CHOC Children’s Community Health Needs Assessment

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 every three years. This assessment 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 hospital’s primary service area.

Children’s Healthcare of California (CHC), the not-for-profit, tax-exempt parent corporation of Children’s Hospital of Orange County (CHOC Children’s), conducted a Community Health Needs Assessment (CHNA) as required by these state and federal laws during its Fiscal Year 2014. This process was led by a multi-disciplinary team of senior managers from CHOC.

In addition to the mandated reasons for conducting a CHNA, CHOC Children’s uses the CHNA to inform its Community Benefit Plan, which outlines how it will give back to the community in the form of health care and other services to address unmet health needs. Faced with the perfect storm of escalating costs (to deliver care), downward pressure on reimbursement, and a changing payer mix, it is important to focus on health conditions that will prove to have the greatest impact on the overall health of Orange County children.

CHOC Children’s

CHOC Children’s has two hospital campuses: CHOC Children’s Hospital (CHOC Orange) and CHOC Children’s at Mission Hospital (CHOC Mission), hereinafter collectively referred to as “CHOC Children’s” or “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 CHOC facilities are located within the same county 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 and together, calling out differences in characteristics of the population and their health status and needs whenever possible.

The Community Needs Assessment Process

In conducting the CHNA process, CHOC used a four-step process – first collecting and analyzing a myriad of population characteristics and health status data (secondary data); next, conducting focus groups and interviews of community members knowledgeable about Orange County’s children’s health and social needs (primary data); third, validating and quantifying these leaders’
thoughts with additional secondary data as needed; and finally, engaging in a process to identify the top three priorities for focus in Community Benefit Plan development.

The Communities Served

CHOC Children’s service area encompasses all of Orange County, California which is comprised of 158 ZIP codes, representing 33 cities or communities, spread over 798 square miles. Orange County children (ages 0-17 years) number approximately 740,000, or 23.8% of the total population. Thirty-eight percent (38%) of households in the county have at least one person who is under the age of 18 years. Over the next five years, the pediatric population (0-17 years) of Orange County is projected to grow 1.2%.

The primary service area for CHOC Orange is the central-northern portion of Orange County (shaded in blue), while the primary service area of CHOC Mission is the southern half of Orange County (shaded in orange) as shown in the map below. Eighty-one percent (81%) of Orange County children reside in the CHOC Orange primary service area.
Findings

Secondary data were collected from a variety of local, county and state sources representing community demographics, social and economic factors, health access and utilization. When possible, CHOC Children’s service area analyses were conducted at the most local level by using ZIP codes. When applicable, these data sets were presented in the context of California and compared to the Healthy People 2020 goals.

The initial secondary data reviewed identified several characteristics of note:

- **Orange County’s population is diverse**, with 43% of the population being Caucasian, 34% being Hispanic, almost 13% being Asian/Pacific Islander, 6.3% being Black, the remaining 3.7% other.

- The percentage of those who are Hispanic varies by area within the county, with Santa Ana (in north Orange County) having 85% of children being Hispanic. This diversity translates to nearly 45% of households in the county where a language other than English is the primary language spoken at home.

- **Orange County’s unemployment rate has improved significantly** between 2010 and 2013, now being among the lowest in the state of California. The median household income in the county is $56,867, and households with children less than 18 years old have a median income of just over $85,000. Households in the CHOC Orange service area have a lower median income than those in CHOC Mission’s service area.

- The 2013 Federal Poverty level for a family of four was $23,550. In the CHOC service area, 14.6% of children under age 18 years live in poverty, compared to 23% of California’s children. This indicator varies across the county, with 26.9% of children in Santa Ana living in poverty compared to 4.8% of children in Mission Viejo (in CHOC Mission’s service area).
Health insurance coverage is a key component of health care access. More than 93% of Orange County residents under 18 have some form of health insurance – 52.7% of which is employment-based, 35.1% is government-funded and 7% is privately purchased. The percentage of children with insurance varies by community of residence, from a low of 67.5% in Santa Ana to a high of 91.7% in Mission Viejo.

Dietary habits and exercise are among the most significant behaviors affecting health. Nearly 20% of children in Orange County consume fast food three to four times per week, 17.1% consume two or more sodas or sweetened drinks per day and less than 39% consume five fruits and vegetables per day. These behaviors, combined with the fact that 35% of children do not engage in any vigorous physical activity at least three days per week, contribute to 33.3% of Orange County children being overweight or obese, as measured by Body Mass Index (BMI). This county-wide figure compares favorably to a statewide rate of 44.4%. The rate of childhood obesity, however, varies across the county, from a low of 14.3% in Laguna Beach (South County) to a high of 46.5% in Santa Ana (North County).

A variety of other health status factors for children and adolescents were examined, including the incidence of pre-term deliveries/low birth-weight babies, infant mortality, teen pregnancy rates, sexually transmitted disease incidence in the teen population, immunization rates, use of special education services, and the incidence rates of common childhood diseases such as asthma. In each case, Orange County’s performance on these indicators was either better than the state or Healthy People 2020 goals, or improvements have been made since the previous CHOC CHNA was conducted in FY 2011. Detailed information about these factors is available by request from the CHOC Strategy and Business Development Department.

In general, access to health care services for children is better in Orange County than in the state and the country as a whole. As shown on the graph on the following page, 91% of children use a doctor’s office or community clinic as their primary source of care, less than 1% use the emergency room, and just over 7% have no routine source for care. This compares favorably to the state of California across all sources, and with the United States in all categories other than “No Usual Source of Care”. Only 2.7% report delayed/no medical care, and 4.9% report a delay or not receiving prescription medicine.
• Access to dental care is inadequate in Orange County, particularly for those in lower-income families. The Patient Protection and Affordable Care Act requires that all health plans sold through the Exchanges include pediatric dental benefits. However, there is a shortage of pediatric dental providers. The Orange County Denti-Cal roster listed only 13 pediatric dentists, and only four practices will see children ages 0-5 years for sedation.

Following collection of the initial set of data, focus group sessions and interviews were used to gather opinions and impressions from people who represent the broad interests of the community. CHOC engaged Truven Health Analytics, a firm with nation-wide experience in facilitating focus groups and conducting interviews for hospital organizations’ Community Needs Assessment processes. These focus groups and phone interviews occurred in October 2013. A total of 30 individuals participated, including leaders and representatives serving at-risk and medically underserved populations and organizations made up of, or working on behalf of, consumers. (A complete list of those who participated in this phase of the process is available by request from the CHOC Strategy and Business Development Department.)

A summary of the key concerns identified through this process include:

**Child Health Status Concerns**

• Respondents believed that mental and behavioral health services are lacking for children and adolescents.
• Focus group participants identified several lifestyle-related issues as concerns: overweight and obesity, alcohol and drug abuse, and teen sexual health.
• They were concerned about developmental delays in young children and the high
rate of autism in Orange County children.

- Participants were concerned about oral and dental health for those on assistance programs, and a lack of dentists who take Denti-Cal due to a recent drop in reimbursement rates.

**Child Health System Concerns**

- Interviewees described pediatric health care as fragmented, with a need for childhood chronic disease management (diabetes and asthma). They said there is poor coordination and communication between primary care, specialists and parents, which is contributing to the duplication of services and conflicting information for parents.
- They indicated that the transition from pediatric care to adult care is challenging for those with chronic conditions. Pediatric medicine provides additional levels of support that are lacking in adult medicine.
- There is a need for culturally competent care: Language barriers prevent parents from asking questions to better understand the care needed for their child, which, in turn, leads to low compliance.
- The majority of services are centralized in the city of Orange, making it difficult for families to coordinate multiple appointments, especially those who rely on public transportation.
- Better coordination of resources is needed to ensure that children who are diagnosed with health conditions have access to follow-up appointments and services.
- The lack of mental and behavioral health services for children and adolescents in Orange County was a consistent theme in the focus groups held at CHOC.

**Unique Needs of South Orange County**

- Respondents expressed concern about their perception that the region has higher rates of asthma and autism.
- Respondents were concerned about a higher prevalence of substance abuse, bullying and the teen suicide rate.
- They also believe there are fewer doctors in South County (than in North County) that accept Medi-Cal.
- Respondents reported that due to public transit issues in the southern part of the county, it is difficult for families to travel to Orange for specialized care.

Additional data were gathered to quantify concerns identified by the focus group and interview participants. This data revealed the following:

- In the most recent *California Healthy Kids Survey*, while the “Past 30-day Use Rate” of alcohol declined in Orange County between 2005/2006 and 2011/2013, the use of marijuana increased. In addition, since 2008, there has been an increase in the proportion of adolescents admitted to county-funded treatment programs that report heroin and other opioids as their primary drug of choice. More than 9% of Orange County teens have tried illegal drugs and 13% of teens admit to engaging in binge drinking (higher than the state of California rate of 5%). Between 2007 and 2011, there were 113 deaths of people ages 15-26 due to prescription drug overdoses.
- The Children and Families Commission of Orange County reports that among children receiving special education services through the county’s public schools, there was an
eight-fold increase in the number of children diagnosed with autism-spectrum disorders between 2000 and 2013. Some of the increase is attributed to changes in the Diagnostic and Statistical Manual of Mental Disorders (DSM), but the Centers for Disease Control and Prevention reported in March 2013 that earlier and better diagnostic tools are also driving the increase.

- According to the California Healthcare Foundation, among all California children ages 0 to 17, more than 8% are considered seriously emotionally disturbed. In Orange County, this translates to more than 55,000 children and adolescents that require support and intervention for mental health conditions prior to reaching adulthood. Currently, there are no inpatient mental health services in Orange County for children under the age of 12 years. It is estimated that 50% of people with lifetime mental illness have symptoms by the age of 14. Patients with behavioral health conditions are increasingly impacting the health care system. Data replicated in several studies of general pediatricians’ offices shows that over a third of visits to pediatrician’s office are for purely psychological issues, 12% are for purely physical issues, and 52% involve a combination of physical and psychological issues. In total, over 88% of visits involve a psychological component. While Orange County teen suicide rates from 2009/2011 were 6.3 per 100,000, down slightly from 6.7 in 2008/2010, the number of clients served by Orange County’s Children and Youth Services has risen 18.8% from 2007/2008 to 2011/2012.

**Prioritization Process**

Once all of the primary and secondary data were aggregated, CHOC leadership engaged in a prioritization process using the Hanlon Method as a guide to assign a score of one to ten for a set of criteria for each of seven health conditions. Based on the priority scores, all conditions were then ranked from highest to lowest. The top three health conditions were determined to be:

- **Mental Health** – a large number of children in Orange County require support and treatment for mental health concerns. There is a dramatic paucity of services available and there is a lifelong impact of the lack of treatment on affected individuals, their families and the community. Consequences of untreated mental illness can range from an increased risk of violence to substance abuse or suicide.

- **Obesity** – approximately 39% of children in Orange County have an unhealthy body composition and more than 25% are far outside the healthy range. Overweight and obese children and teens suffer from increased rates of depression and anxiety. Excess weight acquired during childhood and adolescence may persist into adulthood and increase the risk for chronic diseases such as sleep apnea, musculoskeletal problems, diabetes, cardiovascular disease and hypertension. Obese adolescents have a 70% chance of becoming obese adults.

- **Developmental Disabilities, specifically Autism** – the number of children diagnosed with developmental disabilities increased by 20.1% between 2003 and 2012. The number diagnosed with autism in Orange County increased by 242% between 2004 and 2013. Approximately six of every 1,000 children born are diagnosed with an autism spectrum disorder (ASD). ASD is a lifelong, developmental disability defined by diagnostic criteria and include deficits in social communication and social interaction; and restricted, repetitive forms of behavior, interests and activities. Functional limitations such as speech and language impairment, hearing or visual impairment, intellectual disabilities and emotional disturbances vary and often develop over time.
Transportation, culture and language, and access to care were identified as barriers that impact all three conditions.

Recommendations

It is recommended that these three conditions and the associated barriers receive priority focus as CHOC develops its Community Benefit Plan for the future.

Addressing These High Priority Community Health Needs

In 2013, CHOC developed its new seven-year strategic plan - CHOC 2020. This long-range plan has five goals, one of which is "Create CHOC's Pediatric System of Care". For CHOC, the Pediatric System of Care includes assuring access to the full continuum of healthcare services addressing both the physical and behavioral health of children we serve; creating and implementing processes for the seamless transitioning of patients from one care provider to the next; and, actively engaging patients and families in taking responsibility for their healthcare.

The health system concerns noted above and the three high priority needs are recognized in CHOC 2020 as critical elements of the CHOC Pediatric System of Care. Specific initiatives for the high priority needs are as follows:

Mental Health: CHOC is working to address the lack of mental health services in Orange County in three key areas – crisis care for children and adolescents in the emergency room, outpatient psychology services for children seen in CHOC’s primary care outpatient clinics, and behavioral and mental health support for children with chronic and complex health conditions served in CHOC’s specialty care clinics.

• CHOC participated in a focused study with St. Joseph Hoag Health to identify specific issues in behavioral health in the community across the full spectrum of age cohorts; applied for and was awarded a $500,000 mental health services planning grant for two years; and with the assistance of the Hospital Association of Southern California (HASC) successfully sought out and was awarded funds to support two FTE’s of ED triage personnel for the CHOC Orange emergency department.

• CHOC's advocacy efforts (along with others in the community) resulted in the Orange County Board of Supervisors approving $1.5 million ($500,000 annually for three years) in the Mental Health Services Act (MHSA), providing mental health services for children with co-occurring conditions (mental health services plus other illnesses or disabilities) as part of the County's FY 2015-17 MHSA plan. It is intended that CHOC will be the provider of these services for children and youth in its specialty clinics.

• CHOC is also working with leaders of the Orange County faith community to identify funding sources to support expansion of mental health services for children and adolescents, as well as reaching out to other potential community partners to explore opportunities for collaboration and synergy.

Obesity: CHOC has convened a multi-disciplinary coalition of community members to work on the issue of obesity. This task force includes representatives from the health care community (physicians, dieticians, and psychologists), the University of California – Irvine, Orange County Social Services and the school districts throughout the community. Efforts to date include offering
classes and educational materials, starting a Kids Fit Club, and offering a symposium for the community in June 2014. In addition, the coalition will be engaging in targeted fund raising and seeking grant funding to expand services both in the health care and educational setting.

**Developmental Disabilities, specifically Autism:** Recognizing the pervasiveness of autism in the Orange County pediatric population, CHOC has actively supported For OC Kids, an organization that diagnosed and treated children up to 6 years of age. More recently, CHOC has engaged in a partnership with the Children and Families Commission of Orange County, the University of California – Irvine, Chapman University and the Thompson Center for Autism (Columbia, MO) to establish the Center for Autism and Neurodevelopment Disorders in Santa Ana. CHOC is providing financial support for an additional neuro-developmental pediatrician, psychology and physical therapy services in order to expand access to the services for a greater number of Orange County children including those over eight years old.