



# CHOC

# Children's



## **Community Health Needs Assessment Implementation Plan**

December 12, 2019

# Community Health Needs Assessment (CHNA)

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' service area.

The CHNA identifies unmet 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 developing community benefit programs.



# CHNA Implementation Plan: Prioritized Community Needs

Through a coordinated effort involving input from community stakeholders, primary and secondary data, and the CHNA Steering Committee, the following areas have been identified and prioritized:

1. Mental Health and Autism
2. Access to Pediatric Specialists
3. Immunizations (Vaccines) and Infectious Diseases
4. Substance Abuse
5. Pediatric Obesity
6. Respiratory Illness
7. Oral Health
8. Collaboration and Partnerships with School Programs
9. Bullying and Other Stressors in School
10. Pediatric Diabetes
11. Cost of Child Care (not addressed in Implementation Plan)
12. Housing Affordability (not addressed in Implementation Plan)



# Implementation Plan Process and Timing

- After confirming and ranking the service area’s most important health and social community needs, CHOC developed an Implementation Plan based on key stakeholder feedback.
- Through key stakeholder feedback, CHOC concluded it had both the ability and resources to address all but two of the twelve prioritized needs identified in the 2019 CHNA. Priority needs number 11 and 12, “*Cost of Child Care*” and “*Housing Affordability*,” are not addressed in the Implementation Plan as CHOC has neither the resources or expertise to address the cost of child care or housing affordability. However, CHOC does have relationships with various local agencies that directly or indirectly assist in providing or accessing healthy and affordable food options. Healthcare costs can also negatively affect already cost-burdened households. Therefore, CHOC patients who meet the established Financial Assistance Program criteria are eligible to receive financial assistance to cover all or portions of the patient’s healthcare costs. Under this policy, financial assistance may be provided to patients who are uninsured or underinsured and cannot afford to pay for their own medical care or out-of-pocket expenses. Eligibility for the Financial Assistance Program shall not be based in any way on age, gender, sexual orientation, ethnicity, national origin, disability or religion.
- The Implementation Plan outlines the actions CHOC will address in response to the identified community needs including: rationale, committed resources, implementation strategies, anticipated outcomes/impact/goals, and metrics with which the actions of the Implementation Plan will be evaluated.
- Willing and able community partners, that have committed to assisting CHOC in addressing the identified needs, are also listed in the Implementation Plan.
- Details of the three-year Implementation Plan can be found on the following pages.

# CHNA Implementation Plan: Prioritized Community Needs

## 1. Mental Health

**Rationale:** Orange County community members and leaders identified pediatric mental health to be the most critical need in the community. Mental health affects not only individuals and their families but also systems within the community, such as health systems and school systems. Since CHOC Children's 2016 CHNA, emergency department (ED) rates of patients under 18, with a primary diagnosis related to mental health, increased to 29.8 ED visits per 10,000 population. The age-adjusted rate of Orange County's ED hospitalizations, due to mental health, is 18.5 hospitalizations per 10,000 in populations under 18-years-old. Many community members and stakeholders attribute this to other critical issues, such as substance abuse, food insecurity, and poverty.

**CHOC Children's Committed Resources:** ASPIRE (Intensive Outpatient Program), CHOC Children's Mental Health Inpatient Center (MHIC), CHOC Children's Research Institute, CHOC Children's Thompson Autism Center, CHOC Health Alliance, CHOC Children's Specialists, Mental Health Emergency Services (MHES), Co-occurring Clinic, Project HEALTH, Outpatient Psychology Clinic, CHOC Neuropsychological Assessment Clinic, Outpatient Psychiatry Transition Clinic, GPS Clinic, BAN Clinic, Sleep Clinic, Eating Disorder Medical Rescue Inpatient Program (CHOC Children's at Mission), Case Management and Social Work Department, Department of Pediatric Psychology, Department of Child and Adolescent Psychiatry (PSF), CHOC CME Department, FitBrain Group, and ACT group.

**Community Partners:** "Speak Up We Care" in Irvine Unified School District, Be Well OC, CalOptima Behavioral Health Center for Autism, Child Guidance Center, Crisis Assessment Team (CAT), Crisis Text Line ("Home" to 741741), Didi Hirsch Suicide Crisis Hotline, Family Resource Centers, MOMS of Orange County, National Alliance on Mental Illness (NAMI), National Suicide Prevention Lifeline, Orange County Crisis Assessment Team, Orange County Health Care Agency (OCHCA), Orange County Mental Health Plan Access, Outreach Concern, Regional Center of Orange County, Saddleback Church, Pediatric Mental Health System of Care Taskforce, UCI Department of Psychiatry, Western Youth Services, Orange County Department of Education, Orange County Behavioral Health, Jewish Federation, Catholic Diocese, Orange County Foundation for Health Care, UniHealth Foundation, Hoag Hospital, American Academy of Pediatrics - Orange County Chapter, and With Hope.



# CHNA Implementation Plan: Prioritized Community Needs

## 1. Mental Health - continued

Implementation Strategies	Anticipated Impact of Strategy	How Impact will be Evaluated
1) Increase staffing in CHOC Emergency Department Mental Health Emergency Services team to provide 24-hour coverage and to meet the demand for screening patients in psychiatric emergencies.	Reduce wait times for individuals in emergency department with a psychiatric emergency; allow for additional opportunities for diversion home if crisis intervention services can be given at point of contact.	Track the number of patients screened; wait time in the emergency department for mental health emergencies; percent diverted home (vs admitted for inpatient treatment); return to ED within 7 days.
2) Develop young child specific programming in the Mental Health Inpatient Center; Develop specific intervention programming for young children that does not currently exist in Orange County (such as intensive outpatient services).	Timely diagnosis and intervention (50% of adults with persistent mental health issues first had symptoms before the age of 14 and it takes an average of 10 years before diagnosis).	Implementation of young child curriculum in MHIC and evaluation of symptomatology at discharge from unit; development of young child specific programming including possible intensive outpatient programming, monitor symptom reduction from first visit to discharge.
3) Embed mental health services into CHOC's primary care practices.	To identify more children who may have a diagnosable mental health condition and engage them into treatment earlier before symptoms reach crisis levels. Early diagnosis and intervention is likely to reduce incidents and avoid crisis.	Implementation of behavioral health in primary care practices; number of children served; decrease in mental health symptoms with pre/post measures.
4) Develop specific intensive services programming for children in middle school and junior high. (CHOC is seeing younger and younger suicide victims, but no intensive treatment programs for children younger than high school age in Orange County exist.)	Reduce number of admissions to inpatient psychiatric units in children ages 11 - 14 years of age; reduce rate of readmissions; increase days in school.	MHIC admission rates; readmission rates; school attendance rates.
5) Increase collaboration with school districts to provide education on mental health disorders and create partnerships to help provide services to children in need.	Development of specific curriculum for schools on skills to manage children with mental health conditions; collaboration in Wellness Centers being developed by CHOC to include mental health services.	Number of school presentations; number of mental health services provided to schools.

# CHNA Implementation Plan: Prioritized Community Needs

## 1. Autism

**Rationale:** Approximately 19% of all Orange County children, from three to twenty-two years of age, in special education have been diagnosed with autism. Orange County's rate is the highest in California, followed by Los Angeles County (17%).

Mental health, especially autism, also affects other critical needs identified in the 2019 CHNA. Approximately 50% of community members identified the need for access to autism spectrum disorder services in Orange County as "very critical."

**CHOC Children's Committed Resources:** ASPIRE (Intensive Outpatient Program), CHOC Children's Mental Health Inpatient Center, CHOC Children's Research Institute, CHOC Children's Thompson Autism Center, CHOC Health Alliance, and CHOC Children's Specialists Services.

**Community Partners:** "Speak Up We Care" in Irvine Unified School District, Autism Speaks, Be Well OC, CalOptima Behavioral Health, Care Solace, Center for Autism, Child Guidance Center, Crisis Assessment Team (CAT), Crisis Text Line ("Home" to 741741), Didi Hirsch Suicide Crisis Hotline, Family Resource Centers, KIDA, MOMS of Orange County, National Alliance on Mental Illness (NAMI), National Suicide Prevention Lifeline, Orange County Crisis Assessment Team, Orange County Health Care Agency (OCHCA), Orange County Mental Health Plan Access, Outreach Concern, Regional Center of Orange County, Saddleback Church, Saddleback College Student Health Center, System of Care Taskforce for Mental Health, UCI Department of Psychiatry, and Western Youth.



# CHNA Implementation Plan: Prioritized Community Needs

## 1. Autism - continued

Implementation Strategies	Anticipated Impact of Strategy	How Impact will be Evaluated
<p>1) Launch the Thompson Autism Center to improve on timing of diagnosis. The Autism Center, once fully operational, will have approximately 30 clinical and non-clinical FTEs. CHOC has budgeted approximately \$3.3 million for capital expenditure. CHOC has also secured grants to support the Thompson Autism Center. The Commission for Family and Children has provided \$2.1 million in grant support and the Thompson Family has provided \$6.5 million in grant support.</p>	<p>Provide access and early intervention to improve the development of basic cognitive, relational and communications skills. Most children are not diagnosed with autism spectrum disorders (ASD) until their fourth birthday. The Thompson Autism Center will assess, treat, develop care plans, and provide follow-up services for undiagnosed children ages 1 – 6.</p>	<p>Thompson Autism Center fully launched and operational; care plans developed; Access expanded to children 1-6; work with primary pediatricians to empower and enable them to diagnose appropriate cases of ASD while providing specialty referral center for more challenging diagnostic cases.</p>
<p>2) Assist families in navigating age and condition specific autism spectrum disorders through greater access to resources and treatment plans.</p>	<p>Some children with ASD communicate with negative behaviors such as aggression and self-injury, resulting in physical, emotional and social impacts on them, their parents and siblings. The Thompson Autism Center will partner with families to provide a multi-tiered intervention program that is age and condition specific.</p>	<p>Thompson Center fully launched and operational. CHOC to partner with ABA providers to provide consultative services designed to troubleshoot problem behaviors; care plans developed and implemented.</p>
<p>3) Collaborate with institutions and healthcare professionals who share in CHOC's vision to dramatically improve the lives of children with autism, and other neurodevelopmental disorders, and their families in Orange County.</p>	<p>Greater access to ASD resources for both patients and families, through collaborative measures, offers a team-based approach to assist children with complex and variable ASD needs. This approach allows children with ASDs to combine care of co-occurring conditions under one roof with multidisciplinary teams that can facilitate treatment for families, children, and providers. It is important to employ the knowledge and perspective of the family, since they offer a valuable and unique view. Just as the symptoms of autism vary across children, so will the knowledge bases and coping skills of parents and siblings. Parents can contribute information and a history of successful (and unsuccessful) strategies, and may also benefit from information on strategies and successes at school that can help to extend learning into the home setting. A positive and collaborative relationship with the family and local partners is beneficial to everyone.</p>	<p>Thompson Autism Center multidisciplinary co-occurring care clinic fully launched and operational; care plans developed and implemented; partnerships formed; a parent advisory council in effect.</p>

# CHNA Implementation Plan: Prioritized Community Needs

## 2. Access to Pediatric Specialists

**Rationale:** Both community members and leaders identified access to pediatric specialists (i.e. pediatric diabetes specialist, pediatric mental health specialist) as a very critical need. Particularly, community leaders found that access to pediatric specialists is a barrier to addressing other critical needs (such as diabetes, mental health, and substance abuse) because of a lack of provider specialists, provider scheduling difficulties, high cost, lack of insurance coverage, and lack of collaboration and data sharing.

**CHOC Children's Committed Resources:** CHOC Health Alliance, CHOC Patient Care Coordinators and Social Workers, CHOC Children's Specialists, and CHOC Breathmobile Program (Asthma Outreach)

**Community Partners:** 2-1-1 OC, AltaMed, Black Infant Health Program, Boys & Girls Club, CalOptima, Central City Community Health Center (FQHCs), Family Assistance Ministries, Family Resource Center, Orange County Health Care Agency, Orange County Health Improvement Partnership, Orange County Links, Planned Parenthood, Kidworks, San Juan Unified School District, Anaheim Union School District, Santa Ana Unified School District, Camino Health Center, Anaheim Elementary School District, Capistrano Unified School District, Garden Grove Unified School District, Lestonnac Free Clinic, Magnolia School District, Newport-Mesa Unified School District, City of Fullerton - Parks & Recreation, Share Our Selves Corporation, and The Gary Center



# CHNA Implementation Plan: Prioritized Community Needs

## 2. Access to Pediatric Specialists - continued

Implementation Strategies	Anticipated Impact of Strategy	How Impact will be Evaluated
<p>1) Expand access to the Asthma Outreach Program. The program provides education, diagnosis and treatment, via the Breathmobile and through the Lunch and Learn programs, to school personnel and children suffering from asthma. The Breathmobile program has agreements with various locations throughout the county to provide access to care.</p>	<p>Anticipated outcomes include reduced ED/hospitalization rates, fewer missed school and work days, and reaching and maintaining asthma control.</p>	<p>Reduced ED hospitalization rates per 1,000 pediatric population will be monitored. CHOC will also work with school districts, where a relationship is in place, to track on missed school days.</p>
<p>2) Actively recruiting to fulfill the need for subspecialty providers across all service lines with an emphasis on recruiting Psychiatry, Neurology, Ophthalmology, and Oncology. Also recruiting for Autism specialists to support the opening of the Thompson Autism Center. In total, CHOC intends to add a further 28.5 FTE specialty physicians in FY 2021. This equates to an additional 100,000 patient visits over the course of a year across all specialty types.</p>	<p>These strategies will lead to improved access, more efficient care and ultimately, better patient and family engagement. This will lead to better clinical outcomes.</p>	<p>This will be evaluated through patient experience scores (CGCAHPS) and access measures such as third next available appointment and average time to an appointment.</p>

# CHNA Implementation Plan: Prioritized Community Needs

## 3. Immunizations (Vaccines) and Infectious Diseases

**Rationale:** National trends indicate increasing incidence of infectious diseases that were once deemed zero-to-very low prevalence. This is associated with low-rates of immunizations, which is a sign of poor community health. Community stakeholders noted that vaccination misinformation is partly to blame, leading to an increased need for community education and provider involvement. Even though Orange County immunization rates for kindergartners is at 92.5%, the highest level in 10 years, there are disparities within communities in Orange County. According to surveys and assessments, the schools with the lowest immunization rates include: EPIC Charter (28%), Journey School (53%), Capistrano Connections Academy (53%), Capo Beach Christian School (57%), Waldorf School of Orange County (58%), Prospect Elementary (64%), and Anneliese Schools (64%). In addition to misinformation and the need for provider involvement, barriers to addressing the need for immunizations include: lack of partnership and collaboration with agencies and other community resources, lack of access to medical care, and high costs.

**CHOC Children's Committed Resources:** CHOC Children's Primary Care Network, CHOC Health Alliance, CHOC Children's Specialists, CHOC Population Health Division (Quality Improvement Advisors), and Community Education Department.

**Community Partners:** Central City Community Health Center (FQHCs), Immunization Assistance Program: OC Health Care Agency, Family Resource Centers, O.C. Immunization Registry (CAIR), and Center for the Study of Social Policy.



# CHNA Implementation Plan: Prioritized Community Needs

## 3. Immunizations (Vaccines) and Infectious Diseases - continued

Implementation Strategies	Anticipated Impact of Strategy	How Impact will be Evaluated
<p>1) Real-time clinical gap analyses are presented at the physician-specific level to identify opportunities for providing vaccines at EVERY primary care visit. Physicians use the Orange County Immunization Registry (CAIR) to assure continuity across multiple care settings. Completion of immunizations is aligned with Medi-Cal and CHOC quality metric incentives for primary care physicians. CHOC is also coordinating direct physician-to-physician discussions to ensure all barriers to completing immunizations, and determining status, are addressed. Educational materials regarding the efficacy and safety of vaccines is made available to all CHOC providers and patients. Greater effort will be made to increase availability of material to the broader public.</p>	<p>Improved overall immunization completion rates for Orange County children. Reduction in immunization-preventable diseases (measles, varicella, pertussis, influenza, rotavirus).</p>	<p>Immunization completion is measured by HEDIS metrics: completion of 10 vaccine antigens in the first 2 years of life (CIS-10) and completion of appropriate immunizations for adolescents (IMA).</p>
<p>2) Community Education has implemented Project DULCE that pairs a Family Specialist with newborns through age 6 months and their families at the Santa Ana Boys and Girls Clinic and Clinica CHOC Para Ninos. The Family Specialist ensures families are keeping and attending all visits on the periodicity schedule and compliance with visit recommendations including vaccinations on time towards CIS-10.</p>	<p>Improved overall immunization completion rates for Orange County children. Reduction in immunization-preventable diseases (measles, varicella, pertussis, influenza, rotavirus).</p>	

# CHNA Implementation Plan: Prioritized Community Needs

## 4. Substance Abuse

**Rationale:** Substance abuse (or drug addiction) is a disease that affects a person's brain and behavior and leads to an inability to control the use of legal or illegal drug or medication. In Orange County, community members and leaders have identified substance abuse as a critical health issue that needs to be addressed as it can have dire consequences on an individual, families, community, and community systems. To appropriately assess concerns of the community, substance abuse was assessed based on opioid, alcohol, and vaping utilization. With the opioid epidemic being a national issue, Orange County is seeing an increase in drug-related overdose deaths (~80% between 2000-2017) across all age groups. Orange County coastal cities are also reporting higher opioid use compared to other cities within the county. Compared to California, Orange County youth were less likely to drink and drive or ride with someone who had been drinking alcohol. However, of concern is the high percentage of 9th grade (12.2%) and 11th grade (16.9%) students who reported drinking and driving or riding with someone who had been drinking and driving. Additionally, community members and stakeholders also expressed concern for what was described as a vaping epidemic. According to the CDPH, teenagers and young adults make up nearly 50% of all breathing related hospitalizations from vaping in California. According to a California Healthy Kids survey, 27.5% of high school students, and 13.4% of middle-school students, reported having tried vaping. In Orange County, community leaders are advocating for collaboration and partnership in setting goals and tracking outcomes in order to manage this rising epidemic.

**CHOC Children's Committed Resources:** CHOC Psychology, CHOC Child and Adolescent Psychiatry, ASPIRE, CHOC Children's Mental Health Inpatient Center (MHIC), CHOC Children's Research Institute, CHOC Children's Specialists, Mental Health Emergency Services (MHES) team, Co-occurring Clinic, Project HEALTH, Outpatient Psychology Clinic, Outpatient Psychiatry Clinic, Transition Clinic, Adolescent Medicine, Case Management and Social Work Department, Department of Pediatric Psychology, Department of Child and Adolescent Psychiatry (PSF)

**Community Partners:** ACT Home Visiting Substance Use (OCHA), Betty Ford Center, CalOptima, Chapman House, Mariposa, Matrix Institute on Addictions, MOMS of Orange County, Orange County Behavioral Health, Phoenix House Santa Ana, SafeRXOC, Teen Challenge, Twin Town Treatment Center, AAP Orange County Chapter, Western Youth Services, and OC Behavioral Health.

# CHNA Implementation Plan: Prioritized Community Needs

## 4. Substance Abuse - continued

Implementation Strategies	Anticipated Impact of Strategy	How Impact will be Evaluated
1) CHOC is increasing education to provide additional treatment options to local providers, including increased outreach to local schools and communities. Over the next 3 years, CHOC is investing approximately \$3.7 million, that includes the hiring of approximately 13 FTEs, to assist in developing school-based initiatives and programs to help address, among other important initiatives, substance abuse.	Allow for more effective strategies to help youth reduce substance abuse which often co-occurs with mental health disorders (self-medication). Better health resources and education available to patients induces prevention.	Impact will be monitored through a combination of survey feedback and data collected from outside agencies, including the Orange County Community Indicator report, and the California Department of Public health, County Health Status Profile Report.
2) MHES team (Emergency Department) screens children 11 and older who present for an emergency psychiatric concern with the CRAFFT to determine level of concerning substance use and provide brief alcohol and other drug education as well as referrals for treatment if concerning levels are identified.	Allows for earlier identification of substance use in conjunction with mental health disorders for early linkage to services	Number of youth administered screening; number of positive screens; referrals to treatment centers.

# CHNA Implementation Plan: Prioritized Community Needs

## 5. Pediatric Obesity

**Rationale:** Childhood obesity is defined as a child who is well above the normal or healthy weight for his/her age and height. It is associated with many chronic diseases and other critical concerns (such as bullying, low self-esteem, and mental health). The CDC noted that more than one-third (35%) of U.S. children ages 2-19 are overweight or obese. Although the overall percentage of Orange County 5th graders (18.4%) who are obese is lower than the California average (21.3%), many school districts meet neither the state average or national objective (14.5%). 16 of 26 Orange County school districts fall short of the national objective, nine of which do not meet the California average either. The school districts with the highest percentage of obese 5th graders in Orange County include La Habra City Elementary School District (33.3%), Buena Park Elementary School District (29.6%), Anaheim City Elementary School District (29.5%), Santa Ana Unified School District (28.1%), and Magnolia Elementary School District (26.1%). Many community members and stakeholders attributed a sedentary lifestyle, often blamed on excessive screen time, as behavioral variables exacerbating the issue. Another is the lack of community space for recreational activities that encourage physical activity, and access to nutritious and healthy foods. Others have found cultural perspective and language barriers to be a challenge in addressing obesity.

**CHOC Children's Committed Resources:** CHOC Children's Network, CHOC Health Alliance, Kids Fit Club, NEW You (Nutrition, Exercise, Wellness), PODER (Prevention of Obesity and Diabetes Through Education and Resources, CHOC Population Health Division (Quality Improvement Advisors), and Community Education Department.

**Community Partners:** Boys & Girls Club of Santa Ana, CalFresh Program, Center for Healthy Living, El Camino Health Center, Orange County Health Care Agency, Regional Center of Orange County, School Districts, Weight Watchers, Team KiPOW (CHOC/UCI school-based education), First Five CA Commission, Second Harvest Food Bank, and Live Healthy Orange County.

# CHNA Implementation Plan: Prioritized Community Needs

## 5. Pediatric Obesity - continued

Implementation Strategies	Anticipated Impact of Strategy	How Impact will be Evaluated
<p>1) Children are screened for BMI at all well child visits and appropriate referrals for education, specialty care, and other services provided at CHOC. CHOC Population Health Division is part of a CA First Five Commission Coalition that has developed an 18-month curriculum to help educate frontline providers regarding screening, referral and acquisition of resources for overweight children in Orange County. Four seminars are held with subject matter experts presenting on available resources, communication skills, and collaboration with community partners. Public and private school Wellness Centers will incorporate BMI screening and fitness/nutrition interventions into their curriculum. These Wellness Centers will offer opportunities to work with CHOC dietitians and community exercise coaches to help improve children's fitness levels. Over the next 3 years, CHOC is investing approximately \$3.7 million, that includes the hiring of approximately 13 FTEs, to assist in developing school-based initiatives and programs to help address, among other important initiatives, pediatric obesity.</p>	<p>The anticipated impact is overall reduction in BMI, improved fitness scores, and reduced absenteeism in the students engaged in CHOC's programs. Additionally, CHOC expects a reduction in co-morbid conditions related to diabetes, orthopedic conditions, mental health issues, and cardiovascular conditions.</p>	<p>Children enrolled in these programs will undergo serial assessments of their BMI and fitness as well as questionnaires to assess their mental health status. This will occur in both CHOC's primary care locations and the school Wellness Centers.</p>
<p>2) Expand access to PODER (Prevention of Obesity and Diabetes through Education and Resources). PODER is an in-depth program filled with lessons, games and fun activities that teach healthy eating and behaviors. Prizes are awarded for participation, completion of homework and attendance. These classes are free for the entire family. Classes are held on various days at many locations throughout Orange County.</p>	<p>Reduction in BMI, improved fitness scores, and reduced absenteeism in the students engaged in CHOC's programs.</p>	<p>A combination of enrollment levels, in the PODER program, and improved BMI and fitness scores.</p>
<p>3) Community education is part of the Live Healthy Orange County Initiative that coordinates medical visits at the Santa Ana Boys and Girls Club Clinic. As part of the initiative, CHOC sponsors a monthly farmer's market with the 2nd Harvest Food Bank to bring fresh produce to families. Group medical visits focus on integrative health, proper nutrition, physical activity and mindfulness.</p>	<p>Increased awareness on the importance of healthy eating and education on the ramifications of poor fitness levels and/or high BMI.</p>	<p>Results from the initiative are published annually by Live Healthy Orange County.</p>

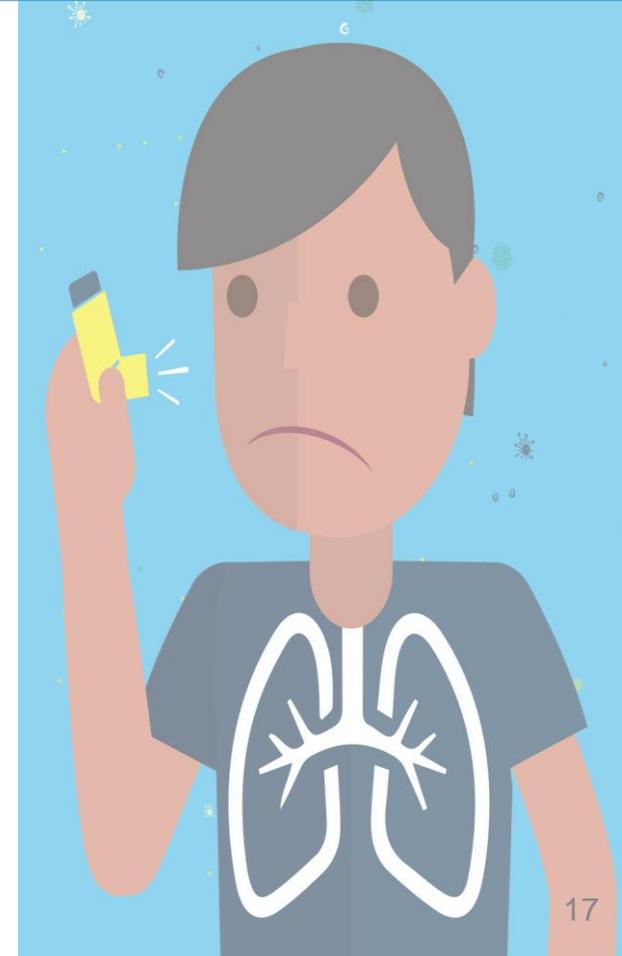
# CHNA Implementation Plan: Prioritized Community Needs

## 6. Respiratory Illness

**Rationale:** Respiratory illness is a critical concern in Orange County. The mortality rate for chronic lower respiratory disease in Orange County is 26.8 deaths per 100,000 people. Orange County has experienced an increase of asthma and allergies over the past three decades which has been a major cause for ED visits, hospitalizations, and school absenteeism. Nearly 14% of Orange County's pediatric population have been diagnosed with asthma, which is a growing trend. According to OSHPD, bronchitis and asthma related diagnoses consistently rank as the number one reason patients 0-17 years old are admitted through the ED in Orange County. Community members and leaders are particularly concerned about asthma as it disproportionately affects low-income and minority children. Barriers to addressing respiratory illnesses include lack of access to pediatric subspecialists, and language and cultural perspectives to understanding and managing respiratory diseases.

**CHOC Children's Committed Resources:** CHOC Children's Breathmobile Program, CHOC Health Alliance, Population Health Division (Quality Improvement Advisors), and CHOC Children's Primary Care Network

**Community Partners:** American Lung Association, Orange County Health Care Agency, Family Resource Centers, Kidworks, San Juan Unified School District, Anaheim Union School District, Santa Ana Unified School District, Camino Health Center, Anaheim Elementary School District, Capistrano Unified School District, Garden Grove Unified School District, Lestonnac Free Clinic, Magnolia School District, Newport-Mesa Unified School District, City of Fullerton - Parks & Recreation, Share Our Selves Corporation, and The Gary Center.



# CHNA Implementation Plan: Prioritized Community Needs

## 6. Respiratory Illness - continued

Implementation Strategies	Anticipated Impact of Strategy	How Impact will be Evaluated
<p>1) Provider-specific gap analysis data regarding opportunities to administer evidence-based interventions like asthma control testing and asthma action plans. Dissemination of evidence-based, specialty approved clinical care guidelines to assure frontline providers are using state of the art approaches to care. These guidelines are accompanied by EMR-based order sets whenever possible.</p>	<p>Improved control of asthma symptoms with concurrent reductions in ED utilization, hospital admissions, and school absenteeism.</p>	<p>Data regarding asthma action plan and asthma control testing is followed on a monthly basis with direct feedback provided to the frontline providers. CHOC also will monitor ED utilization and inpatient stays to determine the benefits of interventions. A new collaboration with The Orange County Department of Education will allow CHOC to monitor school absenteeism rates moving forward.</p>
<p>2) Care will be brought to the children by continuing to deploy the Breathmobile unit to schools and communities as well as developing school-based Wellness Centers in partnership with the Orange County Department of Education. The Breathmobile was budgeted to increase access by 13% in fiscal year 2020 (in terms of number of encounters). The FTE count was increased by 1.5 FTE to accommodate for anticipated volume. Over the next 3 years, CHOC is investing approximately \$3.7 million, that includes the hiring of approximately 13 FTEs, to assist in developing school-based initiatives and programs to help address, among other important initiatives, respiratory illness.</p>	<p>Engagement of children and families, in the community, in a culturally and linguistically competent manner.</p>	<p>ED use rates per 1,000 pertaining to patients with respiratory related symptoms and diagnosis.</p>

# CHNA Implementation Plan: Prioritized Community Needs

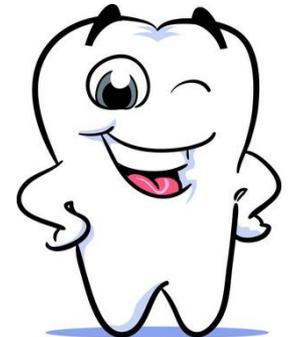
## 7. Oral Health

**Rationale:** Within Orange County, utilization of dental services by the Medi-Cal child population is low and varies significantly by age. The primary reason for non-utilization of dental services by children 0-5 years of age, as reported by parent/guardian, was “cost” (although Medi-Cal covers all dental services) followed by “not having a dentist/difficulty finding one” among 6-18-year-old. Only 3% of all active dentists in Orange County are pediatric dentists. Community members and stakeholders previously identified oral health as a critical concern in the 2016 CHNA. Community stakeholders identified dental disease as the number one most common pathology in pediatrics. Additionally, pregnant women are more prone to gum disease and cavities that can be detrimental to a baby’s health. Low-income pregnant women in Orange County constitute an underserved population that faces barriers in utilizing dental services during pregnancy and have limited access to information about oral health practices and resources. In addition to low-income status, Black and Latina women had the lowest utilization rates (39.8% and 42.4% respectively) followed by Asian women (51.6%).

Over 43% of members responding to CHOC’s survey identified pediatric dental services as a “very critical” need.

**CHOC Children's Committed Resources:** CHOC Health Alliance, and CHOC Children’s Primary Care Network.

**Community Partners:** Boys & Girls Club, Friends of Family Health Center, Healthy Kids of Orange County, Healthy Smiles for Kids (HSK), Orange County Health Care Agency, Orange County Oral Health Collaborative, Regional Center of Orange County, Share Our Selves Community Health Center, and UCI Dental Truck



# CHNA Implementation Plan: Prioritized Community Needs

## 7. Oral Health - continued

Implementation Strategies	Anticipated Impact of Strategy	How Impact will be Evaluated
1) Expand embedded teledentistry services to include more weekday and weekend hours in CHOC Children's practice locations to provide enhanced access to care while adhering to and building a medical/dental model of care in the medical home.	Enhanced access to dental preventative care services, including x-rays and temporary fillings. As a result of improved access, dental disease and complications (such as facial cellulitis, odontogenic abscesses or deep tissue neck infections) are likely to be reduced.	Rate of need for restorative care in the dental clinics. Rate of biannual dental exams in the community. Rate of hospitalization or ED visits for odontogenic related processes.
2) Increase distribution and education for topical fluoride application at primary care well-visits for all patients in the CHA network. Continue to provide screening services and more education to families and patients regarding dental health.	Improved prevention of dental cavities in the broader population of children (over and above preventative measures taken at regular dental visits).	Rate of need for restorative care in the dental clinics. Rate of biannual dental exams in the community. Rate of hospitalization or ED visits for odontogenic related processes.

# CHNA Implementation Plan: Prioritized Community Needs

## 8. Collaboration and Partnerships with School Programs

**Rationale:** Many community leaders suggested that collaboration and partnerships is a way to overcome barriers when addressing a multitude of critical issues identified in the CHNA, such as diabetes, obesity, mental health, substance abuse, bullying and other school stressors, and low immunization rates.

Nearly 56% of the community members participating in on the 2019 CHNA replied with “very critical” when asked to rate the importance of school programs in addressing health and social issues.

**CHOC Children's Committed Resources:** CHOC Breathmobile, CHOC Community Education Department, CHOC Health Alliance, CHOC Mental Health Department, and CHOC Social Services Department

**Community Partners:** Orange County Department of Education, Local Orange County School Districts, O.C. First Five Commission Kidworks, San Juan Unified School District, Anaheim Union School District, Santa Ana Unified School District, Camino Health Center, Anaheim Elementary School District, Capistrano Unified School District, Garden Grove Unified School District, Lestonnac Free Clinic, Magnolia School District, Newport-Mesa Unified School District, City of Fullerton - Parks & Recreation, Share Our Selves Corporation, The Gary Center, Orange County Head Start, and Safe Kids Orange County

# CHNA Implementation Plan: Prioritized Community Needs

## 8. Collaboration and Partnerships with School Programs - continued

Implementation Strategies	Anticipated Impact of Strategy	How Impact will be Evaluated
<p>1) Complete a Memorandum of Understanding with the Orange County Department of Education to formalize a collaboration to enhance the physical, mental, emotional, and educational health of the children in Orange County by focusing on:</p> <ul style="list-style-type: none"> <li>a) Care Coordination and access for school nurses to the CHOC electronic health record. School nurse participation in CHOC Interdisciplinary Care Team Meetings for the most complex children.</li> <li>b) Bi-directional data exchange focused on absenteeism, academic performance and grade progression, fitness and obesity, and graduation/college acceptance.</li> <li>c) Establish student Wellness Centers focused on mental and physical well-being, mindfulness, college prep, and access to mental health professionals.</li> <li>d) Focus on adverse childhood events (ACES) as a trigger to mental health challenges.</li> </ul>	<p>Orange County will demonstrate:</p> <ul style="list-style-type: none"> <li>• Improved graduation rates</li> <li>• Reduced school absenteeism</li> <li>• Improved fitnessgram scores and reduced obesity</li> <li>• Increase in the rate of 2-year and 4-year college acceptance</li> <li>• Reduction in mental health issues</li> </ul>	<p>Data from CALPADS and local OC Department of ED databases will be used to track on these data points. Additionally, multiple self-evaluation, validated questionnaires will be employed to track on wellness and responses to childhood stress.</p>
<p>2) Community education provides school-based programs including helmet safety, water safety, personal hygiene, nutrition, car seat safety. Also is lead agency in Safe Kids Orange County focused on preventing unintentional injuries and conducting walk to school day events in selected schools.</p>	<p>Reduce rates of unintentional injuries for children ages 0-12 years in Orange County.</p>	<p>OC Condition of Children's Report surveillance data.</p>
<p>3) Asthma Outreach Program provides education, diagnosis and treatment via the Breathmobile and through the Lunch and Learn program to school personnel and to children with asthma in the community setting. Breathmobile program has agreements with various locations throughout the county to provide access to care. Over the next 3 years, CHOC is investing approximately \$3.7 million, that includes the hiring of approximately 13 FTEs, to assist in developing school-based initiatives and programs to help address, among other important initiatives, asthma diagnosis and treatment.</p>	<p>Reduction in missed school days, ED utilization and inpatient stays for Asthma. Improvement in controlled medication: emergency medication ratio.</p>	<p>HEDIS metrics, program data collection.</p>

# CHNA Implementation Plan: Prioritized Community Needs

## 9. Bullying and Other Stressors in School

**Rationale:** Bullying and other stressors in school was referenced as a major concern of community members and stakeholders in Orange County. Bullying and other stressors can cause, among other issues, chronic absenteeism. The Orange County chronic absenteeism rate is 8.3%. Only three school districts reported higher chronic absenteeism rates when compared to the statewide rate (11.1%). These include the Orange County Department of Education (36.3%), Fullerton Joint Union High (11.7%), and Anaheim Union High School District (11.4%). Although Orange County's chronic absenteeism rate is lower than that of California, there are ethnic and racial disparities within Orange County that are of concern. The American Indian or Alaska Native population have a 16.5% chronic absenteeism rate, followed by the African American population (13.5%) and Pacific Islander population (14.5%). Additionally, community members and leaders identified bullying and other stressors in school as issues exacerbating already critical health issues, such as mental health, obesity, and hunger.

**CHOC Children's Committed Resources:** CHOC Health Alliance, CHOC Children's Primary Care Network, CHOC Community Education Department

**Community Partners:** "Speak Up We Care" in Irvine Unified School District, BRIDGES Program, Family Resource Centers, Orange County Sheriff's Department of California, StopBullying.Gov, First Five Orange County, and AAP Chapter 4, Orange County



# CHNA Implementation Plan: Prioritized Community Needs

## 9. Bullying and Other Stressors in School - continued

Implementation Strategies	Anticipated Impact of Strategy	How Impact will be Evaluated
<p>1) Implementation of universal ACES screening (Adverse Childhood Events) across all Orange County primary care pediatric offices. Addition of ACES screening results to the already developed Orange County Developmental Screening Registry. The registry connects to Help Me Grow staff who are well versed in available community resources to refer at-risk children and families for intervention. CHOC Quality Improvement Advisors will provide directed education to pediatric practices regarding the importance and operationalization of implementing the ACES screens. Over the next 3 years, CHOC is investing approximately \$3.7 million, that includes the hiring of approximately 13 FTEs, to assist in developing school-based initiatives and programs to help address, among other important initiatives, bullying and other stressors in school.</p>	<p>Marked increase in community pediatrician awareness of adverse childhood events and the importance of regular screening.            Early identification and referral of at-risk youth to community social and mental/behavioral health services.            Ultimate reduction in school absenteeism, improvement in grade progression, and reduction in suicide/violent events related to Orange County youth.            Reduction in medical resource waste due to unidentified mental health and trauma-related issues by reducing unnecessary ED visits and inpatient stays.</p>	<p>Review the OC Department of Education data bases to track absenteeism, grade progression, and violent acts in Orange County schools (compare and contract with statewide data (CALPADS)). Track CHOC Health Alliance data regarding ED and inpatient utilization of services attributed to mental and behavioral health.</p>
<p>2) CHOC Health Alliance, with oversight of 150,000 of the most vulnerable children in Orange County, will align its incentive program with completion of ACES screens to help practices operationalize screening completion and complete entry into the Orange County Developmental Screening Registry.</p>	<p>Reduction in medical resource waste due to unidentified mental health and trauma-related issues by reducing unnecessary ED visits and inpatient stays.</p>	<p>Track CHOC Health Alliance data regarding ED and inpatient utilization of services attributed to mental and behavioral health.</p>

# CHNA Implementation Plan: Prioritized Community Needs

## 10. Pediatric Diabetes

**Rationale:** Obesity and diabetes are major contributors to the leading causes of death including heart disease, stroke, and certain cancers. Specifically, childhood obesity and Type 2 diabetes have been closely linked and identified as a major concern of both community members and stakeholders. Challenges to addressing diabetes include a lack of access to healthy foods, lack of partnerships and collaborations with other agencies, increased social media exposure and screen time, and decreased physical activity. Cultural perspective and language are also barriers when it comes to understanding management of diabetes.

**CHOC Children's Committed Resources:** CHOC Health Alliance, and CHOC Children's Specialists

**Community Partners:** "No Kid Hungry" Program, 2-1-1 OC, CalFresh Program, Diabetes Collaborative – OC Healthier Together, Family Resource Centers, Meals on Wheels, Orange County Health Care Agency, Waste Not OC Coalition, and Weight Watchers



# CHNA Implementation Plan: Prioritized Community Needs

## 10. Pediatric Diabetes - continued

Implementation Strategies	Anticipated Impact of Strategy	How Impact will be Evaluated
<p>1) Identify all children in Orange County with "overweight" or "obesity" status, defined by Body Mass Index (BMI) over 85<sup>th</sup> and 95<sup>th</sup> percentile respectively. CHOC will then be able to focus attention on early intervention and early diagnosis of diabetes (hyperglycemia). This strategy will require assessment of children "where they are," namely at schools. Schools, through CHOC's Wellness Centers, can identify children with elevated BMI values, then refer for lifestyle intervention programs. In addition, those children with a skin finding called Acanthosis Nigricans can be referred to their pediatrician to have stepped up monitoring, including either a blood glucose test or a Hemoglobin A1C Point of Care test. Over the next 3 years, CHOC is investing approximately \$3.7 million, that includes the hiring of 6-8 FTEs, to assist in developing school-based initiatives and programs to help address, among other important initiatives, diabetes prevention and treatment.</p>	<p>Early intervention will allow for altered lifestyle habits, healthier BMI values, and prevention of progression to diabetes. Early referral to their pediatrician/family practitioner will allow for early detection of diabetes mellitus, thereby avoiding extended periods of undiagnosed hyperglycemia, and will avoid metabolic decompensation leading to hospitalization.</p>	<p>Those children identified as having obesity level BMIs will be monitored for participation in interventional programs. This includes BMI monitoring at 4-6 month intervals. The age and number of children presenting with overt diabetes, as defined by those with an A1C over 6.5% or blood glucose over 200 mg/dl, will be followed with an expectation of an early rise in number of children screened, but eventual drop in necessary interventions.</p>
<p>2) PODER (Prevention of Obesity and Diabetes through Education and Resources) is an in-depth program aimed at the whole family, filled with lessons, games and fun activities that teach healthy eating and behaviors. These classes are free for the entire family. Classes are held on various days at many locations throughout Orange County. Despite this comprehensive curriculum, the reach is limited by the number of instructors available. Efforts are underway to increase access and expand reach.</p>	<p>"Whole family intervention" to promote healthy lifestyle and food choices are much more likely to effect change than focusing solely on the child. PODER ensures that the key figures in the family have the knowledge and motivation to make better choices at the critical decision points, including when purchasing food at grocery stores and when choosing activities.</p>	<p>PODER has been able to measure weight at the onset of classes, and to track this weight over time. In addition, they administer pre and post surveys that assess knowledge and motivation. This data will be collected and analyzed, and when possible, this data will be published.</p>
<p>3) Organize and supply the growing number of primary care physicians in CHOC's population health network with specific diabetes screening guidelines (as outlined by the American Diabetes Association). In addition, CHOC can leverage its electronic medical record data that monitors BMI, then alerts the provider to an elevated value that would require screening. This will allow for increased focus and attention on the recommended steps for identifying children who are most likely to have pre-diabetes or diabetes.</p>	<p>Increased frequency of diabetes screening and increased identification of those children with elevated blood glucose values consistent with diabetes mellitus. This will allow earlier institution of medical and lifestyle interventions, thereby avoiding metabolic decompensation that could be deadly, such as Ketoacidosis and Hyperosmolar Coma.</p>	<p>We will perform frequent data analysis of glucose values entered into the charts of children with an elevated BMI. This will indicate the frequency of screening, and can be compared to historical/baseline values. In addition, we will assess the A1C measurement at time of diagnosis.</p>