI3	Diabetes long-term complications
PQI5	Chronic obstructive pulmonary disease (COPD): chronic bronchitis or emphysema or asthma in older adults (ages 40 and over)
PQI7	Hypertension (high blood pressure)
PQI8	Heart failure
PQI10	Dehydration
PQI11	Bacterial pneumonia
PQI12	Urinary tract infection (UTI)
PQI13	Angina without procedure (chest pain)
PQI14	Uncontrolled diabetes
PQI15	Asthma in younger adults (ages 18-39)
PQI16	Lower-extremity amputation among patients with diabetes (removal of leg or foot due to diabetes complications)

Though not all Communities of Concern had data available to examine each of the 13 PQI indicators (composite), stable data were available for five PQIs in all 13 Communities of Concern. These five PQI indicators are detailed in Table 32.

Table 32: Prevention Quality Indicators 5, 8, 10, 11, and 12 for the ABSMC Communities of Concern as rates of hospitalization per 10,000

	ZIP Code	COPD (PQI5)	Heart Failure (PQI8)	Dehydration (PQI 10)	Bacterial Pneumonia (PQI 11)	Urinary Tract Infection (PQI 12)
Prevention Quality Indicators (PQI)	94601	61.6	36.1	5.8	19.2	12.0
	94602	39.2	36.1	5.7	15.1	10.3
	94603	85.9	57.3	8.9	19.4	14.2
	94605	59.0	48.4	6.7	17.4	9.8
	94606	33.7	25.8	6.0	16.4	10.7
	94607	64.3	46.3	9.3	18.8	10.9
	94608	50.5	40.7	6.6	11.8	9.9
	94609	40.5	35.8	4.9	14.2	10.4
	94612	67.4	57.4	9.9	24.4	12.9
	94621	77.1	59.4	8.1	17.0	16.0
	94702	32.0	38.7	4.9	11.7	8.3
	94703	27.8	22.9	4.9	13.0	5.1
	94710	**35.4**	**31.5**	**8.2**	**18.4**	**9.5**
	Alameda County	*33.0*	*29.4*	*5.7*	*15.2*	*11.3*
	CA State	*35.2*	*28.1*	*7.3*	*18.8*	*13.7*

Five of the 13 Communities of Concern had undesirable rates for all five PQI indicators: COPD, heart failure, dehydration, bacterial pneumonia, and urinary tract infection. ZIP codes 94601 (East Oakland/Fruitvale), 94603 (East Oakland/Brookefield), 94612 (Downtown Oakland), 94621 (East Oakland) and 94710 (West Berkeley/Marina) all had rates above the county and state benchmarks.

Social and Economic Factors -- Economic Stability (Income, Employment, and Education) and Community Safety (Major Crime, Violence and Traffic Accidents)

Economic Stability -- Education and Income

Indicators of economic stability used in the CHNA included percent of adults without a high school diploma, percent living below the federal poverty level, median household income, percent unemployed and percent of residents receiving public assistance. Economic instability and housing instability were commonly mentioned by key informants and community members as challenges for many residents in the ABSMC HSA. Stable income and housing are important to live a healthy life. Table 33 examines indicators of economic stability in the Communities of Concern (Housing stability is examined elsewhere in this report).

Table 33: Percent: no high school diploma, living below 100% federal poverty level, median household income, percent on public assistance, and percent unemployed by ZIP code compared to county and state benchmarks

	ZIP Code	Percent Adults with No High School Diploma	Percent Living in Poverty	Median Income	Percent Receiving Public Assistance	Percent Unemployed
Economic Stability	94601	37.7	28.5	$38,305	26.6	16.6
	94602	12.1	9.61	$71,510	9.6	8.6
	94603	35.9	23.6	$40,927	30.3	18.1
	94605	16.5	20.0	$56,944	21.1	16.6
	94606	29.0	27.0	$38,363	21.0	13.5
	94607	24.1	31.5	$32,856	22.5	16.2
	94608	9.1	16.4	$52,787	11.9	10.1
	94609	8.3	16.3	$52,400	13.9	10.1
	94612	21.9	32.5	$26,054	9.8	14.1
	94621	42.5	33.3	$31,082	44.0	17.2
	94702	8.0	15.1	$57,457	6.9	7.0
	94703	7.8	18.5	$55,554	11.5	9.1
	94710	14.4	17.1	$63,125	9.8	8.7
	Alameda	*13.6*	*12.5*	*$72,112*	*10.5*	*10.3*
	CA State	*18.8*	*15.94*	*$61,094*	*12.1*	*11.5*

(Source: Census, 2013)

ZIP codes 94621 (East Oakland) and 94601 (East Oakland/Fruitvale) had drastically high percentages of residents with no high school diploma: the rate in 94621 (East Oakland) was more than twice that in the state and county, followed by ZIP code 94601 (East Oakland/Fruitvale). Approximately 50% of the ZIP codes in Communities of Concern had rates higher than both the county and state benchmarks.

Similar to the quantitative data findings, primary qualitative data revealed that many residents struggle with poverty. As one key informant said *"I think poverty has…poverty and education are…a big impact on our communities and I think our community, our members regularly have to make decisions*

about how to spend their limited dollars" (KI_8). Other key informants discussed the drastic effects of the economic recession on the community, particularly among residents in service industries; *"they are working in lower income jobs and are more vulnerable to shifts in the economy" (KI_1).* Key informants also reported that the intersection of multiple stressors such as *"unstable housing, unstable employment and unsafe communities"* compounded the stress among area residents *(KI_5).*

Community Safety -- Major Crime Rates, Assault, and Traffic Accidents with Fatalities

Feeling safe in the community you live in is an important part of overall health. Safety is affected by both the physical and social environment in which community members reside. When residents feel safe while navigating their physical environment they are more likely to travel through the community for daily activities[34]. The repeated exposure to violence and crime could lead to feeling traumatized and lacking in trust towards other members in the community, resulting in isolation.

One of the prevalent themes in the qualitative data was the negative effects of exposure to violence on their health and well-being. Virtually every key informant interview and focus group mentioned the frequency of violence in the HSA and its impact on health. As one key informant said, *"So it will not surprise you that I think that the single most critical health issue facing not just that population but Oakland is violence,"* followed by, *"We go to classrooms and when our youth leaders teach a workshop and they'll say you know do you know anyone who's been killed and there will be every hand will go up" (KI_14).* Another key informant said, *"I think there are a lot of issues around violence and safety. One of the things that we see cutting across all of our clinics and across all of the population is the huge impact of trauma" (KI_9).*

One key informant from Berkeley described how might feel for a child living in a community with high rates of violence and crime, saying:

> *And there's that trauma too of living in an environment where there is all the crime happening, there is violence happening next door, upstairs, underneath you, but your family is here and it could be away, you know, mom, dad, kids, but you are surrounded by trauma. You walk out your door it's am I going to make it to school safe with my lunch? Is somebody going to rob me or this or that? So, that trauma and that fear of, okay, how am I going to make it to school and walk around this way, that way, to make it there safe and to get back? (KI_5)*

As discussed earlier, primary care and mental health treatment that is informed by exposure to violence and trauma was a primary significant health need identified for the ABSMC. One key informant expressed this need, saying:

> *(Violence) It's a big one. You need to know about that. So, it's about being informed and aware that the community that you are serving may have had dealt with trauma and that they bring that trauma with them. It's a part of them and they bring it with them to their medical visit, right? And so it's a way that you will interact with them, because you acknowledge that they may have had some trauma that may be leading to some other health conditions. (KI_14)*

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[34] Cubbin, C., Pedregon, V., Egerter, S. and Braveman, P. (2008). *Where we live matters for our health: Neighborhoods and Health*. Retrieved from: http://www.commissiononhealth.org/PDF/888f4a18-eb90-45be-a2f8-159e84a55a4c/Issue%20Brief%203%20Sept%2008%20-%20Neighborhoods%20and%20Health.pdf

Further concern about the effects that exposure to violence has on young people was expressed by another key informant, saying:

> *They can no longer tell because of the trauma what a real threat is and what a perceived threat is. They start making bad decisions like carrying a gun because they don't feel safe anymore, joining a gang because they don't feel safe and they want to feel safe. And all of these things can put them in harm's way right. (KI_14)*

Quantitative data pointed to disparate conditions in the ABSMC Communities of Concern. Following are Indicators of crime and violence, ED visits and hospitalizations related to assault and intentional injury, as well as factors related to physically navigating the community and feeling safe from traffic related injury.

Major Crimes

Criminal activity in a community has a strong effect on a community's actual and perceived safety. Data on major crimes reported to the California Department of Justice were used to create estimated major crime rates for the Oakland and Berkeley areas (note: ZIP codes are approximations for these areas).

Table 34: Major crimes by jurisdiction and ZIP code for the ABSMC Communities of Concern

	ZIP Code	Place	Crimes by Area
Major Crimes	94601	Oakland	838.8
	94602		
	94603		
	94605		
	94606		
	94607		
	94608		
	94609		
	94612		
	94621		
	94702	Berkeley	612.1
	94703		
	94710		
	Alameda County		*470.2*
	CA State		*312.7*

(Source: California Department of Justice, 2013)

Table 34 indicates that crime rates reported for both Oakland and Berkeley are noticeably higher than both the county and state rate. Rates for Oakland are more than twice the state rate and almost twice the rate of the Alameda county rate. Crime rates in Berkeley stagger over both the county and state benchmarks, but are lower in comparison to the Oakland rate.

Assault: Emergency Department Visits and Hospitalizations

Understanding safety in the ABSMC requires the examination of both crime rates as shown above as well as incidents of intentional harm, such as rates of assault. Rates of assault (intentionally harming another person) are included in this assessment to gain an understanding of violence in the ABSMC HSA area. Figure 15 and 16 show ED visits and hospitalizations related to assaults in the area.

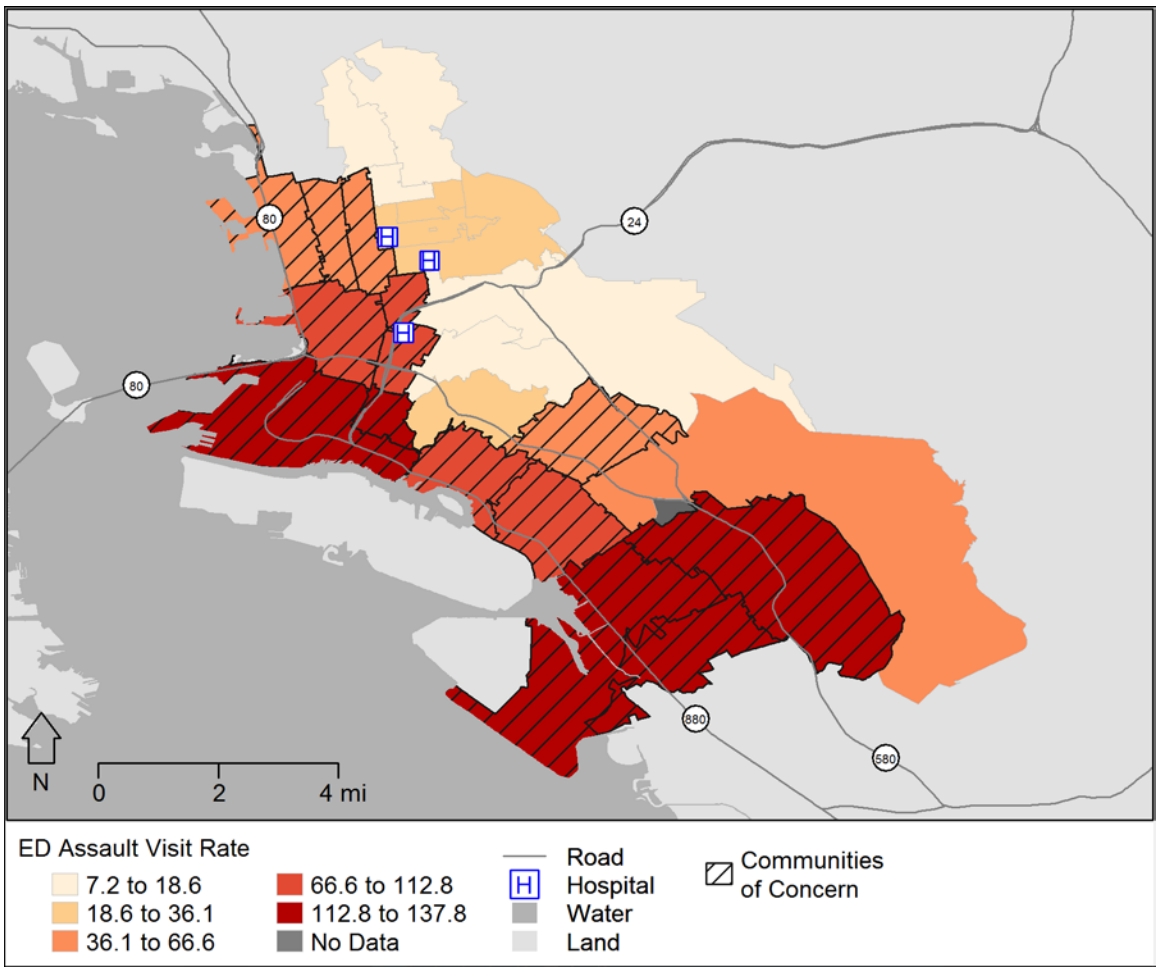

Figure 15: ED visits related to assault

Higher rates of ED visits due to assault were seen in the ZIP code Communities of Concern compared to the rest of the HSA. ZIP codes 94603 (East Oakland/Brookefield), 94621 (East Oakland), 94605 (East Oakland/Oakland Zoo), 94607 (West Oakland/Jack London Square), and 94612 (Downtown Oakland) had the highest rates of ED visits in the ABSMC HSA, ranging from 112.8 to 137.8 per 10,000. These rates were considerably higher than the county benchmark of 42.3 and the state benchmark of 30.55 visits per 10,000.

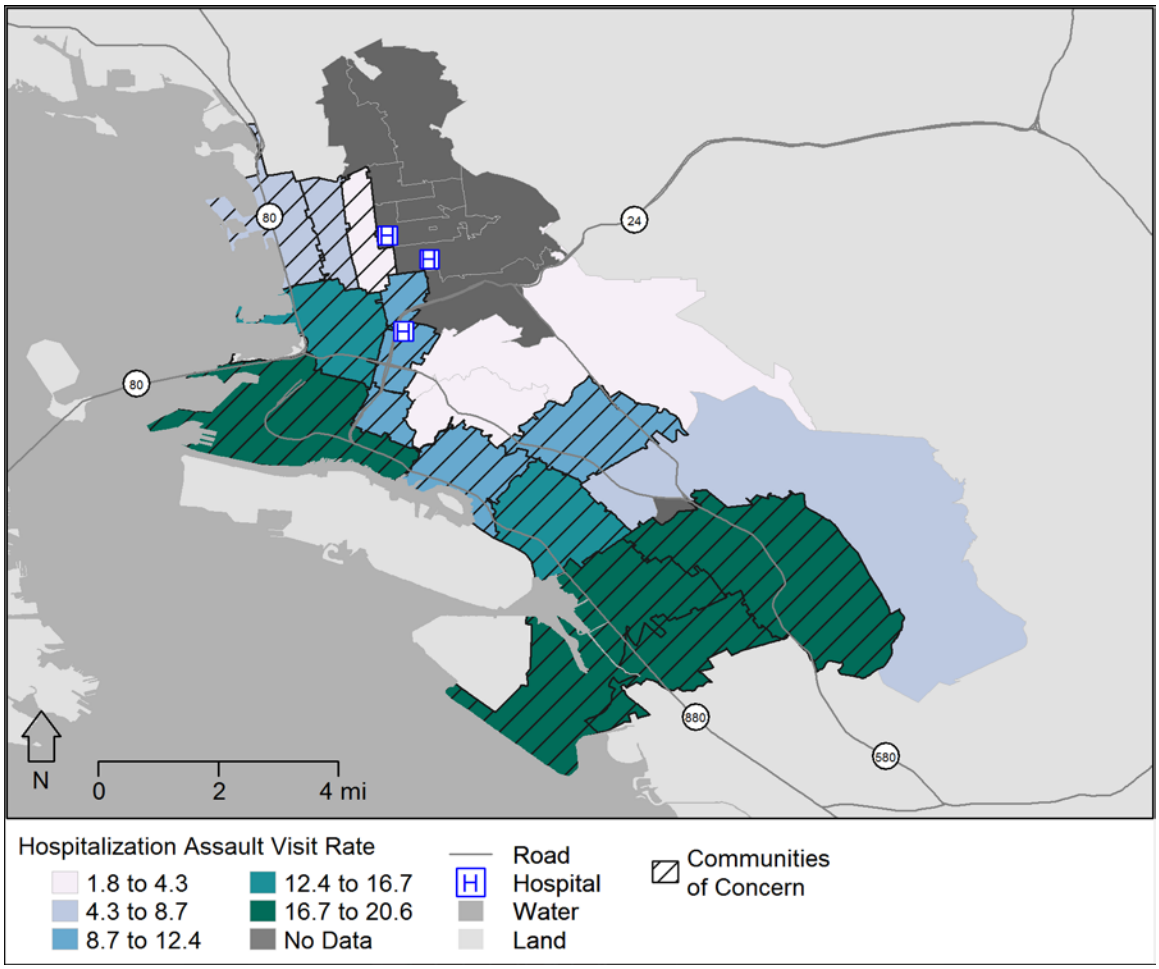

Figure 16: Hospitalizations related to assault

The geographic pattern seen for ED visits due to assault is also true for hospitalizations. The same five ZIP codes (94603, 94621, 94605, 94607, and 94612) had the highest rates of hospitalizations at four to five times higher than the county benchmark at 5.2 hospitalizations per 10,000 and the state rate of 3.89 per 10,000. As stated early in this section of the report, violence and assault were mentioned by the majority of primary data participants as barriers to living healthy.

Traffic Accidents with Fatalities

An examination of fatal traffic accidents helps to provide insight on residents' physical safety as they travel through the area they live and work. Figure 17 shows traffic accidents resulting in a fatality. Data indicates that traffic accidents resulting in a fatality were spread throughout the ABSMC HSA and more commonly occurred on the 880 freeway in the HSA.

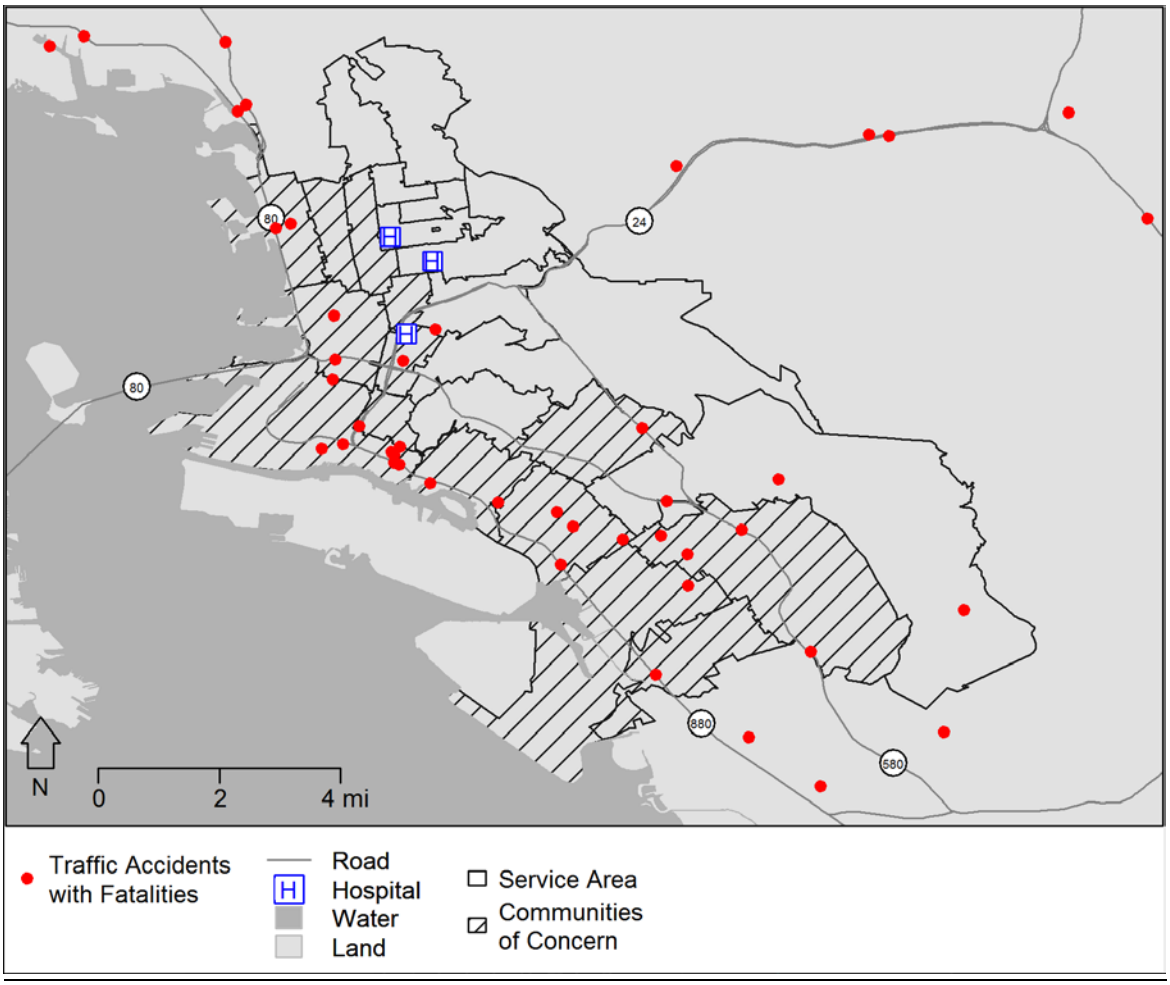

Figure 17: Traffic accidents resulting in a fatality for the ABSMC HSA and surrounding area

Figure 17 indicates a concentration of accident related fatalities (4 accidents) in the 94607 ZIP code (West Oakland/Jack London area) as it borders 94612 (Downtown Oakland). Many of these fatalities do not occur on a freeway but rather in the area where pedestrians navigate their community. ZIP codes 94601 (East Oakland) and 94605 (East Oakland/Oakland Zoo) also had a high number of fatal accidents (4 accidents) in comparison to other ZIP codes in the HSA.

Physical Environment -- Air and Water Quality, Housing, and Transportation

Pollution Burden Score

The California Environmental Protection Agency and the Office of Environmental Health Hazard Assessment developed the *California Communities Environmental Health Screening Tool, Version 2.0*.[35] This tool was designed to identify California communities that are disproportionately burdened by multiple sources of pollution. The tool combines 13 types of pollution, environmental factors to produce a "pollution burden" score for each census tract in the state ranging between a minimum 0 and a maximum of 100, with higher scores indicator a great pollution burden. The pollution factors included

[35] *California Communities Environmental Health Screening Tool, Version 2.0 (CalEnviroScreen 2.0). Guidance and Screen Tool*. October 2014. Retrieved from: http://oehha.ca.gov/ej/pdf/CES20FinalReportUpdateOct2014.pdf

ozone and PM2.5 concentrations, diesel PM emissions, pesticide use, toxic releases from facilities, traffic density, drinking water contaminants, cleanup sites, impaired water bodies, groundwater threats, hazardous wastes facilities and generators, and solid waste sites and facilities.

A pollution burden score was identified for each census tract in the ABSMC HSA and is displayed in Figure 18. Each census tract's pollution burden score ranged from 0 to 100 and was assigned to a quintile, displayed in the figure using color gradation. In the figure census tracts with darker colors have higher pollution burden scores.

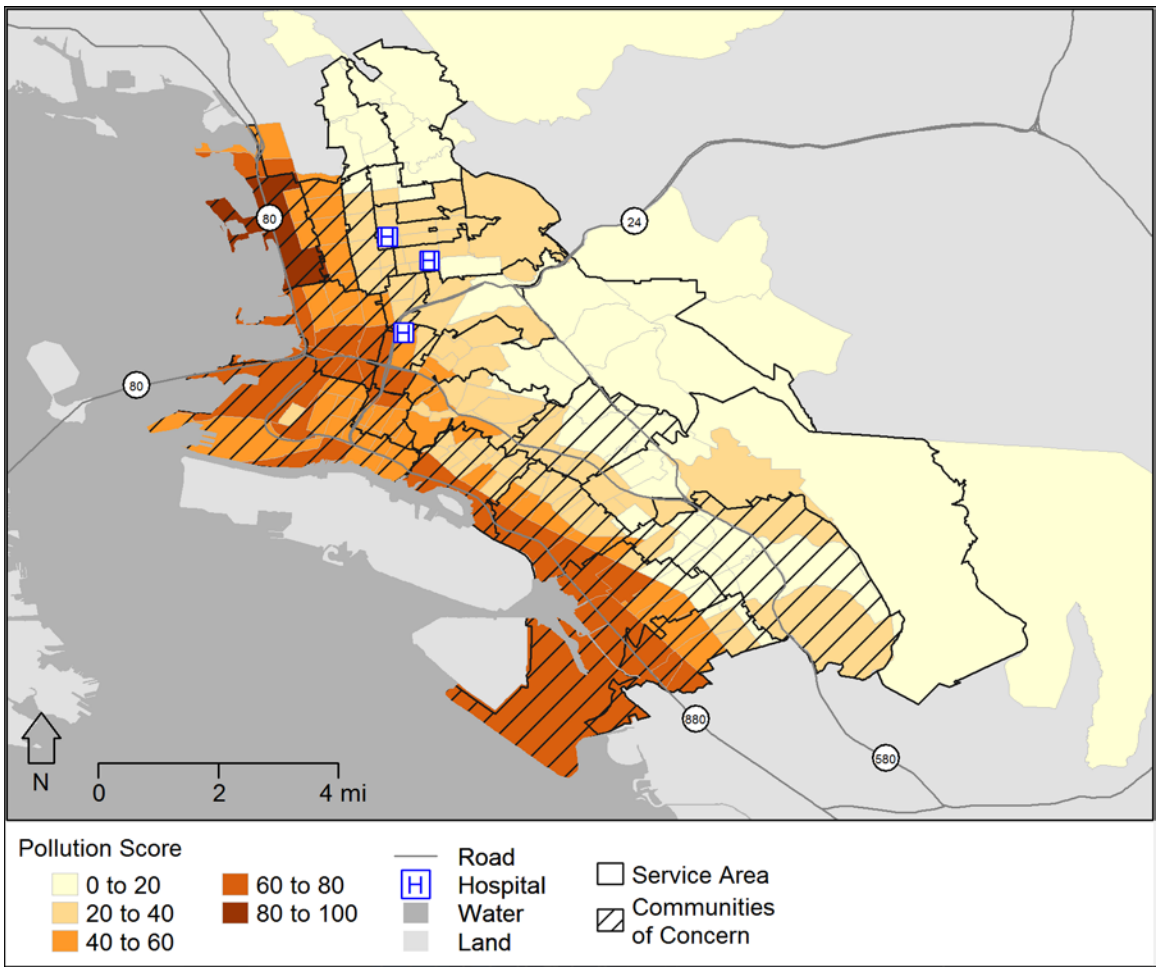

Figure 18: Pollution burden score for census tracts in the ABSMC HSA

The figure shows that portions of ZIP code 94710 (West Berkeley/Marina) had a pollution burden score in the highest quintile, 80-100. Portions of ZIP codes 94607 (West Oakland/Jack London Square), 94621 (East Oakland), 94601 (East Oakland/Fruitvale), 94606 (Oakland/ Cleveland Heights) and 94608 (Emeryville) had census tracts with scores in the second highest quintiles. The effect of exposure to pollution contributes to the high rates of respiratory illness mentioned previously in this report.

Housing & Transit -- Housing Stability and Distance to Nearest Transit Stop

Examining where people live and how they navigate their community is important in order to understand the health of the community overall. This section examines housing stability and distance to a transit stop.

Housing Stability

One of the biggest health needs mentioned in the assessment was clean, stable, and good quality housing. The lack of a stable place to live can have negative health effects on individuals and families. Table 35 shows rates for various housing indicators by ZIP code for the Communities of Concern as an indicator of housing stability.

Table 35: Housing vacancy, people living per housing unit, and percent of population renting by ZIP code

ZIP Code	Percent Housing Vacancy	People per Housing Unit	Percent Renting
94601	12.3	3.4	68.4
94602	6.5	2.4	41.6
94603	10.4	3.6	54.5
94605	11.0	2.8	40.3
94606	10.1	2.44	81.0
94607	12.0	2.27	76.4
94608	12.0	1.99	65.0
94609	7.4	2.11	69.5
94612	9.4	1.66	90.8
94621	11.0	3.57	69.5
94702	7.6	2.17	54.4
94703	9.9	2.4	59.8
94710	10.1	2.31	59.7
Alameda County	*6.8*	*2.76*	*46.8*
CA State	*8.6*	*2.94*	*44.7*

(Source: Census, 2013)

The largest percent of vacancies were in 94601 (East Oakland/Fruitvale), 94607 (West Oakland/Jack London Square), and 94608 (Emeryville), higher than the state rate and almost twice the county rate. High vacancy rates are indicators of housing market conditions[36], specifically the affordability of housing in the area. The number of people per housing unit is an indicator of multiple people living together, which can be an indicator of poverty. The highest people-per-housing unit rates were seen in ZIP codes 94603 (East Oakland/Brookefield) and 94621 (East Oakland), followed by 94601 (East Oakland/Frutivale) and 94605 (East Oakland/Oakland Zoo). Also, a large number of renters in a given geographical area can be an indicator of the area's economic stability as well as housing costs. ZIP code 94612 (Downtown Oakland) had a much higher percent renting rate than the county and state benchmark.

Most key informants in the assessment mentioned housing instability as an issue affecting area residents, a major part of the fifth priority health need for ABSMC, access to basic needs, such as housing and stable employment. As one key informant from Berkeley stated, *"I mean, housing is a huge need for folks being able to address numerous health issues" (KI_5).* This informant then elaborated:

[36] Belsky, E.S. (n.d.) *Vacancy rates: A policy primer*. Housing Policy Debate, vol 3(I3), 793-814. Retrieved from: http://content.knowledgeplex.org/kp2/img/cache/kp/2627.pdf

> *But in my world I think the major thing that is affecting the overall health is the lack of housing. It is phenomenally difficult for poor individuals to find housing, forget finding adequate housing. That creates so many obstacles for folks that both affect their health, but also creates barriers to actually participating in activities that would improve your health. I think that has been an enormous one in this area. (KI_5)*

A similar statement was made by a key informant from Oakland: *"I think one of the things we're seeing now is really questions around housing and the cost of housing and not just in a few places but a lot of places its going up (in price) significantly" (KI_1).* Another service provider stated:

> *There is lot of instability with housing, it is a big challenge in the Bay Area, you know that, but specially with low-income to find affordable housing and I mean, you could imagine when you have a young family or you are pregnant, on top of the many stresses that come with that, to have the stress of housing and your basic needs. (KI_6)*

Distance to Nearest Transit Stop

Research shows that there are limits to the distances community residents are willing and capable of walking to access public transportation services. These distances are documented in a number studies and vary due to a number of factors such as climate, attractiveness of the area, the amount of traffic on streets, and similar,[37] but most estimates note that individuals will travel no more than one-fourth to one-third of a mile to access public transportation. Identifying the areas that are at least one-half mile from a transit station helps highlight areas where transportation barriers may be contributing to poorer health outcomes. Figure 19 shows areas of the ABSMC HSA that are within one-half mile from a transit stop.

[37] *Building Transit-Friendly Communities: A design and development strategy for the Tri-State Metropolitan Region* (1997). Regional Plan Association. Retrieved from: http://ntl.bts.gov/DOCS/GL.html

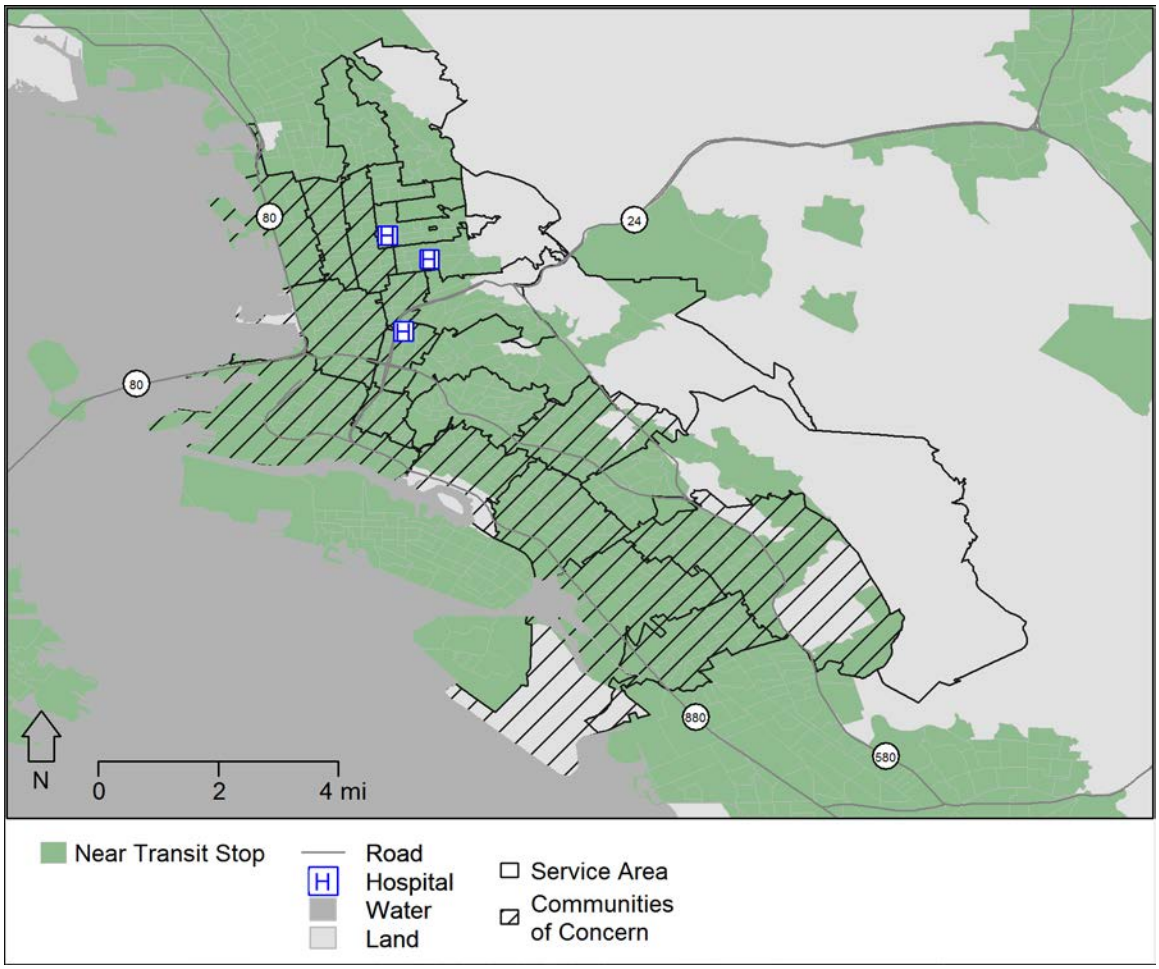

Figure 19: Locations in the ABSMC HSA within one-half mile of a transit stop.

In Figure 19, areas outside the shaded green portion of the map are located more than a half-mile from a transit stop; this figure shows few areas where residents have to travel more than a half-mile to a transit stop. However, ZIP code 94605 (East Oakland/Oakland Zoo) and 94621 (East Oakland) have some areas where residents lack access to a transit stop within a half-mile.

Resources Potentially Available to Meet Significant Health Needs

Three hundred and forty-five resources were identified in the Communities of Concern in accordance with the analytical method detailed in Appendix B. The method included starting with the list of resources from the 2013 ABSMC CHNA, verification that the resource was still existed, and adding newly identified resources in the primary data for the 2016 CHNA report. Examination of the resources revealed the following numbers of resources for each significant health need:

Table 36: Resources potentially available to meet significant health needs in priority order

Significant Health Need (in priority order)	Number of resources
Access to mental/behavioral/substance abuse services	181
Safe and violence-free environment	28
Access to affordable, healthy food	9
Health education and health literacy	114
Access to basic needs, such as housing and employment	133
Access to quality primary care health services	80

For more specific examination of resources by significant health need and by geographic locations, see the full list in Appendix H.

Impact of Actions Taken Since the Previous CHNA

The final regulations issued by the Department of Treasury on December 29, 2014, regarding nonprofit hospitals conducting CHNAs require that each hospital's CHNA report include: "… an evaluation of the impact of any actions that were taken since the hospital facility finished conducting its immediately preceding CHNA to address the significant health needs identified in the hospital facility's prior CHNA(s) (p. 78969)."[38] Prior to this report, ABSMC conducted its most recent CHNA in 2013. The 2013 CHNA identified nine specific health needs. Working within its mission and capabilities, ABSMC identified three of the nine needs to address in its community benefit implementation strategy:

1. Lack of access to mental health services/treatment – substance abuse
2. Limited access to quality primary health care services
3. Lack of access to basic needs: food, housing, jobs

A detailed report of the impact of the actions taken by ABSMC to address the health needs identified in the 2013 CHNA can be found in Appendix I.

Soliciting for Public Comments

Alta Bates Summit Medical Center requested written comments from the public on its 2013 Community Health Needs Assessment (CHNA) and most recently adopted implementation strategy through http://www.altabatessummit.org/about/communitybenefit/community-assessment.html. At the time of the development of this CHNA report, Alta Bates Summit Medical Center had not received written comments. However, input from the broader community was considered and taken into account when identifying and prioritizing the significant health needs of the community we serve for the 2016 CHNA through key informant interviews, surveys, focus groups and more. Alta Bates Summit Medical Center will continue to use its website as a tool to solicit for public comments, and ensure that these comments are considered community input in the development of future CHNAs.

Limitations

Study limitations included challenges obtaining secondary quantitative data and assuring community representation via primary qualitative data collection. For example, most of the data used in

[38] *Federal Register*, Vol. 79, No. 250, (Wednesday, December 31, 2014). Department of the Treasury, Internal Revenue Service.

this assessment were not available by race/ethnicity. In addition, data about behavioral issues and conditions like obesity were difficult to obtain at the sub-county level and were not available by race and ethnicity, resulting in the reliance on county data. The timeliness of the data also presented a challenge, as some of the data were collected in different years; however, this is clearly noted in the report to allow for proper comparison.

As always with primary data collection, gaining access to participants that best represent the populations needed for this assessment proved to be a challenge. Measures were taken to reach out to area organizations for recruitment, assuming that the organization represented a Community of Concern geographically, racially, ethnically, or culturally. Some key informants and organizations that helped with focus groups participated in the 2013 round of data collection, possibly contributing to assessment fatigue. To help with recruitment, focus group participants were offered incentives such as food and refreshments. Additionally, data collection of health resources in the hospital service areas was challenging; though an effort was made to verify all resources (assets) collected in the 2013 round via web search, we recognize that ultimately some resources may not be listed that exist in the HSA.

Conclusion

The results contained in this CHNA are directly in line with results from other assessments conducted in the East Bay area of California. Most notably, the results from the focus group discussions conducted for the current Alameda County Public Health Department Accreditation process list the same community health needs as the top priorities outlined in this CHNA: safety and violence, healthcare access, and economic independence.

Nonprofit hospitals play a vital role in the communities they serve. In addition to the delivery of newborns and the treatment of disease, these important institutions work with and along-side other organizations to improve community health and wellbeing by working to prevent disease, improve access to healthcare, promote health education, eliminate health disparities, and similar. CHNAs play an important role in helping nonprofit hospitals, as well as other community organizations, determine where to focus community benefit and improvement efforts, including geographic locations and specific populations living in their service areas.

Appendices

Appendix A: Secondary Data Dictionary and Processing

The secondary data supporting the 2016 Community Health Needs Assessment was collected from a variety of sources, and was processed in multiple stages before it was used for analysis. This document details those stages. It begins with a list of the secondary indicators collected, organized according to the conceptual model used in the CHNA. Next, the approaches used to define ZIP code boundaries and integrate P.O. box records into the analysis are described. General data sources are then listed, followed by a description of the basic processing steps applied to most indicators. It concludes by detailing additional specific processing steps used to generate a subset of more complicated indicators.

Secondary Indicators

The selection of secondary indicators was guided by the conceptual model illustrated in Figure A1 . This model organizes individual health-related characteristics of populations in terms of how they relate to up- or down-stream factors of health and health disparities. Specific secondary indicators were selected to represent these characteristics in the needs assessment. Table A1 lists these indicators, and identifies which health-related characteristic they are primarily used to represent.

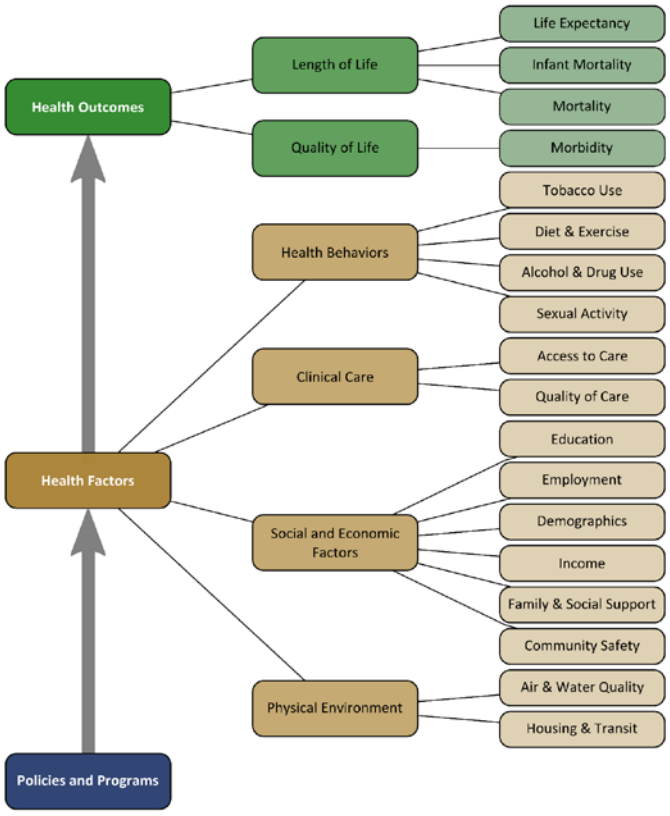

Figure A1: ABSMC Community Health Assessment Conceptual Model as modified from the County Health Rankings Model, Robert Wood Johnson Foundation, and University of Wisconsin, 2015

Table A1: Indicators used in the CHNA as organized by the County Health Rankings Model, Robert Wood Johnson Foundation, and University of Wisconsin, 2015

Conceptual Model			
Main Area	Sub Area	Concept	Indicator
Health Outcomes	Length of Life	Infant Mortality	Infant Mortality Rate
		Life Expectancy	Life Expectancy at Birth
		Mortality	Age-Adjusted All-Cause Mortality
			All Other Causes
			Alzheimer's Disease
			Cerebrovascular Disease (Stroke)
			Chronic Liver Disease and Cirrhosis
			Chronic Lower Respiratory Disease
			Diabetes Mellitus
			Diseases of the Heart
			Essential Hypertension & Hypertensive Renal Disease
			Female Mortality Rate
			Influenza and Pneumonia
			Intentional Self Harm (Suicide)
			Male Mortality Rate
			Malignant Neoplasms (Cancer)
			Years Potential Life Lost (75)
			Nephritis, Nephrotic Syndrome and Nephrosis (Kidney Disease)
			Unintentional Injuries (Accidents)
	Quality of Life / Morbidity	Cancer	Breast Cancer
			Colorectal Cancer
			Lung Cancer
			Prostate Cancer
		Chronic Disease	Diabetes
			Heart Disease
			Hypertension
			Nephritis, Nephrotic Syndrome and Nephrosis (Kidney Disease)
			Stroke
		Infectious Disease	HIV/AIDS
			STIs
			Tuberculosis
		Injuries	Assault
			Self-Inflicted Injury
			Unintentional Injury
		Mental Health	Mental Health
		Respiratory	Asthma
			Chronic Obstructive Pulmonary Disease (COPD)
			Hip Fractures

Conceptual Model			
Main Area	Sub Area	Concept	Indicator
		Other Indicators	Oral Cavity/Dental
			Low Birth Weight
			Total ED Discharge Rate
			Total H Discharge Rate
Health Factors		Tobacco Use	Current Smokers
		Alcohol and Drug Use	Binge Drinking
			Mental Health, Substance Abuse
	Health Behavior	Diet & Exercise	Obesity
			Food Deserts
			Modified Retail Food Environment Index (mRFEI)
			Park Access
		Sexual Activity	Teen Birth Rate
	Clinical Care	Access to Care	Health Professional Shortage Areas (Primary Care, Dental, Mental Health)
			Percent Uninsured
		Quality of Care	Prevention Quality Indicators (PQI)
	Social and Economic Factors	Community Safety	Major Crime Rate
			Traffic Accidents Resulting in Fatalities
		Demographics	Percent Asian (Not Hispanic)
			Percent Black (Not Hispanic)
			Percent Hispanic (Any Race)
			Percent American Indian (Not Hispanic)
			Percent Pacific Islander (Not Hispanic)
			Percent White (Not Hispanic)
			Percent Other Race or Two or More Races (Not Hispanic)
			Percent Minority (Hispanic or Non-White)
			Racial/Ethnic Diversity Index
			Population 5 Years or Older Who Speak Limited English
			Population by Age Group: 0-4, 5-14, 15-24, 25-34,45-54, 55-64, 65-74, 75-84, and 85 and over
			Median Age
			Percent Non-Citizen
			Percent Female
			Percent Foreign-Born
			Percent Male
			Percent Civilian Noninstitutionalized Population with a Disability
			Total Population
			Percent Over 18 Who are Civilian Veterans
		Education	Percent 25 or Older Without a High School Diploma

Conceptual Model			
Main Area	Sub Area	Concept	Indicator
		Family and Social Support	Percent Single Female Headed Households
		Employment	Percent Unemployed
		Income	GINI Coefficient
			Median income
			Percent Families with Children in Poverty
			Percent Households 65 years or Older in Poverty
			Percent Single Female Headed Households in Poverty
			Percent with Public Assistance
			Percent with Income Less Then Federal Poverty Level
	Physical Environment	Air & Water Quality	Pollution Burden
		Housing	Average Population per Housing Unit
			Percent Renter-Occupied Housing Units
			Percent Vacant Housing Units
		Transit	Percent Households with No Vehicle
			Population Living Near a Transit Stop

ZIP Code Definitions

All health outcome indicators collected in this analysis are reported by patient mailing ZIP codes. ZIP codes are defined by the US Postal Service as a single location (such as a PO Box), or a set of roads along which addresses are located. The roads that comprise such a ZIP code may not form contiguous areas, and do not match the approach of the US Census Bureau, which is the main source of population and demographic information in the US. Instead of measuring the population along a collection of roads, the Census reports population figures for distinct, contiguous areas. In an attempt to support the analysis of ZIP code data, the Census Bureau created ZIP Code Tabulation Areas (ZCTAs). ZCTAs are created by identifying the dominant ZIP code for addresses in a given Census block (the smallest unit of Census data available), and then grouping blocks with the same dominant ZIP code into a corresponding ZCTA. The creation of ZCTAs allows us to identify population figures that, in combination the health outcome data reported at the ZIP code level, make it possible to calculate rates for each ZCTA. But the difference in the definition between mailing ZIP codes and ZCTAs has two important implications for analyses of ZIP level data.

First, it should be understood that ZCTAs are approximate representations of ZIP codes, rather than exact matches. While this is not ideal, it is nevertheless the nature of the data being analyzed. Secondly, not all ZIP codes have corresponding ZCTAs. Some PO Box ZIP codes or other unique ZIP codes (such as a ZIP code assigned to a single facility) may not have enough addressees residing in a given census block to ever result in the creation of a ZCTA. But residents whose mailing addresses correspond to these ZIP codes will still show up in reported health outcome data. This means that rates cannot be calculated for these ZIP codes individually because there are no matching ZCTA population figures.

In order to incorporate these patients into the analysis, the point location (latitude and longitude) of all ZIP codes in California[39] were compared to ZCTA boundaries[40]. Because various health outcome data sources were available in different years, this comparison was made between the ZCTA boundaries and the point locations of ZIP codes in April of the year (or the central year in the case of indicators aggregated over multiple years) for which the health outcome indicators were reported. All ZIP codes (whether PO Box or unique ZIP code) that were not included in the ZCTA dataset were identified. These ZIP codes were then assigned to either ZCTA in which they fell, or in the case of rural areas that are not completely covered by ZCTAs, the ZCTA to which they were closest. Health outcome information associated with these PO Box or unique ZIP codes were then assigned added to the ZCTAs to which they were assigned.

For example, 94604 is a PO Box located in Oakland. ZIP Code 94604 is not represented by a ZCTA, but it could have patient data reported as health outcome variables. Through the process identified above, it was found that 94604 is located within 94612, which does have an associated ZCTA. Health outcome data for ZIP codes 94604 and 94612 were therefore assigned to ZCTA 94612, and used to calculate rates. All ZIP code level health outcome variables given in this report are therefore reporting approximate rates for ZCTAs, but for the sake of familiarity of terms they are presented in the body of the report as ZIP code rates.

Data Sources

The majority of health factor and health outcome indicators were collected from three main data sources: the US Census Bureau (Census), the California Office of Statewide Health Planning and Development (OSHPD), and the California Department of Public Health (CDPH). Census data was collected both to provide descriptions of population characteristics for the study area, as well as to calculate rates for health outcome indicators. Table A2 lists the 2013 population characteristic indicators and sources. Table A3 lists sources for indicators used to calculate health outcome indicator rates, which were collected for 2012, 2013, and 2014. These demographic indicators were collected variously at the Census blocks and tracts, ZCTA, county, and state levels. In urban areas, Census blocks are roughly equivalent to a city block, and tracts to a neighborhood.

Table A2: Demographic indicators collected from the US Census Bureau[41]

Derived Indicator Name	Source Indicator Names	Source
Percent Minority (Hispanic or Non-White)	Total Population - Not Hispanic or Latino: - White alone	2013 American Community Survey 5-year Estimate Table B03002

[39] Datasheer, L.L.C. (2015, April 15). *ZIP Code Database DELUXE BUSINESS.* Retrieved from Zip-Codes.com: http://www.Zip-Codes.com

[40] U.S. Census Bureau. (2015). *TIGER/Line® Shapefiles and TIGER/Line® Files.* Retrieved August 31, 2011, from http://www.census.gov/geo/maps-data/data/tiger-line.html

[41] U.S. Census Bureau. (2015). *2013 American Community Survey 5-year Estimates; 2012 American Community Survey 5-year estimates; 2011 American Community Survey 5-year Estimates.* Retrieved February 14, 2015, from American Fact Finder: http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t

Derived Indicator Name	Source Indicator Names	Source
Population 5 Years or Older Who Speak Limited English	For age groups 5 to 17; 18 to 64; and 65 years and over: Speak Spanish: - Speak English "not well"; Speak Spanish: - Speak English "not at all"; Speak other Indo-European languages: - Speak English "not well"; Speak other Indo-European languages: - Speak English "not at all"; Speak Asian and Pacific Island languages: - Speak English "not well"; Speak Asian and Pacific Island languages: - Speak English "not at all"; Speak other languages: - Speak English "not well"; Speak other languages: - Speak English "not at all"	2013 American Community Survey 5-year Estimate Table B16004
Percent Households 65 Years or Older in Poverty	Income in the past 12 months below poverty level: - Family households: - Married-couple family: - Householder 65 years and over; Income in the past 12 months below poverty level: - Family households: - Other family: - Male householder, no wife present: - Householder 65 years and over; Income in the past 12 months below poverty level: - Family households: - Other family: - Female householder, no husband present: - Householder 65 years and over; Income in the past 12 months below poverty level: - Nonfamily households: - Male householder: - Householder 65 years and over; Income in the past 12 months below poverty level: - Nonfamily households: - Female householder: - Householder 65 years and over; Total Households	2013 American Community Survey 5-year Estimate Table B17017
Median Income	Estimate; Median household income in the past 12 months (in 2013 inflation-adjusted dollars)	2013 American Community Survey 5-year Estimate Table B19013
GINI Coefficient	Gini Index	2013 American Community Survey 5-year Estimate Table B19083
Average Population per Housing Unit	Total population in Occupied Housing Units	2013 American Community Survey 5-year Estimate Table B25008
Percent with Income Less Then Federal Poverty Level	Total: - Under .50; Total: - .50 to .99	2013 American Community Survey 5-year Estimate Table C17002
Percent Foreign Born	Total population - Foreign born	2013 American Community Survey 5-year Estimate Table DP02

Derived Indicator Name	Source Indicator Names	Source
Percent Non-Citizen	Foreign-born population - Not a U.S. citizen	2013 American Community Survey 5-year Estimate Table DP02
Percent Over 18 Who are Civilian Veterans	VETERAN STATUS - Civilian population 18 years and over - Civilian veterans	2013 American Community Survey 5-year Estimate Table DP02
Percent Civilian Noninstitutionalized Population with a Disability	DISABILITY STATUS OF THE CIVILIAN NONINSTITUTIONALIZED POPULATION - Total Civilian Noninstitutionalized Population	2013 American Community Survey 5-year Estimate Table DP02
Percent on Public Assistance	INCOME AND BENEFITS (IN 2013 INFLATION-ADJUSTED DOLLARS) - With cash public assistance income; INCOME AND BENEFITS (IN 2013 INFLATION-ADJUSTED DOLLARS) - With cash public assistance income	2013 American Community Survey 5-year Estimate Table DP03
Percent on Public Insurance	HEALTH INSURANCE COVERAGE - Civilian noninstitutionalized population - With health insurance coverage - With public coverage	2013 American Community Survey 5-year Estimate Table DP03
Percent Renter-Occupied Households	Occupied housing units - Renter-occupied	2013 American Community Survey 5-year Estimate Table DP04
Percent Vacant Housing Units	Total housing units - Vacant housing units	2013 American Community Survey 5-year Estimate Table DP04
Percent Households with No Vehicle	Occupied housing units - No vehicles available	2013 American Community Survey 5-year Estimate Table DP04
Total Population	Total Population	2013 American Community Survey 5-year Estimate Table DP05
Percent Asian (Not Hispanic)	Total Population - Not Hispanic or Latino - Asian alone	2013 American Community Survey 5-year Estimate Table DP05
Percent Black (Not Hispanic)	Total Population - Not Hispanic or Latino - Black or African American alone	2013 American Community Survey 5-year Estimate Table DP05
Percent Hispanic (Any Race)	Total population - Hispanic or Latino (of any race)	2013 American Community Survey 5-year Estimate Table DP05
Percent American Indian (Not Hispanic)	Total population - Not Hispanic or Latino - American Indian and Alaska Native alone	2013 American Community Survey 5-year Estimate Table DP05
Percent Pacific Islander (Not Hispanic)	Total population - Not Hispanic or Latino - Native Hawaiian and Other Pacific Islander alone	2013 American Community Survey 5-year Estimate Table DP05

Derived Indicator Name	Source Indicator Names	Source
Percent White (Not Hispanic)	Total population - Not Hispanic or Latino - White alone	2013 American Community Survey 5-year Estimate Table DP05
Percent Other or Two or More Races (Not Hispanic)	Total population - Not Hispanic or Latino - some other race alone; Total population - Not Hispanic or Latino - Two or More Races	2013 American Community Survey 5-year Estimate Table DP05
Percent Female	Total population - Female	2013 American Community Survey 5-year Estimate Table DP05
Percent Male	Total population - Male	2013 American Community Survey 5-year Estimate Table DP05
Median Age	Median age (years)	2013 American Community Survey 5-year Estimate Table DP05
Population by Age Group	Under 5 years; 5 to 9 years; 10 to 14 years; 10 to 14 years; 20 to 24 years; 25 to 34 years; 35 to 44 years; 5 to 54 years; 55 to 59 years; 60 to 64 years; 65 to 74 years; 75 to 84 years; 85 years and over	2013 American Community Survey 5-year Estimate Table DP05
Percent Single Female-Headed Households	Female householder, No Husband Present, Family Household	2013 American Community Survey 5-year Estimate Table S1101
Percent 25 or Older Without a High School Diploma	100 - Percent High School Graduate Or Higher	2013 American Community Survey 5-year Estimate Table S1501
Percent Families with Children in Poverty	All families - Percent Below Poverty Level; Estimate; With Related Children Under 18 years	2013 American Community Survey 5-year Estimate Table S1702
Percent Single Female-Headed Households in Poverty	Female householder, No Husband Present - Percent Below Poverty Level; Estimate; With Related Children Under 18 years	2013 American Community Survey 5-year Estimate Table S1702
Percent Unemployed	Unemployment rate; Estimate; Population 16 years and over	2013 American Community Survey 5-year Estimate Table S2301

Derived Indicator Name	Source Indicator Names	Source
Percent Uninsured	Percent Uninsured; Estimate; Total civilian Noninstitutionalized Population	2013 American Community Survey 5-year Estimate Table S2701

Table A3: Census indicators used for Health Outcome Rate Calculations[41,42]

Derived Indicator Name	Source Indicator Names	Source
Total Population	Total Population	American Community Survey 5-year Estimate Table DP05 (2011, 2012, 2013) 2010 Decennial Census Summary File 1
Female	Female	American Community Survey 5-year Estimate Table DP05 (2011, 2012, 2013)
Male	Male	American Community Survey 5-year Estimate Table DP05 (2011, 2012, 2013)
Age Under 1	DP05: Under 5 years PCT12: Male and Female, ages under 1, 1, 2, 3, and 4	American Community Survey 5-year Estimate Table DP05 (2011, 2012, 2013); 2010 Decennial Census Summary File 1 Table PCT12
Age 1 to 4	DP05: Under 5 years PCT12: Male and Female, ages under 1, 1, 2, 3, and 4	American Community Survey 5-year Estimate Table DP05 (2011, 2012, 2013); 2010 Decennial Census Summary File 1 Table PCT12
Age 5 to 14	5 to 9 years; 10 to 14 years	American Community Survey 5-year Estimate Table DP05 (2011, 2012, 2013)
Age 15 to 24	15 to 19 years; 20 to 24 years	American Community Survey 5-year Estimate Table DP05 (2011, 2012, 2013)
Age 25 to 34	25 to 34 years	American Community Survey 5-year Estimate Table DP05 (2011, 2012, 2013)
Age 35 to 44	35 to 44 years	American Community Survey 5-year Estimate Table DP05 (2011, 2012, 2013)
Age 45 to 54	45 to 54 years	American Community Survey 5-year Estimate Table DP05 (2011, 2012, 2013)
Age 55 to 64	55 to 59 years; 60 to 64 years	American Community Survey 5-year Estimate Table DP05 (2011, 2012, 2013)
Age 65 to 74	65 to 74 years	American Community Survey 5-year Estimate Table DP05 (2011, 2012, 2013)
Age 75 to 84	75 to 84 years	American Community Survey 5-year Estimate Table DP05 (2011, 2012, 2013)
Age 85 and Over	85 Years And Over	American Community Survey 5-year Estimate Table DP05 (2011, 2012, 2013)

[42] U.S. Census Bureau. (2013). *2010 Census Summary File 1.* Retrieved February 14, 2013, from American Fact Finder: http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t

Derived Indicator Name	Source Indicator Names	Source
White	HISPANIC OR LATINO AND RACE - Total population - Not Hispanic or Latino - White alone	American Community Survey 5-year Estimate Table DP05 (2011, 2012, 2013)
Black	HISPANIC OR LATINO AND RACE - Total population - Not Hispanic or Latino - Black or African American alone	American Community Survey 5-year Estimate Table DP05 (2011, 2012, 2013)
Hispanic	HISPANIC OR LATINO AND RACE - Total population - Hispanic or Latino (of any race)	American Community Survey 5-year Estimate Table DP05 (2011, 2012, 2013)
Native American	HISPANIC OR LATINO AND RACE - Total population - Not Hispanic or Latino - American Indian and Alaska Native alone	American Community Survey 5-year Estimate Table DP05 (2011, 2012, 2013)
Asian/Pacific Islander	HISPANIC OR LATINO AND RACE - Total population - Not Hispanic or Latino - Asian alone; HISPANIC OR LATINO AND RACE - Total population - Not Hispanic or Latino - Native Hawaiian and Other Pacific Islander alone	American Community Survey 5-year Estimate Table DP05 (2011, 2012, 2013)

Collected health outcome data included the number of emergency department (ED) discharges, hospital (H) discharges[43], and mortalities associated with a number of conditions. Aggregated 2011 – 2013 ED and H discharge data were obtained from the Office of Statewide Health Planning and Development (OSHPD). Table A4 lists the specific indicators collected by ZIP code and county. These values report the total number of ED or H discharges that listed the corresponding ICD9 code as either a primary or any secondary diagnosis, or a principal or other E-code, as the case may be. In addition to reporting the total number of discharges associated with the specified codes per ZIP code/county, these data were also broken down by sex (male and female), age (under 1 year; 1 to 4 years; 5 to 14 years; 15 to 24 years; 25 to 34 years; 35 to 44 years; 45 to 54 years; 55 to 64 years; 65 to 84 years; and 85 years or older), and normalized race and ethnicity (Hispanic of any race; non-Hispanic White; non-Hispanic Black, non-Hispanic Asian or Pacific Islander, non-Hispanic Native American). In addition to the hospitalization and emergency department discharge data shown in Table A4, aggregated 2011 – 2013 Prevention Quality Indicators (PQI) (Version 4.5a) data were also obtained from OSHPD at the ZIP code and county levels.

To address patient privacy concerns, OSHPD applied a number of masking techniques to all their data (both ED and H discharge and PQI). First, rather than providing data for a single year, data for each condition were totaled for 2011 through 2013 for each ZIP code or county. For the PQI dataset, values were not reported for any ZIP code or county where fewer than 11 cases were reported. For the ED and H discharge datasets, two additional levels of masking were applied. First, ZCTA sex, age, and normalized race/ethnicity indicators were not available for ZCTAs in what OSHPD classifies as "Small Counties." County level values for these small counties were reported in aggregated groups as follows: Alpine, Inyo, Mariposa, and Mono; Modoc, Plumas, and Sierra; and Colusa, Del Norte, Glenn, and Trinity. Secondly, rates were not reported for any ZIP code or county where fewer than 11 cases were reported.

[43] While OSHPD data actually refer to discharges, for simplicity they are referred to as the visits they are taken to represent throughout the body of the report.

Table A4: 2011 – 2013 OSHPD Hospitalization and Emergency Department Discharge Data

Category	Indicator Name	ICD9/E-Codes
Cancer	Breast Cancer	174, 175
	Colorectal Cancer	153, 154
	Lung Cancer	162, 163
	Prostate Cancer	185
Chronic Disease	Diabetes	250
	Hypertension	401-405
	Ischemic Heart Disease	410-414
	Chronic Kidney Disease	580-589
	Stroke	430-438
Infectious Disease	HIV/AIDS	042-044
	STIs	042-044, 090-099, 054.1,079.4
	Tuberculosis	010-018, 137
Injuries[44]	Assault	E960-E969, E999.1
	Self-Inflicted Injury	E950-E959
	Unintentional Injury	E800-E869, E880-E929
Mental Health	Mental Health	290, 293-298, 301-302, 310-311
	Mental Health: Substance Abuse	291-292, 303-305
Respiratory	Asthma	493
	Chronic Obstructive Pulmonary Disease (COPD)	490-492, 494, 496
Other	Hip Fractures	820
	Oral Cavity/Dental	520-529
	Osteoporosis	733
Overall Discharges	Total Discharges	All Codes

Mortality and birth-related data for each ZIP code in 2010, 2011, and 2012 were collected from the California Department of Public Health (CDPH). The specific indicators collected are defined in Table A5. The majority of these indicators were used to calculate specific rates of mortality for 2012. A smaller number of them were used to calculate more complex derived indicators. To increase the stability of these derived indicators, rates were calculated using values for the years 2010 to 2012. These indicators include the total number of live births, total number of infant deaths (ages under 1 year), all-cause mortality by age, births with low infant birth weight, and births with mother's age at delivery under 20. Table A5 consequently also lists the years for which each indicator was collected.

[44] E-code definitions for injury indicators derived from CDC. (2011). *Matrix of E-code Groupings.* Retrieved March 4, 2013, from Injury Prevention & Control: Data & Statistics(WISQARS): http://www.cdc.gov/injury/wisqars/ecode_matrix.html

Table A5: CDPH Birth and Mortality Data by ZIP Code

Indicator Name	ICD10 Code	Years Collected
Total Deaths		2012
Male Deaths		2012
Female Deaths		2012
Deaths by Age Group: Under 1, 1-4, 5-14, 15-24, 25-34,45-54, 55-64, 65-74, 75-84, and 85 and over		2010 - 2012
Diseases of the Heart	I00-I09, I11, I13, I20-I51	2012
Malignant Neoplasms (Cancer)	C00-C97	2012
Cerebrovascular Disease (Stroke)	I60-I69	2012
Chronic Lower Respiratory Disease	J40-J47	2012
Alzheimer's Disease	G30	2012
Unintentional Injuries (Accidents)	V01-X59, Y85-Y86	2012
Diabetes Mellitus	E10-E14	2012
Influenza and Pneumonia	J09-J18	2012
Chronic Liver Disease and Cirrhosis	K70, K73-K74	2012
Intentional Self Harm (Suicide)	U03, X60-X84, Y87.0	2012
Essential Hypertension & Hypertensive Renal Disease	I10, I12, I15	2012
Nephritis, Nephrotic Syndrome and Nephrosis	N00-N07, N17-N19, N25-N27	2012
All Other Causes	Residual Codes	2012
Total Births		2010 - 2012
Births with Infant Birthweight Under 1500 Grams, 1500-2499 Grams		2010 - 2012
Births with Mother's Age at Delivery Under 20		2010 - 2012

The remaining secondary indicators were collected from a variety of sources, and at various geographic levels. Table A6 lists the sources of these indicators, and lists the geographic level at which they were reported.

Table A6: Remaining Secondary Indicators

Indicator	Year	Definition	Reporting Unit	Data Source
Binge Drinking	2014	Adult Binge Drinking in the Past Year	County	2014 California Health Interview Survey http://ask.chis.ucla.edu/AskCHIS/tools/_layouts/AskChisTool/home.aspx#/geography (last accessed 9 Oct 2015)
Current Smokers	2014	Current Smoking Status: Adults and Teens	County	2014 California Health Interview Survey http://ask.chis.ucla.edu/AskCHIS/tools/_layouts/AskChisTool/home.aspx#/geography (last accessed 9 Oct 2015)
Food Deserts	2010	USDA Defined Food Desert; Low Access 1 mile Urban 10 Mile rural	Tract	USDA http://www.ers.usda.gov/data-products/food-access-research-atlas/download-the-data.aspx (Last Accessed 9 Oct 2015)
Modified Retail Food Environment Index (mRFEI)	2013	Table 00CZ2 for the following NAICS codes: 445120, 722513, 445230, 452910, 445110	ZCTA	US Census Bureau 2013 County Business Patterns
Park Access	2010	Percent of 2010 ZCTA Population in blocks Located Within 1/2 Mile of a Park	ZCTA	2010 Decennial Census SF1; ESRI U.S. Parks 2014, park_dtl.gdb Series Name Data and Maps for ArcGIS® Issue 2014 - World, Europe, and United States
Health Professional Shortage Areas (Primary Care, Dental, Mental Health)	2015	Current Primary Care, Dental Health, and Mental Health Professional Shortage Areas	Shortage Areas (Non-Point Locations)	US Department of Health & Human Services Health Resources and Services Administration; http://datawarehouse.hrsa.gov/data/datadownload/hpsadownload.aspx (last accessed 29 Aug 2015)
Major Crime Rate	2013	Major Crimes (Combination Of Violent Crimes, Property Crimes, And Arson)	Law Enforcement Jurisdiction	California Attorney General - Criminal Justice Statistics Center: Crimes and Clearances http://oag.ca.gov/crime/cjsc/stats/crimes-clearances (last accessed 3 Sep 2015)

Indicator	Year	Definition	Reporting Unit	Data Source
Traffic Accidents Resulting in Fatalities	2013	Traffic Accidents Resulting in Fatalities	Point Locations	National Highway Traffic Safety Administration Fatality Analysis Reporting System (FARS) ftp://ftp.nhtsa.dot.gov/fars/2013/DBF/ (lass accessed 8 Sep 2015)
Pollution Burden	2014	Cal EnviroScreen Pollution Burden Scores Indicator (based on ozone and PM2.5 concentrations, diesel PM emissions, drinking water contaminants, pesticide use, toxic releases from facilities, traffic density, cleanup sites, impaired water bodies, groundwater threats, hazardous waste facilities and generators, and solid waste sites and facilities)	Tract	California Office of Environmental Health Hazard Assessment CalEnviroScreen Version 2.0 http://oehha.ca.gov/ej/ces2.html
Obesity	2014	Children Overweight for age (does not factor height); Body Mass Index – 4 level (teen only); Body Mass Index – 4 level (adult only)	County	2014 California Health Interview Survey http://ask.chis.ucla.edu/AskCHIS/tools/_layouts/AskChisTool/home.aspx#/geography (last accessed 12 Jan 2015)
Population Living Near a Transit Stop	2012	Population Weighted Centroid Distance to the Closest Fixed Public Transit Stop	Census Block Group	US EPA Smart Location Database https://edg.epa.gov/data/Public/OP/SLD/SmartLocationDb.zip (last accessed 29 Aug 2015)

General Processing Steps

Rate Smoothing

All OSHPD, as well as all single-year CDPH, indicators were collected for all ZIP codes in California. The CDPH datasets included separate categories that included either patients who did not report any ZIP code, or patients from ZIP codes whose number of cases fell below a minimum level. These patients were removed from the analysis. As described above, patient records in ZIP codes not represented by ZCTAs were added to those ZIP codes corresponding to the ZCTAs that they fell inside or were closest to. When consolidating ZIP codes into ZCTAs, any ZIP codes with no value reported were treated as having a value of 0. For OSHPD data, which, unlike CDPH data, had clearly masked values, if two or more ZIP codes were combined into a single ZCTA, and at least one of those ZIP codes had a value reported, all other ZIP codes with a masked value were treated as having values of 0. Thus OSHPD ZCTA values were recorded as NA only if all ZIP codes contributing values to them had masked values reported for all associated ZIP codes.

The next step in the analysis process was to calculate rates for each of these indicators. However, rather than calculating raw rates, empirical Bayes smoothed rates (EBR) were created for all indicators possible[45]. Smoothed rates are considered preferable to raw rates for two main reasons. First, the small population of many ZCTAs, particularly those in rural areas, meant that the rates calculated for these areas would be unstable. This problem is sometimes referred to as the small number problem. Empirical Bayes smoothing seeks to address this issue by adjusting the calculated rate for areas with small populations so that they more closely resemble the mean rate for the entire study area. The amount of this adjustment is greater in areas with smaller populations, and less in areas with larger populations.

Because the EBR were created for all ZCTAs in the state, ZCTAs with small populations that may have unstable high rates had their rates "shrunk" to more closely match the overall indicator rate for ZCTAs in the entire state. This adjustment can be substantial for ZCTAs with very small populations. The difference between raw rates and EBR in ZCTAs with very large populations, on the other hand, is negligible. In this way, the stable rates in large population ZIP codes are preserved, and the unstable rates in smaller population ZIP codes are shrunk to more closely match the state norm. While this may not entirely resolve the small number problem in all cases, it does make the comparison of the resulting rates more appropriate. Because the rate for each ZCTA is adjusted to some degree by the EBR process, it also has a secondary benefit of better preserving the privacy of patients within the ZCTAs.

EBR were calculated for each indicator using the appropriate base population figure reported for ZCTAs in the American Community Survey 5-year estimate tables: overall EBR for ZCTAs were calculated using total population; and sex, age, and normalized race/ethnicity EBR were calculated using the appropriate corresponding population stratification. In cases where multiple years of data were aggregated, populations for the central year were used and multiplied by the number of years of data to calculate rates. For OSHPD data, 2012 population data was used. For multi-year CDPH indicators (2010 – 2012), 2011 data were used. Population data from 2012 were used to calculate single-year CDPH indicators.

ZCTAs with NA values recorded were treated as having a value of 0 when calculating the overall expected rates for a state as a whole during the smoothing process, but were kept as NA for the individual ZCTA. This meant that smoothed rates could be calculated for indicators, but if a given ZCTA had a value of NA for a given indicator, it retained that NA value after smoothing.

Empirical Bayes smoothing rates were attempted for every overall indicator, but could not be calculated for certain indicators. In these cases, raw rates were used instead. The final rates in either case for H, ED, and the basic mortality indicators were then multiplied by 10,000, so that the final rates represent H or ED discharges, or deaths, per 10,000 people.

[45] Anselin, L. (2003). *Rate Maps and Smoothing.* Retrieved February 16, 2013, from http://www.dpi.inpe.br/gi

Age Adjustment

The additional step of age adjustment[46] was performed on the all-cause mortality indicator. Because the occurrence of mortality varies as a function of the age of the population, differences in the age structure between ZCTAs could obscure the true nature of the variation in its pattern. For example, it would not be unusual for a ZCTA with an older population to have higher rate mortality than a ZCTA with a younger population. In order to accurately compare the experience of mortality between these two populations, the age profile of the ZCTA needs to be accounted for. Age adjusting the rates allows this to occur.

To age adjust these indicators, we first calculated age stratified rates by dividing the number of occurrences for each age category by the population for that category in each ZCTA. Because estimates of age under age 1 and from ages 1 to 4 were not available in the American Community Survey datasets used in this analysis, the proportion of the population under age 5 that was also under age 1 was calculated using 2010 decennial Census data for each geographic area. These proportions were then compared to the age under 5 indicators from the American Community Survey datasets for each geographic area to estimate the values for the population under 1 and from 1 to 4. These estimated values were then used to calculate age stratified rates. Age-stratified EBR were used whenever possible. Each age-stratified rate was then multiplied by a coefficient that gives the proportion of California's total population that was made up by that age group as reported in the 2010 Census. The resulting values are then summed and multiplied by 10,000 to create age-adjusted rates per 10,000 people.

Benchmark Rates

A final step was to obtain or generate benchmark rates to compare the ZCTA level rates to. Benchmarks for all OSHPD indicators were calculated at the HSA, county, and state levels. HSA rates were calculated by first summing the total number of cases and relevant populations for each indicator across all ZCTAs in the HSA. ZCTAs with NA values were treated at this stage as having a value of 0. Smoothed EBR rates were then calculated for each HSA using a broader set of HSAs.

County benchmark rates were calculated as raw rates for each county, or in the case of small counties, group of counties, using the relevant population values. State rates were calculated as raw rates by first summing all county level values (treating NA values 0), and then dividing these values by the relevant population value. HSA, county, and state benchmark rates were also provided for CDPH data. HSA benchmarks were calculated in a process similar to that described above for OSHPD HSA benchmarks: the total number of cases and relevant populations were summed for each indicator across all ZCTAs in the HSA, and used to calculate smoothed EBR rates using a broader set of HSAs.

County and state benchmark rates were either calculated using CDPH data reported at the county and state level[47,48], or else obtained from the County Health Status Profiles 2014[49]. The resulting benchmark values for CDPH and OSHPD indicators were all reported as rates per 10,000 unless the original indicator was reported using some other standard, as described below.

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[46] Klein, R. J., & Schoenborn, C. A. (2001). *Age adjustment using the 2000 projected U.S. population. Healthy People Statistical Notes, no. 20.* Hyattsville, Maryland: National Center for Health Statistics.

[47] California Department of Public Health. (2010,2011,2012). *Ten Leading Causes of Death, California Counties and Selected City Health Departments*. Retrieved July 7, 2015, from http://www.cdph.ca.gov/data/statistics/Documents/VSC-2012-0520.pdf; http://www.cdph.ca.gov/data/statistics/Documents/VSC-2011-0520.pdf; http://www.cdph.ca.gov/data/statistics/Documents/VSC-2010-0520.pdf

[48] California Department of Public Health. (2015a, July 17). Retrieved from Center for Health Statistics and Informatics: Vital Statistics Query System.: http://www.apps.cdph.ca.gov/vsq/

[49] California Department of Public Health. (2015b, July 2). Retrieved from County Health Status Profiles 2014: http://www.cdph.ca.gov/programs/ohir/Documents/OHIRProfiles2014.pd

Processing for Specific Indicators

Additional processing was needed to create the Community Health Vulnerability Index (CHVI), the CDPH-derived health outcome indicators, and some of the other health factor indicators. The process used to calculate these indicators are described in this section below.

Community Health Vulnerability Index (CHVI)

The CHVI is a health care disparity index largely based on the Community Need Index (CNI) developed by Barsi and Roth[50]. The CHVI uses the same basic set of demographic indicators to address health care disparities as outlined in the CNI, but these indicators are aggregated in a different manner to create the CHVI. For this report, the following nine indicators were obtained from the 2013 American Community Survey 5-year Estimate dataset at the census tract level:

- Percent Minority
- Population 5 Years or Older Who Speak Limited English
- Percent 25 or Older Without a High School Diploma
- Percent Unemployed
- Percent Families with Children in Poverty
- Percent Households 65 years or Older in Poverty
- Percent Single Female-Headed Households in Poverty
- Percent Renter-Occupied Households
- Percent Uninsured

All census tracts that crossed ZCTAs within the HSA were included in the analysis. Each indicator was scaled using a min-max stretch, so that the tract with the maximum value for a given indicator within the study area received a value of 1, and the tract with the minimum value for that same indicator within the study area received a 0. All scaled indicators were then summed to form the final CHVI. Areas with higher CHVI values therefore represent locations with relatively higher concentrations of the target index populations, and are likely experiencing greater health care disparities.

CDPH-Derived Health Outcome Indicators

Infant Mortality Rate

The infant mortality rate reports the number of infant deaths per 1,000 live births. It was calculated by dividing the number of deaths for those with ages below 1 from the years 2010 - 2012 by the total number of live births for the same time period (using smoothed EBR), and multiplying the result by 1,000.

Teen Pregnancy Rate

The teen pregnancy rate reports the number of live births to mothers under the age of 20 per 1,000 females between the ages of 15 and 19. It was calculated by dividing the number of live births to mothers whose age at delivery was under 20 reported in the years 2010 – 2012 by three times the total population of females from ages 15 to 19 in 2011 (using smoothed EBR), and multiplying the result by 1,000.

Life Expectancy at Birth

[50] Barsi, E. L., & Roth, R. (2005). The "Community Needs Index". *Health Progress, 86*(4), 32-38. Retrieved from https://www.chausa.org/docs/default-source/health-progress/the-community-need-index-pdf.pdf?sfvrsn=2

Life expectancy at birth values are reported in years, and were derived from period life tables created in the statistical software program R[51] using the Human Ecology, Evolution, and Health Lab's[52] example period life table function. This function was modified to calculate life tables for each ZCTA, and to allow the life table to be calculated from pre-calculated, smoothed, age-stratified mortality rates based on mortality reported in given age categories from 2010 – 2012.

Years Potential Life Lost (75)

Years potential life lost (75) is a metric that can be used to compare health status across populations that better accounts for premature loss of life than many other metrics[53]. It was calculated here following the method described by Dranger and Remington[53]. In brief, this involved calculating EBR-smoothed, age-stratified death rates using CDPH data from 2010 – 2011. For each age stratification group under 75 years of age, the midpoint age of the group was subtracted from 75, and the resulting value was multiplied by the smoothed, age-stratified rate. The resulting values for each age stratification were then age adjusted using a 2010 California base population. These values were then individually multiplied by 10,000 and summed across all age groups to estimate the years of potential life lost before age 75 out of 10,000 people.

Health Factors

Additional specific processing was conducted to derive several health factor indicators. These include the diversity index, major crime rates, park access, and the ZCTA-level Modified Retail Food Environment Index (mRFEI). Details on their calculation are provided below.

Diversity Index

The diversity index was calculated to measure the racial and ethnic diversity of geographic regions within the HSA. It was calculated using concepts from Iceland[54], but using Shannon's evenness index[55] rather than the specific methodology described therein. The diversity index represents how evenly the population within a given geographic unit is divided between the following seven racial/ethnic groups (described previously): Asian, Black, Hispanic, American Indian, Pacific Islander, White, and Other or Two or More Races. Diversity index values range between 0 and 1, with a value of 0 in areas where the entire population belongs to just one racial/ethnic group and a value of 1 in areas with population evenly divided between the seven groups. Readers interested in the specifics of index calculation are referred to the previously listed sources.

Major Crime Rates

Major crimes reported in the State of California Department of Justice's Crime Data reports are listed by reporting police agency. In order to estimate major crime rates, these values need to be associated with particular geographic areas, and then divided by those area populations. This was done for this report by comparing the names of police agencies to populations reported for "places" (including both incorporated and unincorporated areas) by the US Census. Both crime and population data were obtained for 2013.

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[51] R Development Core Team. (2015). R: A language and environment for statistical computing. Vienna, Austria: R Foundation for Statistical Computing, Vienna, Austria. ISBN 3-900051-07-0, URL http://www.R-project.org.

[52] Human Ecology, Evolution, and Health Lab. (2009, March 2). *Life tables and R programming: Period Life Table Construction*. Retrieved February 16, 2013, from Formal Demogrpahy Workshops, 2006 Workshop Labs: http://www.stanford.edu/group/heeh/cgi-bin/web/node/75

[53] Dranger, E., & Remington, P. (2004). YPPL: A Summary Measure of Premature Mortality Used in Measuring the Health of Communities. *Wisconsin Public Health & Health Policy Institute Issue Brief, 5*(7), 1-2. Retrieved May 27, 2015, from http://uwphi.pophealth.wisc.edu/publications/issue-briefs/issueBriefv05n07.pdf

[54] Iceland, J. (2004). *The Multigroup Entropy Index (Also Known as Theil's H or the Information Theory Index).* US Census Bureau. Retrieved June 20, 2015, from http://www.census.gov/housing/patterns/about/multigroup_entropy.pdf

[55] Beals, M., Gross, L., & Harrell, S. (2000). *Diversity Indices: Shannon's H and E*. Retrieved June 20, 2015, from University of Tennessee Knoxville, The Institute for Environmental Modeling: http://www.tiem.utk.edu/~gross/bioed/bealsmodules/shannonDI.html

Many reporting agencies, such as those associated with hospitals, transit and freight rail lines, university campuses, and state and federal agencies, did not correspond to a specific census place. Internet searches were used to identify the Census places they were associated with, and their populations were added to those places. For example, the crimes reported by a University police department were added to the city or county that the university campus was located in. For areas where this was unclear based on the name alone, internet searches were conducted to determine the place an agency fell inside of. Because reported crimes for agencies were organized by county, if the crimes for an agency could not be associated with any specific place, its reported crimes were grouped together with those for the county sheriff's department.

To calculate rates, the total number of crimes for each Census place resulting from the process described above were divided by the population of that place and multiplied by 10,000 to report the number of crimes per 10,000 in that place. For crimes reported for (or grouped with) the county sheriff's department, the county population was modified by subtracting the total population of all Census places within the county with reported crimes. This meant that the major crime rate reported for the county was reporting not the total county's crime rate, but the rate of crimes occurring in those portions of the county that were not otherwise covered by another reporting agency.

Overall county major crime rates were, however, calculated for benchmarking purposes by summing the total number of major crimes reported by any agency within the county, dividing that by the total population of the county, and multiplying the result by 10,000. For further detail as to which specific crimes are covered within the "major crime" category, interested readers are referred to the State of California Department of Justice's Crime Data reports, available online at: http://oag.ca.gov/crime.

Park Access

The park access indicator reports the percentage of the 2010 population residing within each ZCTA that lives in a Census block that intersects a one-half mile buffer around the closest park. Esri's U.S. Parks data set[56], which includes the location of local, county, regional, state, and national parks and forests, was used to determine park locations.

Modified Retail Food Environment Index (mRFEI)

The Modified Retail Food Environment Index (mRFEI) indicator reports the percentage of the total food outlets in a ZCTA that are considered healthy food outlets. Values below 0 are given for ZCTAs with no food outlets. The mRFEI indicator was calculated using a modification of the methods described by the National Center for Chronic Disease Prevention and Health Promotion[57] using ZIP code-level data obtained from the US Census Bureau's 2013 County Business Pattern datasets. Healthy food retailers were defined based on North American Industrial Classification Codes (NAICS), and included:

- Large grocery stores: NAICS code 445110, with 50 or more employees
- Fruit and vegetable markets: NAICS 445230
- Warehouse clubs: NAICS 452910

Food retailers that were considered less healthy included:

- Small grocery stores: NAICS code 445110, with 1 – 4 employees
- Limited-service restaurants: 722513
- Convenience stores: 445120

To calculate the mRFEI, ZIP code values were converted to ZCTAs using previously described processes. The total number of health food retailers was then divided by the total number of healthy and less healthy food retailers for each ZCTA, and the result was multiplied by 100 to calculate the final mRFEI value for that ZCTA. HSA mRFEI benchmark values were

[56] Esri. (2010). U.S. and Canada Detailed Streets. *Esri Data & Maps: StreetMap* (10 edition)

[57] National Center for Chronic Disease Prevention and Health Promotion. (2011). *Census Tract Level State Maps of the Modified Retail Food Environment Index (mRFEI).* Centers for Disease Control. Retrieved Jan 11, 2016, from http://ftp.cdc.gov/pub/Publications/dnpao/census-tract-level-state-maps-mrfei_TAG508.pdf

calculated by first summing the total number of each type of food retailer that fell within the HSA, and then by following the same approach.

Appendix B: Detail Analytic Methodology

The purpose of this appendix is to provide a detailed description of the analytical methodologies utilized in the 2016 Community Health Needs Assessment. It begins with a general methodological overview of the project, and then provides a more detailed description of the methods used to identify 2016 Communities of Concern, identify and prioritize significant health needs, and identify the resources available in the HSA to address health needs.

Overview

As illustrated in Figure B1 below, the project was conducted using alternating data collection and analysis stages. The project began with a definition of the hospital service area based on the definition used for the previous 2013 Community Health Needs Assessment. Area-wide primary and secondary data were then collected for the defined HSA. Primary data included interviews of multiple key informants who were selected based on their ability to speak to conditions across the HSA. Secondary data included the health factor and health outcome indicators described in detail in Appendix A, the list of Communities of Concern identified for the HSA in the 2013 CHNA, as well as the Community Health Vulnerability Index (CHVI) values for each HSA ZCTA.

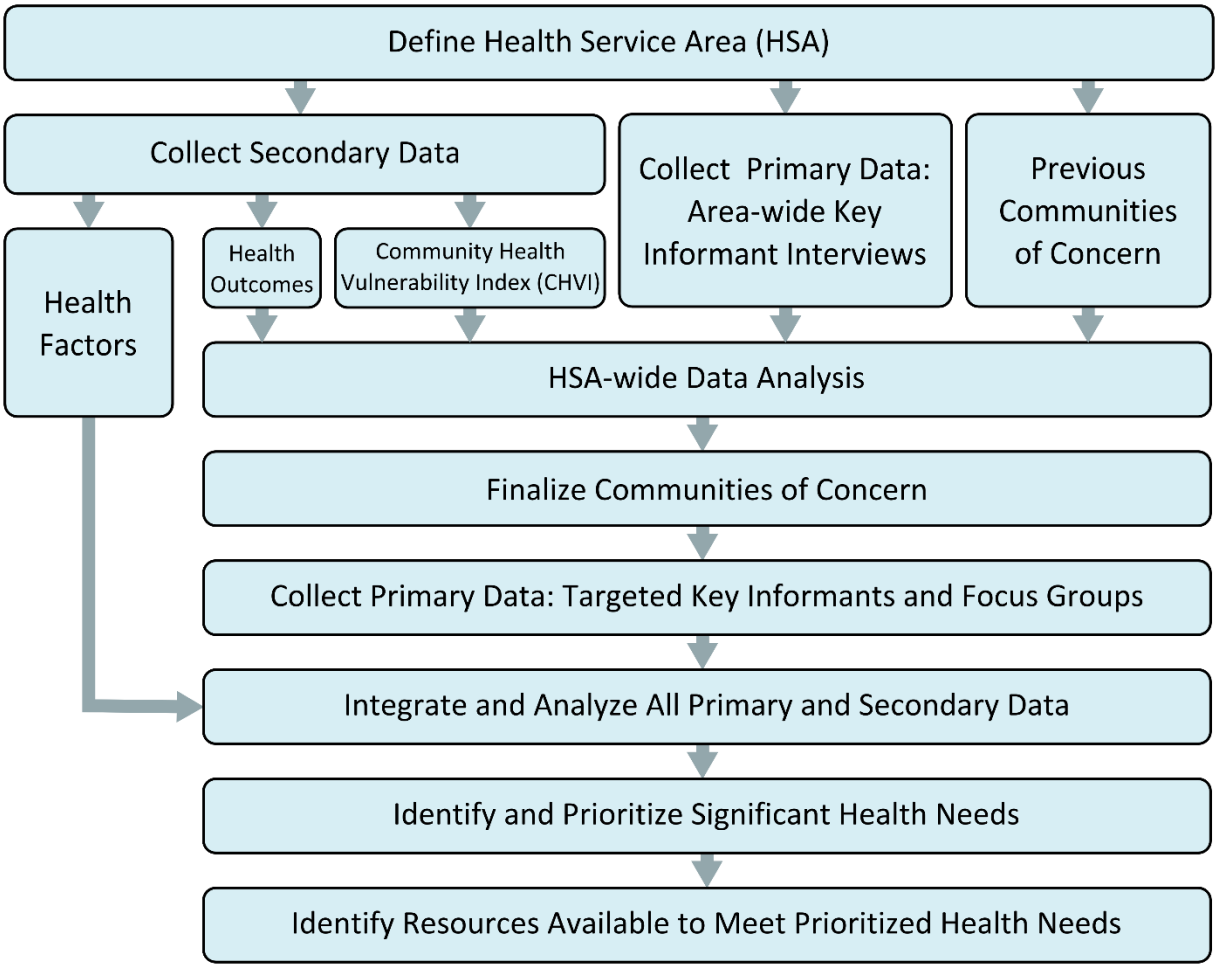

Figure B1: 2016 CHNA process model

2016 Communities of Concern were then defined following an HSA-wide analysis of the secondary health outcome indicators and CHVI values, the 2013 HSA Communities of Concern, and area-wide key informant interviews. This

included both a consideration of geographic areas, identified through secondary data analysis, as well as subgroups experiencing disparities, based on an analysis of the area-wide primary data.

The 2016 Communities of Concern were then used to identify what are referred to as "targeted" key informants and focus groups. These targeted primary data sources were selected based on their ability to speak to the needs of particular geographic locations or subgroups experiencing disparities. Overall primary data, and secondary data for the Communities of Concern, were then integrated to identify the significant health needs for the HSA. Significant health needs were then prioritized based on analysis of the primary data. Finally, resources available within the HSA to address health needs were identified.

Community of Concern Identification

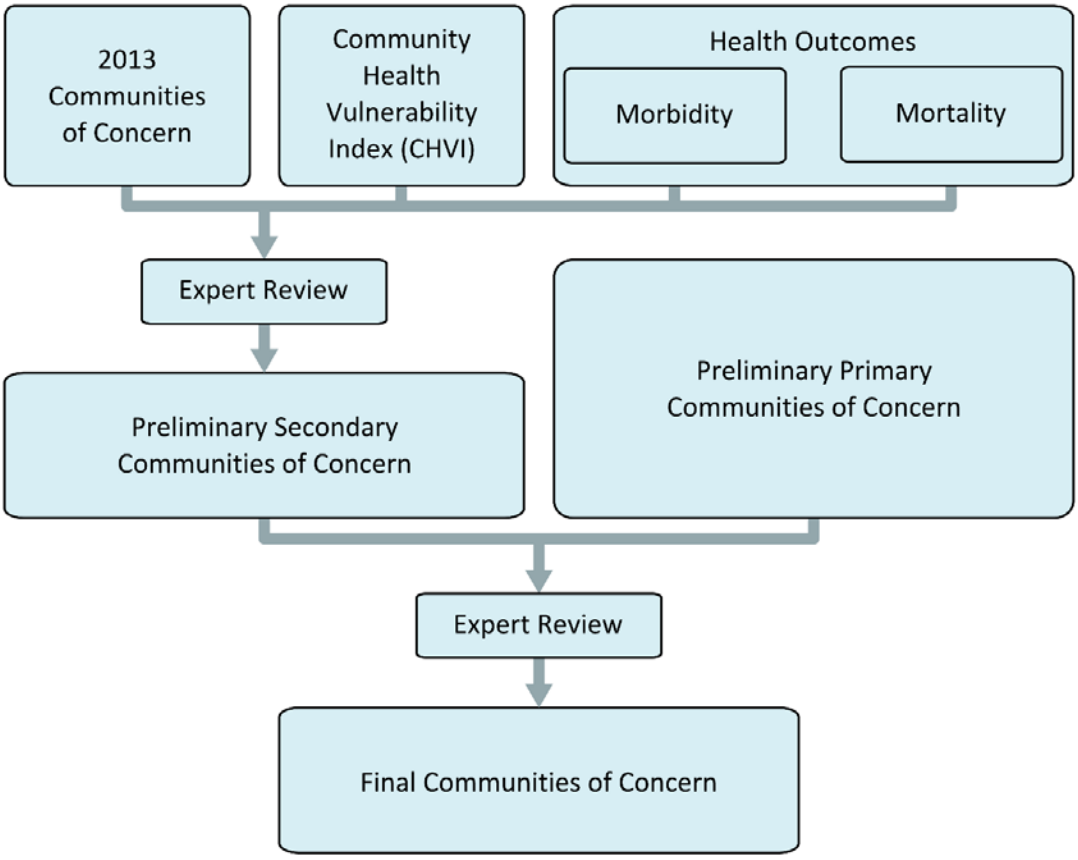

Figure B2: Community of Concern Identification Process

Communities of Concern are used to represent those geographic locations or population subgroups within the HSA that are likely experiencing the greatest overall heath disparities. As illustrated in Figure B2 above, the 2016 Communities of Concern were identified through a process that drew upon both primary qualitative data as well as secondary quantitative data. Four main secondary data inputs were used in this analysis: Communities of Concern identified in the 2013 CHNA; the Census tract-level Community Health Vulnerability Index (CHVI); and representing health outcomes, mortality data from CDPH and morbidity data in the form of emergency department and hospital discharge date obtained from OSHPD.

An evaluation procedure was developed for each of these datasets and applied to each ZCTA within the HSA. In order to be classified as a preliminary secondary Community of Concern, a ZCTA had to meet two of the following four selection criteria:

2013 Community of Concern

The ZCTA was included in the 2013 CHNA Community of Concern list for the HSA. This was done to allow greater continuity between CHNA rounds, and also reflects the work of the hospital systems oriented to serve these disadvantaged communities.

Community Health Vulnerability Index (CHVI)

The ZCTA intersected a census tract whose CHVI value fell within the top 20% for the HSA. These census tracts represent areas with consistently high concentrations of certain demographic subgroups identified in the research literature as being more likely to experience health-related disadvantages.

Morbidity

The processes for reviewing ZCTAs based on morbidity were substantially more complicated than those used for the 2013 Communities of Concern or the CHVI. It began by selecting a subset of emergency department and hospitalization visit discharge rate indicators obtained from OSHPD, given in Table B1 below. Next, the values reported for each indicator in that ZCTA were compared to the lowest of the county and state benchmark rates. If a given ZCTA had a value higher than this benchmark for a given indicator, it was given a value of 1 for that indicator. If its value was below this benchmark, it was given a value of 0.

Table B1: OSHPD emergency department and hospitalization visit discharge rate indicators used in Community of Concern identification

OSHPD Emergency Department and Hospitalization Visit Discharge Rate Indicators Used in Community of Concern Identification
Female Breast Cancer, Colorectal Cancer, Lung Cancer, Male Prostate Cancer, Diabetes, Heart Disease, Hypertension, Kidney Diseases, Stroke, HIV, STIs, Tuberculosis, Assault, Intentional Self Injury, Unintentional Injury, Mental Health, Mental Health: Substance Abuse, Asthma, COPD, Hip Fracture, Osteoporosis, Oral/Dental Diseases

Once these comparisons were made for each indicator in each ZCTA, the total recoded values (0 or 1) were summed for each ZCTA across all indicators to create a morbidity index value. ZCTAs that fell within the top 20% of this morbidity index met the Community of Concern morbidity selection criteria.

Mortality

The process for reviewing ZCTAs based on mortality was very similar to that used for morbidity. A subset of CDPH mortality rates, as well as associated derived indicators, was identified for inclusion in the analysis, and is shown in Table B2. As with the morbidity analysis, ZCTA values for each indicator were compared to the better of the appropriate county and state benchmarks, and ZCTAs with indicator values worse than this benchmark were recoded to 1, while ZCTAs with indicator values better than the worst benchmark were recoded to 0.

Table B2: Mortality-related indicators used in Community of Concern identification

CDPH Mortality-related Indicators Used in Community of Concern Identification
Diseases of the Heart, Cancer, Stroke, Chronic Lower Respiratory Disease, Alzheimer's Disease, Unintentional Injuries, Diabetes Mellitus, Influenza and Pneumonia, Chronic Liver Disease and Cirrhosis, Hypertension, Intentional Self-Injury, Kidney Diseases, Age-Adjusted Mortality, Infant Mortality Rate, Years Potential Life Lost (75), Life Expectancy at Birth

The main difference between the mortality and morbidity approaches is that instead of all mortality-related indicators being weighted equally, as with the morbidity approach, a relative weighted scheme was developed for the mortality-related indicators.

Expert judgment weights were developed using an Analytical Hierarchy Approach (AHP)[58]. This approach used a comparison matrix completed by an internal Community Health Insight subject area expert to rate the relative importance between each pair of mortality indicators in the analysis. These pair-wise importance comparisons were then processed to generate a priority matrix used to weight the mortality indicators. Indicators receiving a higher prioritization value had more weight in determining which ZCTAs would be included as preliminary secondary Communities of Concern.

The recoded (0 or 1) values for each indicator in each ZCTA were then multiplied by the corresponding indicator weight, and the resulting values were summed across all indicators for each ZCTA to create a mortality index. The ZCTAs that fell within the top 20% of this mortality index met the Community of Concern mortality selection criteria.

Integration of Secondary Criteria

Any ZCTA that met two of the four selection criteria (2013 Community of Concern, CHVI, Morbidity, and Mortality) was reviewed for inclusion as a 2016 Community of Concern. An additional round of expert review was applied to determine if any other ZCTAs not thus far indicated should be included based on some other unanticipated secondary data consideration. This list then became the final Preliminary Secondary Communities of Concern.

Preliminary Primary Communities of Concern

Preliminary primary communities of concern were identified by reviewing the geographic locations or population subgroups that were consistently identified by the area-wide primary data sources (key informant interviews).

Integration of Preliminary Primary and Secondary Communities of Concern

Any ZCTA that was identified in either the Preliminary Primary or Secondary Community of Concern list was considered for inclusion as a 2016 Community of Concern. An additional round of expert review was then applied to determine if, based on any primary or secondary data consideration, any final adjustments should be made to this list. The resulting set of ZCTAs was then used as the final 2016 Communities of Concern.

Significant Health Need Identification

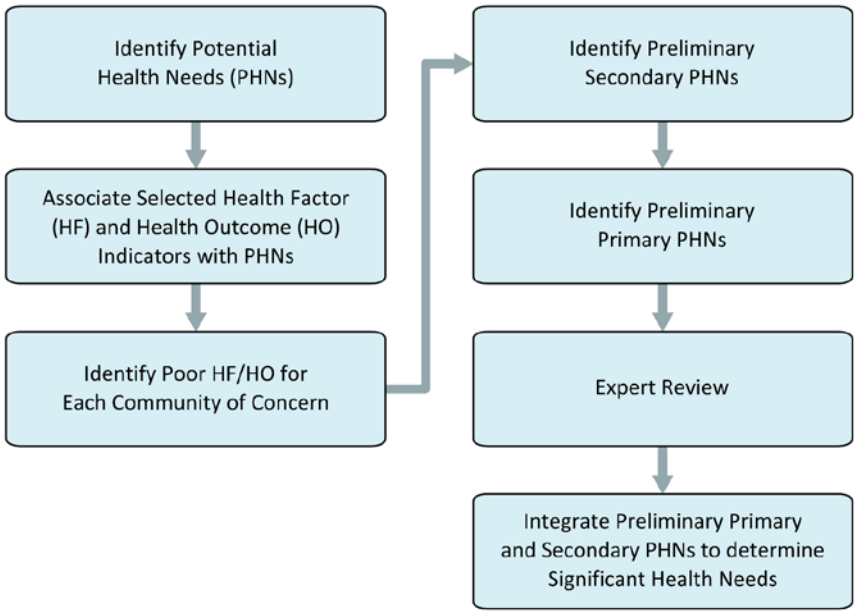

Figure B3: Significant health needs identification process

[58] Saaty, Thomas. 1980. *The Analytic Hierarchy Process: Planning, Priority Setting, Resource Allocation.* New York: McGraw-Hill.

The general methods through which significant health needs (SHNs) were identified are shown in Figure B3 above and described here in greater detail. The first step in this process was to identify a set of potential health needs (PHNs) from which significant health needs could be selected. This was done by reviewing the health needs identified in the Sutter East Bay region during the 2013 CHNA, and then supplementing this list based on a preliminary analysis of the primary qualitative data collected for the 2016 CHNA. This resulted in a list of 10 PHNs for the HSA, shown in Table B2 below.

Table B2: Potential health needs

2016 Potential Health Needs (PHNs)	
PHN1	Access to mental / behavioral / substance abuse services
PHN2	Access to quality primary care health services
PHN3	Access to affordable, healthy food
PHN4	Safe and violence-free environment
PHN5	Access to dental care and preventative services
PHN6	Pollution-free living environment
PHN7	Access to basic needs, such as housing and employment
PHN8	Access to transportation and mobility
PHN9	Access to specialty care
PHN10	Health education and health literacy

The next step in the process was to identify primary and secondary indicators associated with each of these health needs as shown in Table B3 below. Primary indicator associations were used to guide coding of the primary qualitative data sources to specific PHNs.

Table B3: Primary and secondary indicators associated with potential health needs

	Health Need	Quantitative Indicators	Qualitative Indicators
PHN1	Access to mental/behavioral/substance abuse services	• CDPH – Suicide • OSPHD – Mental health (ED/H) • Mental Health – substance abuse (ED/H) • OSHPD – Intentional self-injury (ED/H) • Health Professional Shortage Area: Mental health	• Self-injury • Mental health and coping issues • Substance abuse • Smoking • Stress • Mentally ill homeless • PTSD
PHN 2	Access to quality primary care health services	• OSHPD – Total ED discharge rate • OSHPD – Female breast cancer (ED/H) • OSHPD – Colorectal cancer (ED/H) • OSHPD – Male Prostate cancer (ED/H) • OSHPD – Total hospital discharge rate • OSHPD – PQI • Health Professional Shortage Area: Primary care	• Quality of care • Access to care • Health insurance • Care for cancer/cancer occurrence • Indicators in PQI: diabetes, COPD, CRLD, HTN, HTD, asthma, pneumonia

	Health Need	Quantitative Indicators	Qualitative Indicators
		• Uninsured	
PHN 3	Access to affordable, healthy food	• CDPH – Cancer • CDPH – Diabetes • CDPH – Heart disease • CDPH – Hypertension • CDPH – NEP • CDPH – Stroke • OSHPD – Diabetes (ED/H) • OSHPD – Heart disease (ED/H) • OSHPD – Hypertension (ED/H) • OSHPD – NEP (ED/H) • OSHPD – Stroke (ED/H) • USDA-defined Food Deserts • Modified Retail Food Environment Index	• Food access/insecurity • Community gardens • Fresh fruits and vegetables • Distance to grocery stores • Food swamps • Chronic disease outcomes related to poor eating • Diabetes, HTD, HTN, stroke, kidney issues, cancer
PHN 4	Safe and violence free environment	• OSHPD – Assault (ED/H) • OSHPD – Mental health (ED/H) • OSHPD – Mental health: Substance abuse (ED/H) • CHIS – Binge drinking • traffic accidents with fatalities • Major crimes • Park access	• Crime rates • Violence in the community • Feeling unsafe in the community • Substance abuse: Alcohol and drugs • Access to safe parks • Pedestrian safety • Safe streets • Safe places to be active
PHN 5	Access to dental care and preventive services	• OSHPD – Dental (ED/H) • Health Professional Shortage Area: Dental	• Any issues related to dental health • Access to dental care
PHN 6	Pollution-free living environment	• CDPH – Cancer • CDPH – Chronic Lower Respiratory Disease • OSHPD – Asthma (ED/H) • OSHPD – COPD (ED/H) • OSHPD – Lung cancer (ED/H) • CHIS: Adult and teen current smokers • Pollution score	• Smoking • Unhealthy air, water, housing, • Health issues: asthma, COPD, CLRD, lung cancer

	Health Need	Quantitative Indicators	Qualitative Indicators
PHN 7	Access to basic needs, such as food, housing, jobs	• CDPH – Age-adjusted all-cause mortality • CDPH – Infant mortality rate • CDPH – Life expectancy at birth • People per occupied housing unit • Housing unit vacancy rate • Percent with no diploma • Median household income • Percent below the federal poverty level • Public assistance • Renters • Unemployed	• Employment and unemployment • Poverty • Housing issues • Homelessness • Education access • Community quality of life
PHN 8	Access to transportation and mobility	• Households with no vehicle • Distance to transit stop greater than ½ mile	• Physical access issues • Cost of transportation • Ease of transportation access • No car
PHN 9	Access to specialty care	• OSHPD – Diabetes (H) • OSHPD – Heart disease (H) • OSHPD – Hypertension (H) • OSHPD – Stroke (H) • OSHPD - Nephritis, nephrotic syndrome and nephrosis (H) • OSHPD – PQI • CDPH – Diabetes • CDPH – Heart disease • CDPH – Hypertension • CDPH - Nephritis, nephrotic syndrome and nephrosis	• Seeing a specialist for health conditions • Diabetes-related specialty care • Specialty care for: HTD, HTN, stroke, kidney disease
PHN 10	Health Education and Health Literacy	• CHIS – Adult and teen current smokers • CHIS – Binge drinking • CDPH – Influenza and pneumonia	• Factors related to preventing disease or injury • Unintentional injury

	Health Need	Quantitative Indicators	Qualitative Indicators
		• CDPH – Unintentional injury • CDPH – Diabetes • CDPH – Heart disease • CDPH – Hypertension • CDPH – Stroke • CDHP – Nephritis, nephrotic syndrome and nephrosis • CDPH – Teen birth rate • OSHPD – HIV (ED/H) • OSHPD – STI (ED/H) • OSHPD – TB (ED/H) • OSHPD – Unintentional injuries (ED/H) • OSHPD – Diabetes (ED/H) • OSHPD – Heart disease (ED/H) • OSHPD – Hypertension (ED/H • OSHPD – Stroke (ED/H) • OSHPD – Nephritis, nephrotic syndrome and nephrosis (ED/H)	• Smoking and alcohol/drug abuse • Teen pregnancy • HIV/STD • TB • Influenza and pneumonia • Health classes • Health promotion teams and interventions • Need for health literacy

Next, values for the secondary health factor and health outcome indicators identified above in each Community of Concern were compared to the worst relevant state or county benchmarks to determine if a secondary indicator was problematic in the given Community of Concern. While some indicators were available at the ZCTA level, others were not, and so their geography was compared to the Community of Concern ZCTAs to identify surrogate values for each ZCTA. Additionally, some indicators were considered problematic if they exceeded the relevant benchmark, while others were problematic if they were below the benchmark. Table B4 lists the ZCTA measures or surrogate values used for each secondary indicator, and describes the comparison made to the benchmark to determine if it was problematic.

Table B4: ZCTA measure for PHN identification and benchmark comparisons

Indicator	ZCTA Measure for PHN Identification	Benchmark Comparison
Life Expectancy at Birth	ZCTA Rate	Less than
Age-Adjusted All-Cause Mortality	ZCTA Rate	Greater than
Infant Mortality Rate	ZCTA Rate	Greater than
Malignant Neoplasms (Cancer) (Mortality)	ZCTA Rate	Greater than
Chronic Lower Respiratory Disease (Mortality)	ZCTA Rate	Greater than
Diabetes Mellitus (Mortality)	ZCTA Rate	Greater than
Diseases of the Heart (Mortality)	ZCTA Rate	Greater than
Essential Hypertension & Hypertensive Renal Disease (Mortality)	ZCTA Rate	Greater than

Indicator	ZCTA Measure for PHN Identification	Benchmark Comparison
Unintentional Injuries (Mortality)	ZCTA Rate	Greater than
Chronic Kidney Disease (Mortality)	ZCTA Rate	Greater than
Influenza and Pneumonia (Mortality)	ZCTA Rate	Greater than
Cerebrovascular Disease (Stroke) (Mortality)	ZCTA Rate	Greater than
Intentional Self Harm (Suicide) (Mortality)	ZCTA Rate	Greater than
Traffic Accidents Resulting in Fatalities	Number in ZCTA	Greater than 0
Assault (ED/H)	ZCTA Rate	Greater than
Asthma (ED/H)	ZCTA Rate	Greater than
Breast Cancer (ED/H)	ZCTA Rate	Greater than
Colorectal Cancer (ED/H)	ZCTA Rate	Greater than
COPD (ED/H)	ZCTA Rate	Greater than
Diabetes (ED/H)	ZCTA Rate	Greater than
Oral Cavity/Dental (ED/H)	ZCTA Rate	Greater than
HIV/AIDS (ED/H)	ZCTA Rate	Greater than
Heart Disease (ED/H)	ZCTA Rate	Greater than
Hypertension (ED/H)	ZCTA Rate	Greater than
Lung Cancer (ED/H)	ZCTA Rate	Greater than
Mental Health (ED/H)	ZCTA Rate	Greater than
Mental Health: Substance Abuse (ED/H)	ZCTA Rate	Greater than
Chronic Kidney Disease (ED/H)	ZCTA Rate	Greater than
Prostate Cancer (ED/H)	ZCTA Rate	Greater than
Intentional Self-Injury (ED/H)	ZCTA Rate	Greater than
STIs (ED/H)	ZCTA Rate	Greater than
Stroke (ED/H)	ZCTA Rate	Greater than
Tuberculosis (ED/H)	ZCTA Rate	Greater than
Unintentional Injuries (ED/H)	ZCTA Rate	Greater than
Total ED Discharges	ZCTA Rate	Greater than
Total H Discharges	ZCTA Rate	Greater than
PQI	ZCTA Rate	Greater than
Teen Pregnancy Rate	ZCTA Rate	Greater than
Binge Drinking	County Rate	Greater than state
Current Smokers	County Rate	Greater than state
Food Deserts	Does ZCTA intersect a food desert?	Yes/No
Modified Retail Food Environment Index	ZCTA Rate	Less than
Health Professional Shortage Area: Dental	Does ZCTA intersect shortage area?	Yes/No
Health Professional Shortage Area: Mental Health	Does ZCTA intersect shortage area?	Yes/No
Health Professional Shortage Area: Primary Care	Does ZCTA intersect shortage area?	Yes/No

Indicator	ZCTA Measure for PHN Identification	Benchmark Comparison
Major Crime Rate	Crime rate of jurisdiction associated with ZCTA by Alameda County	Greater than
Park Access	ZCTA Rate	Less than
Pollution Burden	Does the ZCTA intersect Census tract with pollution burden score in the top 20% of the state?	Yes/No
Population Living Near a Transit Stop	Does the ZCTA intersect a Census block group for which the population weighted centroid distance to the closest public transit stop was 805 meters (approx. 1/2 mile) or more?	Yes/No
Median Income	ZCTA Rate	Less than
Percent Unemployed	ZCTA Rate	Greater than
Percent Uninsured	ZCTA Rate	Greater than
Percent Vacant Housing Units	ZCTA Rate	Less than
Percent Renter-Occupied Housing Units	ZCTA Rate	Greater than
Percent with Income Less Then Federal Poverty Level	ZCTA Rate	Greater than
Percent 25 or Older Without a High School Diploma	ZCTA Rate	Greater than
Percent Households with No Vehicle	ZCTA Rate	Greater than
Percent with Public Assistance	ZCTA Rate	Greater than
Average Population per Housing Unit	ZCTA Rate	Greater than

Two standards were then developed to determine whether an indicator would be considered as performing poorly across the Communities of Concern as a whole. First, an indicator could be considered as performing poorly if it had problematic values in any of the Communities of Concern. Second, an indicator could be considered if it had problematic values in at least 75% of the Communities of Concern.

Once identified using one of these two standards, poorly performing indicators were used to determine which PHNs were considered significant. While all PHNs represent actual health needs within the HSA to a greater or lesser extent, a PHN could be considered a Preliminary Secondary Health Need based on four criteria: any poorly performing associated HF/HO indicator; at least 50% of the associated HF/HO indicators were found to perform poorly; at least 66% of the associated HF/HO indicators were found to perform poorly; or at least 75% of the associated HF/HO indicators were found to perform poorly.

A similar set of standards were used to identify the Preliminary Primary Health Needs: at least 50% of the primary data sources mentioned a given PHN; at least 66% of primary data sources mentioned a given PHN; or at least 75% of primary data sources mentioned a given PHN. Allowances were also made for the possibility of a previously unrecognized health need to emerge through qualitative primary data collection. If a health need that did not fit within the previously identified PHNs was found, it was added to the list, and primary data sources were coded to count the percentage of sources mentioning that emergent health need.

These sets of criteria (any mention, 50%, 66%, 75%) were developed for both the primary and secondary analysis because we could not anticipate which specific standard would be most meaningful within the context of the HSA. Having multiple objective decision criteria allows the process to be more easily described, but still allows for enough flexibility to respond to evolving conditions in the HSA. To this end, a final round of expert review was used to compare

the set of primary and secondary SHN selection criteria to find the level at which the criteria converged towards a final set of SHNs. Once the final criteria used to identify the SHN were selected for both primary and secondary analyses, any health PHN included in either the Preliminary Primary or Secondary PHN list was included as a final Significant Health Need for the HSA.

For this report, any indicator above the benchmark in at least 75% of the Communities of Concern was identified as poor performing. A PHN was selected as a Preliminary Secondary Significant Health need only if at least 50% of the associated indicators were identified as performing poorly. A PHN was identified as a Preliminary Primary Significant Health Needs only if it was mentioned by 50% or more of the sources as performing poorly.

Significant Health Need Prioritization

Once identified for the HSA, the final set of SHNs could be prioritized. To reflect the voice of the community, SHNs were prioritized using an analysis of the primary qualitative data, based on two approaches to quantifying the primary data: the percent of all primary data sources that referenced the SHN, and the average number of times the SHN was referenced across all data sources. These measures were developed for each SHN using NVIVO 10 Qualitative Analytical Software.

These SHN measures were next rescaled so that the SHN with the maximum value for each measure equaled 1, and all other SHNs had values appropriately proportional to the maximum value. The rescaled values were then summed to create a combined SHN prioritization index. Finally, SHNs were ranked in descending order so that the SHN with the highest prioritization index value was identified as the highest priority health need, the SHN with the second highest prioritization value was identified as the second highest priority health need, and so on.

Resource Identification Process

The following process was followed in identifying resources and cataloging them for inclusion in the final CHNA report:

1. A search was conducted to identify all resources that meet the federal definition of a resource within the hospital service area, as designated by a set of ZCTA/ZIP codes using the following stages:
    a. Include all resources identified in the 2013 CHNA report.
    b. Conduct internet searches for additional resources.
    c. Use existing area resource guides and directories where available.
    d. Review qualitative data from key informant interviews and focus groups for additional resources not identified elsewhere.
2. After compiling the initial list, verify that each organization or program still exists using the following approaches:
    a. Internet searches.
    b. Phone verification if needed.

Appendix C: Informed Consent

Purpose

You have been invited to participate in a community health needs assessment. This assessment helps to inform area hospitals about the needs of the communities they serve. Our Community Health Insights team will focus all questions on two basic topics: 1) the health of the community, and 2) the aspects of the community which help or prevent the community from being healthy. The information gathered will be combined with that of other interviews and focus groups. Our team will summarize these findings and report these to local area hospital representatives of non-profit healthcare systems.

Procedures

The focus group discussion will attempt to capture your understanding and opinions about community health issues. Completion of the discussion will take approximately 90 minutes. Our team is requesting to record the discussion so that we can later transcribe the session. All identifying information will be removed from the interview transcript, and at the completion of the project both the tape and transcript will be destroyed.

Potential Risks or Benefits

Some of the interview questions may be emotionally charged; otherwise there are no other known risks to answering the questions presented. Each participant will receive a gift card valued at $10.00. In addition, your participation helps to inform community benefit efforts for your local non-profit hospital.

Participants' Rights

Participation in this discussion is completely voluntary; you may choose not to participate and terminate your involvement at any time you wish. However, participants who do not complete the entire discussion will not receive the $10.00 gift card.

Confidentiality

If you agree to participate, you will receive a copy of this consent form. The information you provide and anything you share with us will be kept in the strictest confidence. If a direct quote from your interview is used in the final report, a non-identifying coding system will be used.

How to Obtain Additional Information

If you have any questions or comments regarding this document, interview, or final report, please contact: Dale Ainsworth, Project Consultant, at dale@communityhealthinsights.com or Heather Diaz, Project Consultant, at heather@communityhealthinsights.com

_____ _____

Participant Print and Sign Date

_____ _____

Interviewer Print and Sign Date

Appendix D: Key Informant and Focus Group Interview Guide

Key Informant Interview Guide

1) Please tell me about your current role and the organization you work for?
   a) Probe for:
      i) Public health (division or unit)
      ii) Hospital health system
   b) How would you define the community (ies) you serve?
      i) Probe for:
         (1) Specific geographic areas?
         (2) Specific populations served?
            (a) (Who? Where? Racial/ethnic make-up, physical environment (urban/ rural, large/small)
2) Describe the health of the community you serve.
   a) What are the specific health issues the community struggles with the most?
   b) Probe for:
      i) What specific locations struggle with health issues the most?
      ii) What specific groups in the community experience health issues the most?
   c) Which would you say are the most important or urgent health issues to address?
3) What are the challenges to being healthy for the community?
   a) Probe for:
      i) Health care access
      ii) Built environment
      iii) Food access
      iv) Social stressors
   b) What is contributing to the challenges you described in question 3?
4) What resources exist in the community to help people live healthy lives?
   a) Probe for:
      i) Barriers to accessing these resources.
5) What would you say has been the impact of the Affordable Care Act [may also be known as [Covered California, Obamacare, Medi-Cal, universal healthcare] on the community you serve?
6) What is needed to improve the health of your community?
   a) Probe for:
      i) Policies
      ii) Care coordination
      iii) Access to care
      iv) Environmental change
   b) Of those items you listed in question 7 above, which would you say is the most significant improvement needed? Which is second most significant? Third? and so on?
7) What other people, groups or organizations would you recommend we speak to about the health of the community?
   a) Probe for:
      i) Exact names or people and organizations
      ii) Special populations mentioned
8) Is there anything else you would like to share with our team about the health of your community?

Focus Group Interview Guide

1) Please tell me about the community that you live in?
    i) Probe for:
        (1) Specific geographic areas?
        (2) Specific populations that live there?
            (a) How would you describe the people that live there?
            (b) How would you describe the physical layout of the land?
2) Describe the health of the community that you live in?
    a) What are the specific health issues your community struggles with the most?
    b) Probe for:
        i) What specific locations struggle with health issues the most?
        ii) What specific groups in the community experience health issues the most?
    c) Which would you say are the most important or urgent health issues to address in your community?
3) What are the challenges to being healthy in the community that you live in?
    a) Probe for:
        i) Health care access
        ii) Built environment
        iii) Food access
        iv) Social stressors
    b) What is contributing to the challenges you just described?
4) What resources exist in the community to help people live healthy lives?
    a) Probe for:
        i) Barriers to accessing these resources.
5) What would you say has been the impact of the Affordable Care Act [may also be known as [Covered California, Obamacare, Medi-Cal, universal healthcare] on you or your community?
6) What is needed to improve the health of the community you live in?
    a) Probe for:
        i) Policies
        ii) Care coordination
        iii) Access to care
        iv) Environmental change
    b) Of those items you listed above, which would you say is the most significant improvement needed for your community? Which is second most significant? Third? And so on?
7) What other people, groups or organizations would you recommend we speak to about the health of your community?
    a) Probe for:
        i) Exact names or people and organizations
        ii) Special populations mentioned
8) Is there anything else you would like to share with our team about the health of your community?

Appendix E: Project Summary Sheet

Project Overview
Following state and federal mandates, nonprofit hospitals conduct community health needs assessments (CHNA) every three years. These assessments identify and prioritize the significant health needs of the communities they serve. Based on the results, nonprofit hospitals develop community health improvement or implementation plans to address particular, significant health needs.

Sutter Health East Bay Region-affiliated hospitals, including Sutter Alta Bates Medical Center (three campuses) in Berkeley and Oakland, Eden Medical Center, Castro Valley, and Sutter Delta Medical Center, Antioch, have contracted with Community Health Insights (www.communityhealthinsights.com) to conduct the CHNAs. Community Health Insights is a Sacramento-based, research-oriented consulting firm dedicated to improving the health and well-being of communities across Northern California.

Project Objective
The objective of the 2016 CHNA is to identify and prioritize community health needs—defined as the basic provisions and conditions needed for the improvement and/or maintenance of health—within each hospital's service area. In particular, health needs within neighborhoods and/or populations in the service area experiencing health disparities will be highlighted.

Project Deliverables
The final deliverable of this project will be a written report detailing the CHNA of each individual hospital service area. The report will be posted on each affiliated hospital's website. Comments by community members on the content of the CHNA are welcomed by each affiliated hospital.

Project Timeline
The CHNA will start in May 2015 and be completed by March 2016.

Project Contact
If you are interested in commenting on or participating in the CHNA in any way, please direct all inquiries to:

Dale Ainsworth, PhD
530-417-1770 (cell)

Appendix F: List of Key Informants

Organization	Number of Participants	Area of Expertise	Populations Served	Date
Berkeley City Public Health	5	Public health	All residents of the City of Berkeley	6.19.15
La Clinica	1	FQHC; medical care and social support services	Low income non-English-speaking communities	6.19.15
Alameda County Public Health	1	Public health	All residents of the Alameda County	6.24.15
Oakland Unified School District- Wellness	1	Wellness for OUSD youth and families	All youth and families of the OUSD	6.25.15
Street Level Health	1	Primary care and mental health services; legal assistance; social work	Day workers; low income-poverty; residents of non-legal status	7.2.15
Oakland Unified School District- Behavioral Health	1	Behavioral health services and education; interventions with youth and families of trauma	All youth and families in OUSD	7.24.15
Berkeley City Public Health- Black Infant Health	2	Public health; health of Black mothers and infants	City of Berkeley; Black and Latino families	7.30.15
Abode Health Services	1	Housing support/placement	Homeless/non-stable housing residents	8.4.15
Alta Bates Summit Medical Center-Emergency Department	2	Emergency medicine/social support services	All residents of the City of Berkeley: Black, Latino, Eastern Asian.	8.4.15
Alameda County Public Health	2	Public health	All residents of Alameda County	8.6.15
Lincoln Child Services	1	Coordinated mental health, education and family support services	Youth and families impacted by trauma and poverty	8.6.15
Youth Uprising	2	Youth leadership development, training and education	Low income youth; youth in violent communities	8.10.15
Lifelong Medical Clinic	1	FQHC; social support services	Low income; elderly; Black and Latino	8.17.15
Youth Alive	1	Improving youth and community violence; leadership training and education	Low income youth; youth in violent communities	8.21.15
Center for Independent Living	2	Support services and advocacy for adults with disabilities	Adults with disabilities; veterans	8.21.15

Appendix G: List of Focus Groups

Location	Date	Number of Participants	Demographic Information
Central Family Resource Center	9.2.15	8	Parent leaders of students in OUSD; West Oakland
Alameda Alliance for Health	9.10.15	13	Insurance providers; community leaders
Youth Uprising	9.23.15	11	Youth; low income; Latino and Black; East Oakland
Berkeley Food and Housing	10.1.15	15	Transitionally homeless women; Berkeley
Clinton Commons - Lifelong Clinic East Oakland	10.12.15	9	Residents living in temporary housing unit; low income
Youth Alive	10.14.15	15	Youth; low income; Latino and Black; Berkeley and Oakland

Appendix H: Resources Potentially Available to Meet Identified Health Needs

Organization Information					Health Need Potentially Met by Organization (x)									
Name	Zip Code	Key Words	Website	Specialty	1. Access to mental/behavioral/substance abuse services	2. Access to quality primary care health services	3. Access to affordable, healthy food	4. Safe and violent free environment	5. Access to dental care and preventive services	6. Pollution-free living environment	7. Access to basic needs, such as housing and employment	8. Access to transportation and mobility	9. Access to specialty care	10. Health Education and Health Literacy
Latino Commission on Alcohol and Drug Abuse -Project (Proyecto) Primavera	94601	substance abuse	http://alameda.networkofcare.org/mh/services/agency.aspx?pid=ProjectPrimavera_344_2_0	Ages 12-18	x									
Latino Commission on Alcohol and Drug Abuse - Si Se Puede	94601	substance abuse	http://alameda.networkofcare.org/veterans/services/agency.aspx?pid=SiSePuedeLatinoCommissiononAlcDrugAbuseofAlamedaCounty_842_17_0		x									
Latino Commission on Alcohol and Drug Abuse of Alameda County - Mujeres Con Esperanza	94601	substance abuse	http://berkeleycity.networkofcare.org/mh/services/agency.aspx?pid=MujeresConEsperanzaLatinoCommissiononAlcoholandDrugAbuseofAlamedaCounty_670_2_0	Program for adult women	x			x						

Organization Information					Health Need Potentially Met by Organization (x)									
Name	Zip Code	Key Words	Website	Specialty	1. Access to mental/behavioral/substance abuse services	2. Access to quality primary care health services	3. Access to affordable, healthy food	4. Safe and violent free environment	5. Access to dental care and preventive services	6. Pollution-free living environment	7. Access to basic needs, such as housing and employment	8. Access to transportation and mobility	9. Access to specialty care	10. Health Education and Health Literacy
Centro Legal de la Raza	94601	legal aid	http://centrolegal.org/	culturally-sensitive legal aid										
Clinica la Luna y el Sol	94601	medical clinic	http://clinicalalunayelsol.vpweb.com/	Family medicine		**x**		**x**						**x**
Street Level Health Project	94601	health care; temporary assistance	http://streetlevelhealth.org/	improving the health and wellbeing of underserved urban immigrant communities		**x**					**x**			
24 Hour Oakland Parent Teacher Children Center	94601	child development; emergency shelter	http://www.24hourcenter.com/shelterhousing.html	S/T emergency shelter, d.v., section 8	**x**						**x**			**x**
Salvation Army - Booth Memorial Child Development Center	94601	child development	http://www.alamedasalarmy.org/alameda_county/boothcdc	Childcare and child development	**x**									

Organization Information					Health Need Potentially Met by Organization (x)									
Name	Zip Code	Key Words	Website	Specialty	1. Access to mental/behavioral/substance abuse services	2. Access to quality primary care health services	3. Access to affordable, healthy food	4. Safe and violent free environment	5. Access to dental care and preventive services	6. Pollution-free living environment	7. Access to basic needs, such as housing and employment	8. Access to transportation and mobility	9. Access to specialty care	10. Health Education and Health Literacy
Salvation Army - Garden Street Center Oakland - Emergency Shelter for Families	94601	emergency shelter	http://www.alamedasalarmy.org/alameda_county/oaklandgarden	Emergency housing							x			
Brighter Beginnings - Family and Child Counseling	94601	mental health	http://www.brighter-beginnings.org/clinics/mental-health-services	Family Counseling	x									
Brighter Beginnings - Early Head Start Program	94601	child development; family development	http://www.brighter-beginnings.org/what-we-do/early-childhood-development/early-head-start	Early Childhood Development	x									x
Brighter Beginnings - Teen Family Support	94601	pregnant and parenting teens	http://www.brighter-beginnings.org/what-we-do/teen-family-support	Teens and Families		x					x			x

Organization Information					Health Need Potentially Met by Organization (x)									
Name	Zip Code	Key Words	Website	Specialty	1. Access to mental/behavioral/substance abuse services	2. Access to quality primary care health services	3. Access to affordable, healthy food	4. Safe and violent free environment	5. Access to dental care and preventive services	6. Pollution-free living environment	7. Access to basic needs, such as housing and employment	8. Access to transportation and mobility	9. Access to specialty care	10. Health Education and Health Literacy
HIV Education and Prevention Project of Alameda County (HEPPAC)- Casa Segura - Drop-in Center	94601	HIV; basic needs	http://www.casasegura.org/center.html	STD testing		**x**		**x**			**x**			**x**
Mercy Retirement & Care Center	94601	assisted living	http://www.eldercarealliance.org/mercy-retirement-care-center	Elder Care	**x**	**x**					**x**			
Oakland California Youth Outreach, Inc.	94601	youth development;	http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKEwj9rpPEu7TKAhUYwWMKHcp_CY8QFggeMAA&url=http%3A%2F%2Fwww.oaklandcyoinc.org%2F&usg=AFQjCNHju0bdbly5FU0_8Jf-PLvAO2OpLg&sig2=PxoXtIpfQ_0giaiC1os3jA	outreach services	**x**									

Organization Information					Health Need Potentially Met by Organization (x)									
Name	Zip Code	Key Words	Website	Specialty	1. Access to mental/behavioral/substance abuse services	2. Access to quality primary care health services	3. Access to affordable, healthy food	4. Safe and violent free environment	5. Access to dental care and preventive services	6. Pollution-free living environment	7. Access to basic needs, such as housing and employment	8. Access to transportation and mobility	9. Access to specialty care	10. Health Education and Health Literacy
La Clinica de la Raza, Inc. - Casa Del Sol Mental Health Clinic	94601	mental health; crisis stabilization	http://www.laclinica.org/CasaDelSol/index.html	Specifically dedicated to Spanish speaking community	x			x						
La Clinica de la Raza, Inc. - Clinica Alta Vista	94601	teen health	http://www.laclinica.org/ClinicaAltaVista/	Teen health center (ages 12-21)	x	x							x	
La Clinica Fruitvale Dental	94601	Dental; oral health	http://www.laclinica.org/FruitvaleDental/	Preventative and general dental					x					
La Clinica - WIC - Fruitvale Neighborhood	94601	WIC	http://www.laclinica.org/FruitvaleNeighborhoodWIC/	Pregnant women, children 0-5			x							x
La Clinica - WIC - San Antonio	94601	WIC	http://www.laclinica.org/FruitvaleNeighborhoodWIC/	Pregnant women, children 0-5			x							x

Organization Information					Health Need Potentially Met by Organization (x)									
Name	Zip Code	Key Words	Website	Specialty	1. Access to mental/behavioral/substance abuse services	2. Access to quality primary care health services	3. Access to affordable, healthy food	4. Safe and violent free environment	5. Access to dental care and preventive services	6. Pollution-free living environment	7. Access to basic needs, such as housing and employment	8. Access to transportation and mobility	9. Access to specialty care	10. Health Education and Health Literacy
La Clinica Fruitvale Village	94601	medical center	http://www.laclinica.org/FruitvaleVillage/		x	x			x				x	x
La Clinica de la Raza, Inc. - Hawthorne Clinic	94601	school-based health center	http://www.laclinica.org/Hawthorne/	Kindergarten - 6th grade	x	x								x
La Clinica de la Raza, Inc. - Casa CHE Youth Services	94601	health education	http://www.laclinica.org/programs-che.html	Community health education										x
La Clinica - Tiger Clinic - Fremont HS	94601	school-based health center	http://www.laclinica.org/Tiger/	High School Student Health Center	x	x								x
Lao Family Community Development, Inc. - Senior Assistance Program	94601	senior support	http://www.lfcd.org/seniors/		x						x			x

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Native American Health Center - Community Wellness Department	94601	senior living	http://www.nativehealth.org/content/community-wellness		x									
Native American Health Center - Dental Clinic	94601	Dental; oral health	http://www.nativehealth.org/content/oakland-dental						x					
Native American Health Center - Infant Oral Care Clinic	94601	Dental; oral health	http://www.nativehealth.org/content/oakland-dental	Children 0-5					x					
Native American Health Center - WIC	94601	WIC	http://www.nativehealth.org/content/wic				x							x
Native American Health Center - Youth Services	94601	youth development;	http://www.nativehealth.org/content/youth-services	youth support services							x			

Organization Information					Health Need Potentially Met by Organization (x)									
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Oakland Catholic Worker	94601	transitional housing	http://www.oaklandcatholicworker.org/about.html								x			
Street Level Health Project - Oakland Worker's Collective	94601	jobs assistance; day labor	http://www.oaklanddaylabor.com/	Employment Support and Advocacy							x			
Oakland Unified School District-School Based Health Center-Fremont Tiger Clinic	94601	school-based health center	http://www.ousd.org/Domain/140		x	x			x				x	x
Seneca Center for Children and Families - Building Blocks Therapeutic Preschool	94601	mental health; child development	http://www.senecafoa.org/buildingblocks		x									
Seneca Center for Children and Families - Public School-Based Outpatient Counseling for OUSD	94601	mental health; counseling	http://www.senecafoa.org/publicschools	school-based services	x									

Organization Information					Health Need Potentially Met by Organization (x)									
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Spanish Speaking Citizens' Foundation	94601	advocacy; empowerment	http://www.sscf.org/index.php/en/	culturally-sensitive advocacy services							x			
Telecare Corp. - Garfield Neurobehavioral Center	94601	mental health skilled nursing facility	http://www.telecarecorp.com/programs/12	Skilled Nursing Facility (SNF)	x								x	
Telecare Corp. - Gladman Mental Health Rehabilitation Center	94601	mental health	http://www.telecarecorp.com/programs/13	80-bed psych facility	x	x							x	
Telecare Corp. - Sausal Creek Outpatient Stabilization Clinic	94601	mental health	http://www.telecarecorp.com/programs/38	Walk-ins and referrals	x									
Telecare Corp. - Changes Dual Recovery	94601	mental health; substance abuse	http://www.telecarecorp.com/programs/6	Dual diagnosis	x									

Organization Information					Health Need Potentially Met by Organization (x)									
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Telecare Corp. - Heritage Psychiatric Health Center	94601	mental health	http://www.telecarecorp.com/programs/86	26-bed psych facility	x	x								
The Unity Council - Fruitvale Farmer's Market	94601	farmer's market	http://www.unitycouncil.org/fruitvale-village/	Year-round; biweekly			x							
The Unity Council - Head Start and Early Head Start Programs	94601	child development	http://www.unitycouncil.org/head-start-and-early-head-start/		x						x			
Volunteers of America - (VOABA) - Elsie Dunn Parolee Service Center	94601	parolee services	http://www.voa-ncnn.org/bay-services	reentry program for nonviolent offenders	x									
Volunteers of America - (VOABA) - Linkages to Life	94601	reentry program	http://www.voa-ncnn.org/bay-services		x	x								

Organization Information					Health Need Potentially Met by Organization (x)									
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Eastlake YMCA	94601	youth development; healthy living	http://www.ymcaeastbay.org/Locations/Eastlake_YMCA/About_Eastlake_YMCA.htm											
City of Oakland DHS - Early Childhood and Family Services - Early Head Start	94601	child development	http://www2.oaklandnet.com/Government/o/DHS/o/ChildrenYouthServices/OAK022078	Up to 3 years of age	**x**						**x**			**x**
Latino Commission on Alcohol and Drug Abuse of Alameda County - Centro de Juventud	94601	substance abuse	https://www.berkeleypubliclibrary.org/explore/community-resources/latino-commission-alcohol-and-drug-abuse-alameda-county-1	Ages 7-18	**x**									
Alameda County Medical Center: Highland Campus	94602	medical center	http://www.highlandahs.org/	Designated trauma center, sexual assault treatment center, human rights clinic	**x**	**x**			**x**				**x**	

Organization Information					Health Need Potentially Met by Organization (x)									
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Project Re-Connect	94602	counseling; mental health	http://www.projectreconnect.net/	Youth 12-18, first and second time juvenile offenders	**x**									
Hillcare Foundation for Health - Regynesis Health Services	94603	health services; substance abuse; counseling	http://alameda.networkofcare.org/veterans/services/agency.aspx?pid=HillCareFoundationReGynesisHealthServices_842_17_0	Indigent minority clients, teens, prison re-entry women	**x**	**x**							**x**	
City of Oakland, Department of Human Services (DHS) Aging and Adult Services - East Oakland Multipurpose Senior Center	94603	senior center	http://alamedaco.info/Resource-Finder/Resource-Finder-Results-Details-Eden.asp?Prog=PG000586&web=e								**x**			
Teen Challenge NorWestCal Nevada - Oakland's Men's Center	94603	substance abuse; mental health	http://teenchallenge.net/blog/		**x**									

Organization Information					Health Need Potentially Met by Organization (x)									
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West Oakland Health Council - Albert J. Thomas Medical Clinic	94603	medical center	http://www.alameda.networkofcare.org/mh/services/agency.aspx?pid=WestOaklandHealthCouncilAlbertJThomasMedicalClinic_344_2_0	Ambulatory medical care		x							x	
HEPPAC - Syringe Exchange Program	94603	syringe exchange	http://www.casasegura.org/needle-exchange.html	Thursdays 6pm-8pm	x	x								x
Center for Family Counseling	94603	counseling; mental health	http://www.cffc.biz/		x									
East Oakland Community Project-EOCP - Our House Transitional Housing for Young Adults	94603	transitional housing; substance abuse	http://www.eocp.net/what-we-do/our-house/	Ages 18-25	x									

Organization Information					Health Need Potentially Met by Organization (x)									
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Cocaine Anonymous of NorCal - East Bay Fellowship of Cocaine Anonymous	94603	substance abuse	http://www.norcalca.com/		x									
Oakland Unified School District-School Based Health Center-Life Academy High School- Seven Generations Health Center	94603	school-based health center	http://www.ousd.org/Page/1080		x	x							x	x
Seneca Center for Children and Families - Public School-Based Outpatient Counseling for OUSD	94603	mental health; counseling	http://www.senecafoa.org/publicschools	school-based services	x									
East Bay Men's Network	94605	mental health	http://ebmn.org/		x									

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Schuman-Lilies Clinic Oakland	94605	mental health	http://schuman-liles.org/index.php	Outpatient psychiatric programs	x									
Word Assembly Baptist Church	94605	church; ministry programs	http://wordafc.org/ministries/								x			
Alameda County Behavioral Health Care Services - North County Crisis Response Program	94605	mental health; crisis response	http://www.acbhcs.org/		x									
Alameda County Behavioral Health Care Services - Oakland Children's Services	94605	mental health	http://www.acbhcs.org/internships/oakland_childrens_services.htm	Children 19 and under and their families	x									
Alameda County Public Health Department: Asthma Start Program	94605	Asthma	http://www.acphd.org/asthma.aspx							x	x			x

Organization Information					Health Need Potentially Met by Organization (x)									
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Alameda County Public Health Department: Diabetes Program	94605	Diabetes	http://www.acphd.org/diabetes.aspx	Type II diabetes										x
Alameda County Social Services Agency - Department of Adult, Aging and Medi-Cal Services - Area Agency on Aging (AAA) - Senior Information and Assistance	94605	information and resources	http://www.alamedasocialservices.org/public/services/elders_and_disabled_adults/area_agency_on_aging.cfm	Resource guides for older adults & families										x
Public Authority for In-Home Supportive Services in Alameda County	94605	education; advocacy; in-home supportive services	http://www.alamedasocialservices.org/public/services/elders_and_disabled_adults/in_home_support/public_authority.cfm											x
Alameda County Social Services Agency - Department of Adult and Aging Services- Long-term Care Ombudsman Program	94605	long-term care advocacy	http://www.alamedasocialservices.org/public/services/elders_and_disabled_adults/ombudsman.cfm								x			

Organization Information					Health Need Potentially Met by Organization (x)									
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Alta Bates Emergency Department- Alta Bates Campus	94605	Hospital; Emergency Department	http://www.altabatessummit.org/clinical/emergencyservices.html										x	
Ariel Outreach Mission	94605	outreach; shelter; housing	http://www.arielom.org/#!/sitepage_1	Shelter/Housing							x			
Family Education and Resource Center	94605	information; education; advocacy; support services	http://www.askferc.org/	support services for family/caregivers of children, adolescents, transitional age youth, adults, and older adults with serious emotional disturbance or mental illness										x
Brookins- Kirkland Community African Methodist Episcopal (A.M.E) Church	94605	church; community support	http://www.bcamechurchla.org/ministries.html	community support							x			

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Bi-Bett Corporation - East Oakland Recovery Center	94605	mental health; substance abuse	http://www.california-drug-rehabs.com/bi-bett-corp-east-oakland-recovery-center.html		**x**									
East Oakland Community Project -EOCP- Families in Transition Program (FIT)	94605	transitional housing; mental health	http://www.eocp.net/what-we-do/transitional-family-housing/	transitional housing for single and dual-parent families	**x**						**x**			
East Oakland Community Project -EOCP- Matilda Cleveland Transitional Housing Program for Single Parent Families	94605	transitional housing; mental health	http://www.eocp.net/what-we-do/transitional-family-housing/	transitional housing for single parent families	**x**						**x**			
HAART- Humanistic Alternative to Addiction - Methadone Maintenance & Detox Program	94605	substance abuse; opiate addiction	http://www.haarthayward.org/	Opiate addiction	**x**	**x**								

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LifeLong Medical Care - East Oakland	94605	medical clinic; primary care; mental health	http://www.lifelongmedical.org/locations/our-locations/east-oakland.html	Over 21, target group uninsured persons over 55	x	x							x	
Oakland Unified School District-School Based Health Center-Castlemont High School Campus	94605	school-based health center	http://www.ousd.org/Domain/140		x	x							x	
Seneca Center for Children and Families - Public School-Based Outpatient Counseling for OUSD	94605	mental health; counseling	http://www.senecafoa.org/publicschools	school-based services	x									
The Unity Council - Head Start and Early Head Start Programs	94605	child development	http://www.unitycouncil.org/head-start-and-early-head-start/		x						x			
Youth Uprising	94605	youth development	http://www.youthuprising.org/	violence prevention	x	x		x			x		x	

Organization Information					Health Need Potentially Met by Organization (x)									
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City of Oakland (DHS)/Unity Council Early Head Start	94605	child development	http://www2.oaklandnet.com/Government/o/DHS/o/ChildrenYouthServices/OAK022077	Up to 3 years	x						x			
Alameda County Behavioral Health Care Services - Acute Crisis Care and Evaluation for System wide Services	94606	mental health; substance abuse	http://alameda.networkofcare.org/veterans/services/agency.aspx?pid=AcuteCrisisCareandEvaluationforSystemwideServicesACCESS_842_17_0	screening and referral	x									
Bi-Bett Corporation - Orchid Women's Recovery Center	94606	substance abuse	http://alamedaco.info/Resource-Finder/Resource-Finder-Results-Details-Eden.asp?Prog=PG003249&web=e		x						x			x
Clinton Commons	94606	low-income housing	http://low-income-housing.credio.com/l/38341/Clinton-Commons	Low-Income							x			

Organization Information					Health Need Potentially Met by Organization (x)									
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Alameda County Behavioral Health Care Services - Detoxification Services- Cherry Hill Detoxification Center	94606	substance abuse; detoxification center	http://www.acbhcs.org/sobering_svcs/sobering.htm		x									
Alameda County Public Health Department- AIDS Healthcare Foundation (AHF) Wellness Center- Oakland	94606	HIV/ AIDS	http://www.businesswire.com/news/home/20131114006470/en/AHF-Oakland-Wellness-Center-Extends-Hours-STD	HIV and STD testing		x								
HEPPAC - Syringe Exchange Program	94606	syringe exchange; substance abuse	http://www.casasegura.org/needle-exchange.html	Tuesdays 6pm-8pm	x	x								x
Alameda County Healthy Homes Department- Lead Poisoning Prevention Program	94606	poison prevention	http://www.ci.berkeley.ca.us/Health_Human_Services/Public_Health/Lead_Poisoning_Prevention_Program.aspx	Lead poisoning						x				

Organization Information					Health Need Potentially Met by Organization (x)									
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East Bay Asian Youth Center	94606	youth development	http://www.ebayc.org/	Oakland youth 8-18				x						x
La Clinica - Roosevelt Health Center	94606	school-based health center	http://www.laclinica.org/Roosevelt/	Roosevelt Middle School	x	x			x					x
La Clinica - San Antonio Neighborhood Health Center	94606	health center	http://www.laclinica.org/SANHC/	Services in 9 different languages	x	x							x	x
Alameda County Behavioral Health Care Services - Pool of Consumer Champions	94606	mental health consumers; advocacy	https://www.facebook.com/alamedacountypocc/timeline											x
Catholic Charities of the East Bay - Cassidy Program for Homeless and Marginally Housed Seniors	94607	housing; basic needs	http://alamedaco.info/Resource-Finder/Resource-Finder-Results-Details-	Low-income, homeless or marginally housed individuals over the age of 55							x			

Organization Information					Health Need Potentially Met by Organization (x)									
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			Eden.asp?Prog=PG002080&web=e											
Operation Dignity, Inc.	94607	homeless veterans	http://operationdignity.org/our-programs/	serves homeless veterans; Mobile Outreach Unit							**x**			
Operation Dignity, Inc. - Transitional Housing for Veterans and Families (House of Dignity: Dignity Commons: Ashby House)	94607	housing; veterans; mental health; substance abuse	http://operationdignity.org/our-programs/	Homeless veterans	**x**						**x**			
Alameda County Public Health Department-Children's Specialized Services	94607	mental health	http://www.acbhcs.org/internships/children_specialized_services.htm	Ages 5-22	**x**									

Organization Information					Health Need Potentially Met by Organization (x)									
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Asian Community Mental Health Services: Prevention & Early Intervention: Asian Pacific Islander Connections (APIC)	94607	mental health; prevention; intervention; Asian Pacific Islander	http://www.acmhs.org/services/api-connections/		x									x
Asian Community Mental Health Services: Adult Behavioral Health Services	94607	mental health	http://www.acmhs.org/services/behavioral-health-care-services/		x									x
Asian Community Mental Health Services: Developmental Disabilities Services	94607	mental health; disabilities services	http://www.acmhs.org/services/developmental-disabilities-services/		x									
Asian Community Mental Health Services: Children and Youth Clinical Services	94607	mental health; youth clinical services	http://www.acmhs.org/services/family-support-services/		x									
Alameda County Public Health Department-ACPHD- Division of Communicable Disease Control and	94607	communicable disease; STD	http://www.acphd.org/about-acphd/our-organization/dcdcp.aspx											x

Organization Information					Health Need Potentially Met by Organization (x)									
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Prevention - Acute Communicable & STD Control														
Alameda County Public Health Department- Public Health Nursing	94607	public health; nursing	http://www.acphd.org/about-acphd/our-organization/phn.aspx			**x**								**x**
Alameda County Public Health Department- Alcohol and Drug Prevention	94607	substance abuse;	http://www.acphd.org/alcohol.aspx											**x**
Alameda County Public Health Department- Family Health Services - California Children's Services	94607	children services; special needs	http://www.acphd.org/ccs.aspx	Children with special needs									**x**	
Alameda County Public Health Department- Family Health Services (FHS)- Public Health Clearinghouse	94607	information; referrals	http://www.acphd.org/clearinghouse.aspx	Toll-free information and referral line										**x**

Organization Information					Health Need Potentially Met by Organization (x)									
Name	Zip Code	Key Words	Website	Specialty	1. Access to mental/behavioral/substance abuse services	2. Access to quality primary care health services	3. Access to affordable, healthy food	4. Safe and violent free environment	5. Access to dental care and preventive services	6. Pollution-free living environment	7. Access to basic needs, such as housing and employment	8. Access to transportation and mobility	9. Access to specialty care	10. Health Education and Health Literacy
Alameda County Public Health Department-Developmental Disability Planning and Advisory Council	94607	disabilities services	http://www.acphd.org/ddc.aspx											**x**
Alameda County Public Health Department-Dental Health-Healthy Smiles Children's Dental Program	94607	dental; oral health	http://www.acphd.org/healthy-smiles.aspx	Children					**x**					
Alameda County Public Health Department-Immunization Assistance Project	94607	immunizations	http://www.acphd.org/iap.aspx			**x**								
Alameda County Public Health Department-HealthPAC	94607	HealthPAC; health insurance	http://www.acphd.org/lihp.aspx	Insurance for low - income/ no income residents		**x**							**x**	

Organization Information					Health Need Potentially Met by Organization (x)									
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Alameda County Public Health Department- ACPHD- Medical Marijuana Identification Card	94607	medical marijuana	http://www.acphd.org/mmicp.aspx			x								
Alameda County Public Health Department- Family Health Services (FHS)- Maternal, Paternal, Child and Adolescent Health	94607	maternal child health; adolescents	http://www.acphd.org/mpcah.aspx			x							x	x
Alameda County Public Health Department- DCDCP-Office of AIDS	94607	AIDS/ HIV	http://www.acphd.org/oaa.aspx	Low income, uninsured		x								
Alameda County Public Health Department- DCDCP-Sexually Transmitted Diseases Control and Prevention	94607	STDs	http://www.acphd.org/std.aspx			x								x

Organization Information					Health Need Potentially Met by Organization (x)									
Name	Zip Code	Key Words	Website	Specialty	1. Access to mental/behavioral/substance abuse services	2. Access to quality primary care health services	3. Access to affordable, healthy food	4. Safe and violent free environment	5. Access to dental care and preventive services	6. Pollution-free living environment	7. Access to basic needs, such as housing and employment	8. Access to transportation and mobility	9. Access to specialty care	10. Health Education and Health Literacy
Alameda County Public Health Department-ACPHD-Tobacco Control Program	94607	tobacco	http://www.acphd.org/tobacco-control.aspx							x				x
Pacific ADA Center	94607	disability; advocacy	http://www.adapacific.org/	technical assistance for disabled										x
Alameda Family Services - DreamCatcher Youth Shelter and Support Services	94607	shelter; homeless	http://www.alamedafs.org/dreamcatcher/	Nika's Place: Safe house for girls	x			x			x			
Asian Health Services - Main Campus	94607	medical center	http://www.asianhealthservices.org/		x	x							x	
Boys and Girls Clubs of Oakland-Leonard J. Meltzer Branch - West Oakland	94607	youth development	http://www.bgcoakland.org/clubhouses/					x			x			

Organization Information					Health Need Potentially Met by Organization (x)									
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Catholic Charities of the East Bay- Crisis Response Support Network	94607	mental health; crisis response	http://www.cceb.org/our-services/oakland-crisis-response-and-support-network/		**x**			**x**			**x**			
Children's Hospital of Oakland: Parent Infant Program (PIP)	94607	disabilities services; mental health	http://www.childrenshospitaloakland.org/main/departments-services/parent-infant-program-pip-local-early-access-progr-101.aspx	Developmentally-disabled infants and their families	**x**									**x**
Civicorps Schools	94607	educational assistance; job training	http://www.cvcorps.org/programs/	educational assistance; job training							**x**			
East Bay Community Recovery Project	94607	substance abuse; mental health	http://www.ebcrp.org/	supportive services for Veterans	**x**						**x**			

Organization Information					Health Need Potentially Met by Organization (x)									
Name	Zip Code	Key Words	Website	Specialty	1. Access to mental/behavioral/substance abuse services	2. Access to quality primary care health services	3. Access to affordable, healthy food	4. Safe and violent free environment	5. Access to dental care and preventive services	6. Pollution-free living environment	7. Access to basic needs, such as housing and employment	8. Access to transportation and mobility	9. Access to specialty care	10. Health Education and Health Literacy
Family Bridges: Hong Lok Senior Center	94607	senior center	http://www.fambridges.org/services/hong-lok-senior-centers	Elderly adults							x			x
Institute for the Advanced Study of Black Family Life and Culture	94607	substance abuse	http://www.iasbflc.org/		x									x
Lincoln Child Center	94607	child development; mental health	http://www.lincolnchildcenter.org/		x									x
Oakland Unified School District-Health and Wellness Programs	94607	school-based health services	http://www.ousd.org/schoolwellness							x	x			x
Salvation Army - Adult Rehab Center	94607	substance abuse; mental health	http://www.salvationarmyusa.org/usn/plugins/gdosCenterSearch?query=94607&mode	Residential work therapy program for individuals with substance abuse problems	x									

Organization Information					Health Need Potentially Met by Organization (x)									
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			=query_1&limit=20											
Alameda County Youth Development Inc. George P. Scotlan Youth and Family Center	94607	mental health; counseling	http://www.scotlancenter.org/mission.html	Families with children age 8-18				**x**			**x**			
The Unity Council - Head Start and Early Head Start Programs	94607	child development	http://www.unitycouncil.org/head-start-and-early-head-start/								**x**			
West Oakland Health Council - West Oakland Health Center	94607	health center	http://www.wohc.org/		**x**	**x**			**x**					
Families that Care	94607	child care; day care	http://www.yelp.com/biz/families-that-care-oakland	Foster families							**x**			

Organization Information					Health Need Potentially Met by Organization (x)									
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City of Oakland (DHS)/Unity Council Early Head Start	94607	child development	http://www2.oaklandnet.com/Government/o/DHS/o/ChildrenYouthServices/OAK022077	Up to 3 years	x						x			
CityTeam Ministries - Family Services and Rescue Mission	94607	basic needs; homeless; medical services	https://www.cityteam.org/oakland/	hot meals, shelter, showers, clean clothes	x	x					x			
CityTeam Ministries - Medical and Dental Programs	94607	medical services; dental; oral health	https://www.cityteam.org/oakland/programs.php			x			x				x	
CityTeam - Men's recovery Program and Shelter	94607	mental health; substance abuse	https://www.cityteam.org/oakland/programs.php		x						x			
Alameda County Public Health Department-ACPHD- Health Care for the Homeless Program (HCH)	94607	health care; mobile	https://www.nhchc.org/directory/alameda-county-health-care-	Medical Vans		x			x				x	

Organization Information					Health Need Potentially Met by Organization (x)									
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			homeless-program/											
St. Mary's Food For All Ages	94608	food assistance	http://alamedaco.info/Resource-Finder/Resource-Finder-Results-Details-Eden.asp?Prog=PG002440&web=e				x				x			
Mental Health Association of Alameda County - Patients Rights Advocates	94608	mental health; advocacy	http://mhaac.org/patients-rights-advocates.html											x
St. Mary's Homeless Senior Services	94608	homeless senior support services	http://stmaryscenter.org/homeless-senior-services/	Homeless seniors over 55	x	x					x			

Organization Information					Health Need Potentially Met by Organization (x)									
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Ann Martin Center	94608	mental health	http://www.annmartin.org/		x									
Emeryville Community Services Department - 8-To-Go Shuttle	94608	disabilities services; seniors	http://www.ci.emeryville.ca.us/180/Transportation-Paratransit-Services	Seniors with disabilities								x		
Emeryville Community Services Department - Senior Center	94608	senior center	http://www.ci.emeryville.ca.us/613/Seniors			x					x	x		x
Living Arts Counseling Center	94608	counseling; mental health	http://www.livingartscounseling.org/about-2/		x									
National Alliance of Mental Illness - Alameda County	94608	mental health; mental illness: advocacy; support	http://www.nami-alamedacounty.org/about-us.html		x									x

Organization Information					Health Need Potentially Met by Organization (x)									
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Sutter Care at Home - Hospice Services	94608	hospice	http://www.suttercareathome.org/											
Sutter Care at Home - Home Infusion and Pharmacy Services	94608	infusion therapy; pharmacy	http://www.suttercareathome.org/sips/			**x**							**x**	
M. Robinson Baker YMCA	94608	youth development; healthy living	http://www.ymcaeastbay.org/Locations/M__Robinson_Baker_YMCA.htm								**x**			**x**
Hemophilia Foundation of Northern California	94608	counseling; information; advocacy	https://www.hemophilia.org/Community-Resources/Chapter-Directory/Hemophilia-Foundation-of-Northern-California											**x**

Organization Information					Health Need Potentially Met by Organization (x)									
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ACCESS Women's Health Justice	94609	counseling; medical services	http://accesswhj.org/	women's health and abortion services	x	x					x	x		x
City of Oakland, Department of Human Services (DHS) Aging and Adult Services - North Oakland Multipurpose Senior Center	94609	senior center	http://alamedaco.info/Resource-Finder/Resource-Finder-Results-Details-Eden.asp?Prog=PG000952&web=e								x	x		
Alta Bates Summit Campus - EBAC - Downtown Youth Clinic	94609	youth clinic	http://alamedaco.info/Resource-Finder/Resource-Finder-Results-Details-Eden.asp?Prog=PG002225&web=e			x								
Horizon Services Inc.	94609	mental health; substance abuse	http://horizonservices.org/		x									

Organization Information					Health Need Potentially Met by Organization (x)									
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National Network of Hospital Based Violence Intervention Programs	94609	Violence Prevention	http://nnhvip.org/		x			x						
AIDS Healthcare Foundation: Magic Johnson/Healthcare Center - Oakland	94609	HIV; counseling; health center	http://www.acphd.org/oaa/for-you/service-providers.aspx	HIV testing and treatment	x	x							x	
Alameda County Public Health Department: WIC	94609	WIC	http://www.acphd.org/wic.aspx				x							x
Alta Bates Summit Campus - East Bay AIDS Center	94609	HIV; AIDS	http://www.altabatessummit.org/clinical/aids_scvs.html		x	x								
Alta Bates Summit Medical Center-East Bay AIDS Center (EBAC)	94609	hospital; AIDS	http://www.altabatessummit.org/clinical/aids_scvs.html		x								x	

Organization Information					Health Need Potentially Met by Organization (x)									
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Alta Bates Summit Campus-Emergency Department	94609	Hospital; Emergency Department	http://www.altabatessummit.org/clinical/emergencyservices.html										x	
Alta Bates Perinatal Center	94609	perinatal care	http://www.altabatessummit.org/clinical/women_infants.html										x	
Alta Bates Summit Campus - Markstein Cancer Education and Prevention Services	94609	cancer; education; prevention	http://www.altabatessummit.org/colorectalcancer/support/markstein.html	Cancer-Education & Prevention										x
Alta Bates Summit Campus - Health Access Program	94609	information; resources; screening services	http://www.altabatessummit.org/health/cpsg_healthaccess.html			x								x
Alta Bates Summit Campus - MPI Alcohol and Chemical Dependency Treatment Program	94609	substance abuse; mental health	http://www.altabatessummit.org/mpi/		x									

Organization Information					Health Need Potentially Met by Organization (x)									
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Thunder Road Adolescent Treatment Center	94609	substance abuse; mental health	http://www.altabatessummit.org/thunderroad/	Co-occurring, youth ages 13-18	x									
Bay Area Community Services- Adult Day Care Service	94609	adult day care; Alzheimer's	http://www.bayareacs.org/adult-day-programs/	Alzheimer's	x						x	x		x
Bonita House, Inc. - Homeless Outreach and Stabilization Team	94609	mental health; housing stability; job training; education	http://www.bonitahouse.org/services/host		x						x			
Bonita House, Inc. - Supported Independent Living Program	94609	supported independent living	http://www.bonitahouse.org/services/sil	transitional housing, permanent housing and case management.	x						x			x
Children's Hospital - Division of Infectious Diseases - Pediatric HIV & AIDS Program (PHAP)	94609	Hospital; HIV; AIDS; counseling	http://www.childrenshospitaloakland.org/main/departments-services/55.aspx		x	x							x	x

Organization Information					Health Need Potentially Met by Organization (x)									
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Children's Hospital and Research Center - Center for Child Protection	94609	abuse victims; counseling; support services	http://www.childrenshospitaloakland.org/main/departments-services/center-for-child-protection-7.aspx	Children and adolescents impacted by abuse	x			x					x	x
Children's Hospital - Center for the Vulnerable Child	94609	Hospital; mental health; children's services	http://www.childrenshospitaloakland.org/main/departments-services/center-for-the-vulnerable-child-8.aspx		x	x		x					x	x
La Clinica Dental at Children's Hospital	94609	dental; oral health	http://www.childrenshospitaloakland.org/main/departments-services/dentistry-16.aspx	Preventative, general and specialty dental					x					
Children's Hospital - Family Resource & Information Center	94609	hospital; family resource center; information	http://www.childrenshospitaloakland.org/main/departments-services/family-resource-	Bilingual specialist available										x

Organization Information					Health Need Potentially Met by Organization (x)									
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			information-center-84.aspx											
Children's Hospital-National Center for Sickle Cell Disease	94609	Hospital; sickle cell disease	http://www.childrenshospitaloakland.org/main/departments-services/national-center-for-sickle-cell-disease-41.aspx		**x**								**x**	
Children's Hospital-Psychiatry Department	94609	Hospital; psychiatric services	http://www.childrenshospitaloakland.org/main/departments-services/psychiatry-59.aspx		**x**									
Children's Hospital-Southeast Asia Clinic	94609	Hospital; clinic; Southeast Asia	http://www.childrenshospitaloakland.org/main/departments-services/southeast-asia-clinic-117.aspx			**x**							**x**	

Organization Information					Health Need Potentially Met by Organization (x)									
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Children's Hospital-Research Center	94609	Hospital; research	http://www.childrenshospitaloakland.org/main/research.aspx	Research										x
Crisis Support Services of Alameda County	94609	mental health; crisis services	http://www.crisissupport.org/	24-hour Crisis Line	x									x
East Bay Agency for Children: Therapeutic Nursery School	94609	child development	http://www.ebac.org/programs/specialized/therapeutic.asp	Ages 2-5	x									
Alameda County Public Health Department: Nutrition Services: Healthy Living for Life	94609	nutrition; physical activity	http://www.healthylivingforlife.org/				x							x
Horizon Services Inc.- Chrysalis	94609	mental health; substance abuse	http://www.horizonservices.org/HomePage/Chrysalis.html	COD, Women 18 years & older	x									

Organization Information					Health Need Potentially Met by Organization (x)									
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La Cheim School, Inc.- Behavioral Health Services	94609	mental health	http://www.lacheim.org/#!programs/c8f4		x									
LifeLong Medical Care- Project RESPECT (Alta Bates Summit Medical Center)	94609	mental health; health services; basic needs	http://www.lifelongmedical.org/services/supportive-housing-program.html		x	x					x	x		
Nar-Anon Family Groups	94609	substance abuse; narcotics anonymous	http://www.nar-anon.org/		x									
Seneca Center for Children and Families - Public School-Based Outpatient Counseling for OUSD	94609	mental health; counseling	http://www.senecafoa.org/publicschools	school-based services	x									
Telegraph Community Center	94609	Community center; food pantry; basic needs	http://www.telegraphcenter.com/								x			

Organization Information					Health Need Potentially Met by Organization (x)									
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Women's Cancer Resource Center of Oakland	94609	resource center; cancer; counseling	http://www.wcrc.org/		x						x			
Youth ALIVE! - Caught in the Crossfire	94609	mental health; counseling; violence prevention	http://www.youthalive.org/caught-in-the-crossfire/	violence prevention	x			x						
Youth ALIVE! - Khadafy Washington Project	94609	mental health; counseling	http://www.youthalive.org/khadafy-washington-project/		x			x						
Youth ALIVE! - Teens on Target (TNT)	94609	violence prevention; peer education	http://www.youthalive.org/teens-on-target/	violence prevention/ peer education				x						x
City of Oakland DHS - Early Childhood and Family Services - FAME Early Head Start	94609	child development	http://www2.oaklandnet.com/Government/o/DHS/o/ChildrenYouthServices/OAK022078	Up to 3 years	x						x			

Organization Information					Health Need Potentially Met by Organization (x)									
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Third Box Pregnancy Clinics (previously First Resort - Pregnancy Consulting Women's Health Clinic)	94609	pregnancy; counseling; health services	https://thirdbox.com/		x	x								
Community Health for Asian Americans	94610	mental health; substance abuse; Asian Americans	http://www.chaaweb.org/		x						x			x
East Bay Agency for Children	94610	children mental health services; child abuse prevention	http://www.ebac.org/welcome.asp		x			x						x
Oakland Unified School District-Central Family Resource Center	94610	information; resources	http://www.ousd.org/Page/10632								x			x
Bay Area Community Services, Inc. (BACS) - Admin Office	94611	community services	https://www.bayareacs.org/	Seniors	x						x	x		

Organization Information					Health Need Potentially Met by Organization (x)									
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Lavender Seniors of the East Bay	94612	LGBT; seniors	Bay Area Community Services (BACS)-Lavender Seniors of the East Bay	LGBT Seniors							**x**			**x**
Healthy Communities Inc.-Healthy Oakland-HealthPac Enrollment Sites	94612	HealthPAC; health insurance; enrollment	http://achealthcare.org/health-insurance-info/low-income-coverage-options/screeningenrollment/	Insurance for low income no income residents							**x**			
Healthy Communities Inc.-Healthy Oakland-Urban Male Health Center	94612	health center; mental health	http://achealthcare.org/provider/healthy-communitiesa-healthy-oakland-save-a-life-wellness-center/		**x**	**x**								
ACNMHC: Tenant Support Groups	94612	counseling ; mental health	http://acnetmhc.org/?page_id=77	Homeless mental health clients; housing search support	**x**						**x**			

Organization Information					Health Need Potentially Met by Organization (x)									
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Asian Health Services - Adult Medical Services in Hotel Oakland	94612	medical services	http://alameda.networkofcare.org/veterans/services/agency.aspx?pid=AsianHealthServicesAdultMedicalServicesatHotelOakland_842_17_0			x							x	
City of Oakland Department of Human Services-Aging and Adult Services- Taxi-Up and Go Program	94612	transportation ; seniors	http://alamedaco.info/Resource-Finder/Resource-Finder-Results-Details.asp?Prog=PG000380&web=a	Transportation service for senior Oakland residents								x		
AIDS Project of the East Bay (APEB): Brothas Connect / Bruthas Connexion	94612	mental health; social support	http://alamedaco.info/Resource-Finder/Resource-Finder-Results-Details-Eden.asp?Prog=PG003363&web=e	Support Group for African American and Latino Men living with HIV				x						x

Organization Information					Health Need Potentially Met by Organization (x)									
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Healthy Communities Inc.- Healthy Oakland- Family Resource Center	94612	family resource center; mental health; substance abuse; basic needs	http://alamedaco.info/Resource-Finder/Resource-Finder-Results-Details-Eden.asp?Prog=PG003403&web=e		x						x			x
Foundation for Osteoporosis Research and Education (FORE)	94612	osteoporosis research; education	http://americanbonehealth.org/fore											x
AIDS Project East Bay (APEB)- Shelter Plus Care (S+C)	94612	shelter; HIV; AIDS	http://apeb.org/2015/01/09/shelter-care-sc/	shelter + care through HUD for people living with HIV/AIDS							x			
AIDS Project East Bay (APEB)- Wellness Center	94612	health services; counseling; MSM; transgender	http://apeb.org/program-and-services/	Men who have sex with men, transgender	x	x					x			

Organization Information					Health Need Potentially Met by Organization (x)									
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Daybreak Adult Care Centers (Previously, Adult Day Services Network of Alameda County)	94612	adult day health care	http://daybreakcenters.org/centers/	Adult services							x			x
Alcoholics Anonymous - East Bay Intergroup, Inc. - 24-Hour AA Hotline - Spanish	94612	substance abuse; alcoholism	http://eastbayaa.org/		x									
AA - East Bay Intergroup, Inc. - 24-Hour AA Hotline - English	94612	substance abuse; alcoholism; hotline	http://eastbayaa.org/		x									
Family Paths - 24-hour Parent Support Hotline	94612	parenting support; hotline	http://familypaths.org/what-we-do/24-hour-parent-support/	hotline										x
Family Paths - Mental Health Therapy	94612	counseling; mental health	http://familypaths.org/what-we-do/mental-health-therapy/		x									

Organization Information					Health Need Potentially Met by Organization (x)									
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Family Violence Law Center - Crisis Intervention Services	94612	crisis services; emergency shelter	http://fvlc.org/programs/crisis-intervention/	serve victims of domestic violence							x	x		
Family Violence Law Center - Youth Leadership	94612	violence prevention; domestic violence	http://fvlc.org/programs/youth-programs/	domestic violence prevention training	x									x
The Mentoring Center	94612	mentoring; at-risk youth	http://mentor.org/	training, mentoring and advocacy for at-risk youth	x									
Motivating, Inspiring, Supporting and Serving Sexually Exploited Youth (MISSSEY)	94612	exploited youth; mental health	http://misssey.org/	serves exploited youth	x						x			
Multi Lingual Counseling Center, Inc.	94612	mental health; multilingual	http://multilingualcounseling.com/	Cultural and language specific mental health services (English, Farsi, Dari, Italian,	x									

Organization Information					Health Need Potentially Met by Organization (x)									
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				German and Spanish)										
City of Oakland Department of Human Services - Violence Prevention- Oakland Unite	94612	violence prevention	http://oaklandunite.org/about/					**x**						
Order of Malta Oakland Free Medical Clinic	94612	medical clinic	http://orderofmaltaclinic.com/	Non-insured		**x**							**x**	
Providence House	94612	supportive housing; HIV/AIDS; disabilities; counseling	http://providencesupportivehousing.org/find-a-place-to-live/oakland-providence-house/	Housing for persons with HIV/AIDS or other disabilities							**x**			
United Cerebral Palsy of the Golden Gate	94612	cerebral palsy; advocacy	http://ucpgg.org/support-programs/		**x**									**x**

Organization Information					Health Need Potentially Met by Organization (x)									
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CALICO- Alameda County Family Justice Center	94612	child abuse; referrals	http://www.acfjc.org/get_help	child abuse investigation	x	x								
Alameda County Family Justice Center	94612	violence prevention/ intervention	http://www.acfjc.org/services/		x			x			x			
Healthy Communities Inc.- Healthy Oakland- Save a Life Wellness Center	94612	wellness center; primary care; mental health	http://www.alameda.networkofcare.org/mh/services/agency.aspx?pid=HealthyCommunitiesHealthyOaklandSaveALifeWellnessCenter_344_2_0	Free to low-cost primary care to at-risk, low income residents	x	x							x	
Alameda County Social Services Agency- Workforce and Benefits Admin.- Project Helping Hands	94612	job assistance; food assistance; basic needs	http://www.alamedasocialservices.org/public/services/community/community_ambassadors/volunteering_opportunities.cfm								x			

Organization Information					Health Need Potentially Met by Organization (x)									
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Alliant International University-California School of Professional Psychology - Psychological Services Center: Oakland	94612	mental health	http://www.alliant.edu/cspp/comm-services-placement/san-francisco-community-services/oakland-psc.php		x									
Bay Area Black United Fund - Critical Mass Health Conductors	94612	mental health; health education; advocacy	http://www.babuf.org/what-we-do/bay-area-critical-mass-health-conductors/											x
Bay Area Women Against Rape	94612	violence prevention; counseling; advocacy	http://www.bawar.org/get-help/		x			x			x			
USG - VA - Oakland Vet Center/Veteran Outreach Center Readjustment Services	94612	Veterans; readjustment; counseling	http://www.benefits.va.gov/oakland/index.asp											x

Organization Information					Health Need Potentially Met by Organization (x)									
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Center for Elders' Independence (CEI) - Main Office	94612	elderly care	http://www.cei.elders.org/	ages 55+		x						x		x
Center for Elders' Independence (CEI) - Program of All-inclusive Care for the Elderly	94612	elderly care	http://www.cei.elders.org/	ages 55+		x						x		x
Charlotte Maxwell Complementary Clinic	94612	clinic; cancer care;	http://www.charlottemaxwell.org/our-clinics/what-we-do/	Integrative Cancer Care	x								x	
East Bay Paratransit	94612	transportation; disabilities	http://www.eastbayparatransit.org/	People with disabilities								x		
Easter Seals Bay Area - Pediatric Activity Center	94612	children with disabilities; mental health	http://www.easterseals.com/bayarea/our-programs/childrens-services/pedia	Children with Autism and other disabilities	x								x	

Organization Information					Health Need Potentially Met by Organization (x)									
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			tric-activity-center.html											
East Bay Community Recovery Project: Oakland Outpatient Services Division	94612	mental health; substance abuse; outpatient services	http://www.ebcrp.org/	Wrap-around services	**x**									
EBCRP: Project Pride Residential Treatment	94612	substance abuse; mental health	http://www.ebcrp.org/category/wordpress-tag/residential-treatment	Mothers and children	**x**									
East Bay Community Recovery Project: Day Rehab Program for Individuals with Mental Health Issues and Substance Use Disorders	94612	substance abuse; mental health	http://www.ebcrp.org/services/substance-use-recovery	Co-occurring mental and substance abuse disorders	**x**									

Organization Information					Health Need Potentially Met by Organization (x)									
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Family Bridges: Hong Fook Community-Based Adult Services (CBAS) Center	94612	adult health services	http://www.fambridges.org/services/hong-fook-community-based-adult-services-center	Elderly adults		**x**					**x**			**x**
American Heart Association	94612	heart health; asthma; hypertension	http://www.heart.org/HEARTORG/Affiliate/Oakland/California/Home_UCM_WSA022_AffiliatePage.jsp											**x**
John F. Kennedy University, Oakland Center for Holistic Counseling	94612	counseling; mental health	http://www.jfku.edu/Locations/Community-Counseling-Centers/Oakland-Center-Holistic-Counseling.html		**x**									
Legal Assistance for Seniors	94612	legal aid; seniors	http://www.lashicap.org/about-us								**x**			

Organization Information					Health Need Potentially Met by Organization (x)									
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Lions Center for the Blind of Oakland	94612	center for the blind; information; resources	http://www.lbcenter.org/											x
LifeLong - Downtown Oakland Clinic	94612	clinic; mental health	http://www.lifelongmedical.org/locations/our-locations/downtown-oakland.html		x	x								
USG - VA - Oakland Behavioral Health Clinic	94612	mental health; substance abuse; basic needs	http://www.northerncalifornia.va.gov/locations/Oakland_BHC.asp		x						x			
USG - VA - Oakland Outpatient Clinic	94612	Veterans; medical clinic	http://www.northerncalifornia.va.gov/locations/Oakland_OPC.asp			x							x	
Organization to Achieve Solutions in Substance Abuse	94612	substance abuse	http://www.oasiscliniconline.org/		x								x	x

Organization Information					Health Need Potentially Met by Organization (x)									
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Project Open Hand - East Bay - HIV/AIDS Services	94612	HIV; AIDS	http://www.openhand.org/								x			x
Rubicon Programs-Reentry Success Center	94612	mental health; reentry program	http://www.rubiconprograms.org/economicempowerment.html	Economic Empowerment, Legal Services							x			
Society of St. Vincent de Paul of Alameda County-(SVdP)- Champion Guidance Center for Men	94612	basic needs	http://www.svdp-alameda.org/how-we-help/direct-services/for-men.html	Drop-In							x			
SVdP - Visitation Center for Women and Children	94612	basic needs; information; referrals	http://www.svdp-alameda.org/how-we-help/direct-services/for-women.html								x	x		x

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Society of St. Vincent de Paul of Alameda County (SVdP)- Free Dining Room	94612	food assistance	http://www.svdp-alameda.org/how-we-help/food-assistance/free-dining-room.html								x			
Telecare Corporation - Alameda STAGES (Strides Toward Acquiring Geriatric Empowerment and Success)	94612	geriatric services	http://www.telecarecorp.com/programs/42		x	x					x			
Telecare Corp. - Alameda STRIDES (Steps Towards Recovery, Independence, Dignity, Empowerment and Success)	94612	mental health; substance abuse	http://www.telecarecorp.com/programs/5		x									
Volunteers Of America Bay Area (VOABA)- West House Parolee Service Center	94612	residential reentry program; housing	http://www.voa-ncnn.org/community-re-entry-bay-area	for men							x			

Organization Information					Health Need Potentially Met by Organization (x)									
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Volunteers Of America Bay Area (VOABA)- Project Choice	94612	reentry program	http://www.voa-ncnn.org/project-choice	job skills, educational resources, housing assistance, etc. for newly released offenders							x			
Women Organized to Respond to life-threatening Diseases	94612	HIV; AIDS	http://www.womenhiv.org/	HIV/AIDS	x									x
Downtown Oakland YMCA	94612	youth development; healthy living	http://www.ymcaeastbay.org/locations/downtown_oakland_ymca.htm											x
YMCA of the East Bay Association Research Center	94612	youth development; healthy living	http://www.ymcaeastbay.org/locations/downtown_oakland_ymca.htm											x

Organization Information					Health Need Potentially Met by Organization (x)									
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City of Oakland Department of Human Services-Children and Youth Services	94612	children and youth services; supportive services	http://www2.oaklandnet.com/Government/o/DHS/o/ChildrenYouthServices/index.htm	ages 0-20							**x**			
City of Oakland Department of Human Services - Children and Youth-Head Start	94612	child development	http://www2.oaklandnet.com/Government/o/DHS/o/ChildrenYouthServices/OAK022077	Ages 3-5	**x**						**x**			
City of Oakland Department of Human Services - Early Childhood and Family Services - Early Head Start	94612	child development; family services	http://www2.oaklandnet.com/Government/o/DHS/o/ChildrenYouthServices/OAK022078	Up to 3 years	**x**						**x**			
PREP Alameda-Prevention and Recovery in Early Psychosis	94612	substance abuse; mental health	https://askprep.org/	Co-occurring substance abuse services	**x**									

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A Friendly Place	94612	transitional housing; homeless women; basic needs	https://localwiki.org/oakland/A_Friendly_Place	Drop-in center for homeless women				x			x			
Building Opportunities for Self-Sufficiency (BOSS)- Casa Maria	94612	emergency housing; mental health	https://self-sufficiency.org/programs/casa-maria/	emergency housing; Dual diagnosis	x						x			
Building Opportunities for Self-Sufficiency (BOSS)- Career Training and Employment Center	94612	career training; employment assistance	https://self-sufficiency.org/programs/partners-reentry-program-prep/								x			
Building Opportunities for Self-Sufficiency (BOSS) - Rosa Parks House	94612	transitional housing; mental illness; special needs	https://self-sufficiency.org/programs/rosa-parks-house/		x						x			
Bay Area Legal Aid - Health Care Access	94612	mental health; advocacy	https://www.baylegal.org/what-we-do/health-care-access/								x			

Organization Information					Health Need Potentially Met by Organization (x)									
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American Cancer Society - East Bay Metropolitan Unit	94612	cancer; counseling; medical information; hotline	https://www.berkeleypubliclibrary.org/explore/community-resources/american-cancer-society-east-bay-metropolitan-unit-1		x							x		x
West Oakland Health Council - Community Recovery Center West	94612	health center; primary care; mental health; substance abuse recovery	https://www.berkeleypubliclibrary.org/explore/community-resources/west-oakland-health-council-community-recovery-center-west		x									
Washoe Tribe of Nevada and California - Native TANF Program	94612	temporary assistance; supportive services	https://www.washoetribe.us/contents/organization/washoe-native-tanf-program	basic needs							x			

Organization Information					Health Need Potentially Met by Organization (x)									
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Project Open Hand - Homebound and Critically Ill	94612	basic needs	http://www.openhand.org/	Meals for critically ill and seniors		x					x			
Boys and Girls Clubs of Oakland- Anna Marie Whalen Branch- Central East Oakland	94619	youth development	http://www.bgcoakland.org/clubhouses/											x
Occupational Health Services	94621	substance abuse	http://alameda.networkofcare.org/veterans/services/agency.aspx?pid=OccupationalHealthServicesOHSOakland_842_17_0		x									
American Lung Association - Greater Bay Area Office and State Headquarters	94621	lung health	http://alamedaco.info/Resource-Finder/Resource-Finder-Results-Details-Eden.asp?Prog=PG000086&web=e	Lung disease						x				x

Organization Information					Health Need Potentially Met by Organization (x)									
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East Oakland Switchboard	94621	information and resources	http://alamedaco.info/Resource-Finder/Resource-Finder-Results-Details-Eden.asp?Prog=PG000238&web=e	Must be referred from SSA							**x**			
East Oakland Youth Development Center	94621	youth development	http://eoydc.org/	art, education, jobs, wellness	**x**						**x**			
East Oakland Youth Development Center - Project Joy	94621	youth development; employment	http://eoydc.org/jobs/	Youth employment							**x**			
Images on the Rise: Transitional Housing and Self-Sufficiency Programs	94621	transitional housing; basic needs	http://imagesontherise.org/	Transitional housing and recovery for young mothers and children							**x**			

Organization Information					Health Need Potentially Met by Organization (x)									
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Alameda County Community Food Bank - CalFRESH Outreach and Enrollment	94621	food stamps; food assistance; enrollment	http://www.acfb.org/calfresh/	Food stamps			x				x			
Alameda County Community Food Bank- Food Helpline	94621	food bank; food assistance	http://www.acfb.org/get_food/				x				x			
Alameda County Community Food Bank- Free Summer Lunch Program	94621	food bank; food assistance	http://www.acfb.org/get_food/summerlunch/	Up to age 18			x				x			
Boys and Girls Clubs of Oakland- Ossian E. Carr Branch - East Oakland	94621	youth development	http://www.bgcoakland.org/clubhouses/											x
East Oakland Community Project: Crossroads Emergency Shelter	94621	emergency shelter; counseling	http://www.eocp.net/what-we-do/crossroads/	Individuals, families, people living with HIV/AIDS	x						x			

Organization Information					Health Need Potentially Met by Organization (x)									
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American Lung Association- Lung Helpline	94621	lung health; information; resources	http://www.lung.org/support-and-community/lung-helpline-and-tobacco-quitline/											x
Oakland Unified School District-School Based Health Center-Havenscourt Health Center	94621	school-based health center; dental	http://www.ousd.org/Domain/140		x	x			x					x
PEERS - Peers Envisioning and Engaging in Recovery Services	94621	recovery; substance abuse; mental health	http://www.peersnet.org/		x									
West Oakland Health Council - East Oakland Health Center	94621	health center; dental	http://www.wohc.org/eohc.html	Ambulatory care	x	x			x				x	x
West Oakland Health Council - Community Recovery Center East	94621	recovery; substance abuse; mental health	http://www.wohc.org/substance_svcs.html		x									

Organization Information					Health Need Potentially Met by Organization (x)									
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Allen Temple Baptist Church - AIDS Ministry	94621	church; AIDS	https://www.allen-temple.org/ministries/community-care/aids-ministry			x					x			x
Allen Temple Senior Information and Referral Center	94621	seniors; information; referrals	https://www.allen-temple.org/ministries/congregational-life/seniors-ministry											x
Allen Temple Health and Social Services Ministry	94621	temple; veterans; mental health; substance abuse	https://www.allen-temple.org/the-people/82-community-care/girls-rite-of-passage/114-health-a-social-services-ministry	Violence prevention; Active Duty Military/Veterans Services:	x									x
Pathways: Home Health, Hospice and Private Duty	94621	hospice; counseling	https://www.pathwayshealth.org/		x								x	

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Berkeley Addiction Treatment Services	94702	substance abuse; opiate addiction	http://alameda.networkofcare.org/mh/services/agency.aspx?pid=BerkeleyAddictionTreatmentServicesBATS_344_2_0	Opiate addiction	x									
Women's Daytime Drop-In Center - Bridget House	94702	substance abuse	http://womensdropin.org/programs/bridget-house/		x			x			x			
Women's Daytime Drop-In Center - Children's Program	94702	mental health; referrals	http://womensdropin.org/programs/childrens-program/		x			x			x			x
Women's Daytime Drop-in Center- Women Overcoming Trauma Support Group	94702	trauma support; counseling	http://womensdropin.org/programs/mental-health-services/		x			x						

Organization Information					Health Need Potentially Met by Organization (x)									
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Berkeley Food Pantry	94702	food pantry; food assistance	http://www.berkeleyfoodpantry.org/								x			
Gray Panthers of Berkeley	94702	advocacy	http://www.berkeleygraypanthers.mysite.com/								x			
Berkeley Youth Alternatives - Counseling Center	94702	counseling; youth	http://www.byaonline.org/		x									
Center for Elders' Independence - Program of All-inclusive Care for the Elderly	94702	elderly care	http://www.cei.elders.org/	ages 55+		x						x		x
LifeLong - Over 60 Health Center	94702	elderly care	http://www.lifelongmedical.org/locations/our-locations/over-60-health-center.html		x	x								x

Organization Information					Health Need Potentially Met by Organization (x)									
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Berkeley Public Library	94702	library	https://www.berkeleypubliclibrary.org/					x			x			
Alameda County Network of Mental Health Clients: Reach-out of Alameda	94703	mental health	http://acnetmhc.org/?page_id=75	Transition to community	x						x			
Berkeley Food and Housing Project	94703	housing; food assistance	http://bfhp.org/	housing and meal programs							x			
Berkeley Food and Housing Project - Russell St. Residence and Annex	94703	housing; basic needs	http://bfhp.org/about-bfhp/services-programs/russell-street-residence-and-annex/	Permanent supportive housing for mentally ill	x						x			
Bonita House, Inc. - Creative Wellness Center	94703	wellness center	http://bonitahouse.org/services/cwc		x						x			

Organization Information					Health Need Potentially Met by Organization (x)									
Name	Zip Code	Key Words	Website	Specialty	1. Access to mental/behavioral/substance abuse services	2. Access to quality primary care health services	3. Access to affordable, healthy food	4. Safe and violent free environment	5. Access to dental care and preventive services	6. Pollution-free living environment	7. Access to basic needs, such as housing and employment	8. Access to transportation and mobility	9. Access to specialty care	10. Health Education and Health Literacy
East Bay Center for the Blind	94703	referrals; blind	http://eastbaycenterforthebli nd.org/	referrals							x			
A Better Way	94703	abuse victims; counseling; multilingual	http://www.ab etterwayinc.ne t/Home%20Pa ge	Foster or adopted people ages birth-21 who have been abused.	x			x						
West Oakland Health Council - Berkeley Adult Day Health Center	94703	adult day health center	http://www.al amedahealthc onsortium.org /community-health-centers/west-oakland-health-council/		x	x						x		
City of Berkeley-Health Housing and Community Services - Aging Services - South Berkeley Senior Center	94703	senior center; information; referrals	http://www.ci. berkeley.ca.us /Health_Huma n_Services/Div ision_on_Agin g/South_Berke ley_Senior_Ce nter.aspx	recreational activities for the elder	x	x					x	x		

Organization Information					Health Need Potentially Met by Organization (x)									
Name	Zip Code	Key Words	Website	Specialty	1. Access to mental/behavioral/substance abuse services	2. Access to quality primary care health services	3. Access to affordable, healthy food	4. Safe and violent free environment	5. Access to dental care and preventive services	6. Pollution-free living environment	7. Access to basic needs, such as housing and employment	8. Access to transportation and mobility	9. Access to specialty care	10. Health Education and Health Literacy
Center for Independent Living, Inc.	94703	independent living	http://www.cilberkeley.org/		x						x			x
Center for Independent Living, Inc. - Universal Wellness: Living well with a Disability	94703	disabilities services	http://www.cilberkeley.org/programs/universal-wellness/		x						x			x
Alameda County Network of Mental Health Clients: Berkeley Drop-in Center	94703	community center; mental health; substance abuse counseling; referrals	http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKEwi_55zcirnKAhVR8GMKHe-bDXEQFggmMAA&url=http%3A%2F%2Facnetmhc.org%2F%3Fpage_id%3D67&usg=AFQjCNF36z5Nao8KPe8R2XY8tYwF65Hg0g&sig2=-iXwX28KW3OPzvHHsvcY2w		x			x			x	x		

Organization Information					Health Need Potentially Met by Organization (x)									
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LifeLong - Dental Care	94703	dental; oral health	http://www.lifelongmedical.org/services/dental-care.html						x					
Through the Looking Glass - Bay area services	94703	disabilities services; child development; mental health	http://www.lookingglass.org/services	Children and parents with disabilities	x									
Through the Looking Glass - Early Head Start Program	94703	child development	http://www.lookingglass.org/services/local-services/early-head-start-center	Children with disabilities	x						x			
Senior Medi-Benefits	94703	seniors; information; advocacy	http://www.seniormedi-benefits.org/								x			x
Building Opportunities for Self-Sufficiency (BOSS) - McKinley Family Transitional House	94703	transitional housing; support services	https://self-sufficiency.org/programs/mckinley-house/		x						x			

Organization Information					Health Need Potentially Met by Organization (x)									
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Alameda Alliance for Health	94703	health insurance	https://www.alamedaalliance.org/								**x**			
McGee Avenue Baptist Church	94703	church	https://www.facebook.com/McGee-Ave-Baptist-Church-113498385349900/?fref=ps_result	basic needs							**x**			
Berkeley Food and Hosing Project: North County Women's Center	94704	housing; women's center	http://bfhp.org/about-bfhp/services-programs/north-county-womens-center/								**x**			
East Bay Sanctuary Covenant	94704	sanctuary housing; Community services	http://eastbaysanctuary.org/	Sanctuary to low-income and indigent refugees and immigrants							**x**			

Organization Information					Health Need Potentially Met by Organization (x)									
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City of Berkeley - Department of Health Services- Public Health Division- School Linked Health Services	94704	school; health services;	http://www.ci.berkeley.ca.us/ContentDisplay.aspx?id=13906			x					x			x
City of Berkeley - Department of Health Services- Public Health Division - Heart 2 Heart Program (H2H)	94704	heart disease; heart health	http://www.ci.berkeley.ca.us/ContentDisplay.aspx?id=33982	addressing inequities in hypertension and heart disease within a 2-by-4 block South Berkeley neighborhood.							x			x
City of Berkeley - Department of Health Services- - Mental Health Division - Family Youth and Children's Services	94704	mental health; youth and children counseling	http://www.ci.berkeley.ca.us/Health_Human_Services/Mental_Health/Family,_Youth_and_Children%E2%80%99s_Services_(FYC).aspx	Bilingual (Spanish) services	x									
City of Berkeley - Department of Health Services- Public Health Division- Healthy Eating and Nutrition Program	94704	healthy eating; nutrition program	http://www.ci.berkeley.ca.us/Health_Human_Services/Public_Health/Healthy_Eating_and_Nutrition_Program.aspx											

Organization Information					Health Need Potentially Met by Organization (x)									
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City of Berkeley - Department of Health Services-Public Health Division - Public Health Nursing and Case Management	94704	public health; nursing	http://www.ci.berkeley.ca.us/Health_Human_Services/Public_Health/Public_Health_Nursing.aspx			**x**								**x**
City of Berkeley - Department of Health Services-Mental Health Division	94704	mental health	http://www.ci.berkeley.ca.us/mentalhealth/		**x**									
Rubicon Programs-Reentry Success Center	94704	reentry program	http://www.rubiconprograms.org/contactus.html	Economic Empowerment, Legal Services	**x**						**x**			
The Suitcase Clinic	94704	basic needs; suitcase clinic	http://www.suitcaseclinic.org/			**x**					**x**		**x**	
Berkeley Public Library	94704	library	https://www.berkeleypubliclibrary.org/								**x**			

Organization Information					Health Need Potentially Met by Organization (x)									
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Alta Bates Summit Medical Center-Alta Bates Campus-Asthma Resource Center	94705	asthma; resource center	Alta Bates Summit Medical Center- Alta Bates Campus-Asthma Resource Center										**x**	**x**
Homeless Action Center	94705	legal aid; information; referrals	http://homelessactioncenter.org/	Free legal assistance							**x**			
Alta Bates Summit Diabetes Center	94705	diabetes; medical services	http://www.altabatessummit.org/diabetes/										**x**	**x**
City of Berkeley-Health Housing and Community Services - Aging Services - North Berkeley Senior Center	94709	senior center	http://www.ci.berkeley.ca.us/Health_Human_Services/Division_on_Aging/North_Berkeley_Senior_Center.aspx	recreational activities for the elder	**x**	**x**					**x**			

Organization Information					Health Need Potentially Met by Organization (x)									
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City of Berkeley Housing and Community Services Department- Aging Services - Meals on Wheels	94710	food assistance; meals on wheels	http://www.ci.berkeley.ca.us/aging/								x			
City of Berkeley Department of Health Services- Public Health Division - Black Infant Health Program	94710	social support; education; mental health	http://www.ci.berkeley.ca.us/ContentDisplay.aspx?id=16074	social support and parenting education	x						x			x
City of Berkeley Department of Health Services- Public Health Division - Family Planning and Birth Control	94710	family planning; birth control	http://www.ci.berkeley.ca.us/Health_Human_Services/Public_Health/Family_Planning.aspx			x							x	x
City of Berkeley Department of Health Services- Public Health Division - HIV AIDS Prevention Program	94710	HIV; AIDS; prevention	http://www.ci.berkeley.ca.us/Health_Human_Services/Public_Health/HIV___AIDS_Prevention_Program.aspx			x								x

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City of Berkeley Department of Health Services-Public Health Division - STI Prevention & Education	94710	STI; prevention; education	http://www.ci.berkeley.ca.us/Health_Human_Services/Public_Health/Sexually_Transmitted_Infection_Prevention_Program.aspx			**x**								**x**
City of Berkeley Department of Health Services-Public Health Division - Tuberculosis Prevention & Treatment	94710	tuberculosis; prevention; treatment	http://www.ci.berkeley.ca.us/Health_Human_Services/Public_Health/Tuberculosis_Prevention___Treatment_Program.aspx			**x**								**x**
Community Access Supported Living	94710	supported living; disabilities	http://www.communityaccess.org/what-we-do/housing	Adults with developmental disabilities							**x**			
LifeLong - West Berkeley Family Practice	94710	family health; medical services	http://www.lifelongmedical.org/locations/our-locations/west-berkeley.html	Family Practice	**x**	**x**								**x**

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Building Opportunity for Success (BOSS)-Ursula Sherman Village	94710	housing; shelter	https://self-sufficiency.org/programs/ursula-sherman-village/	Housing Assistance/ shelter							**x**			

Sutter Health
Alta Bates Summit Medical Center

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Community Health Needs Assessment Impact Report
Responding to the 2013 Community Health Needs Assessment

Alta Bates Summit Medical Center
250 Hawthorne Avenue
Oakland, CA 94609
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This document serves as a report of the impact from community benefit programs, initiatives and activities put in place to address the needs identified by the 2013 – 2015 Community Benefit Plan for Alta Bates Summit Medical Center.

2013 – 2015 Implementation Strategy

On December 12, 2013, Sutter East Bay Hospital's Board of Directors passed resolution #13-12004 approving this Community Benefit IRS Implementation Strategy designed to respond to community health needs, defined as health drivers and health outcomes. Different than past community health needs assessments, the 2013 assessment focused on identifying specific vulnerable ZIP codes as communities most in need of support. In addition to the many community benefit programs and services provided throughout Sutter Health East Bay Region, this 2013-2015 implementation strategy is focused on responding to specific health needs of specific zip codes, including, but not limited to, those most vulnerable ZIP codes of West Oakland, East Oakland, and South and West Berkeley. For a comprehensive list of Alta Bates Summit Medical Center community benefit programs and activities, please visit http://www.altabatessummit.org/about/communitybenefit/cb_programs.html.

All Sutter Health East Bay Region Community Benefit Initiatives align with the following pillars:

1) Connect patients to the right care, place and time through access to primary care and mental health services

2) Invest in vulnerable areas to ensure capacity of care meets demands of vulnerable populations

3) Collaborate to influence behavior to utilize preventive care, chronic disease management and community services

4) Build community capacity and improve health

This implementation strategy describes how Alta Bates Summit Medical Center plans to address significant health needs identified in its 2013 Community Health Needs Assessment and consistent with its charitable mission. The strategy describes:

- Actions the hospital intends to take, including programs and resources it plans to commit;
- Anticipated impacts of these actions and a plan to evaluate impact; and
- Any planned collaboration between the hospital and other organizations.

Lack of Access to Mental Health Services/Treatment – Substance Abuse

Name of Program, Initiative or Activity	**MPI collaboration with local Federally Qualified Health Centers for education, outreach, and assessment**
Description	MPI Treatment Services, Inc., a community benefit program of Alta Bates Summit Medical Center, offers a complete range of chemical dependence treatment in five distinct levels of care: • Detoxification (MPI uses special detoxification protocols for detoxification from certain medicines) • Inpatient Rehabilitation • Residential Rehabilitation • Day Treatment • Morning and Evening Intensive Outpatient Programs MPI will work with ABSMC Community Benefits to develop a strategic plan to collaborate with Federally Qualified Health Centers in West Oakland, East Oakland, and Emeryville to support and enhance education, outreach, and assessment.
2013 - 2015 Impact	A written plan was completed in September of 2014 in collaboration with LifeLong Medical Care. The partnership between MPI and LifeLong facilitates supporting members of the community who would otherwise not have access and connect motivated and qualified individuals by referral to MPI treatment services. MPI provided professional development events for 5 members of LifeLong's staff to receive training on how to conduct more effective assessments and treatments. These professional development experiences allowed staff to more accurately identify patients with chemical dependencies, intervene, and link the patient to the appropriate services. LifeLong also referred several potential patients for treatment at MPI; one completed the program as of 12/31/15.
Mechanism(s) Used to Measure Impact	MPI documented LifeLong employees' attendance at the professional development days. MPI staff also documented the referral pattern from LifeLong, which indicated that more appropriate referrals were made after the training.

Limited Access to Quality Primary Health Care Services

Name of Program, Initiative or Activity	**ED Utilization and Care Transitions Initiative**
Description	In order to connect patients to the right care at the right place and time through access to primary care, Alta Bates Summit, in collaboration with the Community Health Center Network, La Clinica, Asian Health Services and Lifelong, will improve the care transition for targeted uninsured and underinsured patients between the medical center and each of these three local health centers. Initiative objectives aim to 1) provide warm hand-offs; 2) establish and monitor compliance and

	outpatient hospitalizations follow-up appointment; and 3) establish care plans for patients at highest risk.
2013 - 2015 Impact	Through collaboration with three of the local federally qualified health centers, Asian Health, Lifelong and La Clinica, along with the Community Health Center Network (CHCN), Care Transitions Registered Nurses (CTRN) were placed in each of the three clinics. The primary role of the nurse is to provide warm handoffs for both inpatients and patients visiting the ED, to provide telephonic clinical assessment, including medication reconciliation, and to ensure that patients make appropriate follow up appointments. Since program inception, more than 9,000 patients were contacted following a hospital stay or ED visit. Of those, more than 5000 were given appointments and on average, 81% of those appointments were kept. Evaluations by CHCN indicate a 17% decrease in emergency department visits within 30 days, a 32% increase in follow up appointments and a 17% decrease in readmissions within 30 days. A total of 174 care plans were developed for the highest at-risk patients. Five cohorts of patients were tracked. While there was an increase in the number of visits by these patients, there was a reduction in the number of non-urgent visits to the ED. In addition to the CTRN program, two ED Navigators, one from La Clinica and another from Lifelong, funded by Community Benefit, were placed in each of the medical center's EDs. The primary goal of these non-clinical workers was to assist with making follow up appointments with a primary care physician at a clinic home, assist with eligibility enrollment and provide linkages to community resources, such as shelter, food or transportation. The program was launched in December 2014. Between program inception and March of 2015, more than 400 patients were assisted. In 2015, we learned that there was duplication in the efforts of the ED Navigators and members of the case management team, so a decision was made to discontinue the navigator program and us the funds to enhance the capacity of the CTRN by hiring an assistant.
Mechanism(s) Used to Measure Impact	CHCN provided program evaluation for the CTRN initiative. A cohort was identified based on claims data and divided with half receiving intervention and half receiving no intervention. Each CTRN has access to EPIC and is able to identify not only patients from a designated clinic, but uninsured patients as well. Patient encounters are captured in EPIC and also tracked through CHCN claims data. Care plans for frequent utilizers are tracked in EPIC. Navigators track and record all encounters and services provided.
Name of Program, Initiative or Activity	**West Oakland Education and Outreach Initiative**
Description	Working with West Oakland partners, Alta Bates Summit will develop and implement a model that replicates best practices of community engagement and community capacity building. Focus will be on access to care, chronic disease management, and reducing health disparities.

2013 - 2015 Impact	A partnership with East Bay Asian Local Development Corporation, (EBALDC) to work with residents along the San Pablo Avenue Corridor in West Oakland, was established in 2014. The partnership has united 12 cross-sector stakeholder groups representing health care, housing, social services, agenda organizing, food justice, public health, economic development, and local residents. A 5-year action plan was developed to transform the San Pablo Avenue community into a healthier neighborhood. The initial focus for the health care work group will be to identify residents who have or are at-risk of having high blood pressure and connect them to neighborhood clinics, healthy foods, exercise, and health education. A collective impact framework will be used to align partnering organizations expertise, programs, and services to reduce hypertension. In October 2015, a hypertension pilot kickoff was held at the California Hotel. The 10-week pilot served 61 residents, connecting them to case management, health education, healthy food and physical activity supports.
Mechanism(s) Used to Measure Impact	A shared measurement system and an evaluation plan are currently being developed to measure the impact on resident health beginning with hypertension.

Name of Program, Initiative or Activity	**Collaboration with existing Heart2Heart (H2H) Hypertension and Heart Disease Initiative in South Berkeley**
Description	The H2H neighborhood program targets a specific South Berkeley neighborhood selected for both its assets and challenges. H2H, now in its 5th year, uses a community-based approach to address health inequities in high blood pressure and heart disease. H2H activities include monthly mobile health van events, blood-pressure screening and education in partnership with local businesses, national drug take-back days, and mini-grants for local organizations. The program seeks to empower residents and build community cohesion and capacity. Alta Bates Summit will collaborate with Lifelong Medical Care, the City of Berkeley Health Department, and other partners to expand the South Berkeley H2H initiative in order to address disparities in cardiovascular disease, especially in hypertensive heart disease.
2013 - 2015 Impact	Continued funding for a Community Engagement Specialist position to manage a mini-grant program empowering and building resident leadership skills and to train health advocates on the topic of navigating the health care system and linking community members to resources. In 2015, 27 Health Advocates were trained and 9 mini-grant applications were submitted. The core training covered community leadership, health promotion, navigation of the health care system, handling medical emergencies, communication, and outreach. On-going training topics included hypertension, diabetes, emergency preparedness, talking to your doctor, stress reduction, hands-only CPR, and health insurance enrollment. Health Advocates provided health education and outreach to family members, friends, neighbors, church groups, local youth and community members. A total of 292 people were reached with educational sessions and outreach held at H2H events, a local flea market, church meetings, local festivals, youth meetings, and community

	member homes. The mini-grant program funded 5 grantees and served 109 youth and 85 adults.
Mechanism(s) Used to Measure Impact	A post evaluation was created to evaluate participants on their confidence navigating the health care system, knowing how to respond to emergencies, knowing the difference between health care settings, knowing which care setting to choose based on health issue, and understanding emergency room procedures. The post evaluation will be administered and an end-of-the-year report will be submitted in 2016

Lack of Access to Basic Needs: Food, Housing, Jobs

Name of Program, Initiative or Activity	**Youth Bridge Career Development Program**
Description	Youth Bridge is a year-round career development program designed to provide high school and college students with support and guidance to complete high school, pursue higher education, and ultimately obtain gainful employment. The program provides mentors and paid summer internships at the medical center and throughout the community.
Anticipated Impact and Plan to Evaluate	A total of 90 students from West and East Oakland and other vulnerable communities will participate in Youth Bridge and will be provided paid summer internships by **December 31, 2014.**
2013 - 2015 Impact	In 2014 and 2015, 245 at-risk youth from the two most vulnerable communities in Alameda and Contra Costa County, East and West Oakland, participated in the year-long program. More than 300 high school and college students, including students returning for 2nd and 3rd years, participated in a health career activities class for four months, received mentorship placement followed by paid summer internships. A total of 90 middle school students participated in a five-week summer Youth in Medicine program. In collaboration with Samuel Merritt University, these students were exposed to interactive training labs and various health professions, while also engaging in fun summer activities.
Mechanism(s) Used to Measure Impact	Students must sign-in for all activities. All attendance is tracked through CitySpan software. All students must complete timesheets for all hours in mentorships, internships, or apprenticeships.

Name of Program, Initiative or Activity	**Interim Care Program (ICP) for Homeless**
Description	This community benefit program is designed to provide homeless patients temporary housing after their hospital discharge. This allows patients to recuperate in a clean and stable environment. Patients may

	stay up to six weeks, are provided three meals a day, and have access to support services, such as substance abuse counseling and other wrap-around services. This pilot project is in collaboration with Lifelong Medical, Inc. and consists of two dedicated shelter beds in Berkeley and three in Oakland.
2013 - 2015 Impact	In 2014 and 2015, 452 homeless inpatients were referred from Alta Bates Summit Medical Center. Of those, 171 entered a shelter. The average length of stay at the shelter was 27 days. Only 13 of these patients were readmitted within a 30 day time period and only 28 were readmitted during that year.
Mechanism(s) Used to Measure Impact	A tracking sheet was kept by Lifelong Medical, Inc., Care Transitions Nurse and included all pertinent information including follow up, primary care appointment and disposition from the shelter.