



2016 Community Health Needs Assessment

Table of Contents

- Executive Summary 5
- Introduction 13
 - Background and Purpose..... 13
 - Service Area 13
 - Project Oversight 14
 - Author 14
 - Organizations and Partners 15
- Methods 16
 - Secondary Data Collection..... 16
 - Primary Data Collection 16
 - Information Gaps 18
 - Public Comment..... 18
- Identification of Significant Health Needs 19
 - Review of Primary and Secondary Data..... 19
 - Significant Health Needs..... 19
 - Resources to Address Significant Needs 19
- Priority Health Needs 20
 - Impact Evaluation 21
- Demographics..... 22
 - Population..... 22
 - Gender..... 24
 - Race/Ethnicity 24
 - Citizenship 25
 - Language..... 25
 - Veterans 26
- Social and Economic Factors..... 27
 - Social and Economic Factors Ranking..... 27
 - Poverty 27
 - Vulnerable Populations 28
 - Households..... 29
 - Free or Reduced Price Meals..... 30
 - Unemployment..... 30

Educational Attainment	31
Homelessness	32
Crime and Violence.....	33
Community Input - Social and Economic Factors	33
Health Access.....	35
Health Insurance.....	35
Sources of Care.....	36
Use of the Emergency Room	37
Community Input – Access to Health Care.....	38
Dental Care.....	39
Community Input – Dental Care	40
Birth Characteristics.....	41
Births	41
Teen Birth Rate.....	41
Prenatal Care.....	41
Low Birth Weight.....	42
Infant Mortality	42
Breastfeeding.....	43
Mortality/Leading Causes of Death	44
Mortality Rates.....	44
Chronic Disease.....	46
Health Status	46
Diabetes	46
Heart Disease	47
High Blood Pressure	48
Community Input – Heart Disease	48
Cancer	49
Community Input – Cancer	50
Asthma	50
Disability	52
Mental Health.....	53
Mental Health Indicators	53
Community Input – Mental Health	54

Community Input – Accessing Mental Health Care	55
Health Behaviors.....	56
Health Behaviors Ranking.....	56
Overweight and Obesity.....	56
Fast Food.....	58
Soda Consumption	58
Fresh Fruits and Vegetables	59
Physical Activity	59
Community Input – Overweight and Obesity	60
HIV/AIDS	61
Sexually Transmitted Diseases	61
Cigarette Smoking	61
Alcohol and Drug Use	62
Community Input – Substance Abuse	63
Preventive Practices	64
Immunization of Children	64
Flu Vaccine	64
Mammograms.....	64
Colorectal Cancer Screening	65
Attachment 1. Community Interviewees and Focus Groups	66
Attachment 2. Community Resources	67
Attachment 3. Impact Evaluation.....	68

Executive Summary

Orange Coast Memorial Medical Center (Orange Coast Memorial) is a member of the MemorialCare Health System family. Orange Coast Memorial has undertaken a Community Health Needs Assessment (CHNA) as required by state and federal law. California Senate Bill 697, the Patient Protection and Affordable Care Act and IRS section 501(r) direct tax-exempt hospitals to conduct a Community Health Needs Assessment and develop an Implementation Strategy every three years.

Orange Coast Memorial Medical Center is located at 9920 Talbert Avenue, Fountain Valley, California 92708. The service area is located in Orange County and includes 25 zip codes, representing 13 cities or communities.

Orange Coast Memorial Medical Center Service Area

City	Zip Code
Buena Park	90620
Cypress	90630
Stanton	90680
Seal Beach	90740
Costa Mesa	92626, 92627
Huntington Beach	92646, 92647, 92648, 92649
Midway City	92655
Westminster	92683
Santa Ana	92703, 92704, 92706, 92707
Fountain Valley	92708
Tustin	92780
Anaheim	92801, 92804
Garden Grove	92840, 92841, 92843, 92844, 92845

Methods

Secondary Data Collection

Secondary data were collected from a variety of local, county, and state sources to present community demographics, social and economic factors, health care access, birth characteristics, leading causes of death, chronic disease, health behaviors, mental health and substance abuse and preventive practices. These data are presented in the context of Orange County and California State, framing the scope of an issue as it relates to the broader community. The report also includes benchmark comparison data that measures Orange Coast Memorial data findings with Healthy People 2020 objectives.

Primary Data Collection

Targeted interviews and focus groups were used to gather information and opinions from persons who represent the broad interests of the community served by the

hospital. Thirteen (13) interviews were completed during February and March 2016. Additionally, 29 community stakeholders participated in three focus groups.

Public Comment

In compliance with IRS regulations 501r for charitable hospitals, the previous Orange Coast Memorial Community Health Needs Assessment and Implementation Strategy were made widely available to the public on the website and public comment was requested on the assessment report. To date, no written comments have been received.

Overview of Key Findings

This overview summarizes significant findings drawn from an analysis of the data from each section of the report. Full data descriptions, findings, and data sources follow.

Community Demographics

- The population of the Orange Coast Memorial service area is 1,275,614.
- Children and youth, ages 0-17, make up 23.8% of the population; 63.9% are adults, ages 18-64; and 12.7% are seniors, ages 65 and over.
- 41.5% of residents are Hispanic/Latino; 32.5% of the service area population is White; 21.9% is Asian; 1.4% is African American.
- English is spoken in the home among 44.4% of the service area population. Spanish is spoken at home among 33.8% of the population; 18.6% of the population speaks an Asian or Pacific Islander language at home.
- Among students enrolled in Orange Coast Memorial service area schools, 33.1% are English learners, higher than the percentage of English learners in the county (26%) and state (22.3%).

Social and Economic Factors

- In the service area, 15.3% of the residents are at or below 100% of the federal poverty level (FPL). Over a third (37%) of the population in the service area is considered low income, living at or below 200% of FPL.

Poverty Levels

	OCMMC Service Area	Orange County	California
<100% FPL	15.3%	12.8%	16.4%
<200% FPL	37.0%	29.9%	36.4%

Source: U.S. Census Bureau, American Community Survey, 2010-2014, S1701. <http://factfinder.census.gov>

- The median household income is \$58,500. This is lower than the median income for the county (\$75,998) and state (\$61,489).

- The 2014 unemployment rate in the service area was 6.1%, compared to Orange County’s 2014 unemployment rate average of 5.5%.
- Among adults, age 25 and older, 22.8% lack a high school diploma, 21.1% of area adults are high school graduates and 34.3% are college graduates.
- The high school graduation rate for the service area is 90.1% which exceeds the Healthy People 2020 objective for high school graduation rate of 82.4%.

Community Input – Social and Economic Factors

Stakeholder interviews and focus groups identified the most important socioeconomic, behavioral, environmental and clinical factors contributing to poor health in the community:

- “Some of the major issues revolve around the growing aging population. Orange County has higher rates of seniors than the rest of the state. There are needs for affordable housing, transportation, and long-term health services. We don’t seem to currently have the infrastructure to fully meet that volume of clients.”
- “Status of citizenship translates to different access points of care. In Orange, if you’re undocumented, the county does not provide health coverage and neither does Covered CA, but there is coverage available with tobacco settlement revenue for unfunded clinic level visits. So people experience different access barriers depending on citizenship status. Also, the undocumented may be leery of seeking health care; they may pay cash, or they may avoid it all together.”
- “Many Vietnamese still live in an enclave that is monolingual. They have ethnic radio and newspapers, but it is hard to reach them because they are so busy going to work and they aren’t aware of what else is going on in the community.”
- “We find that lack of information and awareness and education are closely linked with socioeconomics. People focus on going to work, making money and making sure the kids are fed. As far as their health, especially if there are no symptoms, they tend not to pay attention as much. Also, some people have no means of transportation and have a complete lack of awareness of the health system.”

Health Care Access

- 80.2% of residents in the service area are insured. When insurance coverage for the area is examined by zip code, there is a large variation between communities with the highest coverage in Seal Beach (90740) with 5.7% uninsured. The highest percent uninsured is in Santa Ana (92703), with 43.5% uninsured.

Insurance Status

	OCMMC Service Area	Orange County	California
Insured	80.2%	83.9%	83.3%
Uninsured	19.8%	16.1%	16.7%

Source: Source: U.S. Census Bureau, American Community Survey, 2010-2014, S2701. <http://factfinder.census.gov>

- 14.4% of service area residents visited an ER over the period of a year, and seniors visited the ER at higher rates (23.8%) than other age groups.
- 11.3% of Orange County residents delayed or did not get medical care when needed, and 10.8% delayed or did not fill prescriptions.
- 11.3% of children in Orange County had never been to a dentist.

Community Input – Access to Care

Stakeholder interviews and focus groups identified the following issues, challenges and barriers related to access to care:

- “There are people who fall between the cracks – they do not qualify for the low-cost insurance programs because they make too much, but they are still in need.”
- “Complexity of the health system due to transportation barriers and having to coordinate appointments and transportation.”
- “An issue is the number of appointments needed to deal with just a single issue. The general practitioner ends up being the gatekeeper to accessing care and services.”
- “Availability of providers of a similar ethnicity is important, and I see a need for matching the patient and physician based on language and gender preferences.”
- “It is hard to get referrals to specialists with HMO coverage.”

Birth Characteristics

- There were 16,480 births in the service area.
- Teen births occurred at a rate of 6.7% of total births in the service area.
- Pregnant women in the service area entered prenatal care in the first trimester at a rate of 88.2%. This rate exceeds the Healthy People 2020 objective of 78% of women entering prenatal care in the first trimester.
- The service area rate of low birth rate babies is 6.1%. The service area rate exceeds the Healthy People 2020 objective of 7.8% of births being low birth weight.
- Breastfeeding rates at Orange Coast Memorial Center indicate 92.2% of new mothers use some breastfeeding and 58.2% use breastfeeding exclusively.

Leading Causes of Death

- Heart disease, cancer, and stroke are the top three leading causes of death in the service area. When compared to the county and state, the service area has higher death rates for these three causes of death.

Chronic Disease

- Among residents in the service area, 17.4% report they have fair or poor health status.
- 14.6% of the Orange County population has been diagnosed with asthma. Among those with asthma, 53.9% take medication to control their symptoms. Among youth, 10.9% have been diagnosed with asthma.
- 7.1% of adults in Orange County reported they have been diagnosed with diabetes. 51.2% of those diagnosed with diabetes are very confident they can control their diabetes, while 12.2% were not confident.
- For adults in Orange County, 6.3% have been diagnosed with heart disease. Among these adults, 57.7% are very confident they can manage their condition.
- Rates of chlamydia in Orange County are 296.6 per 100,000, which represents a four-year high, but remains below the California rate of 453.4.

Community Input – Chronic Disease

Stakeholder interviews and focus groups identified the following issues, challenges and barriers related to chronic disease:

- “It’s an issue not a lot of people are aware of. If family members ever had a problem or died from these issues, they need to be more aggressive to check themselves out and work with a specialist. But a lot of people are not aware of that. People are not well informed. They say that someone had a bad cold and died. In reality, it was a stroke but they don’t know this.”
- “Lack of early education is getting better. But lifestyle and habits are difficult to change.”
- “Medication compliance is so important to maintain stability and help keep people with chronic diseases out of the ER with complications.”
- “People need assistance with their diet and understanding what their role is to take responsibility for their health care.”

Mental Health and Substance Abuse

- Among adults, 6.3% in Orange County experienced serious psychological distress in the past year. 14.9% of adults saw a health care provider for their mental health and/or alcohol and drug issues in the past year. However, 55.3% of those who sought help or needed help did not receive treatment.
- Among Orange County teens, 33.1% needed help in the past year for emotional or mental health problems, which is higher than state rates (23.2%).
- 10.8% of Orange County adults are current smokers, lower than the Healthy People 2020 objective for cigarette smoking among adults (12%). Among teens, 3.2% have smoked an electronic (vaporizer) cigarette in Orange County in the past year.

- Among adults in Orange County, 35.1% had engaged in binge drinking in the past year.
- Teens in Orange County have reported having tried alcohol (17.6%) and illegal drugs (7.5%), while 3.8% of teens had used marijuana in the past year.

Community Input – Mental Health and Substance Abuse

Stakeholder interviews and focus groups identified the following issues, challenges and barriers related to mental health:

- “Similar to having cancer, there is a lot of stigma around mental health. If you look physically able, but have a mental health issue, people think you must be possessed by the spirit. The community doesn’t know how to respond to that. They’ll say you are just acting crazy and want attention; you don’t want to deal with life. Depression is still a very unclear health issue.”
- “Caregiver wellbeing is significant because startlingly 60% of caregivers end up passing away before the person they are caring for pass away. We need mental health programs that help caregivers navigate and provide self-care and learn how to manage challenging behaviors, personality changes, and emotional stress.”
- “There are cultural differences in seeking care. We see this for example in Vietnamese older generations who won’t go to a primary care provider; instead they go to an herbalist in their community.”
- “If you can’t afford therapy, your only choice is to ask for a prescription.
- “Schools are looking to provide more mental health services at younger ages when interventions can make a more significant impact.”

Health Behaviors

- In Orange County, 41.9% of adults, 12.7% of teens, and 12.8% of children are overweight. Among adults in Orange County, 18.2% are obese. 16.6% of teens are obese in Orange County, which exceeds the Healthy People 2020 objective of 16.1% for teen obesity.
- Among adults, 86.6% in Orange Coast Memorial’s service area indicated that accessing fresh produce (fruits and vegetables) was somewhat or very easy.
- 25.5% of school-aged children in Orange County engage in physical activity for at least one hour a day, seven days a week, which is less than the state rate of 32.8%.

Community Input – Overweight and Obesity

Stakeholder interviews and focus groups identified the following issues, challenges and barriers related to overweight and obesity:

- “Our cultural perspective on healthiness is that you have enough to eat. And when you have enough to eat, you have some flesh on your body that is healthy. When you are overweight – culturally it is viewed that you eat too much and you aren’t taking care of yourself. They tend to look at it as you are lazy versus other health issues that may be going on.”
- “There have been more community efforts to address this, especially with younger populations. Programs tend to be geared toward ethnicities like Pacific Islanders or Hispanics, more so than Vietnamese.”
- “In schools we have strict guidelines what we can serve kids but they don’t pick healthy alternatives. They throw away the healthy food or find higher fat foods elsewhere.”
- “There isn’t a lot of green space to play on, especially in lower socioeconomic areas.”
- “For single people there is difficulty cooking for one, not knowing how to cook healthy for one, the social side of eating – if it’s just you, why bother?”
- “Cost of fresh food is just too expensive.”

Preventive Practices

- In the Orange Coast Memorial service area, 74.6% of seniors, 60.4% of children 6 months to 17 years of age, and 36.7% of adults received a flu shot. Seniors exceeded the 70% Healthy People 2020 goals for flu vaccination.
- Area rates of compliance with childhood immunizations upon entry into kindergarten are 96.3% compliant, which is higher than the state average (90.4%).
- The Healthy People 2020 objective for mammograms is that 81.1% of women 50-74 years to have a mammogram in the past two years; in Orange County, 72.3% of women 50-74 have had mammograms, which falls below the goal.
- The Healthy People 2020 objective for colorectal cancer screening is 70.5%; Orange County’s rate of compliance (80.8%) exceeds this screening objective.

Priority Health Needs

Health needs were identified from secondary data using the size of the problem (relative portion of population afflicted by the problem) and the seriousness of the problem (impact at individual, family, and community levels). The analysis of secondary data yielded a preliminary list of significant health needs, which then informed primary data collection. The primary data collection process was designed to validate secondary data findings, identify additional community issues, solicit information on disparities among subpopulations, ascertain community assets to address needs and discover gaps in resources.

The identified significant health needs were prioritized with input from the community. The survey respondents, focus group attendees and interviewees were asked to rank order the health needs according to highest level of importance in the community. The total score for each significant health need (possible score of 4) was divided by the total number of responses for which data were provided, resulting in an overall average for each health need. Substance abuse, access to care and heart disease were ranked as the top three priority needs in the service area. The calculations of the community input resulted in the following priority ordering of the significant health needs:

1. Substance abuse
2. Access to care
3. Heart disease
4. Mental health
5. Overweight and obesity
6. Cancer
7. Dental care

Introduction

Background and Purpose

Orange Coast Memorial Medical Center (Orange Coast Memorial) is a member of the MemorialCare Health System family. Orange Coast Memorial is the only nonprofit hospital in Fountain Valley and its surrounding communities. The hospital fulfills its community's health care needs with innovation and a commitment to excellence.

Orange Coast Memorial has undertaken a Community Health Needs Assessment (CHNA) as required by state and federal law. California Senate Bill 697, Patient Protection and Affordable Care Act and IRS section 501(r) direct tax-exempt hospitals to conduct a Community Health Needs Assessment and develop an Implementation Strategy every three years.

The Community Health Needs Assessment is a primary tool used by Orange Coast Memorial to determine its Implementation Strategy and community benefit plan, which outline how it will give back to the community in the form of health care and other community services to address unmet community health needs. This assessment incorporates components of primary data collection and secondary data analysis that focus on the health and social needs of the Orange Coast Memorial service area.

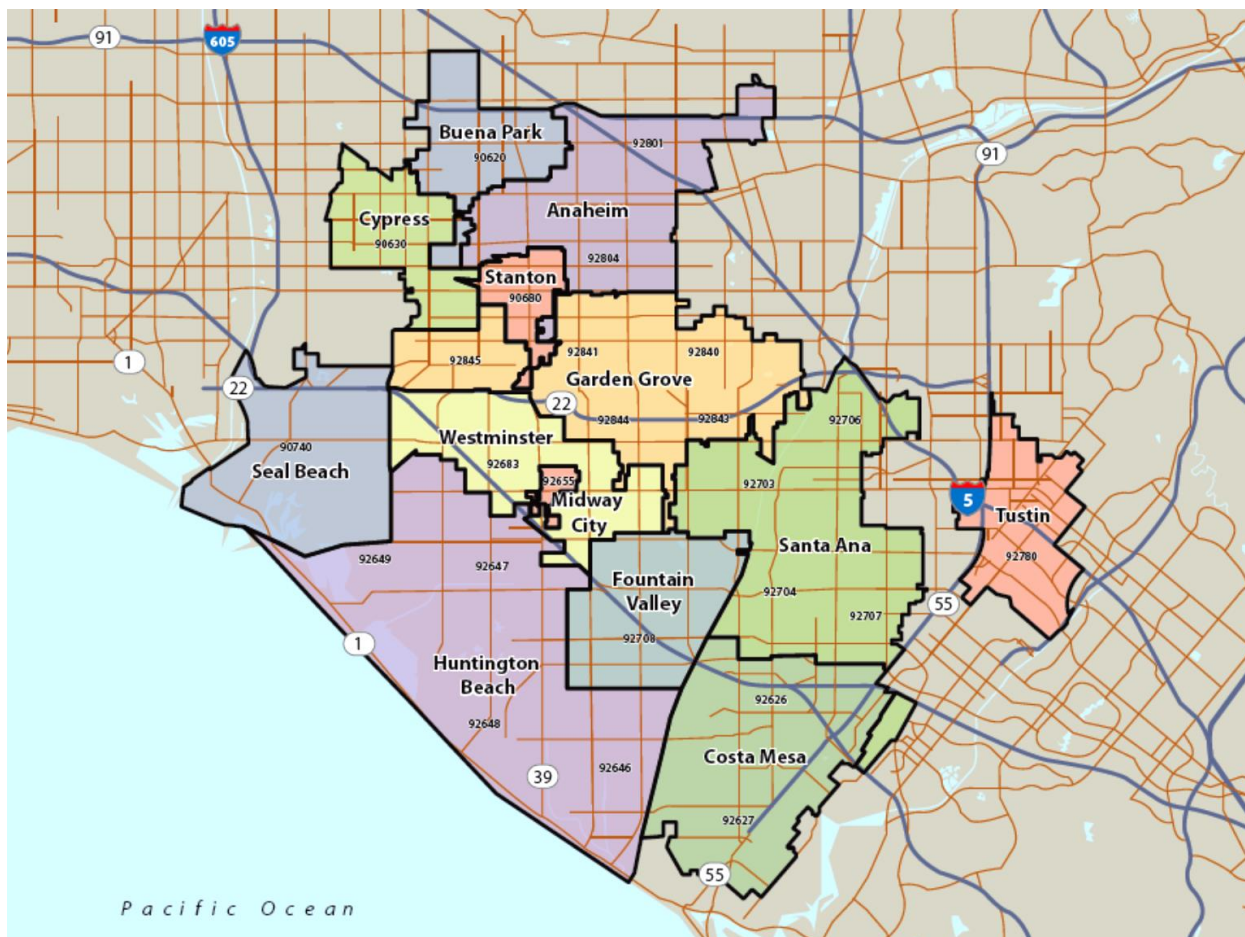
Service Area

Orange Coast Memorial Medical Center is located at 9920 Talbert Avenue Fountain Valley, California 92708. The service area is located in Orange County and includes 25 zip codes, representing 13 cities or communities. Orange Coast Memorial determines the service area by assigning zip codes based on patient discharges. Approximately 78% of admissions came from these zip codes. The Orange Coast Memorial service area is presented below by community and zip code.

Orange Coast Memorial Medical Center Service Area

City	Zip Code
Buena Park	90620
Cypress	90630
Stanton	90680
Seal Beach	90740
Costa Mesa	92626, 92627
Huntington Beach	92646, 92647, 92648, 92649
Midway City	92655
Westminster	92683
Santa Ana	92703, 92704, 92706, 92707
Fountain Valley	92708
Tustin	92780
Anaheim	92801, 92804
Garden Grove	92840, 92841, 92843, 92844, 92845

Map of the Orange Coast Memorial Medical Center Services Area



Project Oversight

The Community Health Needs Assessment process was overseen by:

Beth R. Hambelton

Senior Program and Community Outreach Liaison

Orange Coast Memorial Medical Center

Author

Biel Consulting, Inc. conducted the Community Health Needs Assessment. Biel Consulting, Inc. is an independent consulting firm that works with hospitals, clinics and community-based nonprofit organizations. Dr. Melissa Biel conducted the Community Health Needs Assessment. She was joined by Denise Flanagan, BA, Sandra Humphrey, and Sevanne Sarkis, JD, MHA, MEd. Biel Consulting, Inc. has extensive experience conducting hospital Community Health Needs Assessments and working with hospitals on developing, implementing, and evaluating community benefit programs. www.bielconsulting.com

Organizations and Partners

Orange Coast Memorial acknowledges the organizations and agencies that contributed time and resources to assist with the conduct of this needs assessment. Special thanks to Fountain Valley Senior Center, Huntington Beach Senior Outreach Center and the Boys & Girls Club of Huntington Valley for hosting the focus groups.

Methods

Secondary Data Collection

Secondary data were collected from a variety of local, county, and state sources to present community demographics, social and economic factors, health access, birth characteristics, leading causes of death, chronic disease, mental health, health behaviors, and preventive practices. These data are presented in the context of Orange County and California State, framing the scope of an issue as it relates to the broader community.

Sources of data include U.S. Census Bureau American Community Survey, California Health Interview Survey, California Department of Public Health, California Department of Education, California Employment Development Department, Uniform Data System, California Cancer Registry, California Office of Statewide Health Planning & Development, Community Commons, County Health Rankings, California Department of Education, Orange County's Healthier Together, and others. When pertinent, these data sets are presented in the context of California State.

Secondary data for the hospital service area were collected and documented in data tables with narrative explanation. The tables present the data indicator, the geographic area represented, the data measurement (e.g. rate, number, or percent), county and state comparisons (when available), the data source, data year and an electronic link to the data source. Analysis of secondary data included an examination and reporting of health disparities for some health indicators. The report includes benchmark comparison data that measures Orange Coast Memorial's data findings with Healthy People 2020 objectives. Healthy People 2020 is a national initiative to improve the public's health by providing measurable objectives and goals that are applicable at national, state, and local levels.

Primary Data Collection

Targeted interviews and focus groups were used to gather information and opinions from persons who represent the broad interests of the community served by the hospital.

Interviews

Thirteen (13) interviews were completed during February and March, 2016. For the interviews, community stakeholders identified by Orange Coast Memorial were contacted and asked to participate in the needs assessment. Interviewees included individuals who are leaders and representatives of medically underserved, low-income, and minority populations, or local health or other departments or agencies that have

“current data or other information relevant to the health needs of the community served by the hospital facility.”

The identified stakeholders were invited by email to participate in a one hour phone interview. Appointments for the interviews were made on dates and times convenient to the stakeholders. At the beginning of each interview, the purpose of the interview in the context of the assessment was explained, the stakeholders were assured their responses would remain confidential, and consent to proceed was given.

Focus Groups

Three focus groups were conducted in April 2016 that engaged 29 persons. The focus group meetings were hosted by trusted community organizations. An agency contact was available to answer any questions at each focus group. At the beginning of each focus group, the purpose of the focus group and the community assessment were explained, the participants were assured their responses would not be attributed to them as responses would be aggregated. The focus group discussions were voice recorded for ease of documenting the discussion.

Before beginning the discussion, the facilitator asked for oral consent from each of the participants that they wished to participate in the focus group and agreed to be voice recorded. The focus group participants were asked to share their perspectives related to topics within the following areas:

- Biggest issues and health concerns facing the community.
- Issues, challenges, barriers faced by community members specific to the identified health needs.
- Special populations or groups that are most affected by a health need.
- Programs and resources available to address the health needs.
- How the hospital can help address the community needs.
- Other comments or concerns.

A list of the stakeholder interview respondents, their titles and organizations and the focus groups participants can be found in Attachment 1.

Initially, significant health needs were identified through a review of the secondary health data collected and analyzed prior to the interviews and focus groups. These data were then used to help guide the interviews and focus groups. The needs assessment interviews and focus groups were structured to obtain greater depth and richness of information and build on the secondary data review. During the interviews and focus groups, participants were asked to identify the major health issues in the community, and socioeconomic, behavioral, environmental or clinical factors contributing to poor

health. They were asked to share their perspectives on the issues, challenges and barriers relative to the identified health needs, and identify resources to address these health needs, such as services, programs and/or community efforts.

Analysis of the primary data occurred through a process that compared and combined responses to identify themes. All responses to each question were examined together and concepts and themes were then summarized to reflect the respondents' experiences and opinions. The results of the primary data collection were reviewed in conjunction with the secondary data. Primary data findings were used to corroborate the secondary data-defined health needs, serving as a confirming data source. The responses are included in the following Community Health Needs Assessment chapters.

Information Gaps

Information gaps that impact the ability to assess health needs were identified. Some of the secondary data are not always collected on a regular basis, meaning that some data are several years old. Primary data collection and the prioritization process were also subject to limitations. Themes identified during interviews were likely subject to the experience of individuals selected to provide input. The final prioritized list of significant health needs is also subject to the affiliation and experience of the individuals who participated in the prioritization process.

Public Comment

In compliance with IRS regulations 501(r) for charitable hospitals, a hospital Community Health Needs Assessment (CHNA) and Implementation Strategy are to be made widely available to the public and public comment is to be solicited. In compliance with these regulations, the previous Community Health Needs Assessment and Implementation Strategy were made widely available to the public on the website <http://www.memorialcare.org/content/community-benefit> . Public comment was requested on these reports. To date, no written comments have been received.

Identification of Significant Health Needs

Review of Primary and Secondary Data

The analysis of secondary data yielded a preliminary list of significant health needs, which then informed primary data collection. The primary data collection process helped to validate secondary data findings, identify additional community issues, solicit information on disparities among subpopulations, and ascertain community assets to address needs.

Health needs were identified from secondary data using the size of the problem (relative portion of population afflicted by the problem) and the seriousness of the problem (impact at individual, family, and community levels). To determine size or seriousness of the problem, the health need indicators identified in the secondary data were measured against benchmark data, specifically county rates, state rates and/or Healthy People 2020 objectives. Indicators related to the health needs that performed poorly against one or more of these benchmarks met this criterion to be considered a health need.

The analysis of secondary data yielded a preliminary list of significant health needs, which then informed primary data collection. The primary data collection process was designed to validate secondary data findings, identify additional community issues, solicit information on disparities among subpopulations, ascertain community assets to address needs and discover gaps in resources.

Significant Health Needs

The following significant health needs were determined:

- Access to care
- Cancer
- Dental care
- Heart disease
- Mental health
- Overweight and obesity
- Substance abuse (drug/alcohol/tobacco)

Resources to Address Significant Needs

Through the interview process, community stakeholders identified community resources to address the identified health needs. The identified community resources are presented in Attachment 2.

Priority Health Needs

The identified significant health needs were prioritized with input from the community. Interviews with community stakeholders were used to gather input on the identified health needs. The following criteria were used to prioritize the health needs:

- The perceived severity of a health issue or health factor/driver as it affects the health and lives of those in the community;
- The level of importance the hospital should place on addressing the issue.

Calculations totaling severity and importance scores from the community stakeholder interviews resulted in the following prioritization of the significant health needs:

Each of the stakeholder interviewees was sent a link to an electronic survey (Survey Monkey) in advance of the interview. The stakeholders were asked to rank each identified health need. The percentage of responses were noted as those that identified the need as having severe or very severe impact on the community, had worsened over time, and had a shortage of absence of resources available in the community. Not all survey respondents answered every question, therefore, the response percentages were calculated based on respondents only and not on the entire sample size. Mental health had the highest scores in the survey. Substance abuse was rated as having a severe or very severe impact on the community; overweight and obesity had the highest ranking for worsening over time; and cancer was also rated high on insufficient resources available to address the need.

Significant Health Needs	Severe and Very Severe Impact on the Community	Worsened Over Time	Insufficient or Absence of Resources
Access to care	44.4%	11.1%	33.3%
Cancer	50.0%	16.7%	50.0%
Dental care	37.5%	12.5%	42.9%
Heart disease	42.9%	0%	16.7%
Mental health	100%	50.0%	100%
Overweight and obesity	44.4%	50.0%	37.5%
Substance abuse	66.7%	33.3%	33.3%

The survey respondents, focus group attendees and interviewees were asked to rank order the health needs according to highest level of importance in the community. The total score for each significant health need (possible score of 4) was divided by the total number of responses for which data were provided, resulting in an overall average for each health need. Substance abuse, access to care and heart disease were ranked as the top three priority needs in the service area. The calculations of the community input resulted in the following prioritization of the significant health needs:

Significant Health Need	Priority Ranking (Total Possible Score of 4)
Substance abuse	3.87
Access to care	3.82
Heart disease	3.65
Mental health	3.62
Overweight and obesity	3.62
Cancer	3.58
Dental care	3.54

Impact Evaluation

In 2013 Orange Coast Memorial conducted their previous Community Health Needs Assessment (CHNA). Significant health needs were identified from issues supported by primary and secondary data sources gathered for the Community Health Needs Assessment. In developing the hospital’s Implementation Strategy associated with the 2013 CHNA, Orange Coast Memorial chose to address access to care, chronic disease, overweight and obesity, prevention/preventive care. Orange Coast Memorial also made a commitment to focus on the Vietnamese and senior populations. The evaluation of the impact of actions the hospital used to address these significant health needs can be found in Attachment 3.

Demographics

Population

The population of the Orange Coast Memorial service area is 1,275,614.

Population by Zip Code

Geographic Area	Number
90620 – Buena Park	46,342
90630 – Cypress	49,487
90680 – Stanton	31,244
90740 – Seal Beach	24,929
92626 – Costa Mesa	51,449
92627 – Costa Mesa	64,417
92646 – Huntington Beach	57,241
92647 – Huntington Beach	57,811
92648 – Huntington Beach	46,880
92649 – Huntington Beach	34,080
92655 – Midway City	8,724
92683 – Westminster	93,576
92703 – Santa Ana	69,178
92704 – Santa Ana	89,936
92706 – Santa Ana	37,583
92707 – Santa Ana	61,783
92708 – Fountain Valley	57,495
92780 – Tustin	57,610
92801 – Anaheim	63,624
92804 – Anaheim	92,024
92840 – Garden Grove	55,560
92841 – Garden Grove	34,001
92843 – Garden Grove	48,375
92844 – Garden Grove	25,427
92845 – Garden Grove	16,838
OCMMC Service Area	1,275,614
Orange County	3,160,437
California	38,822,536

Source: Orange County's Healthier Together, Claritas, 2015. www.ochealthiertogether.org

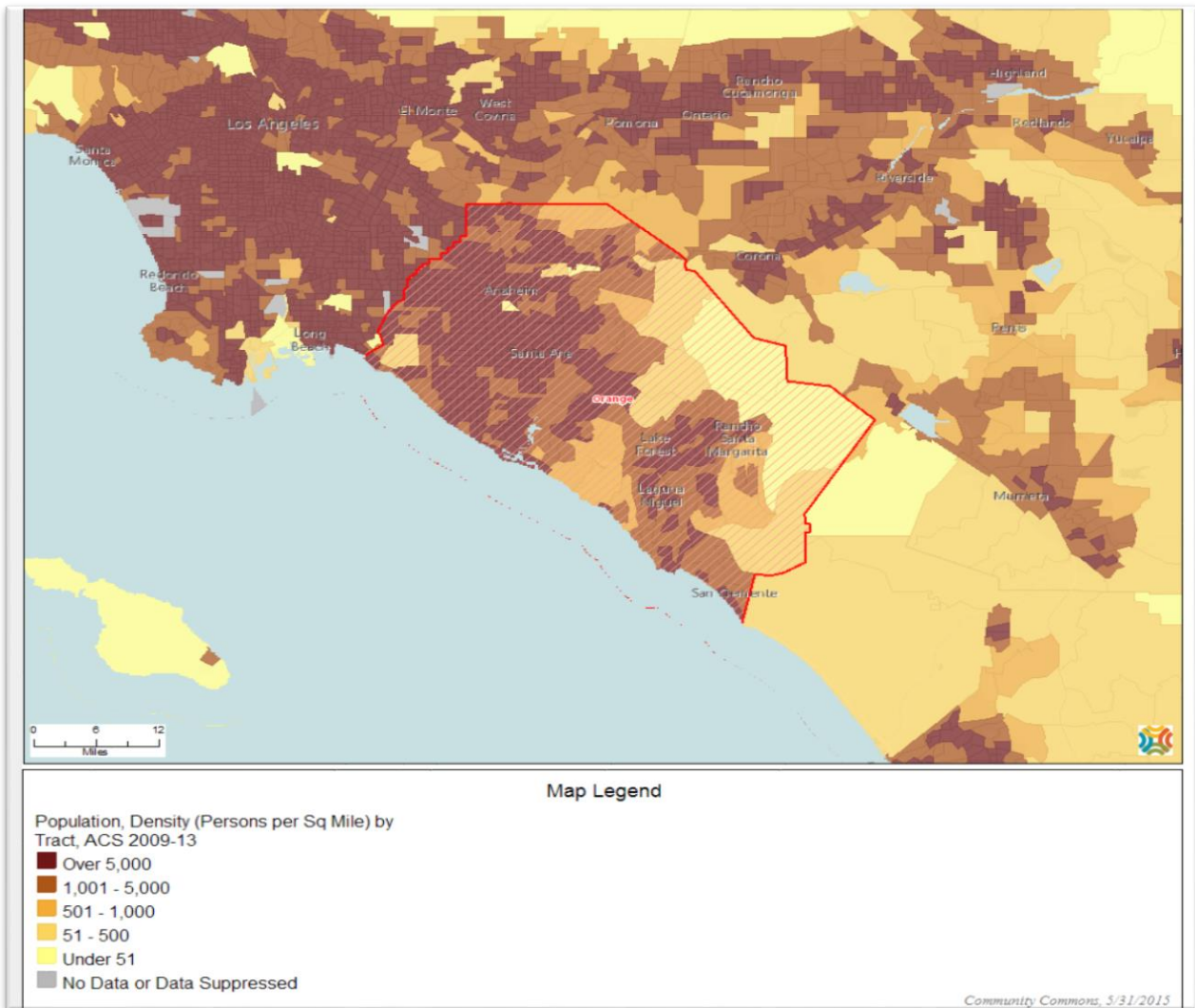
Orange County has experienced a 5% growth in population from 2010 to 2015. This surpasses the state population growth rate of 4.2%.

Population Growth, 2010-2015

Geographic Area	Current Population Estimate	Percent Population Change (2010-2015)
Orange County	3,160,437	5.0%
California	38,822,536	4.2%

Source: Orange County's Healthier Together, Claritas, 2015. www.ochealthiertogether.org

Population Density Orange County, California



Gender

In the service area, 50.4% of the population is female and 49.6% are males.

Population by Gender

Gender	OCMMC Service Area	Orange County	California
Male	49.6%	49.4%	49.7%
Female	50.4%	50.6%	50.3%

Source: U.S. Census Bureau, American Community Survey, 2010-2014, DP05. <http://factfinder.census.gov>

Children and youth are 23.8% of the population, 63.5% is adults, and 12.7% is seniors.

Population by Age

Age Groups	OCMMC Service Area		Orange County		California	
	Number	Percent	Number	Percent	Number	Percent
Age 0-4	82,743	6.5%	194,117	6.1%	2,539,809	6.5%
Age 5-17	220,891	17.3%	539,379	17.1%	6,746,796	17.4%
Age 18-24	123,267	9.7%	313,465	9.9%	3,948,943	10.2%
Age 25-44	364,622	28.6%	866,368	27.4%	10,756,523	27.7%
Age 45-64	322,223	25.3%	833,163	26.4%	9,831,320	25.3%
Age 65+	161,868	12.7%	413,945	13.1%	4,999,145	12.9%
Total	1,275,614	100.0%	3,160,437	100.0%	38,822,536	100.0%

Source: Orange County's Healthier Together, Claritas, 2015. www.ochealthiertogether.org.

Race/Ethnicity

In the service area, Latinos or Hispanics make up 41.5% of the population. At 32.5% of the population, Whites are the second largest race/ethnic group in the service area. Asians account for 21.9% of the population in the service area. The remaining races/ethnicities comprise 4.1% of the service area population.

Race/Ethnicity

Race/Ethnicity	OCMMC Service Area		Orange County		California	
	Number	Percent	Number	Percent	Number	Percent
White	409,186	32.5%	1,323,581	42.9%	14,905,601	39.2%
Asian	274,942	21.9%	569,625	18.5%	5,062,736	13.3%
Hispanic or Latino	521,460	41.5%	1,050,771	34.0%	14,534,449	38.2%
Other or Multiple	26,052	2.1%	80,283	2.6%	1,126,005	3.0%
Black or African American	17,825	1.4%	47,072	1.5%	2,155,929	5.7%
American Indian Alaska Native	2,511	0.2%	6,264	0.2%	145,736	0.4%
Native Hawaiian Pacific Islander	5,523	0.4%	8,735	0.3%	136,464	0.4%

Source: U.S. Census Bureau, American Community Survey, 2010-2014, DP05. <http://factfinder.census.gov>

Citizenship

In the service area, 35.8% of residents are foreign born and 17.6% are not citizens. This is a higher percentage of foreign born residents and those who are not citizens than found in the county and state.

Foreign Born Residents and Citizenship

Citizenship	OCMMC Service Area	Orange County	California
Foreign born	35.8%	30.3%	27.0%
Not a U.S. citizen	17.6%	14.9%	14.1%

Source: U.S. Census Bureau, American Community Survey, 2010-2014, DP02. <http://factfinder.census.gov>

Language

The service area has a lower percentage of those who only speak English (44.4%) than the county (54.4%) or state (56.2%). Spanish is spoken in 33.8% of the homes in the service area, above the percentage spoken in the rest of the county (26.5%) or state (28.7%). Asian and Pacific Islander languages are spoken in 18.6% of service area homes, also above the percentage spoken in the rest of the county (14%) or state (9.7%).

Spoken at Home, Population 5 Years and Older

Language	OCMMC Service Area	Orange County	California
Speaks only English	44.4%	54.4%	56.2%
Speaks Asian/Pacific Islander language	18.6%	14.0%	9.7%
Speaks Spanish	33.8%	26.5%	28.7%
Speaks other Indo-European language	2.4%	4.2%	4.4%
Speaks other language	0.8%	0.9%	0.9%

Source: U.S. Census Bureau, American Community Survey, 2010-2014, DP02. <http://factfinder.census.gov>

Among students enrolled in area school districts, 33.1% are English learners, higher than the percentage of English learners in the county (26%) and state (22.3%).

English Learners

Geographic Area	Percent
OCMMC Service Area	33.1%
Orange County	26.0%
California	22.3%

Source: California Department of Education DataQuest, 2014-2015 Language Group Data. <http://dq.cde.ca.gov/dataquest/>

Veterans

In the service area, 5% of the population 18 years and older are veterans.

Veterans

Geographic Area	Percent
OCMMC Service Area	5.0%
Orange County	5.4%
California	6.4%

Source: U.S. Census Bureau, American Community Survey, 2010-2014, DP02. <http://factfinder.census.gov>

Social and Economic Factors

Social and Economic Factors Ranking

The County Health Rankings rank counties according to health factors data. Social and economic indicators are examined as a contributor to the health of a county's residents. California's 57 evaluated counties (Alpine excluded) are ranked according to social and economic factors with 1 being the county with the best factors to 57 for that county with the poorest factors. This ranking examines: unemployment, high school graduation rates, children in poverty, social support, and others. In 2015, Orange County ranked seventh, putting the county in the top 20% of all California counties on social and economic factors. This ranking has remained the same for the past four years.

Poverty

Poverty thresholds are used for calculating all official poverty population statistics. They are updated each year by the Census Bureau. For 2014 (the most recent year for available data), the federal poverty level (FPL) for one person was an annual income of \$11,670 and for a family of four was \$23,850. Among area residents, 15.3% are at or below 100% of the federal poverty level (FPL) and 37% are at 200% of FPL or below (low-income). These poverty levels are above the county average, and comparable to the state.

Ratio of Income to Poverty Level

Geographic Area	Below 100% Poverty	Below 200% Poverty
OCMMC Service Area	15.3%	37.0%
Orange County	12.8%	29.9%
California	16.4%	36.4%

Source: U.S. Census Bureau, American Community Survey, 2010-2014, S1701. <http://factfinder.census.gov>

Examining poverty levels by community paints an important picture of the population within the hospital service area. 22.1% of children in the OCMMC service area live in poverty. For seniors in the service area, 10.8% live in poverty. These rates of poverty are higher than the county average, and comparable to the state averages.

Poverty Levels of Children and Seniors

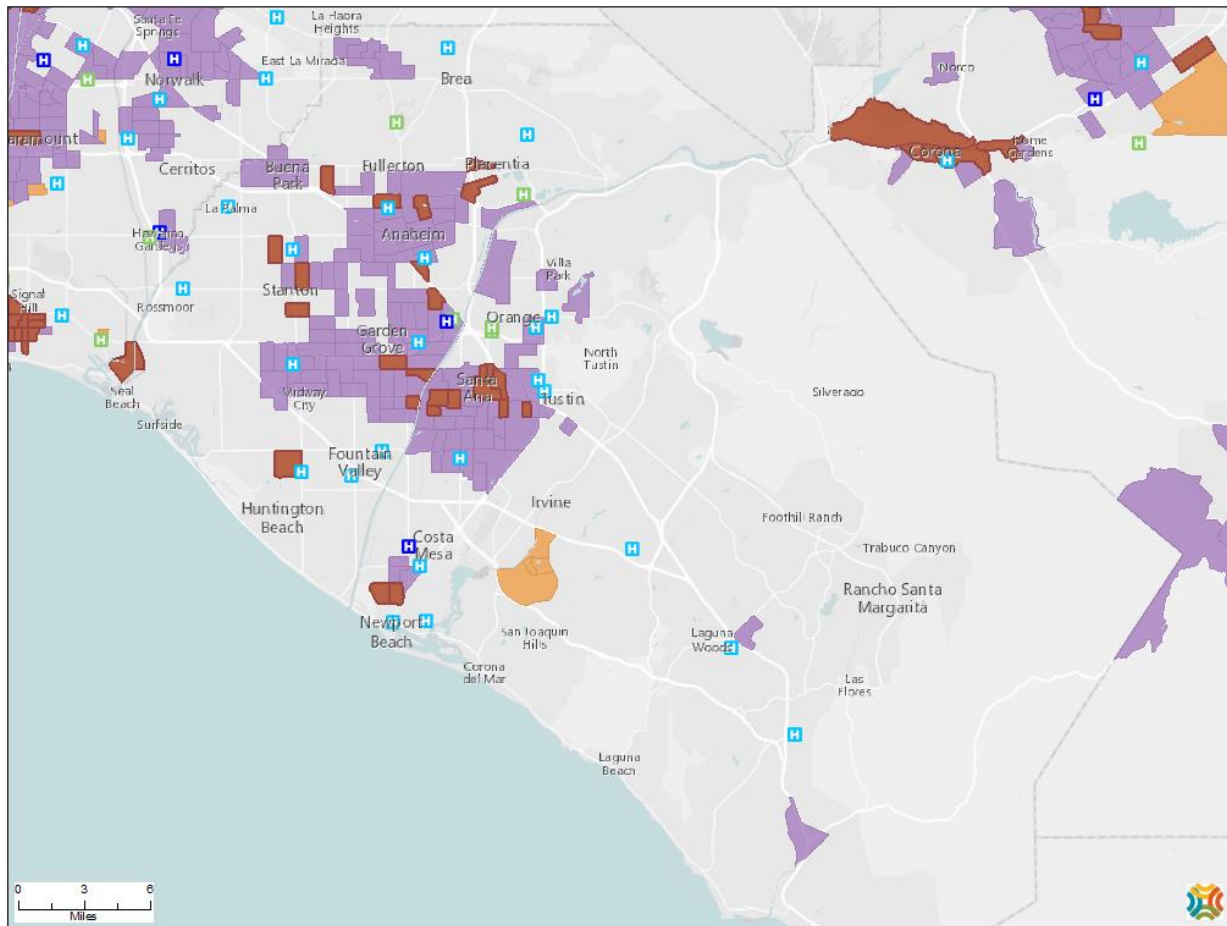
Geographic Area	Children Under 18 Years Old	Seniors
OCMMC Service Area	22.1%	10.8%
Orange County	17.6%	8.7%
California	22.7%	10.2%

Source: U.S. Census Bureau, American Community Survey, 2010-2014, S1701. <http://factfinder.census.gov>

Vulnerable Populations

Poverty and education attainment are two indicators that are predictive of at-risk or vulnerable populations. Visualization of vulnerable populations is provided in the following map. Communities where 30% or more of the residents are in poverty are shown as orange on the map. Communities where 25% or more of the residents do not have a high school education are shown as purple on the map. The overlap of high poverty and low education attainment is depicted as brown on the map. The brown areas indicate communities with vulnerable populations and are clustered primarily in the north central part of the county.

Vulnerable Populations Footprint for Orange County



Map Legend

Hospitals by Location, POS 2014

- H Public
- H Private
- H Other

■ Vulnerable Populations Footprint, ACS 2009-13

Community Commons, 7/31/2015

Households

The median household income for the service area is \$58,500. This is lower than the median income for the county (\$75,998) and state (\$61,489).

Median Household Income

Geographic Area	Median Household Income
OCMMC Service Area	\$58,500
Orange County	\$75,998
California	\$61,489

Source: U.S. Census Bureau, American Community Survey, 2010-2014, DP03. <http://factfinder.census.gov>

There are 377,646 occupied housing units in the hospital service area. The service area percentage of 1 and 2-person households is lower than that of the county or state. The service area has a higher percentage of 4-person households (35.4%) than does the county (31.4%) or state (29.5%). The percentage of 3-person households in the service area (16.6%) is slightly below the county's 17%, and comparable with the state percentage of 16.5%.

Household Size

Household Size	OCMMC Service Area	Orange County	California
1 person households	19.9%	21.3%	24.1%
2 person households	28.2%	30.3%	30.0%
3 person households	16.6%	17.0%	16.5%
4+ person households	35.4%	31.4%	29.5%

Source: U.S. Census Bureau, American Community Survey, 2010-2014, S2501. <http://factfinder.census.gov>

In the service area, residents receive higher rates of supportive benefits than the county, but lower rates than the state. 5.7% of service area households receive SSI benefits, 3% receives cash public assistance income and 8.4% of residents receive food stamp benefits.

Household Supportive Benefits

Benefits	OCMMC Service Area	Orange County	California
Households	377,646	1,002,285	12,617,280
Supplemental Security Income (SSI)	5.7%	4.2%	6.2%
Public Assistance	3.0%	2.4%	4.0%
Food stamps/SNAP	8.4%	5.7%	8.7%

Source: U.S. Census Bureau, American Community Survey, 2010-2014, DP03. <http://factfinder.census.gov>

Food insecurity is the lack of access to sufficient amounts of safe and nutritious food for normal growth and development and an active and healthy life. Food security is access

to sufficient, safe and nutritious food. This indicator was asked of adults ages 18+ with an income < 200% FPL. Among low-income adults in Orange County, 35.8% reported food insecurity, which is lower than the state rate of 38.4%.

Low-Income (<200 FPL) Adult with Food Insecurity

Geographic Area	Percent
Orange County	35.8%
California	38.4%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

Free or Reduced Price Meals

The number of students eligible for the free or reduced price lunch program is one indicator of the socioeconomic status within a region. The service area rate of eligibility was 52.8% in the 2014-2015 school year, higher than rate for the county (49%) and lower than the rate for the state (58.6%).

Eligibility for Free or Reduced Price Meals Program

Geographic Area	Percent Eligible Students
OCMMC Service Area	52.8%
Orange County	49.0%
California	58.6%

Source: California Department of Education DataQuest, 2014-2015. <http://dq.cde.ca.gov/dataquest/>

Unemployment

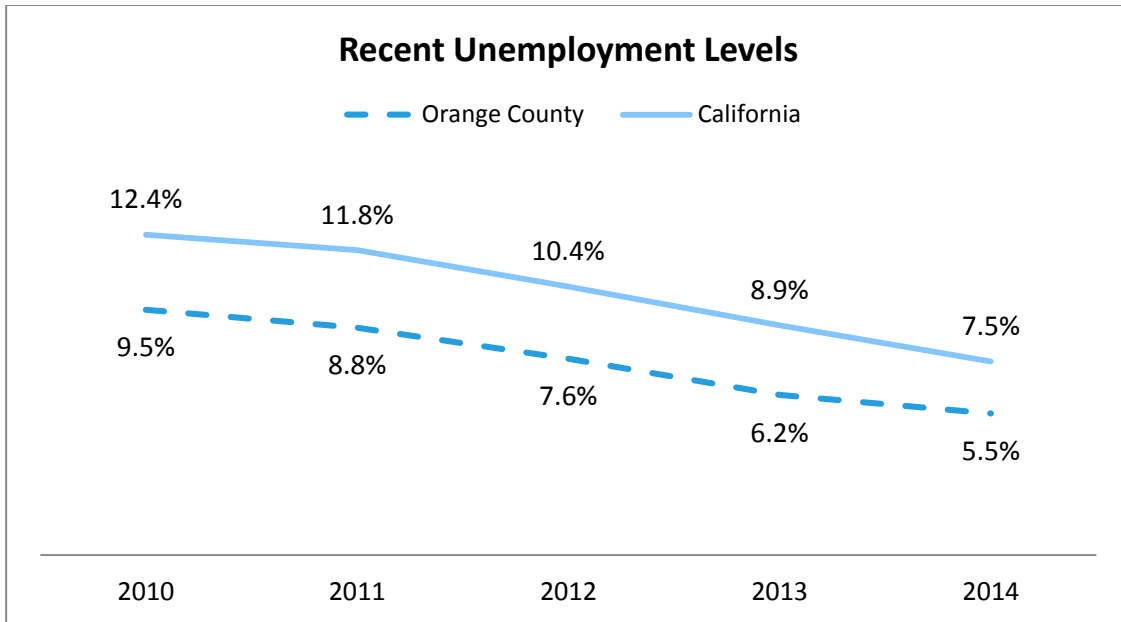
The unemployment rate in the service area was 6.1% in 2014. Orange County’s unemployment rate averaged 5.5% in 2014. Orange County ranks fifth in unemployment levels among California counties, with the first-ranked county having the lowest unemployment. Rates have dropped steadily over the past five years.

Unemployment Rate, 2014 Average

Geographic Area	Percent
OCMMC Service Area *	6.1%
Orange County	5.5%
California	7.5%

Source: California Employment Development Department, [Labor Market Information, 2014](#). Not seasonally adjusted.

* No data available for Midway City.



Source: California Employment Development Department, [Labor Market Information, 2010-2014](#).

Educational Attainment

In the service area, 21.1% of adults are high school graduates, higher than the rate for the county (17.8%) and the state (20.7%). Just over one-third of the population in the service area has graduated college (34.3%), lower than the rate for the county (45.1%) and the state (38.8%).

Educational Attainment of Adults, 25 Years and Older

Education	OCMMC Service Area	Orange County	California
Population 25 years and older	827,744	2,043,735	24,865,866
Less than 9 th grade	12.8%	8.8%	10.1%
Some high school, no diploma	10.0%	7.1%	8.4%
High school graduate	21.1%	17.8%	20.7%
Some college, no degree	21.8%	21.1%	22.0%
Associate degree	7.7%	7.8%	7.8%
Bachelor degree	18.5%	24.2%	19.6%
Graduate or professional degree	8.1%	13.1%	11.4%

Source: U.S. Census Bureau, American Community Survey, 2010-2014, S1501. <http://factfinder.census.gov>

Of the population age 25 and over, 22.8% in the service area have not attained a high school diploma, a rate higher than the county (15.9%) or state (18.5%)

Population, 25 Years and Older, with No High School Diploma

Geographic Area	Percent
OCMMC Service Area	22.8%
Orange County	15.9%
California	18.5%

Source: U.S. Census Bureau, American Community Survey, 2010-2014, S1501. <http://factfinder.census.gov>

High school graduation rates are the number of high school graduates that graduated four years after starting ninth grade. In the service area, the high school graduation rate is 90.1%, which is higher than both the county (88.6%) and the state (81%). The county rate exceeds the Healthy People 2020 objective for high school graduation of 82.4%.

High School Graduation Rates, 2013-2014

Geographic Area	Percent
OCMMC Service Area	90.1%
Orange County	88.6%
California	81.0%

Source: California Department of Education DataQuest, Cohort Outcome Data for Class of 2013-2014.

<http://dq.cohode.ca.gov/dataquest/>

Homelessness

The US Department of Housing and Urban Development (HUD) conducts an annual 'point-in-time' count of homeless, with data reported by Continuums of Care (CoC). Among Smaller City, County, and Regional CoCs, the Santa Ana/Anaheim/Orange County CoC had 3,833 homeless persons observed in January 2014. Recent trends show that rates of homelessness are declining in Orange County, along with the percentage of homeless who are unsheltered.

Homeless Annual Count, Santa Ana/Anaheim/Orange County CoC, 2010 to 2014

Year of Count	Total Homeless	Sheltered	Unsheltered
2010	8,333	31.3%	68.7%
2011	6,939	38.4%	61.6%
2012	7,010	39.1%	60.9%
2013	4,251	60.5%	39.5%
2014	3,833	56.2%	43.8%

Source: HUD Annual Homeless Assessment Report, 2014; HUD PIT Counts by CoC.

<https://www.hudexchange.info/resource/4074/2014-ahar-part-1-pit-estimates-of-homelessness/>

Among school-aged children, 6.5% of public school enrollees in Orange County were recorded as being homeless at some point during the 2013-2014 school year, according to the California Department of Education this rate is higher than the California average of 4.8% (Source: kidsdata.org, January 2015).

Crime and Violence

Violent crimes include homicide, rape, robbery and assault. Crime statistics indicate that the rate of violent crime in the service area is 285.1 per 100,000 persons; higher than the county but less than the state. Orange County has lower rates of violent crime than the state, with 199.7 crimes per 100,000 persons, nearly half the California rate of 393.3.

Violent Crimes, per 100,000 Persons, 2014

Geographic Area	Number	Rate
OCCMMC Service Area *	4,506	285.1
Orange County	6,257	199.7
California	151,425	393.3

Source: US Department of Justice, Federal Bureau of Investigation, 2012.

<http://www.ucrdatatool.gov/Search/Crime/Local/LocalCrime.cfm>

* No data available for Midway City

Calls for domestic violence are categorized as with or without a weapon. The majority of domestic violence calls in the service area did not involve a weapon (79.9%), which was higher than the county average (85.7%).

Domestic Violence Calls, 2014

Geographic Area	Total	Without Weapon	With Weapon
OCCMMC Service Area *	4,105	79.9%	20.1%
Orange County	7,928	85.7%	14.3%
California	155,965	57.3%	42.7%

Source: California Department of Justice, Office of the Attorney General, 2014. <http://oag.ca.gov/crime/cjisc/stats/domestic-violence>

* No data available for Midway City

The 2015 Orange County Community Indicators report noted that in the 10-year period from 2004 to 2013, child abuse reporting increased 9% while confirmed reports of abuse (substantiated allegations) fell 43%. Over the same 10-year period, entries to foster care fell 42% (<http://ocgov.com/about/infooc/facts/indicators>).

Community Input - Social and Economic Factors

Stakeholder interviews and focus groups identified the most important socioeconomic, behavioral, environmental and clinical factors contributing to poor health in the community:

- “Some of the major issues revolve around the growing aging population. Orange County has higher rates of seniors than the rest of the state. There are needs for affordable housing, transportation, and long-term health services. We don’t seem to currently have the infrastructure to fully meet that volume of clients.”
- “There are free services for low-income individuals, but many of the services are tied to an income qualification. Many people are working 1 to 2 part-time jobs and no one is making great wages, and they aren’t getting benefits. There are few discretionary dollars and parents and kids are going without.”
- “Status of citizenship translates to different access points of care. In Orange, if you’re undocumented, the county does not provide health coverage and neither does Covered CA, but there is coverage available with tobacco settlement revenue for unfunded clinic level visits. So people experience different access barriers depending on citizenship status. Also, the undocumented may be leery of seeking health care; they may pay cash, or they may avoid it all together.”
- “In Fountain Valley there are two major populations: the elderly and the young. The elderly have access and mobility issues and the young have getting out and moving issues. We need both populations to be able to move around safely.”
- “We find that lack of information and awareness and education are closely linked with socioeconomics. People focus on going to work, making money and making sure the kids are fed. As far as their health, especially if there are no symptoms, they tend not to pay attention as much. Also, some people have no means of transportation and have a complete lack of awareness of the health system.”
- “Many Vietnamese still live in an enclave that is monolingual. They have ethnic radio and newspapers, but it is hard to reach them because they are so busy going to work and they aren’t aware of what else is going on in the community.”
- “Some lack funds to get medications and others lack transportation.”
- “Cost of medications, rising costs of co-pays and of assisted living. Homelessness in Santa Ana is expanding. Before we can talk about substance abuse or behavioral issues, you need to get temporary shelter or enough beds to get them connected with services starting with shelter and basic social services so they can then get mental health and substance abuse issues addressed. The number of deaths with homeless is on the uptick here and that is an issue. And our homeless numbers are increasing. This will be an increasingly important issue.”
- “In Santa Ana, being proactive and addressing issues early versus when they are a complication, that is still an issue. Part of that is patient engagement. And consistent primary care. Many low-income individuals have never had consistent sources of care and use the ER as their primary care source.”
- “Many of our patients are ESL and come from other countries where the level of care and standard is different. So it’s a lack of understanding the system here.”

Health Access

Health Insurance

Health insurance coverage is considered a key component to accessing health care. The service area insurance rate is 80.2%. This is below the rate for the county (83.9%) and state (83.3%). Among children in the service area, 91.3% have insurance coverage, and 72.7% of non-senior adults are insured. Nearly all seniors are insured (97.9%). Insurance coverage rates for all age groups in the service area run below the rates for the county and state.

According to the 2015 Orange County Community Indicators report, in the six-month period between October 1, 2013 and March 31, 2014, 131,804 Orange County residents enrolled in a Covered California health plan (<http://ocgov.com/about/infooc/facts/indicators>).

Insurance Coverage by Age Group

Geographic Area	Total Population	Children, 0-17	Adults, 18-64	Seniors, 65+
OCMMC Service Area	80.2%	91.3%	72.7%	97.9%
Orange County	83.9%	92.6%	78.0%	98.1%
California	83.3%	92.5%	76.9%	98.3%

Source: U.S. Census Bureau, American Community Survey, 2010-2014, S2701. <http://factfinder.census.gov>

In the Orange Coast Memorial service area, health insurance coverage ranges from a low of 56.5% of adults with insurance in Santa Ana (92703), to a high of 94.3% of adults with insurance in Seal Beach (90740).

Insurance Coverage

Geographic Area	Percent
90620 - Buena Park	81.8%
90630 - Cypress	85.6%
90680 - Stanton	70.0%
90740 - Seal Beach	94.3%
92626 - Costa Mesa	83.6%
92627 - Costa Mesa	69.3%
92646 - Huntington Beach	91.5%
92647 - Huntington Beach	79.7%
92648 - Huntington Beach	87.8%
92649 - Huntington Beach	89.8%
92655 - Midway City	75.8%
92683 - Westminster	79.5%
92703 - Santa Ana	56.5%
92704 - Santa Ana	66.0%
92706 - Santa Ana	65.5%
92707 - Santa Ana	63.2%

Geographic Area	Percent
92708 - Fountain Valley	87.7%
92780 - Tustin	75.8%
92801 - Anaheim	70.6%
92804 - Anaheim	73.7%
92840 - Garden Grove	74.4%
92841 - Garden Grove	75.9%
92843 - Garden Grove	75.9%
92844 - Garden Grove	74.3%
92845 - Garden Grove	93.9%
OCMMC Service Area	76.6%
Orange County	96.8%
California	80.3%

Source: U.S. Census Bureau, American Community Survey, 2010-2014, S2701 <http://factfinder.census.gov>

In Orange County, 49.9% of the population has employment-based health insurance. 19.4% are covered by Medi-Cal and 11.3% of the population has coverage that includes Medicare. Orange County has higher rates of employment-based and private purchase insurance than found in the state.

Insurance Coverage by Type of Coverage

Insurance Coverage	Orange County	California
Total Insured	88.8%	88.1%
Employment-based	49.9%	44.8%
Medi-Cal	19.4%	22.5%
Medicare and others	7.6%	9.0%
Private purchase	7.6%	6.4%
Medicare and Medi-Cal	3.1%	3.0%
Other public	0.6%	1.0%
Medicare	0.6%	1.4%
No Insurance	11.2%	11.9%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

Sources of Care

Residents who have a medical home and access to a primary care provider improve continuity of care and decrease unnecessary ER visits. A total of 86.5% reported a regular source for medical care. The source of care for 70.3% of Orange County is a doctor's office, HMO, or Kaiser. This is higher than the state rate (60.7%). Clinics and community hospitals are the source of care for 15.3% in the county, while 13.5% of county residents have no regular source of care.

Sources of Care

Sources of Care	Orange County	California
Have usual place to go when sick or need health advice	86.5%	85.8%
Dr. office/HMO/Kaiser Permanente	70.3%	60.7%
Community clinic/government clinic/community hospital	15.3%	23.0%
ER/Urgent Care	0.1%	1.4%
Other	0.7%	0.7%
No source of care	13.5%	14.2%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

Accessing health care can be affected by the number of providers in a community. According to the 2015 County Health Rankings, Orange County ranks 18 out of 58 California counties for clinical care, which includes ratios of population-to-care providers and preventive screening practices, among others. The ratio of county population to health care providers indicates there are more primary care physicians and dentists, but fewer mental health providers for its population when compared to California.

Ratio of Population to Health Care Providers

Providers	Orange County	California
Primary Care Physicians	1,063:1	1,294:1
Dentists	987:1	1,291:1
Mental Health Providers	511:1	376:1

Source: County Health Rankings, 2015.

<http://www.countyhealthrankings.org/app/california/2015/rankings/orange/county/outcomes/overall/snapshot>

Delayed care may also indicate reduced access to care; 11.3% of county residents reported delaying or not seeking medical care and 10.8% reported delaying or not getting their prescription medication in the last 12 months.

Delay of Care

Delay of Care	Orange County	California
Delayed or didn't get medical care in last 12 months	11.3%	11.3%
Delayed or didn't get prescription medicine in last 12 months	10.8%	8.7%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

Use of the Emergency Room

An examination of ER use can lead to improvements in providing community-based prevention and primary care; 14.4% of residents in Orange County visited an ER over the period of a year. Seniors visited the emergency room at higher rates (23.8%) than other age groups.

Use of Emergency Room

ER Use	Orange County	California
Visited ER in last 12 months	14.4%	17.4%
0-17 years old	17.0%	19.3%
18-64 years old	11.8%	16.5%
65 and older	23.8%	18.4%
<100% of poverty level	16.1%	20.6%
<200% of poverty level	15.0%	19.8%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

Community Input – Access to Health Care

Stakeholder interviews and focus groups identified the following issues, challenges and barriers related to access to health care:

- “A lot of people are all at an age where they are going on Medicare and there are concerns that doctors are opting out of these programs. People have gone to their doctors for years and now they may not be covered.”
- “Transportation is very important factor in accessing care. Also low socioeconomics impacts access to care.”
- “If people don’t see or feel a problem they think they are healthy. They delay screenings until they have symptoms. When people lack access, they will delay going to see physicians.”
- “A challenge is the time-crunch of trying to access spread-out services while juggling kids and multiple jobs.”
- “There are long waits for health care appointments.”
- “There are people who fall between the cracks. They do not qualify for low-cost insurance programs because they make too much, but they are still in need.”
- “There is a lack of continuum of care for older adults, aging veterans, and older adults and veterans with dementia or Alzheimer’s disease or mental health issues such as depression. There is a lack of community-based outpatient programs that treat or exclusively focus on treating these populations. For existing programs there is limited capacity in terms of space. In addition, most individuals in these groups pay for services out-of-pocket even though may have VA or Medicare, or Medi-Cal.”
- “Complexity of the health system due to transportation barriers and having to coordinate appointments and transportation.”
- “An issue is the number of appointments needed to deal with a single issue. The general practitioner ends up being the gatekeeper to accessing care and services.”

- “It’s confusing for the elderly to try to keep track of their medications and with very little explanation.”
- “Some immigrants may have a language barrier and they do not know how to access or get information from the Internet. They work so hard day and night they have no time to care about their health and when something happens, they don’t know where to turn. Slowly the community has provided more information with multiple media, and local hospitals seminars to learn how to contend with certain illnesses, so it’s improving.”
- “The elderly have a difficult time navigating the health care system.”
- “Availability of providers of a similar ethnicity is important, and I see a need for matching the patient and physician based on language and gender preferences.”
- “It is hard to get referrals to specialists with HMO coverage.”
- “Lack of education on what benefits or treatments may exist for dementia.”
- “Among lower income families, if we didn’t provide transportation in targeted high density areas to our programs, no one would come.”

Dental Care

In Orange County, less than 1% of adults (0.7%) have never been to the dentist compared with 2.2% at the state level. 78.1% of adults have been to a dentist in the past two years.

Time since Last Dental Visit, Adult

Adults Dental Care	Orange County	California
Less than 6 months to 2 years ago	78.1%	79.7%
More than 2 years to more than 5 years	21.2%	18.1%
Never been to dentist	0.7%	2.2%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

In Orange County, 1.8% of teens have never been to the dentist. 98% of teens have been to a dentist in the past two years.

Time Since Last Dental Visit, Teens

Teens Dental Care	Orange County	California
Less than 6 months to 2 years ago	98.0%	94.7%
More than 2 years to more than 5 years	0.2%	3.5%
Never been to dentist	1.8%	1.8%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

Among children in Orange County, 88.7% had been to the dentist in the last two years. 11.3% of children in the county have never been to the dentist.

Time Since Last Dental Visit, Children, Ages 2-11

Children Dental Care	Orange County	California
Less than 6 months to 2 years ago	88.7%	83.8%
More than 2 years to more than 5 years	0%	0.9%
Never been to dentist	11.3%	15.3%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

Community Input – Dental Care

Stakeholder interviews and focus groups identified the following issues, challenges and barriers related to dental care:

- “The cost for dental care is very high, especially for seniors who don’t have money. It is pushing the envelope to be able to afford it.”
- “It’s not part of most people’s insurance coverage, even middle class people’s insurance packages.”
- “Dental care is so important and related to the rest of the body. But sometimes it’s ignored or pushed aside. Oral health impacts how we feel and our nutrition – it dictates whether we are able to eat well.”
- “The County has limited dental benefit emergency extractions. There are some free access points at community FQHCs and low cost clinics, but they only address the most basic issues, not dental reconstruction or more complex procedures.”
- “Often the solution is just to pull the tooth out.”
- “Those undergoing chemotherapy often have dental issues.”
- “You have to choose between important expenses: rent, food, medications and dental care.”
- “People are going without dental care, and it affects their quality of life.”

Birth Characteristics

Births

In 2012, there were 16,480 births in the hospital service area. 55.3% of births were to mothers who were Hispanic or Latino, 20.9% of births were to Asian/Pacific Islander women, and 20% were White.

Teen Birth Rate

Teen birth rates in the service area occurred at a rate of 67.1 per 1,000 births (or 6.7% of total births). This rate is higher than the teen pregnancy rate for the county (4.7%), but lower than the state (7% of total births).

Births to Teenage Mothers (Under Age 20)

Geographic Area	Births to Teen Mothers	Live Births	Percent
OCCMMC Service Area	1,106	16,480	6.7%
Orange County	1,876	40,083	4.7%
California	35,281	503,788	7.0%

Source: California Department of Public Health, 2012. <http://www.cdph.ca.gov/data/statistics/Pages/BirthProfilesbyZIPCode.aspx>

Prenatal Care

Pregnant women in the hospital service area entered prenatal care early – within the first trimester – at a rate of 88.2%. The service area exceeded the Healthy People 2020 benchmark of 77.9% of women entering prenatal care in the first trimester.

Early Entry into Prenatal Care (In First Trimester)

Geographic Area	Early Prenatal Care	Live Births*	Percent
SMMC Service Area	14,256	16,168	88.2%
California	412,679	492,643	83.6%

Source: California Department of Public Health, 2012. <http://www.cdph.ca.gov/data/statistics/Pages/BirthProfilesbyZIPCode.aspx>

*Births in which the first month of prenatal care is unknown are not included in the tabulation.

When prenatal care rates are examined by zip code, rates ranged from a low of 79.4% receiving early prenatal care in Midway City (92655), to a high of 94.4% receiving early prenatal care in Huntington Beach (92649).

Early entry into Prenatal Care (in First Trimester)

Geographic Area	Percent
90620 - Buena Park	84.8%
90630 - Cypress	88.5%
90680 - Stanton	83.6%
90740 - Seal Beach	91.1%
92626 - Costa Mesa	88.0%

Geographic Area	Percent
92627 - Costa Mesa	91.0%
92646 - Huntington Beach	93.3%
92647 - Huntington Beach	85.8%
92648 - Huntington Beach	93.3%
92649 - Huntington Beach	94.4%
92655 - Midway City	79.4%
92683 - Westminster	84.2%
92703 - Santa Ana	84.6%
92704 - Santa Ana	85.1%
92706 - Santa Ana	85.0%
92707 - Santa Ana	84.1%
92708 - Fountain Valley	90.3%
92780 - Tustin	89.3%
92801 - Anaheim	82.5%
92804 - Anaheim	83.1%
92840 - Garden Grove	87.4%
92841 - Garden Grove	85.0%
92843 - Garden Grove	85.3%
92844 - Garden Grove	87.5%
92845 - Garden Grove	92.8%
Orange County	88.3%

Source: Orange County's Healthier Together, California Department of Public Health, 2013. <http://www.ochealthiertogether.org>

Low Birth Weight

Low birth weight is a negative birth indicator. Babies born at a low birth weight are at higher risk for disease, disability and possibly death. The hospital service area has a lower rate of low birth weight babies (6.1%) when compared to the state (6.7%). The rate of incidence of low birth weight is lower than the Healthy People 2020 objective of 7.8%.

Low Birth Weight (Under 2,500 g)

Geographic Area	Low Birth Weight	Live Births	Percent of Live Births
OCMMC Service Area	1,004	16,480	6.1%
California	33,723	503,257	6.7%

Source: California Department of Public Health, 2012. <http://www.cdph.ca.gov/data/statistics/Pages/BirthProfilesbyZIPCode.aspx>

Infant Mortality

Infant mortality reflects deaths of children under one year of age. The infant death rate in the service area is 4.1 deaths per 1,000 live births. This rate is lower than the California rate of 4.5, as well as the Healthy People 2020 objective of 6.0 deaths per 1,000 live births.

Infant Mortality Rate, 2013

Geographic Area	Infant Deaths	Live Births	Rate
OCCMMC Service Area	68	16,480	4.1
California	2,247	503,788	4.5

Source: California Department of Public Health, 2012 <http://www.cdph.ca.gov/data/statistics/Pages/DeathProfilesbyZIPCode.aspx>

Breastfeeding

Breastfeeding has been proven to have considerable benefits to baby and mother. The California Department of Public Health highly recommends babies be fed only breast milk for the first six months of life. Data on breastfeeding are collected by hospitals on the Newborn Screening Test Form. Breastfeeding rates at Orange Coast Memorial Medical Center indicate 92.2% of new mothers use some breastfeeding and 58.2% use breastfeeding exclusively.

In-Hospital Breastfeeding

Geographic Area	Any Breastfeeding		Exclusive Breastfeeding	
	Number	Percent	Number	Percent
Orange Coast Memorial Medical Center	1,368	92.2%	863	58.2%
Orange County	33,720	93.9%	22,898	63.8%
California	396,602	92.9%	275,706	64.6%

Source: California Department of Public Health, Breastfeeding Hospital of Occurrence, 2013
<https://www.cdph.ca.gov/data/statistics/Documents/MO-MCAH-HospitalTotalsReport2013.pdf>

Mortality/Leading Causes of Death

Mortality Rates

The top five leading causes of death in Orange County are 1) cancer, 2) heart disease, 3) Alzheimer’s disease, 4) stroke, and 5) lung disease. Age-adjusted death rates eliminate the bias of age in the makeup of the populations being compared. When comparing across geographic areas, age-adjusting is typically used to control for the influence that different population age distributions might have on health event rates. Death counts and death rates are averages for the three-year period, 2011-2013.

The cancer death rate is 145.1 per 100,000 persons, lower than the state average and the Healthy People 2020 objective of 161.4. The heart disease mortality rate in the county is 101.3 per 100,000 persons, lower than the state rate (104.3) and the Healthy People 2020 objective of 103.4 deaths per 100,000 persons. The death rate due to Alzheimer’s disease ranked third at 38.4, which is higher than the state rate. The death rate due to stroke was 35.2 per 100,000 persons, which exceeded the Healthy People 2020 objective of 34.8. The liver disease death rate in Orange County was 10.3 per 100,000 persons; this exceeds the Healthy People 2020 objective of 8.2 per 100,000 persons.

Mortality Rates, Age Adjusted, per 100,000 Persons, 2011-2013

Causes of Death	Orange County		California	HP 2020
	Number	Rate	Rate	Rate
Cancer	4,458	145.1	150.9	161.4
Heart disease	3,111	101.3	104.3	103.4
Alzheimer’s disease	1,154.7	37.6	30.9	No Objective
Stroke	1,081.7	35.2	35.7	34.8
Chronic Lower Respiratory Disease	950	30.9	35.0	No Objective
Unintentional injuries	695	22.6	28.4	36.4
Pneumonia and influenza	555.7	18.1	16.3	No Objective
Diabetes	470.3	15.3	20.7	No Objective
Liver disease	315.7	10.3	12.3	8.2
Suicide	306	10.0	10.4	10.2

Source: California Department of Public Health, 2011-2013. <http://www.cdph.ca.gov/programs/ohir/Pages/CHSP.aspx>

In the service area, there were a total of 7,627 deaths in 2012. Heart disease, cancer and stroke were the top three leading causes of death in the service area. When compared to the state, the service area has higher death rates for heart disease, cancer, Alzheimer’s disease and pneumonia/influenza. Crude rates are subject to wide variation due to variations in median age from zip code to zip code.

Mortality Rates, per 100,000 Persons, 2012

Causes of Death	OCMMC Service Area		California
	Number	Rate	Rate
Heart disease	1,978	259.3	243.5
Cancer	1,857	243.5	237.2
Stroke	449	58.9	59.9
Alzheimer's disease	435	57.0	48.0
Chronic Lower Respiratory Disease	405	53.1	53.3
Unintentional injuries	310	40.6	44.3
Diabetes	251	32.9	32.5
Pneumonia and influenza	232	30.4	24.0
Liver disease	143	18.7	19.2
Suicide	91	11.9	15.9

Source: California Department of Public Health, 2012. www.cdph.ca.gov/data/statistics/Pages/DeathProfilesbyZIPCode.aspx

Cancer

The five-year average cancer mortality rate for all cancer sites in Orange County was 143.6, statistically significantly lower than the California rate. Mortality in the county from digestive system, respiratory system, and breast cancers were also significantly lower than the state rates.

Cancer Mortality Rates, per 100,000 Persons, 2009-2013

Cancer Sites	Orange County		California
	Number	Rate	Rate
Cancer, all sites	21,983	143.6	152.1
Digestive system	5,935	38.4	41.6
Respiratory system	5,018	33.4	35.8
Breast	1,677	10.7	11.5
Female genital	1,226	14.3	14.9
Male genital	1,209	19.9	21.0
Urinary system	1,119	7.3	7.7
Leukemia	1,001	6.6	6.5
Lymphoma	887	5.9	6.0

Source: California Cancer Registry, Cancer Surveillance Section, California Department of Public Health, 2009-2013. <http://www.cancer-rates.info/ca/>

Chronic Disease

Health Status

Among the Orange County population, 17.4% reported being in fair or poor health. This rate is slightly higher than the California rate of 17%.

Health Status, Fair or Poor Health

Health Status	Orange County	California
Persons with fair or poor health	17.4%	17.0%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

Diabetes

Diabetes is a growing concern in the community; 7.1% of adults in Orange County have been diagnosed with diabetes, and 9.2% have been diagnosed as pre-diabetic. Among adults with diabetes, 51.2% are very confident they can control their diabetes; 12.2% of adults in Orange County are not confident that they can control/manage their diabetes.

Adult Diabetes

Diabetes	Orange County	California
Diagnosed pre/borderline diabetic	9.2%	10.5%
Diagnosed with diabetes	7.1%	8.9%
Very confident to control diabetes	51.2%	56.5%
Somewhat confident	36.6%	34.7%
Not confident	12.2%	8.8%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

In the service area 74% of reported zip codes have rates of adults with diabetes equal to or greater than the county rate of 7.1%. Huntington Beach and Costa Mesa have rates lower than 7.1%.

Adults with Diabetes

Geographic Area *	Percent
90620 - Buena Park	8.1%
90630 - Cypress	7.3%
90680 - Stanton	8.5%
90740 - Seal Beach	7.9%
92626 - Costa Mesa	5.5%
92627 - Costa Mesa	6.0%
92646 - Huntington Beach	6.7%
92647 - Huntington Beach	6.5%
92648 - Huntington Beach	5.2%
92649 - Huntington Beach	6.0%
92683 - Westminster	8.7%

Geographic Area *	Percent
92703 - Santa Ana	10.8%
92704 - Santa Ana	10.0%
92706 - Santa Ana	9.1%
92707 - Santa Ana	9.7%
92708 - Fountain Valley	7.6%
92780 - Tustin	7.1%
92801 - Anaheim	9.1%
92804 - Anaheim	8.3%
92840 - Garden Grove	8.6%
92841 - Garden Grove	8.9%
92843 - Garden Grove	9.3%
92844 - Garden Grove	8.9%
Orange County	7.1%

Source: Orange County's Healthier Together, California Health Interview Survey, 2011-2012. <http://www.ochealthiertogether.org>
 * No data available for Zip Codes 92655 and 92845.

The federal Agency for Healthcare Research and Quality (AHRQ) developed Prevention Quality Indicators (PQIs) that identify hospital admissions that may be avoided through access to high-quality outpatient care. Four PQIs are related to diabetes: long-term complications (renal, ophthalmic, or neurological manifestations, and peripheral circulatory disorders); short-term complications (ketoacidosis, hyperosmolarity and coma); amputation; and uncontrolled diabetes. For all indicators, hospitalization rates were lower for Orange County than for California.

Diabetes Hospitalization Rates* for Prevention Quality Indicators

Prevention Quality Indicators (PQI)	Orange County	California
Diabetes long term complications	92.4	107.4
Diabetes short term complications	39.9	56.1
Lower-extremity amputation among patients with diabetes	11.3	16.1
Uncontrolled diabetes	7.7	9.2

Source: California Office of Statewide Health Planning & Development, 2013.
http://www.oshpd.ca.gov/HID/Products/PatDischargeData/AHRQ/pqi_overview.html

* Risk-adjusted (age-sex) annual rates per 100,000 population.

Heart Disease

For adults in Orange County, 6.3% have been diagnosed with heart disease. Among these adults, 57% are very confident they can manage their condition but 13.7% were not confident they could control their heart disease. 62.9% have a disease management care plan developed by a health care professional.

Adult Heart Disease

Heart Disease	Orange County	California
Diagnosed with heart disease	6.3%	6.1%
Very confident to control condition	57.0%	53.6%
Somewhat confident to control condition	29.3%	34.9%
Not Confident to control condition	13.7%	11.5%
Has a disease management care plan	62.9%	67.1%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

As noted, Prevention Quality Indicators (PQIs) identify hospital admissions that may be avoided through access to high-quality outpatient care. The three PQIs related to heart disease are hypertension, heart failure, and angina without procedure. In 2013, rates of hypertension, Congestive Heart Failure and Angina were lower in the county than in the state.

Hospitalization Rates* for Prevention Quality Indicators – Heart Disease

Prevention Quality Indicators (PQI)	Orange County	California
Congestive Heart Failure	213.2	292.0
Hypertension	22.5	33.3
Angina without procedure	8.5	16.9

Source: California Office of Statewide Health Planning & Development, 2013.

http://www.oshpd.ca.gov/HID/Products/PatDischargeData/AHRQ/pqi_overview.html

* Risk-adjusted (age-sex) annual rates per 100,000 population.

High Blood Pressure

A co-morbidity factor for diabetes and heart disease is hypertension (high blood pressure). In Orange County, 27.8% of adults have been diagnosed with high blood pressure, and of those, 75% take medication to control their hypertension. The Healthy People 2020 objective is to reduce the proportion of adults with high blood pressure to 26.9%.

High Blood Pressure

Blood Pressure	Orange County	California
Ever diagnosed with hypertension	27.8%	28.5%
Takes medicine for hypertension	75.0%	68.5%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

Community Input – Heart Disease

Stakeholder interviews and focus groups identified the following issues, challenges and barriers related to heart disease:

- “It’s an issue not a lot of people are aware of. If family members ever had a problem or died from these issues, they need to be more aggressive to check themselves out and work with a specialist. But a lot of people are not aware of

that. People are not well informed. They say that someone had a bad cold and died. In reality, it was a stroke but they don't know this."

- "People always ask a lot about chronic diseases. They are hearing more about it from the mainstream media. Obesity, life style issues, cholesterol, and diabetes. Cholesterol is affecting our community at a very high rate. You wouldn't think it looking at the people, because they are not overweight, but it is and hypertension as well."
- "Lack of early education is getting better. But lifestyle and habits are difficult to change."
- "Medication compliance is so important to maintain stability and help keep people with chronic diseases out of the ER with complications."
- "People need assistance with their diet and understanding what their role is to take responsibility for their health care."

Cancer

In Orange County, the five-year, age-adjusted, cancer incidence rate is 418.6 per 100,000 persons, statistically significantly lower than the California average (424.9 per 100,000 persons). Rates for cancers of male genital, digestive system, female genital and urinary system were all significantly lower than the state average. Cancers of the breast, skin, and endocrine system/thyroid had modest but significantly higher rates.

Cancer Incidence, per 100,000 Persons, Age Adjusted, 2008-2012

Cancer Sites	Orange County	California
All sites	418.6	424.9
Male genital	127.6	133.7
Digestive system	76.4	81.1
Breast, either sex	67.4	65.3
Respiratory system	49.0	51.2
Female genital	45.1	47.6
Urinary system	30.2	33.5
Skin	28.4	23.0
Lymphoma	21.1	21.3
Endocrine system/thyroid	14.3	12.7
Leukemia	12.5	12.5
Oral Cavity and pharynx	10.6	10.4
Brain and nervous system	6.4	6.1

Source: California Cancer Registry, Cancer Surveillance Section, Cancer Surveillance and Research Branch, California Department of Public Health, 2008-2012. <http://www.cancer-rates.info/ca/>

Community Input – Cancer

Stakeholder interviews and focus groups identified the following issues, challenges and barriers related to cancer:

- “The stigma associated with having cancer is a top barrier for our population. Right now we have the cultural view if you go out and screen yourself, you will get cancer. You are seeking it and you will find it. Also, we have a distrust of institutions.”
- “Patients with more medical knowledge about cancer seem to get better service versus someone who doesn’t know. They know how to navigate the system.”
- “On the National Cancer Association website they have some Vietnamese language resources but it is not thorough or complete. Also, they need to use the correct language we use here in the United States. This is a major problem with pharmaceuticals and other organizations. They will use Vietnamese translation services from Vietnam and not the United States and the quality and correct language usage isn’t there.”
- “Doctors are pressed for time and just doing the minimum. You have to advocate scheduling your preventive screenings and most people don’t know to do that.”
- “For our Vietnamese community, lung cancer continues to be very high. Also, liver and stomach cancers are high on our list for both men and women.”
- “Right now a lot of people who are infected with Hepatitis C are not even aware. The cost of treatment is so expensive: \$1,000 a pill for 12 weeks. For Hepatitis C if you don’t get treated, it will progress to cirrhosis and cancer.”
- “Vietnamese women have breast cancer more than others and generally the Vietnamese also have more colon cancer.”
- “Caregivers are dealing with emotional issues around cancer as well.”

Asthma

In Orange County, 14.6% of the population has been diagnosed with asthma. 95.8% have had symptoms in the past year and 53.9% take daily medication to control their asthma. Among county youth, 10.9% have been diagnosed with asthma, and 35.9% have visited the ER as a result of their asthma.

Asthma

Asthma	Orange County	California
Diagnosed with asthma, total population	14.6%	14.0%
Diagnosed with asthma, 0-17 years old	10.9%	14.5%
ER visit in past year due to asthma, total population	12.1%	9.6%
ER visit in past year due to asthma, 0-17 years old	35.9%	13.9%
Takes daily medication to control asthma, total population	53.9%	44.2%
Takes daily medication to control asthma, 0-17 years old	6.2%	39.0%
Had asthma symptoms in the past 12 months	95.8%	88.2%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

In the service area, those reporting the rates of adults with asthma show rates lower than the county's rate of 15.6%.

Adults with Asthma

Geographic Area *	Percent
90620 - Buena Park	10.5%
90630 - Cypress	11.5%
90680 - Stanton	9.4%
90740 - Seal Beach	10.4%
92626 - Costa Mesa	11.6%
92627 - Costa Mesa	11.2%
92646 - Huntington Beach	12.3%
92647 - Huntington Beach	11.9%
92648 - Huntington Beach	11.9%
92649 - Huntington Beach	11.6%
92683 - Westminster	9.4%
92703 - Santa Ana	7.9%
92704 - Santa Ana	8.5%
92706 - Santa Ana	9.3%
92707 - Santa Ana	8.7%
92708 - Fountain Valley	11.5%
92780 - Tustin	10.8%
92801 - Anaheim	9.2%
92804 - Anaheim	9.6%
92840 - Garden Grove	9.3%
92841 - Garden Grove	9.3%
92843 - Garden Grove	8.4%
92844 - Garden Grove	8.4%
Orange County	15.6%

Source: Orange County's Healthier Together, California Health Interview Survey, 2011-2012. <http://www.ochealthiertogether.org>

* No data available for Zip Codes 92655 and 92845.

The Prevention Quality Indicators (PQIs) related to asthma include chronic obstructive pulmonary disease (COPD) or Asthma in Older Adults, and Asthma in Younger Adults. In 2013, hospitalization rates for COPD and younger adult asthma were lower in the county than the state.

Asthma Hospitalization Rates* for Prevention Quality Indicators (PQI)

Prevention Quality Indicators (PQI)	Orange County	California
COPD or asthma in older adults	256.3	329.9
Asthma in younger adults	15.2	26.4

Source: California Office of Statewide Health Planning & Development, 2013. * Risk-adjusted (age-sex) annual rates per 100,000 population. http://www.oshpd.ca.gov/HID/Products/PatDischargeData/AHRQ/pqi_overview.html

Disability

Among adults in Orange County, 27.3% had been identified as having a physical, mental or emotional disability. This rate is lower than the state rate of disability (28.5%). 4.6% of adults could not work for at least a year due to physical or mental impairment.

Population with a Disability

Disability	Orange County	California
Adults with a disability	27.3%	28.5%
Couldn't work due to impairment	4.6%	5.2%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

Mental Health

Mental Health Indicators

In Orange County, 6.3% of adults experienced serious psychological distress in the past year. 14.9% of adults saw a health care provider for emotional, mental health, alcohol or drug issues, however, 55.3% of those who sought or needed help did not receive treatment. The Healthy People 2020 objective is for 64.6% of adults with a mental disorder to receive treatment (35.4% who do not receive treatment). 11.1% of adults took prescription medicine for emotional/mental health issues in the past year.

Mental Health Indicators, Adults

Mental Health	Orange County	California
Adults who has likely had serious psychological distress during past year	6.3%	7.7%
Adults who needed help for emotional-mental and/or alcohol-drug issues in past year	14.9%	15.9%
Adults who saw a health care provider for emotional/mental health and/or alcohol-drug issues in past year	9.9%	12.0%
Adults who sought/needed help but did not receive treatment	55.3%	56.6%
Adults who took prescription medicine for emotional/mental health issue in past year	11.1%	10.1%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

In Orange County, 33.1% of teens needed help for an emotional or mental health problem and 15.1% received counseling.

Mental Health Indicators, Teens

Mental Health	Orange County	California
Teens who needed help for emotional/mental health problems in past year	33.1%	23.2%
Teens who received psychological/emotional counseling in past year	15.1%	11.6%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

In Orange County, 7.7% of adults had seriously considered suicide. This is less than the state rate.

Thought about Committing Suicide

Suicide	Orange County	California
Adults who ever seriously thought about committing suicide	7.7%	7.8%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

Community Input – Mental Health

Stakeholder interviews and focus groups identified the following issues, challenges and barriers related to mental health:

- “You might feel someone needs help, but unless they want help, there’s not much you can do. Your hands are tied.”
- “Similar to having cancer, there is a lot of stigma around mental health. If you look physically able, but have a mental health issue, people think you must be possessed by the spirit. The community doesn’t know how to respond to that. They’ll say you are just acting crazy and want attention; you don’t want to deal with life. Depression is still a very unclear health issue.”
- “There need to be mental health community based programs for family caregivers who are that sandwich generation – caring for an aging parent while caring for a child and working caregivers. It’s really difficult to balance responsibilities, especially with someone with dementia.”
- “Caregiver wellbeing is significant because startlingly 60% of caregivers end up passing away before the person they are caring for pass away. We need mental health programs that help caregivers navigate and provide self-care and learn how to manage challenging behaviors, personality changes, and emotional stress.”
- “Schools are looking to provide more mental health services at younger ages when interventions can make a more significant impact.”
- “Human barriers - ourselves. And stigma in the community. The health care system doesn’t focus on advertising mental health. You see more heart treatment or cancer services, you rarely see mental health services, and this adds to the stigma.”
- “It is a problem to get learning disabilities (autism, dyslexia, etc.) diagnosed and treated. It is difficult to access services and to navigate the system once your child is diagnosed. Oftentimes the parents are in denial about the situation.”
- “Treatment options have varied success. There is no magic pill, people can get frustrated. No distinct solutions.”
- “Not knowing where to go for help when someone you know needs help and they won’t seek help. People call the police and that goes poorly.”
- “If you can’t afford therapy, your only choice is to ask for a prescription.”
- “Mental health plays into older adults being able to manage other chronic health conditions and healthy brain aging. There are medical interventions that treat symptoms that are quite disconnected from the preventive population health perspective. There is little attention to the mental wellbeing dimension across services that are being provided.”

- “There are cultural differences in seeking care. We see this for example in Vietnamese older generations who won’t go to a primary care provider; instead they go to an herbalist in their community.”
- “We need more education: what is mental illness, and how do you know if you have it?”
- “The issue of dealing with mental health has been pushed off onto the faith-based community, and that’s not where it belongs.”

Community Input – Accessing Mental Health Care

Stakeholders were asked what needs to happen in the community to help people access mental health care. Their responses included:

- “Right now for the Vietnamese community it is awareness, accessibility of the counseling centers, and having the appropriate bicultural professionals. It is hard to overcome stigmas to get help.”
- “People think, “Why would you be depressed, you have a wonderful spouse, your kids are doing well, and you have a good job.” Invisible diseases are very hard for both mainstream and ethnic communities. Is this for real or are you faking it to get attention? How do you know when it is real?”
- “You don’t know what you don’t know. People don’t know they have a mental health problem in a lot of cases. More outreach and education is needed. And family members recognizing and doing something about it. People don’t like to talk about it.”
- “Larger health care systems like hospitals, ACOs, physician groups and insurance providers need to recognize that there are community-based services that would help improve patient outcomes, reduce health care costs and improve quality of life. There is opportunity for those players to establish contractual agreements and partnerships. This is a significant dimension that is currently missing in our community, those linkages and partnerships.”
- “More access points for mild and moderate issues and also working on de-stigmatizing the issue. Many people with anxiety or depression come in to the doctor’s office saying they have a medical issue like stomach or chest pains and it turns out to be anxiety. People need to be comfortable to seek out help and it needs to be covered and billable because cost may still be a barrier.”
- “What is needed is education on where to go to get services and better linkages to local services. People get lost in the health care system and have to be very persistent to get to services.”
- “Wellness Centers on school campuses to provide overall mental health, dental and physical care so the community wraps its arms around our students would be ideal.”

- “You don’t see many signs for mental care facilities. There is a lack of marketing, perhaps because of stigma.”
- “There should be some kind of campaign to show that it is available. Many people don’t know where to go. You don’t see it being publicized much.”

Health Behaviors

Health Behaviors Ranking

County Health Rankings examines healthy behaviors and ranks counties according to health behavior data. California’s 57 evaluated counties (Alpine excluded) are ranked from 1 (healthiest) to 57 (least healthy) based on a number of indicators that include: adult smoking, obesity, physical inactivity, excessive drinking, sexually transmitted infections, and others. A ranking of 8 puts Orange County in the top 20% of California counties for health behaviors. This ranking has been stable for the past three years.

Overweight and Obesity

In Orange County, 41.9% of the adult population reported being overweight. The county adult rate of overweight exceeds the state rate of 35.5%. 12.7% of teens and 12.8% of children in the county are overweight.

Overweight

Age Groups	Orange County	California
Adult (ages 20+ years)	41.9%	35.5%
Teen (ages 12-17 years)	12.7%	16.3%
Child	12.8%	13.6%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

The Healthy People 2020 objectives for obesity are 30.5% of adults and 16.1% of teens. In Orange County, 18.2% of adults and 16.6% of teens are obese.

Obese

Age Groups	Orange County	California
Adult (ages 20+ years)	18.2%	27.0%
Teen (ages 12-17 years)	16.6%	14.6%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

In the service area, the rates of adults who are obese range from 16.2% in Seal Beach (90740) to 33.2% in Santa Ana (92707). The county rate for obese adults is 18.2%.

Adults who are Obese

Geographic Area *	Percent
90620 - Buena Park	25.4%

Geographic Area *	Percent
90630 - Cypress	21.4%
90680 - Stanton	27.5%
90740 - Seal Beach	16.2%
92626 - Costa Mesa	20.6%
92627 - Costa Mesa	24.2%
92646 - Huntington Beach	19.0%
92647 - Huntington Beach	22.1%
92648 - Huntington Beach	18.5%
92649 - Huntington Beach	18.1%
92683 - Westminster	21.8%
92703 - Santa Ana	31.2%
92704 - Santa Ana	29.7%
92706 - Santa Ana	30.2%
92707 - Santa Ana	33.2%
92708 - Fountain Valley	18.9%
92780 - Tustin	26.6%
92801 - Anaheim	29.6%
92804 - Anaheim	28.0%
92840 - Garden Grove	26.1%
92841 - Garden Grove	24.1%
92843 - Garden Grove	25.2%
92844 - Garden Grove	20.6%
Orange County	18.2%

Source: Orange County's Healthier Together, California Health Interview Survey, 2011-2012. <http://www.ochealthiertogether.org>

* No data available for Zip Codes 92655 and 92845.

When adult obesity levels are tracked over time, the county has experienced a variable trend, increasing over time. California has seen a small but measurable increase in rates of obesity.

Adult Obesity, 2005-2013

Geography	2005	2007	2009	2011	2013
Orange County	17.3%	18.5%	17.3%	24.2%	20.8%
California	21.2%	22.6%	22.7%	25.1%	24.7%

Source: California Health Interview Survey, 2005, 2007, 2009, 2011, 2013. <http://ask.chis.ucla.edu>

Adult overweight and obesity by race and ethnicity indicate high rates among Latinos (75.3%) and African Americans (71.4%). Whites also report higher levels of overweight and obesity (60.2%) compared with state averages (58.9%). Asians in Orange County have the lowest rates of overweight and obesity (36.5%).

Adult Overweight and Obesity by Race/Ethnicity

Race/Ethnicity	Orange County	California
Latino	75.3%	73.2%
African American	71.4%	71.2%
White	60.2%	58.9%
Asian	36.5%	43.7%
Total Adult Population	60.1%	62.5%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

The physical fitness test (PFT) for students in California schools is the FitnessGram®. One of the components of the PFT is measurement of body composition (measured by skinfold measurement, BMI, or bioelectric impedance). Children who do not meet the “Healthy Fitness Zone” criteria for body composition are categorized as needing improvement or at high risk (overweight/obese). Among school districts in the service area, 20.7% of 5th grade students and 17.1% of 9th graders tested as needing improvement or at high risk for body composition.

5th and 9th Graders, Body Composition, Needs Improvement + High Risk

School District	Fifth Grade	Ninth Grade
OCMMC Service Area	20.7%	17.1%
Orange County	18.3%	12.8%
California	21.0%	16.8%

Source: California Department of Education, Fitnessgram Physical Fitness Testing Results, 2013-2014.

<http://data1.cde.ca.gov/dataquest/>

Fast Food

In Orange County, 20.2% of children and 29.2% of adults consume fast food three to four times a week. This rate of fast food consumption is higher than the state rate.

Fast Food Consumption

Fast Food Consumption	Orange County	California
Children who were reported to eat fast food 3-4 times a week	20.2%	14.6%
Adults who reported eating fast food 3-4 times a week	29.2%	22.2%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

Soda Consumption

14.2% of children in Orange County consume at least two sodas or sweetened drinks a day. Among county adults, 6.7% drank at least seven sodas or sweetened drinks weekly; 63.3% of adults drank no soda or sweetened drinks.

Soda or Sweetened Drink Consumption

Soda or Sweetened Drink Consumption	Orange County	California
Children reported to drink at least 2 sodas or sweetened drinks a day*	14.2%	14.2%
Adults who reported drinking at least 7 sodas or sweetened drinks weekly^	6.7%	10.1%
Adults who reported drinking no soda or sweetened drinks weekly^	63.3%	61.4%

Source: California Health Interview Survey, *2012, ^2014. <http://ask.chis.ucla.edu>

Fresh Fruits and Vegetables

58.8% of children and teens in Orange County consume two or more servings of fruit in a day. Adults (86.6%) report that they could usually or always find fresh fruits and vegetables in the neighborhood. And 80.2% of adults reported the fruits and vegetables were always or usually affordable.

Access to and Consumption of Fresh Fruits and Vegetables

Fresh Fruits and Vegetables	Orange County	California
Children and teens who reported eating 2 or more servings of fruit in the previous day	58.8%	63.3%
Adults who reported finding fresh fruits and vegetables in the neighborhood always or usually	86.6%	86.7%
Adults who reported fresh fruits and vegetables were always or usually affordable in the neighborhood	80.2%	78.1%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

Physical Activity

For school-aged children in Orange County, 25.5% engage in physical activity for at least one hour a day, 7 days a week, which is less than the state rate of 32.8%. 92.8% of Orange County teens and children visited a park, playground or open space in the last month.

Physical Activity, Children and Teens, Ages 6-17

Physical Activity	Orange County	California
Activity available one hour or more per day, 7 days per week	25.5%	32.8%
Visited a park, playground or open space in the last month	92.8%	83.9%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

Among adults in Orange County, 15.4% are sedentary and do not participate in leisure time physical activities. This rate compares favorably to the Healthy People 2020 objective of 32.6%.

Adults who are Sedentary

Physical Activity	Orange County	Healthy People 2020 Objective
Adults (ages 20+) who did not participate in any leisure-time physical activities during past month	15.4%	32.6%

Source: Centers for Disease Control and Prevention, 2012. www.ochealthiertogether.org

One of the components of the physical fitness test (PFT) for students in schools is measurement of aerobic capacity through run and walk tests. 66.3% of 5th grade

students and 67.3% of 9th graders in the service area meet the Healthy Fitness Zone standards for aerobic capacity.

5th and 9th Grade Students, Aerobic Capacity, Healthy Fitness Zone

School District	Fifth Grade	Ninth Grade
OCMMC Service Area	66.3%	67.3%
Orange County	70.2%	72.0%
California	63.4%	63.9%

Source: California Department of Education, Fitnessgram Physical Fitness Testing Results, 2013-2014.

<http://data1.cde.ca.gov/dataquest/>

Community Input – Overweight and Obesity

Stakeholder interviews and focus groups identified the following issues, challenges and barriers related to overweight and obesity:

- “Our cultural perspective on healthiness is that you have enough to eat. And when you have enough to eat, you have some flesh on your body that is healthy. When you are overweight, culturally it is viewed that you eat too much and you aren’t taking care of yourself. They tend to look at it as you are lazy versus other health issues that may be going on.”
- “There have been more community efforts to address this, especially with younger populations. Programs tend to be geared toward ethnicities like Pacific Islanders or Hispanics, more so than Vietnamese.”
- “We need gyms or programs that allow parents and kids to exercise together.”
- “There are some studies that indicate that BMI is no longer considered a good indicator of obesity. Right now medical professionals can’t even tell us what the standard is.”
- “Kids have too much screen time (TV and computers).”
- “In schools we have strict guidelines what we can serve kids but they don’t pick healthy alternatives. They throw away the healthy food or find higher fat foods elsewhere.”
- “There isn’t a lot of green space to play on, especially in lower socioeconomic areas.”
- “For single people there is difficulty cooking for one, not knowing how to cook healthy for one, the social side of eating – if it’s just you, why bother?”
- “Cost of fresh food is just too expensive.”
- “Cheaper food has more calories. Lifestyle choices, treatments and best practices are there, but getting people to change habits and early intervention is key. Diabetes and other related issues continue to be a problem for older adults.

Some insurance groups are providing more treatment, counseling, and weight management support services.>

HIV/AIDS

The 2015 County Health Rankings reports an HIV prevalence rate, or the number of persons living with a diagnosis of human immunodeficiency virus (HIV) infection per 100,000 population. The Orange County rate was 259, lower than the California rate of 363. There were 6,478 documented cases in the county in 2010.

Sexually Transmitted Diseases

The rate of Chlamydia cases in Orange County is 296.6 per 100,000 persons. This rate represents a 4-year high but remains well below the California rate of 453.4. The county rate of Gonorrhea is 57.3 per 100,000 persons, also lower than the state rate of 116.8. Rates of Syphilis are slightly lower than the state rates.

STD Cases, Rate per 100,000 Persons, 2014

STD	Orange County		California
	Cases	Rate	Rate
Chlamydia	9,292	296.6	453.4
Gonorrhea	1,796	57.3	116.8
Primary & Secondary Syphilis	205	6.5	9.9
Early Latent Syphilis	143	4.6	8.8

Source: California Department of Public Health, 2014. <http://www.cdph.ca.gov/data/statistics/>

Cigarette Smoking

In Orange County, 10.8% of adults smoke cigarettes, lower than the state rate of 11.6% and the Healthy People 2020 objective of 12%.

Cigarette Smoking, Adults

Smoking	Orange County	California
Current smoker	10.8%	11.6%
Former smoker	21.8%	22.4%
Never smoked	67.5%	66.0%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

In the service area, adults who smoke cigarettes range from 8.2% in Seal Beach (90740) to 15.8% in Costa Mesa (92627). The rate of smoking among Orange County adults is 10.8%.

Adults who Smoke

Geographic Area*	Percent
90620 – Buena Park	13.4%
90630 – Cypress	12.7%
90680 – Stanton	13.7%
90740 – Seal Beach	8.2%
92626 – Costa Mesa	15.4%
92627 – Costa Mesa	15.8%
92646 – Huntington Beach	12.3%
92647 – Huntington Beach	13.9%
92648 – Huntington Beach	12.7%
92649 – Huntington Beach	11.9%
92683 – Westminster	12.9%
92703 – Santa Ana	12.2%
92704 – Santa Ana	12.2%
92706 – Santa Ana	12.5%
92707 – Santa Ana	12.8%
92708 – Fountain Valley	12.2%
92780 – Tustin	13.0%
92801 – Anaheim	13.9%
92804 – Anaheim	14.2%
92840 – Garden Grove	13.4%
92841 – Garden Grove	13.2%
92843 – Garden Grove	12.5%
92844 – Garden Grove	13.5%
Orange County	10.8%

Source: Orange County's Healthier Together, California Health Interview Survey, 2011-2012. <http://www.ochealthiertogether.org>

* No data available for Zip Codes 92655 and 92845.

Among teens in Orange County, 5.5% smoke cigarettes and 3.2% have smoked an electronic (vaporizer) cigarette.

Smoking, Teens

Smoking	Orange County	California
Current cigarette smoker	5.5%	3.1%
Ever smoked an e-cigarette	3.2%	10.3%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

Alcohol and Drug Use

Binge drinking is defined as consuming a certain amount of alcohol within a set period of time. For males this is five or more drinks per occasion and for females it is four or more drinks per occasion. Among adults, 35.1% of county adults had engaged in binge drinking in the past year.

Alcohol Consumption Binge Drinking, Adult

Alcohol Consumption	Orange County	California
Reported binge drinking in the past year	35.1%	34.0%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

Among Orange County teens, 17.6% had reported having an alcoholic drink and 1.9% had engaged in binge drinking in the past month.

Alcohol Consumption and Binge Drinking, Teens

Alcohol Consumption	Orange County	California
Ever had an alcoholic drink	17.6%	22.5%
Reported binge drinking in the past month	1.9%	3.6%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

7.5% of teens in Orange County had tried marijuana, cocaine, sniffing glue, other drugs and 3.8% had used marijuana in the past year. These rates of reported drug use are less than state rates of teen drug use.

Illicit Drug Use, Teens

Drug Use	Orange County	California
Ever tried marijuana, cocaine, sniffing glue, other drugs	7.5%	12.4%
Marijuana use in the past year	3.8%	8.6%

Source: California Health Interview Survey, 2012. <http://ask.chis.ucla.edu>

Community Input – Substance Abuse (Drugs, Alcohol and Tobacco)

Stakeholder interviews and focus groups identified the following issues, challenges and barriers related to drugs, alcohol and tobacco:

- “Tobacco use in our community is huge. With substance abuse, we know there is an issue but it isn’t visual in our community just yet.”
- “Drug abuse is associated with stigma. So for a person who is an addict, it’s harder to seek support. It’s more secret here.”
- “In last few years, drugs have been a big problem in high schools because it’s so inexpensive to get drugs. Mostly heroin, pot, meth, alcohol and abusing parents’ prescription drugs.”
- “Overusing pain medications can be issue. People are not able to admit they have a problem and for treatment, you have to be willing. Lack of treatment options, limited by cost for Medi-Cal and Medicare.”
- “The older generation still smokes a lot. In younger generations you see drugs; it is part of a parent’s responsibility to check up on that.”
- “We see a lot of drugs and alcohol with our parents. They are making bad choices and are unable to take care of their kids.”

- “Factors contributing to poor health include lifestyle, smoking, alcohol and noncompliance with medical care.”
- “It is still very socially acceptable to be a smoker in Vietnamese culture.”

Preventive Practices

Immunization of Children

Most Orange County school districts have high rates of compliance with childhood immunizations upon entry into kindergarten, with the county rate similar to the state average. The schools in the service area have a higher rate of compliance when compared to the county or state.

Up-to-Date Immunization Rates of Children Entering Kindergarten, 2014-2015

Geographic Area	Immunization Rate
OCMMC Service Area	96.3%
Orange County	90.1%
California	90.5%

Source: California Department of Public Health, Immunization Branch, 2014-2015.

<https://cdph.data.ca.gov/Healthcare/School-Immunizations-In-Kindergarten-2014-2015/4y8p-xn54>

Flu Vaccine

46.4% of Orange County residents have received a flu shot. 60.4% of children, 0-17, and 74.6% of seniors in Orange County received flu shots. The Healthy People 2020 objective is for 70% of the population to receive a flu shot.

Flu Vaccine in Past 12 months

Vaccines	Orange County	California
Vaccinated for flu in past 12 months	46.4%	45.8%
Vaccinated for flu in past 12 months, 0-17	60.4%	53.7%
Vaccinated for flu in past 12 months, 18-64	36.7%	37.4%
Vaccinated for flu in past 12 months, 65+	74.6%	72.8%

Source: California Health Interview Survey, 2014. <http://ask.chis.ucla.edu>

Mammograms

In Orange County, 72.3% of women have obtained a mammogram in the past two years. This rate is less than the Healthy People Objective of 81% of women 50 to 74 years to have a mammogram within the past two years.

Mammograms

Mammograms	Orange County	California
Women ages 50-74 who reported having a mammogram in the past 2 years	72.3%	65.1%

Source: California Health Interview Survey, 2012. <http://ask.chis.ucla.edu>

Colorectal Cancer Screening

In Orange County, the rate of compliance for colorectal cancer screening is 80.8%, which exceeds the Healthy People 2020 objective for colorectal cancer screening of 70.5%. Of adults advised to obtain screening, 73.6% of county residents were compliant at the time of the recommendation.

Colorectal Cancer Screening, Adults 50+

Colorectal Cancer Screening	Orange County	California
Sigmoidoscopy, colonoscopy or fecal occult blood test	80.8%	78.0%
Compliant with screening at time of recommendation	73.6%	68.1%

Source: California Health Interview Survey, 2009. <http://ask.chis.ucla.edu>

Attachment 1. Community Interviewees and Focus Groups

Community input was obtained from public health professionals, representatives from organizations that represent medically underserved, low income, or minority populations, and community residents.

Interviewees

Name	Title	Organization
Bob Dettloff	President	Huntington Beach Council on Aging
Art Groeneveld	Executive Director	Boys & Girls Club of Huntington Valley
Tanya Hoxsie	Chief Executive Officer	Boys & Girls Club of Huntington Valley
Mark Johnson	Superintendent	Fountain Valley School District
Lalita Komanapalli, MD	Clinic Medical Director	MemorialCare Medical Group
Peter LePort, MD	Director, Center for Obesity	Orange Coast Memorial Medical Center
JudyAnn Morris	Board Member	Huntington Beach Council on Aging
Tom Phan	Chairman	Vietnamese American Cancer Foundation
Lucy Takahashi	Director of Fund Development	Alzheimer's Family Services Center
David Truong	Community Member	Mimi's Jewelry
Shelley Vrungos	Division Manager, Medical Safety Net Program	Orange County Health Care Agency
Nora Webb	Senior Center Supervisor	City of Fountain Valley
Michelle Yerke, MSW	Social Worker	City of Huntington Beach

Focus Groups

Focus Group Site	Number of Participants	Participants
Fountain Valley Senior Center	10 persons	Seniors and volunteers at the center
Huntington Beach Seniors' Outreach Center	7 persons	Seniors and disabled community members
Boys & Girls Club of Huntington Valley	12 persons	Parents and staff

Attachment 2. Community Resources

Community resources to address the identified significant health needs are listed in the table below. This is not a comprehensive list of all available resources. For additional resources, refer to Orange County 211 at <http://www.211oc.org/> and Orange County Healthier Together at www.ochealthiertogether.org.

Significant Health Needs	Community Resources
Access to Health Care	AltaMed, City of Huntington Beach Transportation for Seniors, Off the Streets, Project Self-Sufficiency Foundation, Access Services, Aging Services Collaborative, Latino Health Access, CalOptima, Nhan Hoa Clinic, Southland Health Center, Help Me Grow, OCMC Senior Plus medical transportation, City of Fountain Valley senior transportation, City of Costa Mesa senior transportation, OCTA ACCESS
Cancer	Vietnamese American Cancer Association, National Cancer Society, AltaMed, Calvary Church
Dental Health	Boys & Girls Club, Southland Health Center, Nhan Hoa Clinic, Rosy Dental, SOS Dental, Orange County Healthy Smiles, school districts
Heart Disease	Orange Coast Memorial Sweetheart Screenings, Cardiovascular Associates, American Heart Association
Mental Health	Vietnamese Mental Health Awareness and Support, Long Beach Veteran's Hospital, Huntington Beach Council on Aging, National Alliance on Mental Illness (NAMI), Braille Institute
Overweight and Obesity	Take off Pounds Sensibly (TOPS), Assistance League, Kiwanis, Second Harvest Food Bank, Weight Watchers, Surf City Rotary, senior centers
Substance Abuse	REACH CDC program, 1-800-No-Butts, Alcoholics Anonymous (AA), DARE, Red Ribbon Week, Substance Abuse Resource Team (START)

Attachment 3. Impact Evaluation

Orange Coast Memorial developed and approved an Implementation Strategy to address significant health needs identified in the 2013 Community Health Needs Assessment. The Implementation Strategy addressed the following health needs through a commitment of community benefit programs and resources: access to care, chronic disease, overweight and obesity, and prevention/preventive care. Community Benefit efforts also focused on the Vietnamese and senior populations. To accomplish the Implementation Strategy, goals were established that indicated the expected changes in the health needs as a result of community programs and activities. Strategies to address the priority health needs were identified and impact measures tracked. The following section outlines the impact made on the selected significant health needs since the completion of the 2013 CHNA.

Access to Care

The hospital provided financial assistance through free and discounted care for health care services, consistent with MemorialCare's financial assistance policy. Patient Financial Services helped individuals enroll in Medi-Cal and MSI, regardless of where they received care.

The Vietnamese Community Outreach Liaison coordinated free community education and outreach and free health screenings, and assisted with securing medical transportation for the Vietnamese community. The Senior Advocate worked with local agencies and organizations to assist older adults in securing needed services, coordinated free medical transportation program for seniors, coordinated free health screenings, flu clinics, health education and disease prevention classes for seniors, organized socialization and enrichment events for seniors, and directly assisted seniors and their families, upon request. Orange Coast Memorial provided free non-emergency, non-urgent medical transportation for seniors. Orange Coast Memorial also provided financial support for the City of Fountain Valley's senior transportation program. Together, Orange Coast Memorial and City of Fountain Valley transportation services assisted 4,200 persons.

Chronic Disease/Overweight and Obesity/Prevention

In 2014, over 9,400 persons participated in community offerings. In 2015, over 14,150 individuals were reached through diverse community classes and events. Orange Coast Memorial provided health improvement services through programs and activities, which included community health education, community lectures, presentations and workshops. The hospital hosted health and wellness fairs for seniors included screenings for stroke, blood pressure, glucose, lung function, body composition;

provided carotid artery stroke risk screenings for seniors throughout the community; offered flu shot clinics for adults, seniors and the Vietnamese community.

The hospital also offered Vietnamese-specific health and wellness fairs, and additional screenings targeting the Vietnamese community included hepatitis, bone density, stroke risk, heart health, body fat, prostate cancer, and breast cancer. Individuals in the broader community received screenings for prostate cancer, heart disease, lung function, body fat, glucose, and skin cancer at community-wide screenings.

The community was served by the provision of a variety of health education classes, support groups and events made available to the public at no cost. Health education targeted the general community, pregnant and lactating mothers, seniors, and the Vietnamese community.

- General health and wellness education reached individuals on topics that included: Cardiovascular health, cancer, digestive disorders, allergies, asthma, peripheral artery disease, back health, skin health, allergies, foot health, eye health, arthritis, osteoporosis, diabetes, physical activity, nutrition and more.
- Childbirth, baby care and lactation support classes were provided, free of charge, to low- income mothers from the community.
- Seniors attended health and wellness education classes with topics that included: Cancer, lymphedema, diabetes prevention and management, eye health, cardiovascular disease, joint health, arthritis, Medicare education, memory wellness, nutrition, physical activity, hernia prevention, breathing techniques, hypertension, digestive disorders, allergies, advance directives, personal preparedness, and more.
- Vietnamese health and wellness education was provided on topics that included: Cardiovascular disease, cancer, hepatitis, stroke, psoriasis, kidney stones, kidney failure, diabetes, hemorrhoids, sleep apnea, heart failure, shingles and more.
- Support for educational outreach to children and their families was provided in the areas of nutrition, healthy food choices, and physical activity.
- Cancer support groups and survivor events provided support assistance to individuals in the community. Counseling was also provided to individuals.

Orange Coast Memorial tracks knowledge gained and planned changes in behavior as a result of health education classes. All health education participants are asked if they gained new knowledge and to give examples of information they learned. Among the participants 97% - 100% of attendees identified new knowledge gained from the session; 47% - 76% of attendees indicated they planned to make changes as a result of what they learned at the sessions.

Orange Coast Memorial offered a targeted health outreach program on local radio and cable TV to the Vietnamese community. Information on a variety of topics, including preventive practices was presented weekly on local access channels. Radio listeners were able to call-in with questions. It is estimated that annually 250,000 people listened to and watched these presentations.