OVERVIEW AND PURPOSE

Children’s Hospital Colorado is a private, not-for-profit pediatric health care network that has been serving the children of Colorado for more than 100 years. Launched in 1908, the organization has, from the start, been committed to providing outstanding pediatric care. Today, the network consists of 16 hospital, urgent care and specialty facilities. The main hospital facility, located in Aurora, provides comprehensive pediatric care to patients in metro Denver and is the only Level 1 Pediatric Trauma Center in a 7-state region. The Children’s Colorado South Campus facility, located in Douglas County, also provides comprehensive care including emergency, inpatient and diagnostic care. The Children’s Hospital at Parker Adventist, also located in Douglas County, offers pediatric medicine, emergency services and inpatient care inside Parker Adventist Hospital, which is operated by Centura Health. “This community health needs assessment is a join assessment for the Main Campus, South Campus and Parker Adventist locations of Children’s Hospital Colorado.

The purpose of the community health needs assessment (CHNA) is to better understand the current state of children’s health in Colorado as well the interests and concerns of Colorado parents. Through an examination of both demographic data and community input, we can better understand how to fulfill the hospital’s mission of improving the health of children. The CHNA will help us focus our efforts on the most urgent challenges facing children in our community. This report will be followed by a detailed implementation plan that will provide in-depth information about the specific activities that Children’s Hospital Colorado will engage in over the next three years to address the priority needs that have been identified. Please note that the full 2015 Community Health Needs Assessment can be found at childrenscolorado.org/events-community/community/community-health-needs.

7-STATE REGION
COMMUNITY

For the purposes of this report, “community” is defined as the eight-county region surrounding the Main Campus, South Campus and Parker Adventist location of Children’s Hospital. 84% of patients at the Main Campus, 93% of patients at the South Campus and 92% of patients at the Parker Adventist location reside in these counties. Particular attention is also paid to the neighborhoods immediately surrounding these facilities. While the needs of children statewide are considered, the focus is on those counties and neighborhoods where the hospital has the greatest influence.

Description of the Community Served

About 25 percent of the population in Colorado is under the age of 18. In the counties we considered, the percentage of the population under 18 ranges from 22 percent to 31 percent.¹

While Colorado, as a state, has a population that is just over 40 percent minority, the racial and ethnic composition of the counties in our community varies widely. Arapahoe County, where the main hospital campus is located, and Adams and Denver Counties, which are the nearest other counties, have higher minority populations than the state. In all counties, Hispanics and Latinos are the largest minority population by a wide margin.²

Nearly one out of five children in Colorado is living in poverty. In the County of Denver, close to one third of all children are living in poverty. The median household income in the state is $57,892³ which compares favorably to the national median income of $53,046. However, as with the race and ethnic distribution of the population, poverty rates and median incomes vary significantly by county.
While it is difficult to use any single measure to determine the health status of children in a given community, Colorado parents in general feel positive about the health of their children, with fewer than three percent of parents reporting that their children’s health is either “fair” or “poor.” The ratings that parents give to their children’s health are also fairly consistent across counties with the interesting exception of Adams County, where ratings are slightly lower. It is noteworthy that there are disparities among different racial and ethnic groups in the ratings they give to their children’s health, with Hispanic families being far less likely to believe that their children’s health is “excellent.” Similarly, there is a notable difference between the health ratings that low-income parents, in contrast to higher income parents, give to their children’s health. Parents from the lowest-income group are least likely to rate their children’s health status as excellent.

On a positive note, Colorado children are increasingly getting access to health insurance. However, the rates of coverage vary significantly across counties. Using a five-year average from 2009-2013, the rate of uninsured children under the age of 18 ranged from four percent to 13 percent in the counties considered. Newly released data for 2014 indicates that the state-level uninsured rate for children has dropped to 5.6 percent, down significantly from 9 percent the previous year. A substantial number of children are receiving coverage from public sources, including Medicaid and CHP+ and, again, rates of enrollment in public programs vary significantly across counties. As expected, higher income counties have lower rates of enrollment in public insurance programs.

However, increased health insurance coverage does not necessarily mean that children are finding medical homes or getting the medical care they need. While only about two percent of parents report that their child has no place to go when the child is sick, five percent did not get needed medical care due to cost, and 10 percent did not get needed dental care due to cost. Again, rates vary by county with lower income counties having higher rates of children unable to access care due to cost.

Additionally, only 64 percent of children statewide have health care that meets the criteria of a “medical home,” and the rate varies greatly both by county and by income and race, with minority and low-income children being far less likely to have a medical home than their peers.
METHODOLOGY

To prepare this report, Children’s Hospital Colorado engaged in a comprehensive process of gathering data and input from nonprofit organizations, government agencies, public health departments, the business community, and individual parents and community members. Our data gathering included 40 key informant interviews, 9 focus groups and an online survey that was completed by 346 parents.

The 40 key informant interviews were conducted by phone and lasted approximately 30 minutes. Respondents were asked to identify the top three health-related issues or concerns for children in their community. Responses were open-ended and interviewers provided no prompts.

Focus groups were held in partnership with local nonprofit organizations. Emphasis was placed on working with groups that serve low-income and at-risk parents. Focus groups sessions lasted one hour and were facilitated by a hospital representative. Participants were asked a series of questions similar to those used for key informant interviews and were encouraged to speak to one another and to build on each other’s thoughts and ideas.

Recognizing that the number of individuals who could be reached through interviews and focus groups was inherently limited, the hospital also sought to reach a significantly greater number of community members through an online survey. The survey was distributed by partner organizations that had participated in interview and focus groups, through the hospital’s social media outlets, and through the organic process of individuals forwarding the survey to colleagues, friends and family. The survey was available in both English and Spanish and had a total of 346 respondents.

In addition to gathering qualitative data through interviews and focus groups, the authors also studied a variety of quantitative data sources. Through a partnership with the Colorado Children’s Campaign, we collected state and county level data on a number of child health indicators as well as basic demographic information. We also reviewed internal data to better understand the needs of our patient population.

An internal leadership committee established criteria that could be used to analyze all of the data collected and to select the issues that the hospital will focus on for the coming years. Those criteria include:

- **Scale**: How many children are impacted by the issue?
- **Impact**: How significantly does the issue impact the lives of those touched by it?
- **Community Importance**: How important is this issue to the community members who have been part of the assessment?
- **Sustainability**: Are resources available (either currently or in the future) to support work on this issue over the long term?

Once these criteria were established, the final step in the process was to present the research findings to key stakeholders and ask them to provide input on the issues that the hospital will prioritize. Two different prioritization meetings were held, one with representatives from nonprofit, government and public health agencies and one with internal leadership. Lastly, hospital leadership reviewed all available data and selected the final three priority issues identified in this report.
PRIORITIZATION PROCESS

Finally, we presented the research findings first to a group of community stakeholders and then to an internal leadership team and asked them how they would prioritize the issues that were identified through interviews, focus groups, surveys and data analysis.

CHNA DATA

<table>
<thead>
<tr>
<th>Focus Groups</th>
<th>Interviews</th>
<th>Parent Survey</th>
<th>Quantitative Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>92 Parent Participants</td>
<td>42 Key Informants</td>
<td>346 Parent Respondents</td>
<td>13 Comprehensive Data Reports</td>
</tr>
</tbody>
</table>

The outcomes of those discussions were as follows:

Community ranking of priorities (from highest to lowest)
- Mental/Behavioral Health/Toxic Stress
- Oral Health
- Early Intervention
- Obesity/Nutrition
- Parent Education
- Health Literacy
- Access/Wait times for appointments
- Care Coordination
- Disparities
- Physical Activity

Internal leadership ranking of priorities (from highest to lowest)
- Mental/Behavioral Health/Toxic Stress
- Disparities
- Medical Home
- Parent Education
- Obesity/Nutrition
- Oral Health
- Accidental Injury
- Physical Activity
- Early Intervention
- Infant Care

There was clear consensus between both groups that mental health, obesity/nutrition and oral health are high priorities. Also, further discussion with hospital leadership led to the conclusion that some items that were prioritized by the internal team are actually strategies for addressing key issues. These include medical homes and parent education. While these strategies will be considered as part of the implementation plan, for the purposes of the needs assessment, they will not be included in the list of top priorities.
COMMUNITY BENEFIT PRIORITIES

After careful consideration of all available data, and with considerable input from the community, Children’s Hospital Colorado has determined that the issues that both are of greatest importance to the community and which the hospital can most effectively address are:

- Mental health
- Nutrition, physical activity and obesity
- Oral health

In addition to these priority needs, the hospital will sustain our current work on three issues that are critical to the long-term health and wellness of children in our community:

- Injury
- Prematurity
- Respiratory illness/disease

COMMUNITY IDENTIFIED PRIORITIES

DATA DRIVEN PRIORITIES
Mental Health

The urgent need for improved mental health care was evident in our conversations with community members. Fully 23 out of the 42 stakeholders who were interviewed for this assessment chose mental health as one their top three issues or concerns. The issue was raised 28 times during our 8 focus groups and was selected as a top priority by 111 out of 374 people who responded to our online survey. Mental health also ranked highest in both our community and our internal prioritization meetings.

Public health departments have also identified mental health as a top priority. Half of the eight counties in our community selected mental health as a top issue area in their own community health needs assessments. These include Tri-County Health, which represents Adams, Arapahoe and Douglas Counties, and Boulder County.

Nearly one fourth of all parents statewide report challenges with their children’s emotional and behavioral health, and, in some counties, it is closer to one third of all parents. Of note, mental health concerns are almost nearly as high for children between the ages of one and four as they are for children between four and 14.12 Significantly, 24 percent of parents statewide who reported that their child needed mental health care or counseling during the past 12 months did not receive all needed care.13

Looking specifically at the mental health needs of teens, the data is even more discouraging. Nearly one in four students statewide reported symptoms of depression in 2013 (the last year for which data is available) and nearly one in six seriously considered attempting suicide. These rates are fairly consistent across the state, but are slightly higher in lower-income counties.14

Children’s Hospital Colorado has existing resources and capacity to address the issue of childhood mental health. Our psychology and psychiatry department offers outpatient, day treatment and inpatient care for children and adolescents ages three to 17. The hospital has also been a leader in integrating mental and behavioral health services with primary care. The hospital is also aware of many state and local organizations doing innovative work in the field of childhood mental health. We look forward to working with these and other key organizations as we develop our implementation plan for better addressing the mental health needs of children in the community.

<table>
<thead>
<tr>
<th>Mental Health</th>
<th>National</th>
<th>Colorado</th>
</tr>
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<tbody>
<tr>
<td>Children ages 0-14 needed care in the last year</td>
<td>8%</td>
<td>13%</td>
</tr>
<tr>
<td>Teens felt sad or hopeless at least two weeks in last year</td>
<td>28%</td>
<td>24%</td>
</tr>
<tr>
<td>Teens lost their lives due to suicide</td>
<td>4600</td>
<td>60</td>
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</table>
**Nutrition, physical activity and obesity**

While Colorado has long enjoyed one of the lowest childhood obesity rates in the nation, we are unfortunately losing ground in the battle against the epidemic, with 28 percent of children in the state, and 34 percent of children in Denver, now overweight or obese.\(^5\) While nutrition and physical activity are distinct issues, they are closely related to obesity and we have chosen to group them together for the purposes of this needs assessment.

Obesity has significant impacts at the both the individual and the community level. A 2005 study showed that an overweight adolescent has a 70 percent chance of becoming an overweight or obese adult, and that obese six- to eight-year-olds are approximately 10 times more likely to become obese adults than their average-weight peers.\(^\text{16}\) Overweight children are at greater risk for a range of diseases including asthma, Type 2 diabetes, high blood pressure and high cholesterol, sleep apnea, and joint problems.\(^\text{17}\) They are also more likely to miss school and have poorer academic outcomes than their normal-weight peers in every grade level.\(^\text{18}\)

Our research also revealed that community members are very concerned about this issue. The combined topics of obesity, physical activity and nutrition were selected as top priorities a total of 34 times in our 42 stakeholder interviews. These topics were mentioned 60 times in our focus groups and were selected as key concerns 251 times in our online survey. Both the internal and the community prioritization groups ranked this issue 4th on their list of concerns. Five of the county public health departments in our community, including Boulder, Broomfield, Denver, El Paso and Jefferson, have also made this one of their top priorities.

Children’s Hospital Colorado does have clinical resources in place to help address this issue. We have treated children with weight management issues for more than 20 years through our Weight Management Program and are the only regional specialty care center to treat obese pediatric patients and focus on obesity treatment for the special-needs population. We also have a number of community outreach programs designed to encourage children to develop healthy habits.
Oral Health

The third issue that we have chosen to prioritize is oral health. The data collected for this assessment indicates that poor oral health disproportionately impacts low-income children, often with distressing consequences. About 10 percent of children in Colorado do not get the dental care they need due to cost. This equates to nearly 125,000 children in our state with untreated dental conditions. While 70 percent of parents report that their children’s teeth are in “good” or “excellent” condition, about 22 percent of children statewide did not receive preventive dental care in the past year. According to a 2012 study, almost 40 percent of kindergarteners in the state have tooth decay, and 13.8 percent have untreated decay.

Oral health care was not identified as a key issue in our stakeholder interviews, but it was mentioned 26 times in our focus groups. We believe this indicates a gap in awareness among the professionals we interviewed. Focus group participants, who were predominantly low-income community members, clearly felt that lack of access to dental care was a major concern for their children. Our online survey also revealed notable difference in how this issue was prioritized among different socio-economic groups. Those respondents with the lowest income levels ($0-24,999) ranked oral health as the highest priority health issue for their children, and those in the second-lowest income level ($25,000-49,999) ranked it third. No other income levels placed oral care in their top five priorities.

The Children's Hospital Colorado Dental Center sees more than 35,000 unique patients each year. Treatments range from routine preventive care to complex treatments. We also offer a walk-in emergency clinic for severe toothaches, physical injuries and other traumas. And, unlike most other dental practices, we are devoted entirely to pediatric care.
Other Needs

While the hospital is genuinely concerned about the wide range of issues raised through this assessment, we acknowledge that some of the topics that are important to community members are not on our list of priority needs. In some cases, this is because we feel that we are not the best organization to lead efforts to address a particular issue. In other cases, we have initiatives in place, and those efforts will continue. Specifically:

- Injury prevention has been, and will continue to be, a major area of focus for the hospital. Unintentional injury is the leading cause of death nationwide for children and youth between the ages of 1 and 24. Children’s Colorado has many important initiatives in place to help prevent accidental injury including passenger safety programs, projects to encourage children to safely walk and bike to school, and public education campaigns aimed at preventing abuse.

- Prematurity prevention will also continue to be one of our top priorities. Short gestation is the second leading cause of death for children under the age of 1, just behind congenital abnormalities. Children’s Colorado is a partner in the Colorado Institute for Maternal Fetal Health and offers comprehensive care and treatment both before and after birth for high-risk pregnancies.

- Because respiratory illness is one of the leading causes of inpatient and outpatient visits for all of our facilities, we are also committed to improving respiratory care for Colorado kids. Our Breathing Institute provides cutting edge research and professional development for pulmonary care providers. In addition, we offer comprehensive clinical care, family support services, and outreach with schools and other groups that are responsible for helping children manage their respiratory conditions.
Conclusion

The findings of this community health needs assessment will have important implications for our organization for years to come. We are grateful to the more than 470 individuals who have contributed to this report through interviews, focus groups and surveys. We believe that we have heard from a representative group of community members and we take seriously all of the issues, ideas, and concerns that have surfaced through our conversations.

The next step in this process will be to develop an implementation plan that will spell out in detail the ways that we plan to address the priority needs of mental health, obesity/nutrition/physical activity, and oral health. The implementation plan will be available by May 2016 and will provide a three-year roadmap for our work. We look forward to working with our many community partners to develop effective and innovative approaches to addressing these entrenched issues.

Children’s Hospital Colorado is committed to making Colorado a healthier place for all kids. Together with our partners, we know that we can improve the mental, emotional, physical and oral health of children in our state. We recognize that the challenge before us is significant, but we look forward to the work ahead.

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