



2016 Community Health Needs Assessment Report

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I. Introduction

California Senate Bill 697, the Patient Protection and Affordable Care Act (PPACA) (HR3590), and Internal Revenue Service section 501(r)(3) direct tax exempt hospitals to conduct a Community Health Needs Assessment (CHNA) and develop an implementation strategy to address these needs every three years. The CHNA is required to incorporate both primary data collection and secondary data analysis that focus on the health and social needs of the population in the hospitals' primary service area. It identifies un- and under-met health needs in the service area, provides information to select priorities for action and target geographical areas, and serves as the basis for community benefit programs.



Children's Healthcare of California (CHC), the not-for-profit, tax-exempt parent corporation of Children's Hospital of Orange County (CHOC) and CHOC Children's at Mission Hospital (CCMH), conducted a Community Health Needs Assessment as required during 2013 (Fiscal Year 2014) and again in 2016 (Fiscal Year 2017) for both of the hospitals. This most recent process was led by a team of senior managers from CHOC and facilitated by a consultant familiar with the organization.

CHOC Children's has two hospital campuses – CHOC Children's Hospital (CHOC Orange) located at 1201 W. LaVeta Avenue in Orange and CHOC Children's at Mission Hospital (CHOC Mission or CCMH) located on the 5th floor of Mission Hospital at 27700 Medical Center Road in Mission Viejo, collectively referred to as CHOC. While the law requires that each licensed hospital conduct a CHNA, it may be conducted in connection with another hospital or group of hospitals, so long as the characteristics and specific needs of each hospital's population are distinctly identified where different. Because both facilities are located within the same county, serve the same populations and often secondary health care-related data is only available at the county level, CHOC Children's conducted the CHNA for its two facilities simultaneously. This CHNA report will highlight the differences in characteristics of the populations, their health status and needs whenever possible.

The CHOC Orange hospital is a 279-bed tertiary and quaternary hospital dedicated to the care of patients ranging primarily from neonates (newborns) through the age of 21 years, and patients with certain diagnoses up to the age of 25 years.



CHOC Children's Hospital - Orange



CHOC Children's at Mission Hospital

CHOC Children's at Mission Hospital is a 54-bed hospital that treats patients ranging in age from newborn through 17 years of age.

Together they are the only hospitals in Orange County that exclusively treat pediatric inpatients.

The pediatric subspecialists on staff at both facilities are members of the pediatric teaching faculty for UC Irvine School of Medicine and pediatric residents have rotations on both campuses. In addition to inpatient care, CHOC Children’s also provides ambulatory care, specialty medical clinics, and behavioral health services. The CHOC Orange campus is home to Orange County’s only dedicated pediatric Level II trauma center. Eight of its pediatric specialties are nationally ranked by *US News and World Report*. It has the only Level III+ Neonatal Intensive Care Unit (NICU) in Orange County and is a designated Level IV Epilepsy Center. CHOC Children’s at Mission Hospital (CCMH) has a Level II NICU in addition to general and intensive care pediatric beds and cares for the needs of pediatric trauma patients from Mission Hospital’s Level II Trauma Center.

II. Communities Served:

As a regional health care provider, the geographic service area for the CHOC hospitals comprises all of Orange County, California, situated between Los Angeles and San Diego counties and bordered on the west by the Pacific Ocean.

Orange County is made up of 158 zip codes, representing 34 cities and a few unincorporated areas, spread over 798 square miles. Orange County cities include: Aliso Viejo, Anaheim, Brea, Buena Park, Costa Mesa, Cypress, Dana Point, Fountain Valley, Fullerton, Garden Grove, Huntington Beach, Irvine, La Habra, La Palma, Laguna Beach, Laguna Hills, Laguna Niguel, Laguna Woods, Lake Forest, Los Alamitos, Mission Viejo, Newport Beach, Orange, Placentia, Rancho Santa Margarita, San Clemente, San Juan Capistrano, Santa Ana, Seal Beach, Stanton, Tustin, Villa Park, Westminster and Yorba Linda.

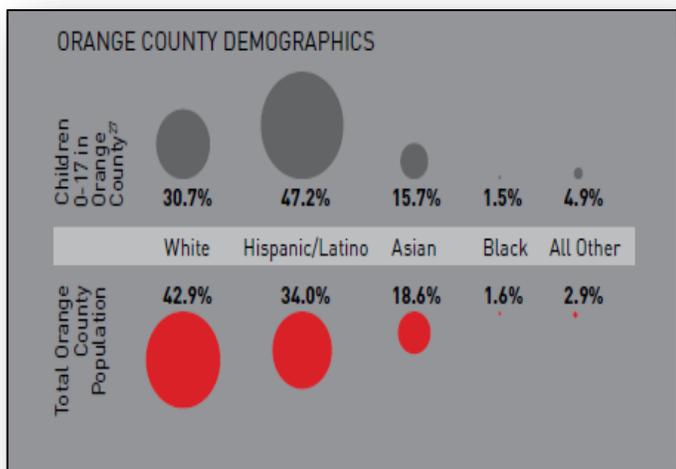
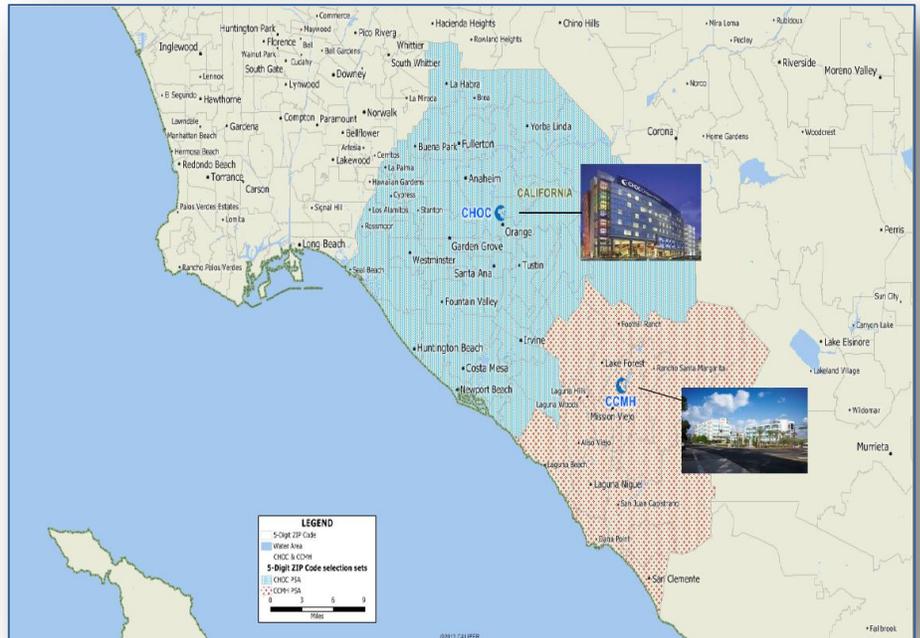


The population of Orange County totals nearly 3.2 million, the third largest county by population in California and the sixth most populated county in the United States. Orange County is considered one of the most densely populated areas in the United States, ranking 19th out of 3,143 counties in the nation. In 2016, the average household size was 3.06 persons, larger than California (2.97) and the United States (2.63). Orange County’s population density is 4,034 persons per square mile, an increase of 5.8% since 2010 (3,815 persons per square mile).¹

Orange County children (ages 0-17 years) number approximately 732,000, or 22.8% of the total population. Almost 38% of the households in the county have at least one person who is under the age of 18 years. The number of births in Orange County in 2014 was 38,610, down 12.4% from 44,065 in

2005. Over the next five years, the pediatric population of Orange County is expected to grow less than 1.0%.

While both hospitals serve all of Orange County, the primary service area for CHOC Orange is the central to northern two-thirds of Orange County (shaded in blue on the map to the right) and the primary service area of CHOC Children’s at Mission Hospital is the southern roughly one-third of Orange County (shaded in orange on the map below). The service area of each hospital is determined by the zip code of patient residence. 81.5% of Orange County children reside in the CHOC Orange primary service area.



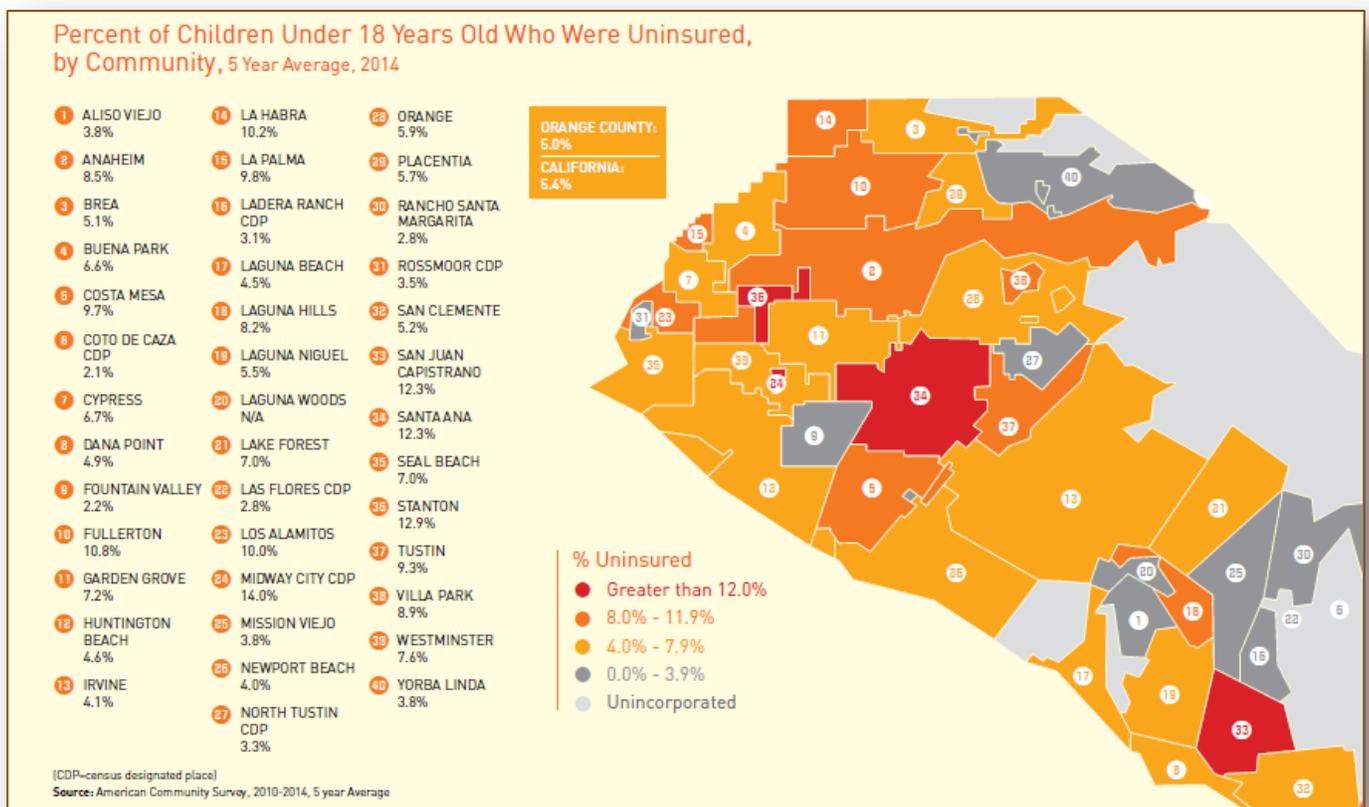
Orange County’s population is diverse - 42.9% of the population is white, non-Hispanic; 34.0% of the population is Hispanic; 18.6% is Asian or other Pacific Islander; 1.6% is black, non-Hispanic and 2.9% is ‘All Other’. The diversity of Orange County’s children is more pronounced, with 30.7% of the children White, 47.2% Hispanic, 15.7% Asian, 1.5% black and 4.9% ‘All Other’. The percentage of those who are Hispanic varies by area within the county, with Santa Ana (north Orange County) having 74.4% of its population who are Hispanic. In aggregate, the CHOC Orange service area is more diverse than the CHOC Mission service area with 34.3% of the population being White, non-Hispanic in zip codes in the CHOC Orange primary service area, compared to 65.5% in the CCMH primary service area.² Foreign-born residents comprise 14% of the Orange County population.³

Nearly 46% of households in the county have a language other than English as the primary language spoken at home⁴. Of those, 58.6% speak Spanish and 30.5% speak an Asian or Pacific Islander language at home.⁵ This presents challenges in clearly communicating complex health-related concepts to patients and families.

Orange County's unemployment rate has continued to improve since CHOC's 2013 CHNA, and at 4.4% in May 2016, continues to be among the lowest in the state of California (which is 5.6%) and the nation (5.0%)⁶. In 2014, the median household income in the county was \$86,881. Households with children under 18 years old have a median income slightly lower at \$81,992⁷. The average household income in the CHOC Orange service area is \$27,000 lower than in the CHOC Mission service area.⁸

The 2016 Federal Poverty level for a family of four is \$24,250. In Orange County, 17.6% of children less than 18 years old live in poverty, compared to 23% of California's children and 22% of children in the United States.

Health insurance coverage is key to health care access. Approximately 95% of children under 18 years old in Orange County have some form of health insurance. The percentage of children with insurance varies by community of residence, as shown on the map below. Those communities with the highest rate of uninsured children include Midway City (14.0%), Stanton (12.9%), Santa Ana (12.3%) in the CHOC Orange primary service area and San Juan Capistrano (12.3%) in the CHOC Mission primary service area.⁹



In addition to health insurance, availability of health care providers is essential for access to health care services. One indicator of health care provider capacity is federal and state designations of primary care shortage areas, medically-underserved areas and medically-underserved populations. Areas within the CHOC Orange primary service area are designated as Medically Underserved – for primary care (as shown on Map 1 below), Medically Underserved (geographic) Area (map 2 below) and Medically Underserved Population (map 3 below). These designations apply to the whole population, and include adults as well as children. CHOC has four primary care clinics that serve low-income children and subspecialty physician offices located throughout Orange County, and specifically in the areas highlighted on these maps.



Data collected in the 2014 California Health Interview survey indicate that 68.9% of children 0-17 years of age received care at their doctor's office/HMO/Kaiser and 23% received care at a community clinic/government clinic/community hospital. 8.1% of Orange County children have no usual source of care, up from 7% in 2012.¹⁰

III. Community Needs Assessment Process:

The CHOC Community Health Needs Assessment was conducted in the fall of calendar year 2016 and involved the following steps:

- a. gathering and analyzing secondary data from numerous authoritative, publicly available sources (listed at the end of this report);
- b. soliciting and receiving input from community leaders from various business, religious, social service and public agencies knowledgeable regarding the gaps and resources available for children in Orange County (a list of those who contributed their perspective is attached);
- c. surveying the Orange County community-at-large regarding their knowledge and perceptions of the needs of Orange County children;
- d. aggregating the data collected from the three methods outlined above and assembling a list of needs and gaps for review and prioritization by CHOC senior leaders;
- e. engaging senior leaders in a prioritization process, identifying needs CHOC will address;
- f. presenting the report and recommended priorities to the CHOC Board for their endorsement and approval.

IV. Community Input:

Between October 4 and October 18, 2016, CHOC offered an opportunity for residents of Orange County to identify un- and under-met health care and social service needs of children residing in the CHOC – Orange and CHOC Children’s at Mission Hospital (CCMH) service areas through an on-line survey using Survey Monkey. Availability of the survey opportunity was promoted through CHOC’s website – www.CHOC.org – and various social media sites. The survey was available in both English and Spanish. A complete list of survey questions can be found in Appendix A.



Forty-six (46) individuals responded to the English survey and none availed themselves of the Spanish version. Respondents were asked to provide their zip code of residence so that the responses could be summarized and compared for each hospital’s primary service area. Thirty-one (31) respondents (or 67.4%) were from the CHOC – Orange primary service area, ten (10) (or 21.7%) were from the CHOC Children’s at Mission Hospital (CCMH) primary service area. The remaining five (5) live in zip codes in Los Angeles and Riverside counties, considered to be in the secondary service area of CHOC – Orange.

Of those who responded, thirty-four (34), or 74%, self-reported that they are White; eight (8), or 17.4%, said they are Hispanic; one (1) is Asian; and three (3), or 6.5%, are ‘Other’.

Findings - CHOC – Orange Results

Of the thirty-one (31) respondents from the CHOC - Orange primary service area, twenty-one (21), or 68%, have employer-provided health insurance; seven (7), or 23%, have Medi-Cal; one has both employer-provided health insurance and Medi-Cal; and two did not answer the question. Respondents were asked if any children in their family had been diagnosed with one or more of several conditions. Seven respondents said asthma, two said Attention Deficit Disorder, two said an autism spectrum disorder, one said obesity and one said an alcohol, drugs or tobacco addiction. Five said they had a child in fair to poor health.

All but two respondents said their children had seen a primary care physician in the past year and all but five said their children had received their immunizations on time. The ones who had not provided different reasons ranging from they didn’t believe in them to not being able to find a provider to administer the vaccine, to saying they had a health condition that prevented them from getting their immunizations. Two out of 31 responded that they had difficulty finding a physician to treat a specific illness – mental health and allergies.



Most Pressing Health Problems Facing Children in the Community

- Ability to Pay for Care – 71%
- Lack of Health Insurance – 48%
- Access to Mental Health Services – 45%
- Cost of Prescriptions – 35%
- Obesity – 35%

In a question asking their opinion on the most pressing health problems facing children in the community, twenty-two (22), or 71%, said the ability to pay for care, and eleven (11), or 35% said prescription medicine is too expensive. Other pressing health problems for children in the community include lack of health insurance (15 respondents), access to mental health services (14 respondents), and obesity (11 respondents). (Numbers do not total to 31 as multiple answers were possible.)

When asked [what medical services for children are most needed in the community](#), ten (10), or 32% said mental health; seven (7), or 23%, said resources for children with autism spectrum disorder; five (5), or 16%, said pediatric specialists; and four (4), or 13%, said pediatricians.

When asked [what health services CHOC should provide that are not currently available](#) in the community, the following services were mentioned (rank ordered by frequency of mention):

- Services for treating teens with depression/mental illness
- Counseling for hematology/oncology patients and their families, including Spanish-speakers
- Transportation for low-income families
- Pediatric urgent care
- Concussion clinics
- Food desensitization clinics
- Vision services
- Preparing and recovering kids from surgery
- Social Worker services

Suggestions to [improve the overall health of the community](#) included:

- More community education classes – nutrition, CPR, drowning prevention, diabetes, wellness and vaccinations
- Outreach to middle and high schools
- Assistance to families in navigating the health system
- More appointment availability
- More advocacy for health insurance coverage

Findings - CHOC Children's at Mission Hospital (CCMH) Results

Of the ten respondents from the CCMH primary service area, five had employer-provided health insurance, three had Medi-Cal, one had privately purchased insurance and one provided no response. Respondents were asked if any children in their family had been diagnosed with one or more of several conditions. Two respondents said Attention Deficit Disorder, two said an autism spectrum disorder, one said asthma and one said an alcohol, drugs or tobacco addiction.

All respondents said their children had seen a primary care physician in the past year and all but one said their children had received their immunizations on time. The one who had not received immunizations on time suffered from a chronic illness. Two responded that they had difficulty finding a physician to treat a specific illness – mental health and rheumatology.

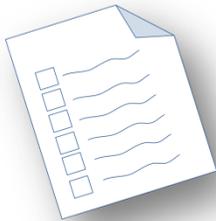


Seven of ten said they thought the most pressing health problem is the ability to pay for care, while six of the ten said prescription medicine is too expensive.

When asked [what medical services for children are most needed in the community](#), four said mental health, three said pediatric specialists, two said alcohol and drug treatment programs and one indicated special education services for developmentally disabled children.

One half of the respondents indicated that caring for a child with disabilities was a problem in their family (3 indicated it is a major problem and 2 said it was a minor problem). In addition, mental health or depression was a problem for eight of the ten respondents.

Community Leaders' Feedback



Eighty-six (86) leaders of social services and health care agencies, law enforcement and school districts were invited to provide their insight into the health and social service needs of children living in Orange County through a customized, open-ended Survey Monkey instrument. Six leaders responded. Both the survey instrument and information about those who responded can be found in Appendix A.

Leaders were invited to describe their *vision* of a healthy community for children. In summary, respondents described such a community as:

One in which all children have access to high quality, affordable medical, dental and behavioral health care; one that helps parents understand the importance of regular visits to healthcare providers, the importance of nutrition and exercise and provides support for parents and education on good parenting skills. They also describe a healthy community as one where kids have access to nutritious food and exercise venues, and good education; one where they can walk the streets without fear; one that doesn't tolerate bullying; and, one that prepares them for life.

They were then asked about what is healthy and what is unhealthy about Orange County for children. All respondents agreed that there are many health care services in Orange County specifically designed to address the needs of children, as well as many social service agencies that form a network to address a wide variety of other needs.

As to what is unhealthy about Orange County, most respondents cited the large portion of children who are living at, or below poverty level and the challenges facing providers regarding the low reimbursement from Medi-Cal. They also discussed compounding factors of this low income population that are present including lower education levels, English as a second language, and the ability to afford healthy food leading to obesity and poor health in general.

Respondents' perceptions of the most serious health issues facing Orange County's children include the lack of mental health services, access to dental services for the low income population, and transportation to services. Specific clinical concerns include obesity, substance abuse, and mental health. These responses are consistent with the results of the Community-at-Large survey.

Community Leaders were asked about what CHOC could do to improve the health and quality of life of children in each hospital's service area. In the CHOC – Orange primary service area (north Orange County), it was suggested that:

- CHOC provide more access to outpatient mental health services,
- dental services (perhaps in partnership with Healthy Smiles) and,
- additional community and parent education especially in Spanish, Korean and Vietnamese.
- Two of the leaders also suggested that CHOC be more active in partnering with other agencies in the community by sitting on their Boards and participating in/partnering with them on community events.

In the CHOC Children's at Mission Hospital (CCMH) service area (south Orange County) it was suggested that:

- more pediatric subspecialists, including pediatric surgeons, be available in the area as well as
- pediatric urgent care.
- Partnering with other agencies and increased visibility at community events was also suggested.

Review of community leader input provided to other not-for-profit hospitals in Orange County that serve the same population in their Community Health Needs Assessment and published on-line revealed similar un- or under-met needs of children.¹¹

V. Findings from Secondary Data Sources:

More than 100 years ago, Annie E. Casey was a widow raising her four children near Seattle. Her sacrifice and struggles deeply affected her eldest, Jim, who dedicated his life to creating an enduring legacy of service to children and families in America. In 1990, the Annie E. Casey Foundation published the first KIDS COUNT data resource which is considered one of the premier resources for data on the health and well-being of children in the United States. The KIDS COUNT resource aggregates national, state and county-level data into four domains to create an "Index" that captures what children need most to thrive:

- Economic Well-Being,
- Education,
- Health, and
- Family and Community.

Each domain includes four indicators, for a total of 16. These indicators represent the best available data to measure the status of child well-being at the state and national levels. (For a more thorough description of the KIDS COUNT index, visit www.aecf.org/2016db.) National data mask a great deal of state-by-state and regional variations in child well-being. A state-level examination of the data reveals a hard truth: A child's chances of thriving depend not just on individual, familial and community characteristics, but also on the state in which she or he is born and raised. States vary considerably in

their amount of wealth and other resources. State policy choices also strongly influence children’s chances for success.



Economic Well-Being – Growing Up in Poverty

Growing up in poverty is one of the greatest threats to healthy child development. The child poverty rate in the United States increased dramatically as a result of the 2008 economic crisis and has yet to return to pre-recession levels. Poverty can impede cognitive development and a child’s ability to learn. It can also contribute to behavioral, social and emotional problems and can lead to poor health outcomes. The risks posed by economic hardship are greatest among children who experience poverty when they are young and among those who experience persistent and deep poverty.¹²

Family income is only one component of financial security; the cost of basic expenses also matters. Housing is typically one of the largest expenses that families face.

The “High Housing Cost Burden” measure identifies the proportion of children living in households that spend more than 30 percent of their pretax income on housing, whether they are renters or homeowners. Low-income families, in particular, are more likely to experience a housing affordability problem. Paying high housing costs limits the resources they have for other necessities like food, health care, transportation and child care.

Notably, in Orange County, fewer children live in poverty (17.6%) compared to 23% of California’s children and 22% of the nation’s children; and fewer children in Orange County have parents who lack secure employment than California or the nation as a whole. However, over 44% of children in Orange County live in households with a high housing cost burden which is higher than the nation, but lower than the state of California.

Region	Children in poverty	Children whose parents lack secure employment	Children living in households with a high housing cost burden	Teens not in school and not working
United States	Children in poverty 2014 22% 15,686,000 CHILDREN WORSENE 2008 18%	Children whose parents lack secure employment 2014 30% 22,061,000 CHILDREN WORSENE 2008 27%	Children living in households with a high housing cost burden 2014 35% 25,710,000 CHILDREN IMPROVED 2008 39%	Teens not in school and not working 2014 7% 1,255,000 TEENS IMPROVED 2008 8%
California	Children in poverty 2014 23% 2,047,000 CHILDREN WORSENE 2008 18%	Children whose parents lack secure employment 2014 33% 2,993,000 CHILDREN WORSENE 2008 30%	Children living in households with a high housing cost burden 2014 47% 4,279,000 CHILDREN IMPROVED 2008 55%	Teens not in school and not working 2014 7% 155,000 TEENS IMPROVED 2008 8%
Orange County	17.6%	28.2%	44.1%	6.7%

Sources: Annie E. Casey Foundation – KIDS COUNT Data; Children Now - California



Education

Establishing the conditions that promote successful educational achievement for children begins with quality prenatal care and continues into the early elementary school years. With a strong and healthy beginning, children can more easily stay on track to remain in school and graduate, pursue postsecondary education and training and successfully transition to adulthood. Yet the United States continues to have significant gaps in educational achievement by race and income. It has been well-documented that health status is directly correlated to educational attainment, employment status and income level. Those with higher levels of education, reliable employment and higher wages are healthier.¹³

The foundation of brain architecture and subsequent lifelong developmental potential are laid down in a child's early years. High-quality pre-kindergarten programs for 3- and 4-year-olds play an important role in preparing children for success and lead to higher levels of educational attainment, career advancement and earnings. Although Head Start and the expansion of state-funded programs since the 1990s have greatly increased access to preschool and kindergarten, many children, especially 3-year-olds, continue to be left out, exacerbating socioeconomic differences in educational achievement.¹⁴

Proficiency in reading by the end of third grade is a crucial marker in a child's educational development. By fourth grade, children use reading to learn other subjects. Therefore, mastery of reading is critical for them to keep up academically. Children who reach fourth grade without being able to read proficiently are more likely to disengage and drop out of school. Low reading proficiency also reduces their earning potential and chances for career success as adults. Although improvements in reading proficiency have occurred nationally since the early 1990s, progress has been slow, and gaps remain.¹⁵

Competence in mathematics is essential for success in the workplace, which increasingly requires higher-level technical skills. Students who take advanced math and science courses are more likely to graduate from high school, attend and complete college and earn higher incomes. Even for young people who do not attend college, basic math skills help with

United States	Young children not in school 2012-14	Fourth graders not proficient in reading 2015	Eighth graders not proficient in math 2015	High school students not graduating on time 2012/13
 EDUCATION	53% 4,387,000 CHILDREN WORSENERD 2007-09 52%	65% N.A. IMPROVED 2007 68%	68% N.A. IMPROVED 2007 69%	18% N.A. IMPROVED 2007/08 25%
California	Young children not in school 2012-14	Fourth graders not proficient in reading 2015	Eighth graders not proficient in math 2015	High school students not graduating on time 2012/13
 EDUCATION DOMAIN RANK 35	52% 548,000 CHILDREN WORSENERD 2007-09 50%	72% N.A. IMPROVED 2007 77%	73% N.A. IMPROVED 2007 76%	16% N.A. IMPROVED 2007/08 29%
Orange County	36.3%	52%	55%	13%

Sources: Annie E. Casey Foundation – KIDS COUNT Data; Children Now - California

everyday functioning and improve employability. Ensuring that children have early access to high-quality mathematics education is critical for their success in both school and life.¹⁶

Students who graduate from high school on time are more likely to pursue postsecondary education and training; they are more employable and have higher incomes than students who fail to graduate. In 2014, median annual earnings for someone without a high school diploma (\$20,500) were 74 percent of those of a high school graduate (\$27,800) and 41 percent of the median earnings of someone with a bachelor's degree (\$50,500).¹⁷ High school graduates have better health outcomes, make healthier choices and are less likely to engage in risky behavior.

Orange County's children fare significantly better than children in the state of California and the nation as a whole across all four Education measures in KIDS COUNT. As explained in the Economic Well-Being section, children who live in homes with more favorable economic factors, tend to do better in school.



Children's health is the foundation of their overall development, and ensuring that they are born healthy is the first step toward increasing the life chances of disadvantaged children. Poverty, poor nutrition, lack of preventive health care, substance abuse, maternal depression and family violence put children's health at risk. Poor health in childhood impacts other critical aspects of a child's life, such as school readiness and attendance, and can have lasting consequences on his or her future health and well-being.¹⁸

Babies born with a low birth weight (less than 5.5 pounds) have a high probability of experiencing developmental problems and short- and long-term disabilities. They are also at a greater risk of dying within the first year of life. Multiple-birth babies and those who have mothers who smoke, have poor nutrition, live in poverty, and/or experience stress, infections and violence during pregnancy are at increased risk of being born with a low birth weight. Compared with other affluent countries, the United States has among the highest percentages of babies born with a low birth weight.¹⁹

Children without health insurance coverage are less likely than insured children to have a regular health care provider and to receive care when they need it. They are also more likely to begin receiving treatment after their condition has worsened, putting them at greater risk of hospitalization. Although the provision of employer-sponsored health insurance is declining, and most low-wage and part-time workers lack employer coverage, public health insurance has resulted in increased coverage among children during the past decade. Having health insurance can protect families from financial devastation when a child experiences a serious or chronic illness and can help children remain healthy, active and in school.

The child and teen death rate (deaths per 100,000 children ages 1 to 19 years) reflects a broad array of factors: physical and mental health; access to health care; community factors (such as violence and environmental toxins); use of safety practices; and, especially for younger children, the level of adult supervision. Accidents, primarily those involving motor vehicles, were the leading cause of death for children and youth, accounting for 30 percent of all deaths among children ages 1 to 14. As children move into their mid- and late-teenage years, they encounter new risks that can be deadly. In 2014, accidents, homicides and suicides accounted for 73 percent of deaths to teens ages 15 to 19 years nationally.

Abuse of alcohol and drugs can negatively impact cognitive growth of the teenage brain during a critical time of development. Abuse of these substances by teens is linked to such harmful behaviors as engaging in risky sexual activity, driving under the influence, abusing multiple substances and committing crimes. Alcohol and drug abuse are also linked to short- and long-term physical and mental health problems, poor academic performance and an increased risk of dropping out of school. The negative consequences of teen alcohol and drug abuse can carry over into adulthood. Overall, alcohol and drug use by adolescents have declined during the past decade, although patterns vary by substance.²⁰

Orange County's children have a mixed report on these four indicators of health. There is a smaller percentage of low-birth weight babies born to residents of Orange County, nearly 50% fewer than in the United States as a whole. The number of children without health insurance mirrors that of the state of California which is a smaller percentage than the United States.

However, the child and teen death rate per 100,000 population and the percentage of Orange County teens who abuse alcohol or drugs is higher than both the state of California and the nation as a whole. This data is consistent with what was reported in the Community-at-large survey and by Community Leaders.

Region	Low-birthweight babies	Children without health insurance	Child and teen deaths per 100,000	Teens who abuse alcohol or drugs
United States  HEALTH	2014 8.0% 318,847 BABIES IMPROVED 2008 8.2%	2014 6% 4,397,000 CHILDREN IMPROVED 2008 10%	2014 24 18,666 DEATHS IMPROVED 2008 29	2013-14 5% 1,276,000 TEENS IMPROVED 2007-08 8%
California  HEALTH DOMAIN RANK 11	2014 6.7% 33,586 BABIES IMPROVED 2008 6.8%	2014 5% 497,000 CHILDREN IMPROVED 2008 11%	2014 19 1,850 DEATHS IMPROVED 2008 24	2013-14 5% 167,000 TEENS IMPROVED 2007-08 8%
Orange County	4.3%	5%	24.9%	6.8%

Sources: Annie E. Casey Foundation – KIDS COUNT Data; Children Now - California



Family and Community

Children who live in nurturing families and are part of supportive communities have better social-emotional and learning outcomes. Parents struggling with financial hardship are more prone to stress and depression, which can interfere with effective parenting. These findings underscore the importance of two-generation strategies that strengthen families by mitigating their underlying economic distress, while addressing the well-being of children. It also matters where families live. When communities have strong institutions and the resources to provide safety, good schools and quality support services, families and their children are more likely to thrive.²¹

Children growing up in single-parent families typically have access to fewer economic or emotional resources than children in two-parent families. Nationwide in 2014, 36% of single-parent families had incomes below the poverty line, compared with 8% of married couples with children. Compared with children in married-couple families, children raised in female-headed households are more likely to drop out of school, to have or cause a teen pregnancy and to experience a divorce in adulthood. Nearly one in four of the 24.7 million children living with an unmarried parent in 2014 was living with cohabiting domestic partners, compared with only 16% in 1990.²²

Higher levels of parental education are strongly associated with better outcomes for children, including higher educational achievement. Children growing up with parents who have not graduated from high school have fewer socioeconomic advantages. They are at greater risk of being born with a low birth weight, having health problems, entering school not ready to learn and having poor educational outcomes. More highly educated parents are better able to provide their children with economic stability and security, which enhances child development. During the past several decades, parental education levels have steadily increased.²³

Concentrated poverty puts whole neighborhoods at risk. High-poverty neighborhoods are much more likely than moderate- and upper-income communities to have worse health outcomes, higher crime rates and violence, inadequate schools and limited access to job opportunities. Concentrated neighborhood poverty negatively affects all children living in the area — not only poor children, but also those who are economically better off. High poverty areas are defined as census tracts where the poverty rates for the total population are 30% more.

Teenage childbearing can have long-term negative effects for both the mother and the newborn. Teens are at higher risk of bearing low-birth weight and preterm babies. And, their babies are far more likely to be born into families with limited educational and economic resources, which function as barriers to future success. Children born to teen mothers tend to have poorer academic and behavioral outcomes and are more likely to engage in sexual activity and become teen mothers themselves. Although currently at a historic low, the teen birth rate in the United States remains the highest among all affluent countries.²⁴

Data for three of the four indicators of Family and Community were available for Orange County. On all three, Orange County has a better outcome than the state and nation as a whole. There are nearly 10% fewer children in single-parent families than in the country; half as many children live in high-poverty areas as in the state of California, and the number of teen births per 1,000 population is 38% less than in the United States.

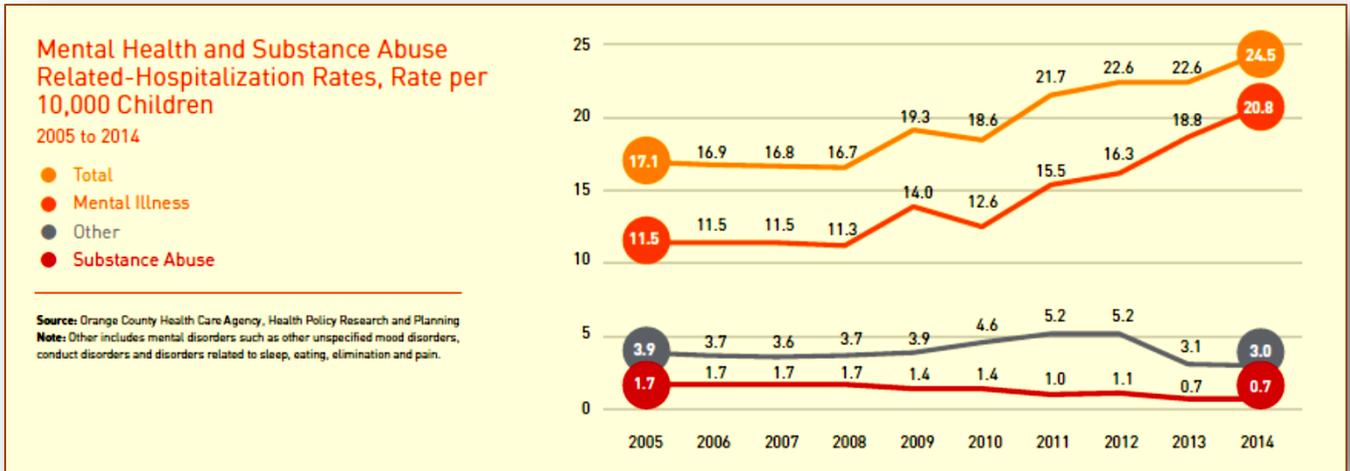
Region	Children in single-parent families 2014	Children in families where the household head lacks a high school diploma 2014	Children living in high-poverty areas 2010-14	Teen births per 1,000 2014
United States FAMILY AND COMMUNITY	35% 24,689,000 CHILDREN WORSENERD 2008 32%	14% 10,412,000 CHILDREN IMPROVED 2008 16%	14% 10,333,000 CHILDREN WORSENERD 2006-10 11%	24 249,078 BIRTHS IMPROVED 2008 40
California FAMILY AND COMMUNITY DOMAIN RANK 41	34% 2,996,000 CHILDREN WORSENERD 2008 32%	23% 2,069,000 CHILDREN IMPROVED 2008 26%	17% 1,535,000 CHILDREN WORSENERD 2006-10 11%	21 27,025 BIRTHS IMPROVED 2008 38
Orange County	25.6%	NA	8.2%	14.8

Sources: Annie E. Casey Foundation – KIDS COUNT Data; Children Now – California

More comparative detailed data on these and other indicators from KIDS COUNT 2016 and its California counterpart – Children Now – are in Appendix B.

Additional Data

Additional secondary data was examined in follow up to the feedback from the Community-at-Large survey and the Community Leader input. The most mentioned need identified by both the Community-at-Large and Community Leader surveys was [mental health services](#) for children and youth. The hospitalization rate per 10,000 Orange County children for serious mental illness and substance abuse has increased by nearly 50% between 2005 and 2014. Mental health is the major component of this hospitalization rate, of which 64% was due to Major Depression and Mood Disorders.



For children in the 15 to 19 year old age cohort in Orange County, suicide is the 2nd highest cause of death and for all children aged 0 – 19 years, suicide was the 3rd leading cause of death.

	1-4 Years	5-9 Years	10-14 Years	15-19 Years	1-19 Years
FIRST LEADING CAUSE	Unintentional Injuries (22)	Unintentional Injuries (11)	Unintentional Injuries (20)	Unintentional Injuries (70)	Unintentional Injuries (123)
SECOND LEADING CAUSE	Congenital Anomalies (12)	Cancer (10)	Cancer (16)	Suicide (29)	Cancer (50)
THIRD LEADING CAUSE	Cancer (7)	Congenital Anomalies (4)	Congenital Anomalies (5)	Homicide (23)	Suicide (33)

Note: Three-year total number of deaths.
Source: Orange County Health Care Agency

Mental health services for children and adolescents were the highest priority need identified in CHOC’s 2013 CHNA. Since 2013, CHOC has been actively engaged with many community partners on this topic creating community awareness and raising funds. CHOC is in the process of implementing a comprehensive plan to meet the heretofore unmet behavioral health needs of the children of Orange County across the care spectrum. CHOC is building an 18-bed inpatient mental health unit, is expanding services for CHOC patients being treated for serious/chronic health conditions, opening an intensive outpatient program to keep struggling children out of the hospital, expanding its outpatient eating disorders program, and continuing to facilitate community groups working together on county-wide services. Respondents to the surveys are aware of this effort and commend it.

The second most frequently identified need by both the Community-at-Large and Community Leaders are more [services for children with autism spectrum disorders](#). Autism spectrum disorders (ASD) are a group of developmental disabilities that can cause significant social, communication and behavioral challenges. They affect people in different ways and can range from mild to severe, according to the U.S. Centers for Disease Control & Prevention (CDC).

Autism has no single known cause, and the number of diagnosed cases has risen sharply — 300% over the past 11 years. In 2012, the CDC reported that one in 88 American children had an ASD — an increase from one in 150 in 2002. Recently revised estimates point to an even higher rate of one in 50. ASDs are almost five times more common among boys (one in 54) than among girls (one in 252).

A 2011 California Department of Education study found that about 1% of all children enrolled in the state’s public schools are diagnosed with autism. Orange County has the highest rate, with 1.5%; one child in 63 has been diagnosed with autism and is receiving special education services.

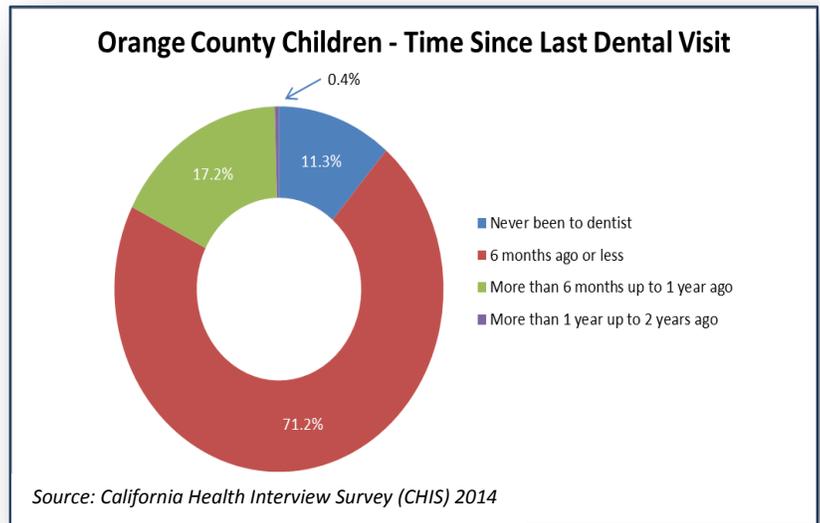
In the last 10 years, the autism rate has increased nearly fivefold in California. One in 94 children is receiving special education services for autism in 2011, compared to one in 431 a decade ago.²⁵

Resources available in the community for children with an ASD are included in Appendix D.

Children with a Diagnosis of Autism Served by Regional Center of Orange County, July 2012			
	Number of Children Served	Number with Autism	Percent with Autism
3-4 years of age	731	308	42.1%
5-9 years of age	2,140	1,088	50.8%
10-14 years of age	1,877	853	45.4%
15-18 years of age	1,541	626	40.6%

Source: Regional Center of Orange County

The next greatest need identified in the surveys was access to [pediatric dental services](#), especially for those in low income groups. In 2014, a question was asked on the California Health Interview Survey about time since last dental visit. For all of Orange County, 71.2% (or 289,000 of 406,000 surveyed) indicated that it was 6 months ago or less. Another 17.2% (or 70,000) indicated that the last visit to a dentist was between 6 months and 1 year ago. Only 11.3% said that their child had never been to a dentist. By comparison, nationally, it is reported that 83% of children between 0-17 years old have visited a dentist in the past 6 months.



In January 2015, The Children and Families Commission of Orange County published a brief on Children’s Oral Health Policy. That brief describes the progression of dental care for children in Orange County over the previous decade and the funding that has been committed for dental services to low income residents. In 2013, there were 54 dentists in Orange County accepting Denti-Cal resulting in a ratio of one pediatric dentist per 1,242 children under 5 years old, among the best of all counties in California. Since then, there has been a reduction in Denti-Cal reimbursement and all but seven dentists have closed their practices to Denti-Cal patients. As a result, the ratio of dentists to children under 5 years old is not estimated to be one pediatric dentist to 4,900 children with Denti-Cal. The ratio is even more dramatic when the need for sedation is necessary. Wait times for an appointment can be up to eight months. California’s reimbursements are approximately 35% of the national average for comparable Medicaid- reimbursed dental services.²⁶

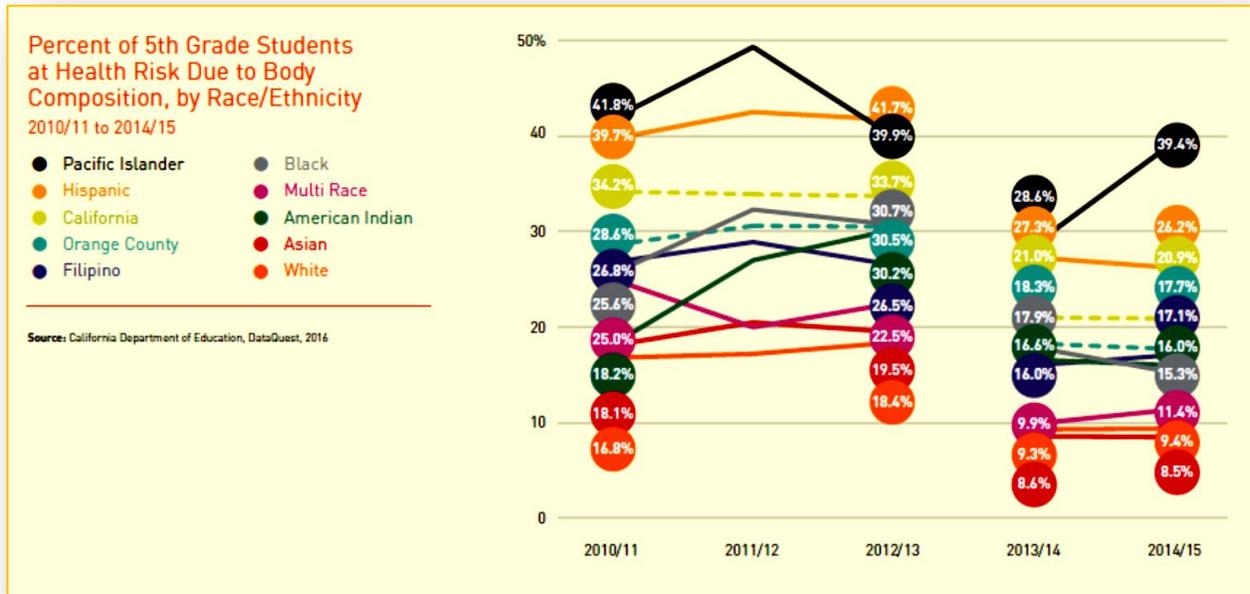
Another un- and under-met need receiving multiple mentions by the community, is the area of [childhood obesity](#).

Dietary habits and exercise are significant behaviors affecting health. Nearly 50% of children in Orange County consume fast food three to four times per week (compared to 39% across California). 49% consume one or more sodas or sweetened drinks per day (compared to 42% in California) and only 20% between 2 and 17 years of age consume five fruits and vegetables per day.

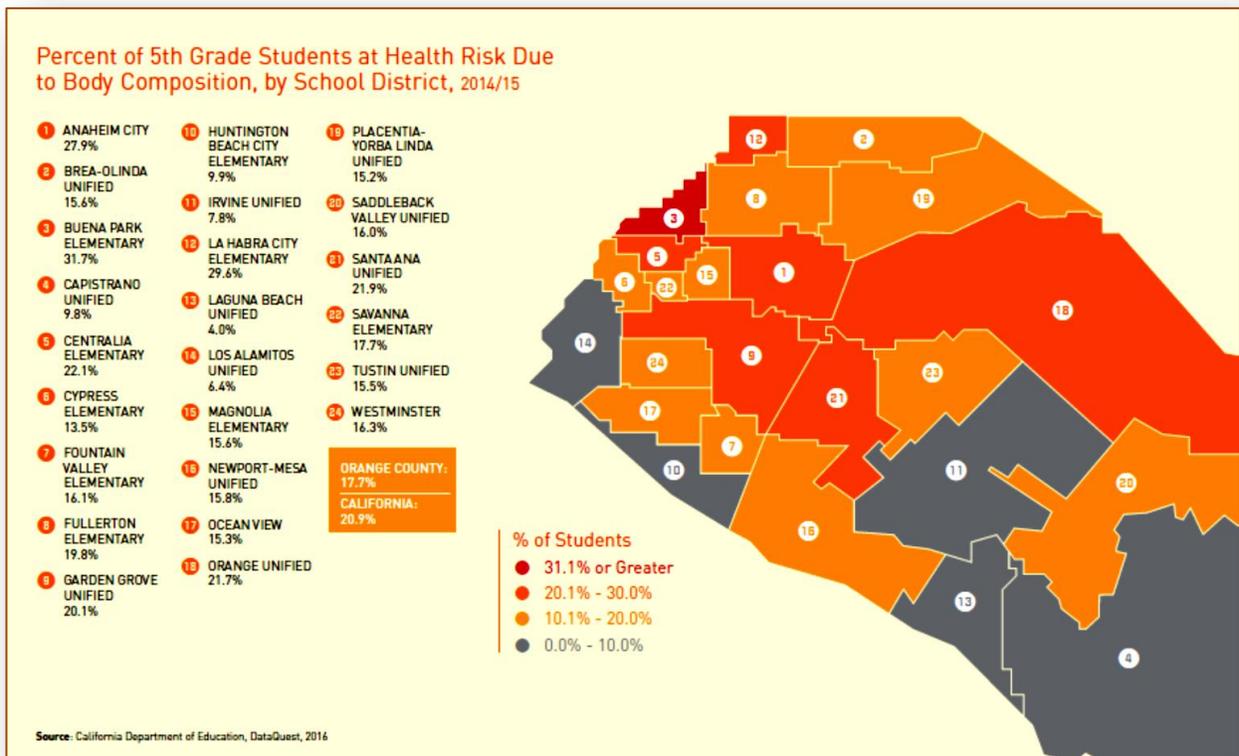


These behaviors contribute to 36% of Orange County 5th grade children being overweight or obese as measured by Body Mass Index (BMI). While this county-wide figure compares favorably to a statewide rate of 40%, it is up from 33.3% three years ago.

In Orange County, obesity varies by ethnicity, with Pacific Islander and Hispanic children in Orange County having the most health risk due to body composition. The data suggest that for all ethnic groups, the percent of 5th grade students who are at Health Risk due to body composition has improved between 2010/2011 and 2014/2015.



The map below shows the school districts where the children are most at health risk due to body composition. The majority of these districts are concentrated in the northern portion of the county – in the CHOC-Orange primary service area.



Obesity is one of the four priorities for action in the Orange County Health Care Agency's 2014-2016 Orange County Health Improvement Plan.²⁷ This plan identifies actions to be taken and agencies/ organizations in Orange County that are collaborating to address this issue. A summary of this initiative can be found in Appendix C of this report.

Other indicators of child health were reviewed in order to potentially identify other health needs in Orange County. These included the number of pre-term births, infant mortality, teen pregnancy rates, sexually transmitted disease incidence in the teen population, immunization rates and the incidence of common childhood diseases such as asthma. In each case, Orange County's performance on these indicators was either better than the state of California and/or improvements have been made since the previous CHOC CHNA.

VI. Community Resource Inventory:

Before engaging in a prioritization process to identify un- and under-met needs to address, it is important to understand the resources that already exist in the community directed at the identified needs. It may be that resources are inadequate, or it may be that the resources are not being utilized effectively by the community. Appendix D contains a comprehensive (but not exhaustive) list of resources in the community to assist children and their families with health and social service needs. In addition to those listed, schools and school districts have resources to address social service needs beyond education, and places of worship also provide support to their members and the communities in which they are located.

VII. CHOC Priorities:

Following review of the secondary data and feedback from the Community-at-Large and Community Leaders, and taking into consideration the resources available in the community to address various needs, CHOC senior leaders engaged in a priority setting process that used the following criteria:

- What is the magnitude of the need in the Orange County pediatric population?
- Is the problem getting better or worse in the community over time?
- What are the consequences of inaction? (risks associated with exacerbation of the needs/related problems if the need is not addressed)
- Is there alignment with the CHOC hospitals' mission?
- Are there existing programs/resources within the community to address the need?
- Are there existing programs/resources within CHOC that could be deployed differently or built upon to address the need?
- Can CHOC make an impact within a reasonable timeframe?
- What are the financial resources required?
- What are the human resources required?
- Are there measurable outcome metrics available?

As a result of the prioritization process and ensuing discussion, CHOC leaders determined the priority of pediatric community needs that CHOC will address over the next three years:

1. Mental Health
2. Pediatric Obesity
3. Pediatric Specialists
4. Pediatricians
5. Resources for children with Autism Spectrum Disorders (ASD)
6. Pediatric Dental Services
7. Partnering/collaborating with Other Agencies'
8. Outreach to Schools
9. Treatment for Alcohol and Substance Abuse
10. Community Education
11. Transportation Services

Appendix E contains the scoring tool and outcomes matrix for the priority-setting process.

A strategic implementation plan will be developed that outlines the steps to be taken, persons within the organization who will be responsible for them and the resources the organization will commit to addressing the needs.

VIII. Community Health Needs Assessment Dissemination Strategy:

Following approval of this Community Health Needs Assessment by the CHOC Board of Directors, it will be made available on the CHOC website – www.CHOC.org – along with a link that will provide anyone who cares to comment on it, to do so. It will be available in a format that allows it be downloaded and printed. CHOC will post announcements on its Social Media sites letting the community know that it is available for review and comment.

APPENDIX A

CHOC Community Needs Assessment – Community-at-large Questions
(Survey Monkey)

1. What is your zipcode? _____
2. What is your gender?
 - a. Male
 - b. Female
3. What is your race?
 - a. White
 - b. Black or African American
 - c. American Indian or Alaska Native
 - d. Asian
 - e. Hispanic or Latino
 - f. Native Hawaiian and Other Pacific Islander
 - g. Other
4. How long have you lived in the area?
 - a. Less than 1 year
 - b. 1-2 years
 - c. 3-5 years
 - d. 6-10 years
 - e. 11-20 years
 - f. More than 20 years
5. How many people live in your household?
 - a. One
 - b. Two
 - c. Three to five
 - d. Six to eight
 - e. More than eight
6. Are any of them children between 0 and 17 years old?
 - a. Yes
 - b. No If “No”, please skip to question 26.
7. How many children in your household are between 0-5 years old? ____ 6-13 years old? ____ 14 – 17 years old? ____
8. Have any of the children in your household been told by a doctor that they have one of the following conditions? (check all that apply)
 - a. Asthma
 - b. Diabetes
 - c. Overweight or obesity
 - d. Autism Spectrum Disorder
 - e. Attention Deficit Disorder (ADD) or Attention Deficit Hyperactivity Disorder (ADHD)
 - f. None of the above
9. If a child in your household has asthma, how many times during the past 12 months did you visit an emergency room because of the asthma?
 - a. None
 - b. Once
 - c. Twice
 - d. Three or more times

10. If a child in your household has diabetes, how many times during the past 12 months did you visit an emergency room because of the diabetes?
 - a. None
 - b. Once
 - c. Twice
 - d. Three or more times
11. Has a child in your household used the following? (check all that apply)
 - a. Alcohol
 - b. Drugs
 - c. Tobacco
 - d. None of the above
12. Has a child in your household (age 17 or younger) become pregnant?
 - a. Yes
 - b. No
13. Is any child in your household in fair to poor health?
 - a. Yes
 - b. No
14. How long has it been since the children in your household last visited a doctor for a routine checkup? (A routine checkup is a general visit, not a visit for a specific illness, injury, or condition.)
 - a. Within in the past year
 - b. Within the past two years
 - c. Within the past five years
 - d. Five or more years ago
 - e. Never
15. If their last visit was longer than one year ago, is it because:
 - a. They do not have a medical condition that requires care and they receive health screenings from another provider
 - b. They do not receive any health screenings
 - c. Could not schedule due to work or personal conflicts within normal business hours
 - d. Could not afford the payments due, regardless of insurance status
 - e. Could not arrange transportation
16. If the children in your household have a health care need: (check all that apply)
 - a. Do they have a doctor they can go to? A. Yes B. No
 - b. Do they have a dentist they can go to? A. Yes B. No
 - c. Do they have a mental health specialist they can go to? A. Yes B. No
 - d. Do they have a substance abuse counselor they can go to? A. Yes B. No
17. Have your children had all of their immunizations on time?
 - a. Yes
 - b. No
18. If no, is it because:
 - a. You do not believe in immunizations
 - b. You could not afford the immunizations
 - c. You could not find a provider to give the immunizations
 - d. You didn't know you needed to have them immunized
 - e. Other _____

19. How many times during the past 12 months have any of the children in your household used a hospital emergency room?
- None
 - 1-2 times
 - 3-5 times
 - 6 or more times
20. If any of your children went to a hospital emergency room in the last 12 months, was it due to:
- They had an injury that required immediate attention.
 - They had an injury that did not require immediate attention but it was the most convenient/only service available
 - An ongoing illness.
 - Other _____
21. Have you had any difficulty finding a doctor for any of the children in your household in the past two years?
- Yes
 - No
22. If yes, why would you say you had trouble finding a doctor?
- Couldn't get a convenient appointment
 - Didn't know how to get in contact with one
 - Doctor was not taking new patients
 - No transportation
 - Would not accept your insurance
 - Other _____
23. Have you had any difficulty finding a doctor for your child/children that treats specific illnesses or conditions in your area in the past two years?
- Yes
 - No
24. If yes, what kind of specialist did you look for? (check all that apply)
- Bone or joint specialist
 - Cancer specialist
 - Dentist
 - Diabetes specialist
 - Heart specialist
 - Lung/breathing specialist
 - Mental health specialist
 - Nerve and brain specialist
 - Other _____
25. Why were you unable to visit the specialist when your child needed one?
- No appointments were available
 - No specialist was available in the area
 - Did not have a car or transportation to get to their office
 - Could not get to the office when they were open
 - Did not know how to find one
 - The specialist would not take my insurance
 - Could not afford to pay for the specialist
 - Other _____

26. What do you think are the most pressing health problems facing children in the community? (check all that apply)
- Ability to pay for health care services
 - Alcohol dependency or abuse
 - Drug abuse – prescription medications
 - Drug abuse – illegal substances
 - Child abuse
 - Domestic violence
 - Lack of health insurance
 - Lack of transportation to health services
 - Lack of dental care
 - Mental Health
 - Obesity
 - Prescription medicine is too expensive
 - Teen pregnancy
 - Tobacco use/smoking among teenagers
 - Other _____
27. What medical services for children (0-17 years of age) are most needed in the community?
- Alcohol and drug abuse treatment
 - Counseling/mental health services
 - Diabetes care
 - Dental services
 - Emergency/trauma care
 - Pediatricians
 - Pediatric specialists
 - Special education for children with developmental disabilities
 - Specialized resources for children with Autism Spectrum Disorder
28. What health or community services should CHOC provide that currently are not available? (Open ended response)
29. What ideas or suggestions do you have for improving the overall health of the area community? (Open ended response)
30. What is your highest level of education?
- Left high school without a diploma
 - High school diploma
 - GED
 - Currently attending, or have some college
 - Two-year college degree
 - Four-year college degree
 - Graduate-level degree
31. Including yourself, how many adults (18 years or older) live in your household?
- One
 - Two
 - Three
 - Four
 - Five or more

32. Including yourself, how many adults (18+) are employed full-time, year-round?
- One
 - Two
 - Three
 - Four
 - Five or more
33. How many household members are covered by insurance?
- Adults _____
 - Children _____
 - How many are not covered by insurance? _____
34. If there are children in your household that have health insurance, how is it obtained? (check all that apply)
- Medi-cal
 - Through an employer's health plan
 - Privately purchased
35. Counting all income sources from everyone in your household, what was the combined household income last year? (check only one)
- Less than \$20,000
 - \$20,000 to \$29,999
 - \$30,000 to \$39,999
 - \$40,000 to \$49,999
 - \$50,000 to \$59,999
 - \$60,000 to \$69,999
 - \$70,000 to \$99,999
 - \$100,000 to \$199,999
 - \$200,000 or more
36. How would you describe your housing situation? (check only one)
- Own a house or condo
 - Rent a house, apartment, or a room
 - Living in a group home
 - Living temporarily with a friend or relative
 - Multiple households sharing an apartment or a house
 - Living in a shelter
 - Living in a motel
 - Living in senior housing or assisted living
 - Other _____
37. Household issues – Some of the following may have been a problem for you or someone in your household (adults and/or children). If it has been a problem in your household during the past 12 months, please tell us how much of a problem it has been. (check one on each line)
- Adult substance abuse (alcohol or legal medications) A. Not a problem B. Minor problem C. Major problem D. Don't know
 - Adult substance abuse (illegal drugs) A. Not a problem B. Minor problem C. Major problem D. Don't know
 - Youth substance abuse (alcohol, drugs, etc. A. Not a problem B. Minor problem C. Major problem D. Don't know
 - Caring for an adult with disabilities A. Not a problem B. Minor problem C. Major problem D. Don't know

- e. Caring for a child with disabilities A. Not a problem B. Minor problem C. Major problem D. Don't know
- f. Child abuse A. Not a problem B. Minor problem C. Major problem D. Don't know
- g. Depression A. Not a problem B. Minor problem C. Major problem D. Don't know
- h. Not having enough money for food A. Not a problem B. Minor problem C. Major problem D. Don't know
- i. Not able to afford nutritious food (fresh vegetables and fruits) A. Not a problem B. Minor problem C. Major problem D. Don't know
- j. Not able to afford transportation A. Not a problem B. Minor problem C. Major problem D. Don't know
- k. Not having enough money to pay for housing A. Not a problem B. Minor problem C. Major problem D. Don't know
- l. Not having enough money to pay the doctor, dentist or pharmacy A. Not a problem B. Minor problem C. Major problem D. Don't know
- m. Not having enough money to pay for mental health services A. Not a problem B. Minor problem C. Major problem D. Don't know
- n. Use of tobacco products A. Not a problem B. Minor problem C. Major problem D. Don't know
- o. Not being able to find or afford after-school child care A. Not a problem B. Minor problem C. Major problem D. Don't know
- p. Sexual abuse A. Not a problem B. Minor problem C. Major problem D. Don't know
- q. Teen pregnancy A. Not a problem B. Minor problem C. Major problem D. Don't know
- r. Other (please explain)

THANK YOU FOR YOUR TIME! Your input is very much appreciated!

2016 Community Health Needs Assessment Community Leader Survey

Name: _____ Title: _____

Organization: _____ Phone Number: _____

CHOC has two hospitals in Orange County – CHOC Children’s in Orange and CHOC Children’s at Mission Hospital in Mission Viejo. These two hospitals primarily provide acute and outpatient care for children between birth and 18 years of age (although we do have patients up to the age of 25 years old). When responding to the questions below, please keep this in mind and answer for the population between 0 and 18 years old.

1. In general, how would you describe a “healthy community” for children? Please be as specific as possible.
2. What is healthy about Orange County (for children)?
3. What is unhealthy about Orange County (for children)?
4. What is your perception of the most serious health issues facing children in this community? Please be as specific as possible.
5. Please share specific examples of the most beneficial health resources or services for children in Orange County.
6. What is your perception of each CHOC hospital overall and of the specific programs and services provided there? Are there any gaps in service?

CHOC – Orange:

CHOC at Mission Hospital:

7. What is your perception of the physicians and other medical service providers (dentists, eye doctors, etc.) who serve the children in Orange County? Are there opportunities to improve their services? Are there any gaps in services?
8. What can CHOC do to improve the health and quality of life for children in Orange County?

CHOC – Orange campus (primarily north Orange County):

CHOC – Mission Hospital campus (primarily south Orange County):

9. Please provide any other thoughts you have about the health needs of children in Orange County.

Again, THANK YOU for your time!

Community Leader Survey Respondents

Name	Title	Organization	Representing
Tommie Servi	Vice President, Operations	Healthy Smiles for Kids of Orange County	Medically underserved, low-income, minority population
Theodore J. Caliendo, MD	Physician	Community Pediatrician; Board Member of CHOC Health Alliance	Medically underserved, low-income, minority population
Sandra Schultz	Manager, Customer Service	CHOC Children's; CHOC Family Advisory Council	Broad interest of the community
Kris Backouris	Community Service Officer; Crime Prevention Officer	Garden Grove Police Department	Medically underserved, low-income, minority population
James Peterson	Executive Director	Orange County Medical Association	Broad interest of the community
Rich Hunter	EMT	CHOC	Broad interest of the community

APPENDIX B

Secondary Data Sources

22nd Annual Report on the Conditions of Children in Orange County; 2016

www.kidsdata.org/region/365/orange-county/summary#37/family-economics

California Health Interview Survey 2013/2014

County of Orange, Health Care Agency, Public Health Services, "Orange County Health Improvement Plan 2014-2016", May 2014; available on-line at

<http://ohealthinfo.com/about/admin/pubs/OCHealthImprovementPlan>

Children and Families Commission of Orange County – *Oral Health Policy Brief*; January 2015

2016 California Children's Report Card – Children Now

KIDS COUNT Data Book 2016; Annie E. Casey Foundation; www.aecf.org/2016db.

Health Resources: www.ohealthiertogether.org ; www.211oc.org

<http://ohealthinfo.com>

UC Irvine Medical Center Community Health Needs Assessment; 2016

Community Health Needs Assessment 2016 - Saddleback Memorial Medical Center, Laguna Hills, CA

2015 PRC Community Health Needs Assessment Report - Hoag Memorial Hospital Presbyterian Service Area

www.cdc.gov

<https://www.census.gov>

UNITED STATES | 2016 KIDS COUNT PROFILE

ECONOMIC WELL-BEING

Children in poverty

2014

22%

15,686,000 CHILDREN

WORSENERD

2008 18%

Children whose parents lack secure employment

2014

30%

22,061,000 CHILDREN

WORSENERD

2008 27%

Children living in households with a high housing cost burden

2014

35%

25,710,000 CHILDREN

IMPROVED

2008 39%

Teens not in school and not working

2014

7%

1,255,000 TEENS

IMPROVED

2008 8%

EDUCATION

Young children not in school

2012-14

53%

4,387,000 CHILDREN

WORSENERD

2007-09 52%

Fourth graders not proficient in reading

2015

65%

N.A.

IMPROVED

2007 68%

Eighth graders not proficient in math

2015

68%

N.A.

IMPROVED

2007 69%

High school students not graduating on time

2012/13

18%

N.A.

IMPROVED

2007/08 25%

N.A. NOT AVAILABLE

HEALTH

Low-birthweight babies

2014

8.0%

318,847 BABIES

IMPROVED

2008 8.2%

Children without health insurance

2014

6%

4,397,000 CHILDREN

IMPROVED

2008 10%

Child and teen deaths per 100,000

2014

24

18,666 DEATHS

IMPROVED

2008 29

Teens who abuse alcohol or drugs

2013-14

5%

1,276,000 TEENS

IMPROVED

2007-08 8%

FAMILY AND COMMUNITY

Children in single-parent families

2014

35%

24,689,000 CHILDREN

WORSENERD

2008 32%

Children in families where the household head lacks a high school diploma

2014

14%

10,412,000 CHILDREN

IMPROVED

2008 16%

Children living in high-poverty areas

2010-14

14%

10,333,000 CHILDREN

WORSENERD

2006-10 11%

Teen births per 1,000

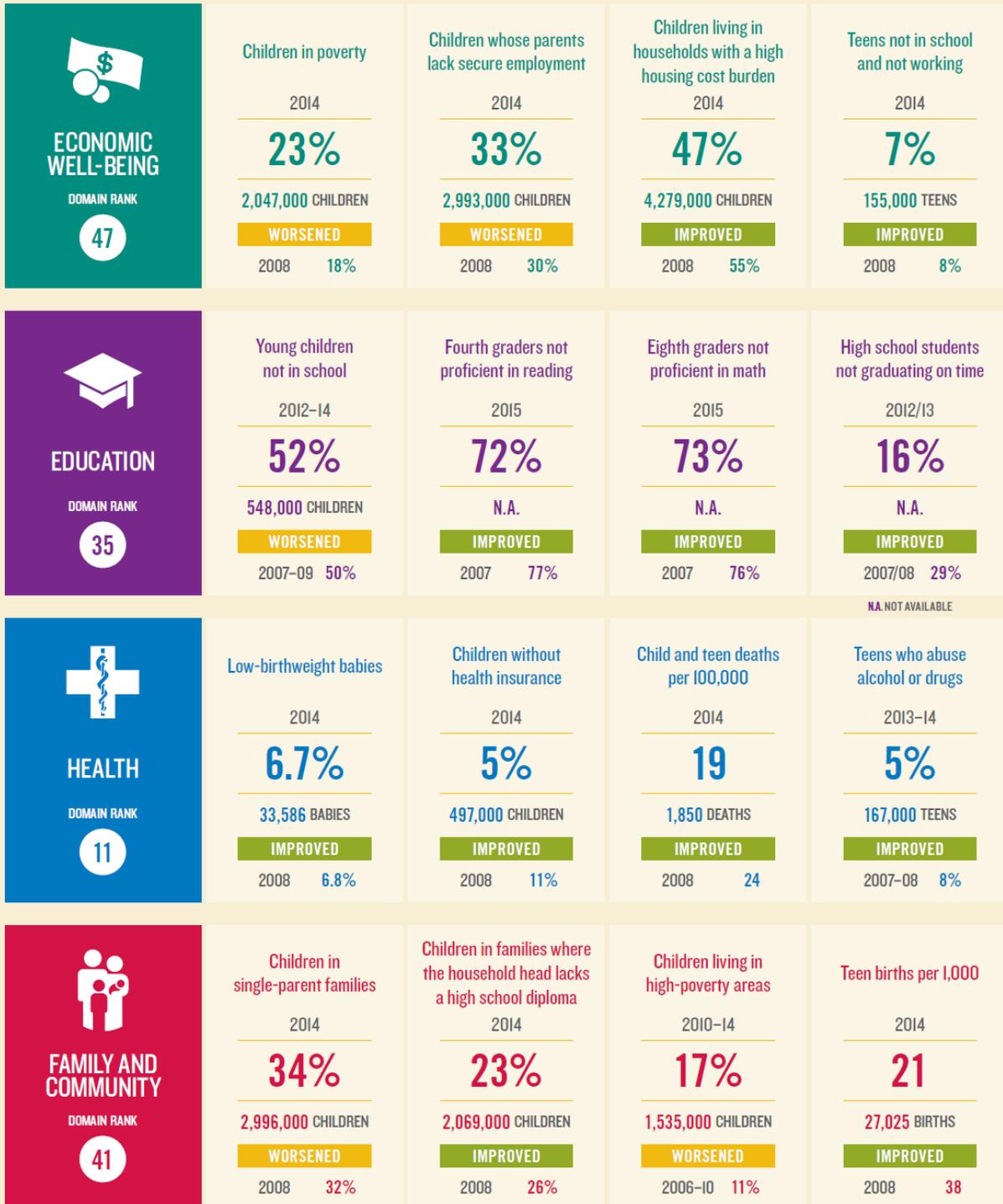
2014

24

249,078 BIRTHS

IMPROVED

2008 40



Orange County

COUNTY COMPARISON RATING

COUNTY QUICK FACTS

Education

719,772 children live in Orange county.

Health

Ethnicity is **48%** Latino, **30%** White, **1%** African-American, **16%** Asian, **4%** Other

Child Welfare & Economic Well-Being

\$85,144 is the average family income for this county.

58% of families can afford basic living expenses.

18% of children live in poverty.

EDUCATION	DATA ACROSS COUNTIES				DATA OVER TIME			DATA BY RACE / ETHNICITY				
	2014 Rank	Low	CA Avg	High	2014	Change	2012	Latino	White	African American	Asian	Other
1. Young children, ages 0-5, who are read to every day	20	52%	62% CA	81%	63%	-	63%	52%	NA	NA	NA	NA
2. 3- and 4-year-olds who attend preschool	24	32%	47% CA	67%	49%	↓	51%	39%	62%	NA	60%	52%*
3. 3rd graders who read at grade level	10	24%	46% CA	66%	52%	-	52%	32%	69%	44%	75%	71%
4. 7th graders who meet or exceed state standards in math	5	32%	51% CA	67%	61%	↑	60%	46%	74%	49%	83%	71%
5. Students who are low income and have access to a state-funded afterschool program	37	0%	12% CA	51%	9%	↓	11%	NA	NA	NA	NA	NA
6. High school science classes that are taught by a highly qualified teacher	12	23%	89% CA	100%	98%	↑	97%	NA	NA	NA	NA	NA
7. Students who feel connected to their school	16	25%	44% CA	66%	52%	↑	50%	NA	NA	NA	NA	NA
8. Suspensions that are limited to serious offenses, not willful defiance	11	27%	57% CA	80%	68%	↑	66%	67%	67%	69%	73%	67%
9. Expulsions that are limited to serious offenses, not willful defiance	16	38%	94% CA	100%	98%	↑	96%	98%	96%	92%	100%	100%
10. Students who are ready or conditionally ready for college-level math courses	5	41%	60% CA	74%	67%	↑	66%	49%	71%	59%	86%	69%
11. 12th graders who graduate on time	13	32%	80% CA	95%	87%	↑	86%	81%	93%	79%	94%	87%

HEALTH	DATA ACROSS COUNTIES				DATA OVER TIME			DATA BY RACE / ETHNICITY				
	2014 Rank	Low	CA Avg	High	2014	Change	2012	Latino	White	African American	Asian	Other
1. Women who receive early prenatal care	3	52%	84% CA	94%	90%	-	90%	87%	93%	85%	91%	89%
2. Newborns who are exclusively breastfed while in the hospital	42	28%	63% CA	91%	62%	↑	55%	57%	76%	61%	51%	72%
3. Children who have health insurance for the entire year	29	86%	92% CA	97%	92%	↑	90%	NA	NA	NA	NA	NA
4. Children with a usual source of health care	20	85%	91% CA	95%	92%	↑	88%	NA	NA	NA	NA	NA
5. Children who have visited a dentist in the last year	16	80%	88% CA	92%	89%	↑	84%	NA	NA	NA	NA	NA
6. Asthmatic children who have been given an asthma management plan	25	25%	40% CA	64%	37%	-	37%	NA	NA	NA	NA	NA
7. Children who are in a healthy weight zone	7	41%	56% CA	78%	62%	NA	NA	50%	74%	63%	73%	73%
8. Students who are low income and eat free or reduced price breakfasts during the school year	51	17%	35% CA	75%	27%	↓	31%	NA	NA	NA	NA	NA
9. Students who are low income and eat free or reduced price meals during the summer	21	0%	18% CA	46%	14%	↓	15%	NA	NA	NA	NA	NA
10. Schools that have a health center	17	0%	2% CA	14%	2%	↑	1%	NA	NA	NA	NA	NA
11. Adolescents who are not at risk for depression	11	63%	70% CA	74%	71%	↓	72%	68%	75%	97%	88%	64%
CHILD WELFARE & ECONOMIC WELL-BEING												
	2014 Rank	Low	CA Avg	High	2014	Change	2012	Latino	White	African American	Asian	Other
1. Young children, ages 0-3, who do not experience recurring neglect or abuse	10	73%	93% CA	100%	96%	↑	95%	97%	93%	92%	93%	100%
2. Children in the child welfare system who have stability in their placement	21	67%	87% CA	100%	89%	-	89%	88%	90%	88%	89%	NA
3. Adolescents in the child welfare system who are placed in family-like settings	31	58%	81% CA	100%	78%	↓	81%	77%	78%	88%	87%	NA
4. Children in the child welfare system who have had a medical exam in the last year	25	60%	86% CA	100%	90%	↓	93%	91%	90%	92%	86%	NA
5. Children in the child welfare system who exit to permanency within three years	23	73%	86% CA	100%	88%	↓	89%	91%	84%	60%	90%	NA
6. Children who are not living in communities of concentrated poverty	32	56%	86% CA	100%	93%	NA	NA	NA	NA	NA	NA	NA
7. Youth who attend school or are employed	12	84%	92% CA	97%	93%	↓	94%	90%	95%	92%*	98%	97%

APPENDIX C



Child and Adolescent Weight

Goal 1: Increase the proportion of Orange County residents who are in a healthy weight category.

Objective 1.1: By 2020, increase the proportion of children and adolescents who are in a healthy weight category and reduce disparities in subgroups with lower rates of healthy weight. 

Why is this a priority?

Obesity is the 2nd leading behavioral contributor to death in the United States [1]. Today's children may lead less healthy lives and have shorter life spans than their parents due largely to heart disease, cancers, stroke, and diabetes associated with obesity [2]. Obesity is included as a priority in *Let's Get Healthy California* and is a *CDC Winnable Battle*. Healthy eating and active living are contributing causes of obesity are both priorities in the *National Prevention Strategy*.

According to the California Physical Fitness Test, in 2012/13, only 56.7% of Orange County 5th graders had a healthy body composition in 2012/13. Latino and male 5th graders were less likely to have a healthy body composition with only 44.8% and 52.4%, respectively. Rates of healthy body composition among 5th graders also varied by geography, with some school districts having half or less than half of students with healthy body weight. Among 9th graders, 65.3% had healthy body composition, with only 56.0% of Latino 9th graders having a healthy body composition in 2012/13. Working with schools, families, and communities to increase healthy body composition and address disparities in subgroups are important steps to increasing overall healthy weight status in Orange County.

Strategies (All strategies contribute to Infant and Child Health priority area)

Short-term strategies

1. Work with **school districts and educators** to explore opportunities to align priorities for health and education. 
2. Promote implementation of **school wellness plans** and use of Wellness Councils in elementary schools.
3. Promote and expand **community efforts** involving parents and families such as *Walk to School Day*, *Champion Moms*, and youth engagement programs.
4. Promote and expand **existing environmental efforts** such as *HEAL Cities*, *The Wellness Corridor*, and increasing joint-use agreements.
5. Identify ways to retain **WIC participants through age four** to improve a "healthy start" for nutrition.

Longer-term strategies to consider

1. Initiate **workplace wellness programs** in schools to support healthy lifestyles for school staff.
2. Work with school districts, schools, Parent Teacher Student Associations (PTSAs), and educators to expand **school-based programmatic and policy opportunities** to improve nutrition and physical activity.
3. Coordinate **consistent messages** about obesity with health care providers, schools, and others. 
4. Work with **neighborhood and community-based programs** and providers to target interventions for populations at greatest risk.

APPENDIX D

Community Resource Inventory

Resource	CHOC PSA	CCMH PSA	Other than English	Services Provided
2-1-1 Orange County	X	X		Health and human services resources and referrals.
Blind Children's Learning Center	X	X	Spanish	Developmental Screenings; Counseling and support for children and families, early childhood center, newsletters, specialty services for blind children, instructions in Braille.
CA State Council on Developmental Disabilities	X	X		Advocacy, service coordination and support for individuals with developmental disabilities; rehabilitative services; in-home personal care services, protective supervision, domestic services, paramedical services, and transportation to medical services.
California Children's Services (CCS)	X	X		Diagnostic Evaluation, Medical Services, PT and OT, Case Management for conditions with severe physical disabilities from congenital defects, disease or accidents.
CalOptima	X - Office is in Orange		Spanish and five other languages	County-organized health system administering health insurance programs for Orange County children, low income families, seniors, and persons with disabilities.
Center for Autism and Neurodevelopmental Disorders	X	X		Parent and caregiver support, workshops; assessment and diagnosis
Child Behavior Pathways	X	X	Spanish	Parent education services for managing children with challenging social behaviors
Children and Youth Behavioral Health	X	X		Evaluation, therapy, medication management, crisis intervention and collateral materials for children and adolescents.
Children's Cerebral Palsy Movement	X	X		Advocacy and research funding; community dance therapy program for children with Cerebral Palsy
CHOC Breathmobile	X	X	Spanish	Mobile service visiting 13 schools, 4 community centers and 3 clinics on a rotating schedule providing Asthma evaluation; lung function testing; allergy testing; asthma education; resources and literature
CHOC Children's	X	X	Spanish	Inpatient and outpatient health services; primary and sub-specialist physicians; child and parent education and support groups; resource materials and research studies

Community Clinics	X	X	Spanish	ARCHES/Boys and Girls Clubs for Garden Grove; Children's Health Initiative of Orange County; Coalition of Orange County Community Clinics; Friends of Family Health Center; Hope Clinic; Hurtt Family Clinic; Serving Kids Hope; Sierra Health Center; St. Jude Neighborhood Health Centers
Community Health Initiative of Orange County	X - Office is in Santa Ana		Spanish	Enrollment assistance for Medi-Cal, Covered California, Kaiser Child Health Plan, CalFresh and CalWorks
Down Syndrome Association of Orange County	X - Costa Mesa		Spanish	Programs, resources and services for people with Downs Syndrome and their families; advocacy and outreach; Pediatric Downs Syndrome Clinic with CHOC Children's
Epilepsy Support Network of Orange County	X	X	Spanish	Support groups and education; help line; seminars/workshops; printed resource materials
Family Support Network of Orange County	X	X	Spanish	Family Resource Center for children with special needs or at risk for having special needs and their families. Medi-Cal enrollment, monthly support groups, summer camps, peer parents, emergency needs (diapers, formula, food, clothes) developmental screenings for 0-5 year olds, Parent Institute. Wrap-around Orange County Social Services Agency
Healthy Families for Kids of Orange County				Developmental Screening
Healthy Smiles	X	X	Spanish	Dental Clinics throughout Orange County; mobile dental clinics providing low cost and sliding scale dental services
Help Me Grow	X	X		Connects families to resources for behavior, parenting, child development, speech and language, developmental screening, support groups, early literacy, education
Intervention Centers for Early Childhood				Developmental Screening
John Tracy Clinic (JTC)	No	No	Spanish	Diagnostic and treatment center for young children with hearing loss; audiology, education and and support services for children 0-5 years old and their families; summer camp in Malibu
Juvenile Diabetes Research Foundation (JDRF)				
KIDA - Kids Institute for Development and Advancement	X - located in Irvine			School for children with Autism Spectrum Disorders - K-7; therapy, assessments, social groups for ages 3-18

Make a Wish Foundation	X	X		Fulfills the wishes of children between 2 1/2 and 18 years
March of Dimes	?	?	Spanish	Pregnancy and newborn health education center - literature on pregnancy, pre-term births, immunizations; NICU Family Support Program
Maxim Healthcare Services	X	X		Provider of home healthcare, medical-related staffing; ventilator training for nurses
Orange County Healthcare Agency	X	X	Spanish	Public Health Nursing
Phoenix House	X	X		School based behavioral health intervention and support provides curriculum for students and families for preventing and/or interrupting onset or progression of behavioral health conditions.
PODER (Prevention of Diabetes through Education Resources)	X - Newport Beach		Spanish	Diabetes support and education for children with diabetes and their families; Zumba and exercise classes
Pretend City Children's Museum	X	X		Developmental Screening and tools for for families, educators and community agencies.
Proof Positive ABA Therapies	X	X		Applied Behavioral Analysis (ABA) Therapies treating Autism; Social Skills, 1:1 Therapy, Parent Education, Fine and Gross Motor Skills, Speech and Language Therapy, Counseling, Self-help Programs; Social Skills classes
Providence Speech and Hearing	X	X		Developmental Screening
Regional Center of Orange County	X	X	Spanish	Services and support for children with developmental disabilities including cerebral palsy, autism, epilepsy and other intellectual disorders; includes a Family Resource Center in Santa Ana for training and education, lending library, on-line resources, parent-to-parent support; service coordination, early intervention services, respite, behavioral health services, support groups, residential care; OT, PT and speech therapy, mobility training, vocational training; transportation services, legal rights and advocacy services.
Rehabilitation Institute of Southern California	X	X		Physical, occupational and speech therapy; swim school; Infant Care; Child Development Program; Pre-school
Shield Healthcare				Medical equipment and supply company; Enteral Nutrition Support Program - training and equipment

Talk About Curing Autism (TACA)	X	X	Spanish	Education, Support Groups, Website, Resource Library, Parent Mentors, Scholarship Funds, Autism Youth Ambassadors
United Cerebral Palsy of Orange County	X - Office is in Irvine			In-center therapy services; in-home individualized developmental guidance, therapy and parent support; in-home respite care; center-based inclusive child care; recreation program; informational network; parent email network
Western Youth Services	X - located in Anaheim and Santa Ana			Developmental Screening; outpatient and partial hospitalization mental health facility for youth and young adults 18-25 years old; crisis intervention

Note: This is not an exhaustive list of resources available to Orange County residents. More information can be obtained on all of these by “Googling” them on the internet. In addition to the resources listed above, most school districts and many places of worship have resources available to their residents and members.

APPENDIX E

The following criteria, weights and ratings were used to prioritize identified health needs:

Criteria	Weight	Rating
Alignment with CHOC mission	3.0	1 - Not Aligned 5 - Well Aligned
Magnitude of the need	3.0	1 - None 5 - HUGE
What are the financial resources required?	2.7	1 - Significant 5 - Limited
Are there measurable outcome metrics available?	2.6	1 - No 5 - Yes
Are there existing programs in the community to address the need?	2.4	1 - Yes 5 - No
Consequences of inaction	2.3	1 - Little to none 5 - Negative Systemic Impact
Can CHOC make an impact within a reasonable time frame? (3-5 years)	2.3	1 - No 5 - Yes
Is it getting better or worse over time?	2.1	1 - Improving 5 - Worsening
Are there existing programs at CHOC that could be deployed differently or expanded?	2.1	1 - No 5 - Yes
What are the Human Resources required?	2.1	1 - Significant 5 - Limited

Weighted scores were computed for each of the needs, resulting in the following ranking:

Health Need	Weighted Score
Mental Health	102.6
Pediatric Obesity	91.6
More Pediatric Specialists	90.7
More Pediatricians	88.0
Resources for Children with Autism Spectrum Disorders	85.6
Pediatric Dental Services	83.7
Partnering/collaborating with Other Agencies	83.0
Outreach to Schools	76.1
Treatment for Alcohol and Substance Abuse	74.4
Community Education	72.3
Transportation Services	60.0

End Notes

¹ Orange County Conditions of Children, 22nd Edition; 2016

² Claritas; 2016 Truven Health Analytics

³ Orange County Conditions of Children, 22nd Edition; 2016

⁴ <http://www.census.gov/quickfacts>

⁵ <http://cpehn.org/chart/languages-other-english-spoken-home-orange-county-2012>

⁶ State of California, Department of Employment, Sept. 16, 2016 Maritza Gamboa;
[http://www.calmis.ca.gov/file/lfmonth/oran\\$pbs.pdf](http://www.calmis.ca.gov/file/lfmonth/oran$pbs.pdf)

⁷ <http://www.kidsdata.org/region/365/orange-county/summary#37/family-economics>

⁸ Claritas; 2016 Truven Health Analytics

⁹ Orange County Conditions of Children, 22nd Edition; 2016

¹⁰ 2014 California Health Interview Survey (CHIS)

¹¹ UC Irvine 2016 Community Health Needs Assessment Report; Saddleback Memorial Medical Center 2016 Community Health Needs Assessment; Hoag Memorial Hospital Presbyterian 2015 Community Health Needs Assessment Report

¹² 2016 KIDS COUNT Report; Annie E. Casey Foundation; Baltimore, MD

¹³ Ibid.

¹⁴ Ibid.

¹⁵ Ibid.

¹⁶ Ibid.

¹⁷ Ibid.

¹⁸ Ibid.

¹⁹ Ibid.

²⁰ Ibid.

²¹ Ibid.

²² Ibid.

²³ Ibid.

²⁴ Ibid.

²⁵ <http://www.ucirvinehealth.org/medical-services/autism-neurodevelopmental-services/autism-facts/>

²⁶ Children's Oral Health Policy Brief; January 2015; Children and Families Commission of Orange County

²⁷ <http://www.cdph.ca.gov/data/informatics/Documents/OC%20Health%20Improvement%20Plan%202014-05-14%20FINAL.pdf>