Community Health Needs Assessment 2018

A Joint assessment of Children's Hospital Colorado licensed hospital facilities located at the Anschutz Campus, South Campus and Parker Adventist Campus

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Overview and Purpose

Overview of Children's Hospital

Founded in 1908, Children's Hospital Colorado has been a leader in providing the best healthcare outcomes for children for more than 100 years. Our mission is to improve the health of children through the provision of high-quality coordinated programs of patient care, education, research and advocacy. We also work hard to keep kids out of the hospital. Through medical research and advocacy efforts, we are committed to finding ways to keep kids safe and healthy.

Children's Colorado is a not-for-profit pediatric healthcare network. We have more than 3,000 pediatric specialists and more than 5,000 full-time employees helping to carry out our mission. We provide comprehensive pediatric care at our hospital on the Anschutz Medical Campus in Aurora and at several locations throughout the region, including our South Campus and the 5 licensed inpatient beds and an emergency department at Parker Adventist Hospital. The main hospital facility, which provides a full spectrum of care, is the only Level 1 Pediatric Trauma Center in a 7-state region. The South Campus facility, located in Douglas County, also provides comprehensive care including emergency, inpatient and diagnostic care. In addition, we have multiple specialty care centers and clinics. Each year, the network has more than 15,000 inpatient admissions and more than 600,000 outpatient visits.

This community health needs assessment is a joint assessment for the Main Campus, South Campus and Parker Adventist locations of Children's Hospital Colorado.

Purpose of the Assessment

Children's Colorado welcomes the opportunity to engage with our community to better understand their interests and concerns and to design programs and partnerships that directly respond to community needs. The primary purpose of this assessment is to help better fulfill our mission of improving the health of all Colorado children.

We will use the information gathered from this assessment in two specific ways:

- The results of this analysis will inform the work of the Child Health Advocacy Institute (CHAI). CHAI is a division of Children's Colorado whose mission is to positively impact the health and safety of children by working collaboratively with the public and our community partners. CHAI develops and implements evidence-based programs aimed specifically at addressing community needs.
- This report is also foundational for our population health strategy. One of our key strategic priorities at Children's Colorado is to create healthier communities through a population health approach. We invest resources to help keep kids out of our hospital through preventative programs and partnerships. We are concerned not only about access to medical care, but also about supporting health and wellness in the home, in communities, and in schools. This report will help us align our population health activities with the needs and interests of the community.

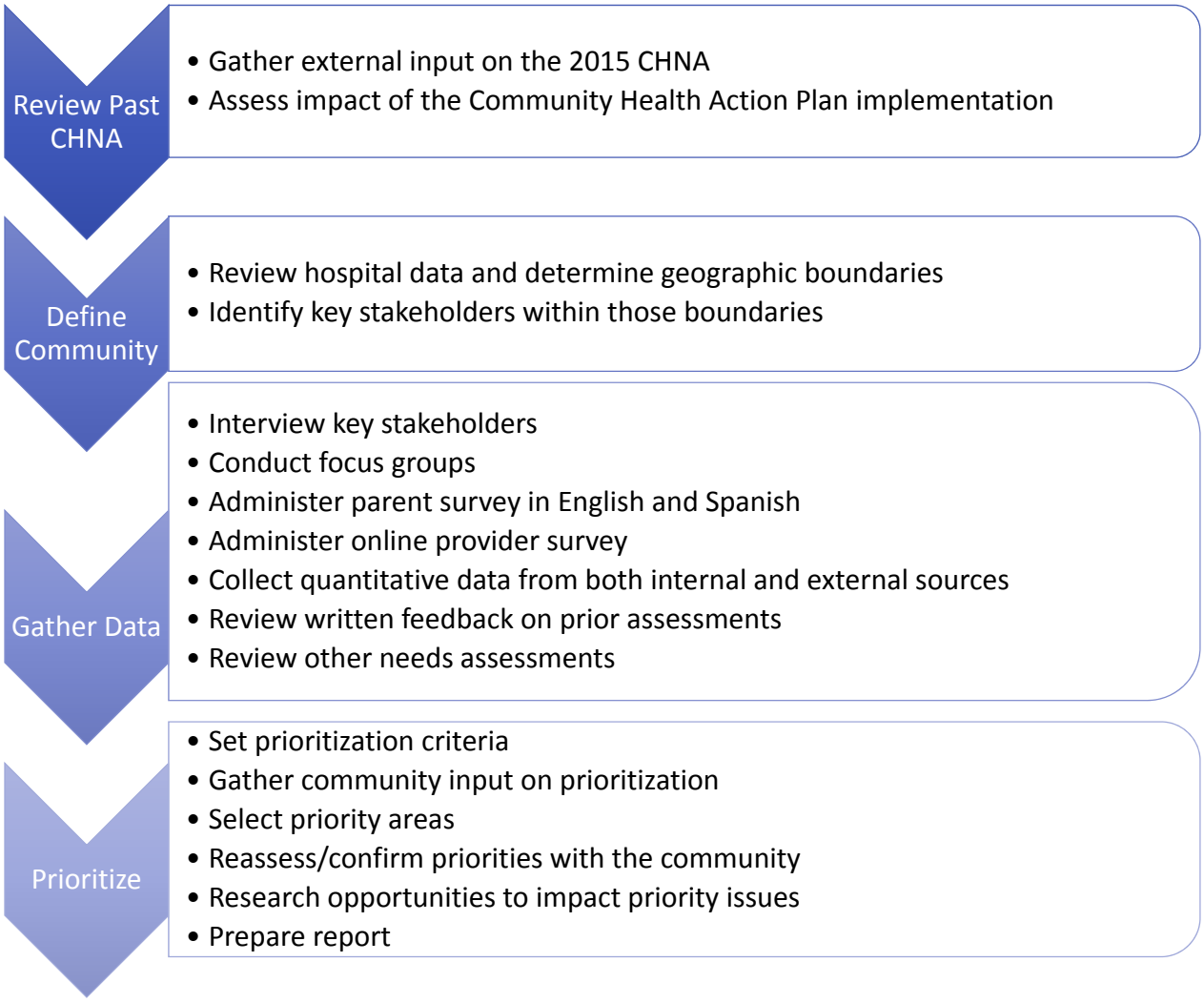
While this report is focused on identifying and quantifying community health needs, it will be followed by a plan for addressing those needs. The Community Health Action Plan will be completed no later than May, 2018 and will guide the implementation of the hospital's strategies for addressing the identified needs.

In addition, this report fulfills the requirements of the Affordable Care Act of 2010. IRS Section 501(r) requires that nonprofit community hospitals conduct a community health needs assessment every three years. This is a joint report for the Main Campus, South Campus, and a hospital unit of 5 licensed inpatient beds and an emergency department that are covered by our hospital unit license at Parker Adventist Hospital. Regulations for joint assessments are described in Treas. Reg. §§ 1.501(r)-3(b)(6)(v) and 1.501(r)-3(c)(4). The IRS allows hospital facilities to produce a joint CHNA report if the facilities use the same definitions of community and conduct a joint CHNA process. We have followed those requirements for this report. The last Children's Colorado CHNA was conducted in 2015.

Methodology

The process that Children's Colorado used to complete this needs assessment is in full compliance with IRS requirements and builds on the process we have used for prior assessments.

Process Overview



Review of Past Community Health Needs Assessment

Prior to launching our 2018 assessment, Children's Colorado solicited internal and external feedback on our previous assessment, which was conducted in 2015. We were interested in

learning about and improving upon both the process that was used previously and the conclusions that were drawn in that assessment.

A total of seven external evaluators provided detailed written feedback on the 2015 assessment. They included representatives from public health, nonprofit organizations, health advocacy organizations and health care providers. Reviewers were asked to identify key strengths and weaknesses of the previous assessments. In addition, we commissioned Melissa Biel, DPA, RN of Biel Consulting, Inc. to conduct a formal review of the 2015 assessment. Key themes that emerged from this analysis included:

- The report effectively combined qualitative and quantitative measures
- Diverse populations were included in the data gathering
- The sample size for the focus groups and surveys was adequate but should ideally be larger
- The process used for selecting priority issues was not clearly articulated

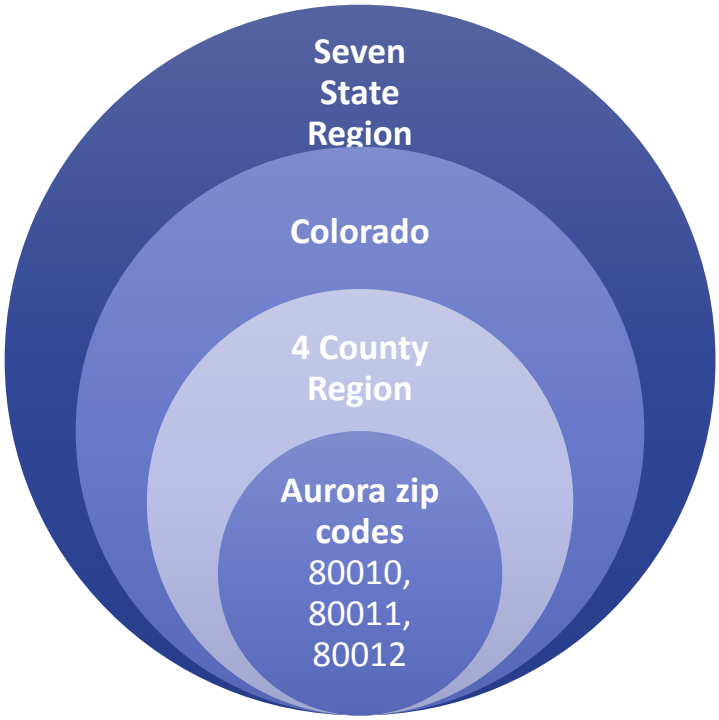
We used this feedback to help design our 2018 process and to inform the writing of this report. In addition, Children's Colorado conducted a thorough review of its Community Health Action Plan that was adopted in 2016. The action plan details the steps that the hospital planned to undertake to address the priority needs identified in the 2015 CHNA. The evaluation of the action plan identifies both successes and challenges that the hospital has had in addressing those needs. The executive summary of that review is provided in Appendix I and the full report can be found at https://www.childrenscolorado.org/globalassets/community/2016-2018-action-plan-evaluation-report.pdf.

Definition of Community

For the purposes of this assessment, Children's Colorado has defined community as all children living in the four-county area from which most of its patient population is drawn and in which we have facilities. Within these four counties, we have three licensed hospital facilities located at the Anschutz Campus, South Campus and Parker Adventist Campus and 6 Networks of Care. The four counties we have included are:

- Denver
- Douglas
- Adams
- Arapahoe

Additional emphasis is given to the neighborhood surrounding the main campus in Aurora, Colorado, where the hospital is uniquely situated to have a significant impact. While the needs of children across Colorado are considered, our data collection and outreach efforts were focused in our target counties.



Per IRS guidelines, Children's Colorado considered three criteria when selecting the geographic areas to be included in this assessment:

- The mission of the organization
- The geographic area served by the hospital facilities
- The physical location of the hospital facilities

The mission of Children's Hospital Colorado is "to improve the health of children through the provision of high-quality, coordinated programs of patient care, education, research and

advocacy." This broad commitment to all children accurately reflects the core beliefs of the hospital, but was not useful in narrowing the definition of community.

We next considered our patient population and found that a majority of both inpatient admissions and outpatient visits are from children who live in the four counties that we ultimately decided to include in our definition of community. In 2017, we had more than 15,000 inpatient admissions, more than 624,000 outpatient visits, and more than 150,000 emergency department and urgent care visits. 60% of all visits for all locations were from patients who reside in Denver, Douglas, Adams and Arapahoe counties.

	TOTAL CHCO VISITS				VISITS FROM 4 COUNTY REGION			
Svc Location	**IP**	**OP**	**ED/UC**	**Total**	**IP**	**OP**	**ED**	**Total**
Main	14,138	351,856	61,023	427,017	7,071	234,729	54,813	296,613
South	408	53,385	18,234	72,027	271	34,738	13,239	48,248
Parker	187	8,719	8,921	17,827	168	7,205	8,206	15,579
Other	434	210,747	64,378	275,559	232	82,809	30,758	113,799
Grand Total	**15,167**	**624,707**	**152,556**	**792,430**	**7,742**	**359,481**	**107,016**	**474,239**
PERCENTAGE OF CHCO TOTALS					**51%**	**58%**	**70%**	**60%**

For the three licensed facilities that are part of this Community Health Needs Assessment, the concentration of visits from residents of our four-county area is even greater. 69% of all visits at the main campus were from this region, as were 67% of visits at the south campus and 87% of the Parker Adventist visits.

Main Campus					
	Inpatient	**Outpatient**	**ED/UC**	**Total**	**% of Total**
Adams	1,963	61,424	14,867	78,254	18%
Arapahoe	2,612	95,894	23,965	122,471	29%
Denver	1,544	61,185	15,178	77,907	18%
Douglas	952	16,226	803	17,981	4%
All Other	7,067	117,127	6,210	130,404	31%
TOTAL	**14,138**	**351,856**	**61,023**	**427,017**	

Four county total = 69%

South Campus					
	Inpatient	**Outpatient**	**ED/UC**	**Total**	**% of Total**
Adams	2	1,561	105	1,668	2%
Arapahoe	76	11,050	4,254	15,380	21%
Denver	42	4,936	1,906	6,884	10%
Douglas	151	17,191	6,974	24,316	34%
All Other	137	18,647	4,995	23,779	33%
TOTAL	408	53,385	18,234	72,027	

Four County total = 67%

Parker Adventist					
	Inpatient	**Outpatient**	**ED/UC**	**Total**	**% of Total**
Adams	3	280	149	432	2%
Arapahoe	98	3,382	4,633	8,113	46%
Denver	3	328	180	511	3%
Douglas	64	3,215	3,244	6,523	37%
All Other	19	1,514	715	2,248	13%
Total	**187**	**8,719**	**8,921**	**17,827**	

Four County total = 87%

The Main Campus of the hospital is located in Arapahoe County at 13123 East 16th Avenue in the City of Aurora. The three zip code region surrounding this facility faces significant economic challenges and has a population that is more diverse than the most other parts of the state. Children's Colorado has a long-standing commitment to serving this community, and extra effort was made to gather input from residents in these zip codes.

Our South Campus is located at 1811 Plaza Drive in Douglas County. Parker Adventist is also in Douglas County at 9395 Crown Crest Blvd. This is a more affluent area in the Denver metro region, and we relied more heavily on our online survey to gather input from this community. We also conducted stakeholder interviews with groups working Douglas County, and held one focus group with local residents.

Identification of Key Stakeholders

Having established the community that would be included in this assessment, our next step was to identify key stakeholders in that community who could participate in interviews, organize and host focus groups, and help distribute surveys to parents and health care providers.
An initial list of stakeholders was developed by hospital staff and leadership. Additionally, when we conducted stakeholder interviews, we solicited suggestions for additional informants. In total, more than 40 organizations partnered with Children's Colorado to help us access community members and understand their priorities. We are deeply grateful to the many organizations that contributed to our efforts, including:

- ABCD of Colorado
- Adams County WIC
- American Academy of Pediatrics - Colorado Chapter
- Arapahoe County WIC
- Aurora Public Schools
- Aurora Strong Resilience Center
- Aurora Youth Options
- Be Well
- Brighton School District 27J
- CHCO Adolescent Medicine
- CHCO School Health Nursing
- Child Care Connections
- City of Aurora
- Clinica Tepeyac
- Colorado Association of School Based Health Centers
- Colorado Children's Healthcare Access Program
- Colorado Department of Public Health and Environment
- Colorado Health Foundation
- Community Campus Partnership
- Denver Health Lowry Clinic
- Denver Public Health
- Developmental Pathways
- Douglas County WIC

- Early Childhood Colorado Partnership
- Early Childhood Partnership of Adams County
- El Grupo Vida
- Elmira Refugee Health Center
- Epwirth Church
- Executives Partnering to Invest in Children
- Familias Saludables
- Family Forward Resource Center
- Family Voices Colorado
- Girl Scouts
- Metro Community Provider Network
- Mile High Early Learning
- Project Worthmore at Mango House
- Providers Resource Clearinghouse
- Rose Community Foundation
- Southeast Community Church
- The Center
- Together Colorado
- Tri-County Health
- University of Colorado Health

Data Collection

For the purposes of this assessment, we used six primary data collection methods:

- ***Key stakeholder interviews with community and health leaders***. These interviews used open-ended questions to both identify priority needs and to understand the community conditions impacting those needs. A copy of the interview guide is included in Appendix A. A total of 44 interviews were completed with individuals who represented public health, government, public safety, direct service, public education and advocacy organizations. Interviewees also represented a range of geographic areas and all four counties in our community were well represented. 7 of the interviews were with staff members of the Tri-County Health Department, which is one of the largest public health departments in the state and covers Adams, Arapahoe and Douglas counties.

Geography	Number of Interviews
Tri-County Health Department (Adams, Arapahoe, Douglas)	7

Adams	1
Aurora	11
Denver	10
Douglas	2
All other	13

- ***Focus groups in each of the four counties in our community***. We focused on recruiting low-income and vulnerable populations to the focus groups that we conducted. Each session was 60 minutes long, included between 5 and 20 participants, and was led by a hospital representative. Participants received a $20 gift certificate and were offered a meal. A copy of the discussion guide is included in Appendix B and is based on best practices suggested by R.A Krueger and M.A. Casey[i]. We conducted 6 focus groups and had a total of 48 participants. We conducted 2 groups in Denver County, 1 in Douglas County, and 3 in locations where both Adams and Arapahoe county residents could participate.
- ***Parent survey in both English and Spanish***. Our survey targeted parents and caregivers and asked for basic demographic information. It also asked respondents to rate a list of potential health concerns on a 3-point rating scale from "less critical" to "very critical." Copies of the survey questions are included in Appendix C (English) and Appendix D (Spanish.) Participants were recruited via Children's Hospital email lists and social media and through email campaigns with our partners. In addition, we worked closely with the Community Campus Partnership (CCP), a nonprofit organization that fosters collaborations between the Anschutz Medical Campus and the surrounding Aurora community neighborhoods to improve the health and economic well-being of the Aurora community. Members of the CCP's resident leadership council, who all reside near the main campus, we recruited to conduct the surveys in additional languages, translate the responses, and enter the data online. They greatly expanded our access to non-English speakers who reside in the three zip codes close to the hospital.

In all, 582 residents of our four-county community responded to the survey; 409 in English and 173 in Spanish. The four counties were fairly equally represented in the total responses:

Respondents – Geographic Distribution

County of Residence	English Responses	Spanish Responses	Total Responses	% of Total
Adams	72	47	119	20%
Arapahoe	105	94	199	34%
Denver	130	30	160	27%
Douglas	102	2	104	18%
TOTAL	409	173	582	100%

We made great efforts to reach a broad audience with the survey, and we believe that the survey participants reflect the socio-economic and racial diversity of our community:

Respondents – Income Distribution

Income	English respondents	Spanish respondents	Total respondents	% of Total
$0 to $24,999	58	65	123	21%
$25,000 to $49,999	82	74	156	27%
$50,000 to $74,999	55	15	70	12%
$75,000 to $99,000	56	0	56	10%
$100,000 or more	136	1	137	24%

Don't know/prefer not to answer	22	18	40	7%
Total	409	173	582	100%

Respondents – Race/Ethnicity of Children

Race/Ethnicity	Total	% of Total
Non-Hispanic White	205	35%
Hispanic White	158	27%
Asian	62	11%
Hispanic Other Race	57	10%
Black or African American	48	8%
More than one race	9	2%
Pacific Islander	3	1%
American Indian or Alaska Native	1	0%
Other/No reply	39	7%
Total	582	100%

- ***Online provider survey***. The provider survey was a new addition to our data collection efforts this year and allowed us to hear directly from health care workers about the community needs they are seeing in their practices. The provider survey can be found in Appendix E. We had 108 provider responses from physicians, school nurses and other health care providers.

- ***Quantitative Data***. In addition to gathering qualitative data through interviews and focus groups, we 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 many child health indicators as well as basic demographic information. The data reviewed is listed in Appendix F and the sources of data are included in Appendix G.

- ***Internal Data***. The final step in our data collection process was to gather internal information on admissions, diagnoses and patient demographics. A complete list of internal data indicators is included in Appendix H.

Prioritization

Once data collection was completed, the final step of our assessment was to seek input on how to prioritize among the needs identified. The Population Health committee, which is comprised of CHCO clinical and nonclinical leadership worked to select prioritization criteria and, after careful consideration, determined that following four factors were most important:

- **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?
- **Viability –** is it likely that putting resources and effort into addressing this issue will lead to substantive change?

These criteria were then used to inform meetings with key stakeholders who were tasked with reviewing the available data and providing input on the issues that the hospital will prioritize in the coming years. Three different prioritization meetings were held, two with representatives from nonprofit, government and public health agencies and one with a multi-disciplinary hospital committee comprised of clinical and nonclinical leadership. In both meetings, participants were presented with detailed information about the results of the interviews, focus groups and surveys as wells as data from internal and external sources. In addition, there was discussion about how the prioritization criteria were selected and how they should be applied to research results. Participants were given an opportunity to ask questions and to advocate for

issues that they found most compelling. They then voted for their top issues. Finally, the data and voting results were shared with hospital leadership, and they selected the priority issues identified in this report.

Third Party Contractor

Cause Effect Advisory Services was retained as a third-party contractor to facilitate this community health needs assessment. The firm conducted some of the key stakeholder interviews, trained other interviewers, facilitated the focus groups, analyzed the quantitative data, led internal and external discussions about how to prioritize the needs of the community and wrote the report.

In addition, staff members from the Child Health Advocacy Institute's Community Health Team contributed significantly to the data collection efforts. They designed the survey instruments and focus group facilitation guides, identified key stakeholders, collected hundreds of survey responses from community members, conducted dozens of interviews, and were integral to the analysis of the data and the development of the report.

Underserved Population Input

As part of this assessment, we prioritized getting input from underserved populations including low-income and minority groups and groups whose primary language is not English. Steps we took to solicit feedback from underserved groups include:

- Conducting stakeholder interviews with leaders of organizations that serve and/or advocate for underserved groups. Those organizations include:
    - Aurora Strong Resilience Center
    - Aurora Youth Options
    - Clinica Tepeyac
    - Community Campus Partnership
    - Elimira Refugee Health Center
    - Family Saludables
    - Family Forward Resource Center

    - Family Voices Colorado
    - Project Worthmore at Mango House
- Conducting focus groups in low-income communities and with underserved populations
- Working with community partners to ensure that the parent survey reached a socio-economically and ethnically diverse population. 60% of our respondents have a household income that is less than the state's average household income of $75,000 and 21% have household incomes of less than $25,000. 65% of our respondents are ethnic minorities.
- Partnering with Community Campus Partnership to reach more than 200 parents who live near the campus and do not speak English. Paid community volunteers conducted the survey in person with these residents in their native language and translated responses into English.
- Partnering with Crawford Elementary School, an Aurora publicsSchool which is home to a school-based community center. The School serves a diverse population with 96 primary languages. We administered the survey in 5 different languages during a community night at the school.
- Administering the survey to families in 2 Tri-County Health Department WIC Offices through our Community Health Navigators
- Administering the survey at the Center for African American Health's annual Health Fair through our Community Health Navigators
- Conducting door-knocking in apartment complexes with high immigrant populations to collect surveys
- Collecting quantitative data at the zip code level. We gave special consideration to the three zip codes surrounding the hospital's main campus. This area is 44% minority and has a median household income of about $47,000, which is far lower than the state average of about $75,000[ii].

Information Gaps/Limitations

Children's Colorado has engaged in an extensive process of gathering community input and examining internal and external data to develop this needs assessment. We worked diligently

to ensure that we heard from a very broad range of stakeholders including government and nonprofit agencies, health care providers, and, most importantly, parents. We have also considered public health data and hospital admissions and outpatient visits data. We believe that the conclusions we have drawn with this report accurately reflect both what the community has said is important for the wellbeing of their children and what the empirical data shows is impacting their health.

As with any assessment that is largely qualitative, there were limitations and gaps in our data collection and analysis. Specific challenges include:

- Some quantitative data is only available at the state level and could not be analyzed at a county or zip code level
- The opinions gathered from key stakeholder interviews, focus groups and surveys may or may not be representative of those of the broader population. While every effort was made to recruit a diverse group of participants and to seek input from a large number of individuals, the respondents are not representative, in a statistical sense, of our four-county community and there is no way to guarantee that their opinions are identical to those of the entire region considered in this analysis.

Summary Findings

Description of Community Served

The counties that are included in this assessment are part of the Denver metro area and reflect the rich diversity of this urban community. While there are slight variances between the four counties considered, the demographics of Adams, Arapahoe and Denver are similar. Douglas County is generally more affluent and less diverse.

Age

About 23% of Colorado's residents are under the age of 18. This figure is slightly higher for the more suburban counties in our community and slightly lower in Denver proper. Around half of all households in the state have children[iii].

County	% of Population under age of 18	% of Households with Children
Adams	27%	52%
Arapahoe	24%	50%
Denver	20%	48%
Douglas	26%	55%
State	23%	47%

Source: Colorado State Demography Office

While the percentage of residents under the age of 18 has decreased by about 2% since the 2010 Census both statewide and in each of the counties under consideration, the total population has grown over the same period. Therefore, the actual number of children residing in each county has increased. There are currently 1.28 million children in Colorado and that figure is projected to grow by about 100,000 over the next five years. The projected growth is larger in Denver County, and Douglas County's childhood population is projected to decline[iv].

COUNTY	2018 Population Ages 0-17	2023 Projected Population Ages 0-17	% Change
Adams	123,785	129,165	4%
Arapahoe	163,514	169,910	4%
Denver	148,010	165,323	12%
Douglas	89,014	87,430	-2%
Sub-Total	524,323	551,828	5%
Other Counties	764,396	786,437	3%
CO TOTALS	1,288,719	1,338,265	4%

Race and Ethnicity

While Colorado is predominantly white, 43% of the population is minority. When we conducted our previous community health needs assessment, the state population was just over 40% minority, so this is a notable increase in three years. Three of the four counties in our community have higher minority populations than the state, and Douglas county has a much

smaller minority population. For all counties, the Hispanic/Latino group is the largest minority population by a wide margin, and in both Denver and Adams county they are the majority population[v]. The three-zip-code region surrounding the hospital is 77% minority and 47% Hispanic[vi].

	Colorado	Adams	Arapahoe	Denver	Douglas	3-zip code region
American Indian or Alaska Native	1%	1%	1%	1%	1%	
Asian	4%	5%	7%	5%	5%	4%
Black/African-American	5%	3%	12%	12%	2%	17%
Hispanic/Latino	32%	52%	29%	53%	11%	47%
White	57%	39%	50%	30%	81%	27%
Other	1%		1%			4%

About 10% of Colorado's population is foreign-born population, with slightly higher percentages in Adams, Arapahoe and Denver counties and a slighter lower percentage in Douglas County[vii]. The percentage of children ages 5 to 17 who speak a language other than English in the home is 20% statewide, and in some counties, nearly 1 out 3 children speak another language[viii]. The percentage of children who speak a language other than English in the home has increased by about 2% since our last analysis.

	Residents (all ages) who are foreign-born	Children ages 5 to 17 who speak a language other than English at home
Adams	15%	34%
Arapahoe	15%	27%
Denver	16%	41%
Douglas	7%	7%
State	10%	20%

Socio-Economic Status

While Colorado is generally an affluent state, with an average household income of nearly $75,000, 16% of children in the state are living in poverty. For our four-county area, the rate

ranges from 25% in Denver to just 4% in Douglas County. Median household income has increased significantly in the three years since our last assessment, and the percentage of children living in poverty has dropped by about 2%.

County	Children living in poverty[ix]	Median Household Income[x]
Adams	18%	$71,613
Arapahoe	15%	$75,593
Denver	25%	$68,810
Douglas	4%	$120,125
State	16%	$73,535

Close to one-third of children in Colorado are being raised in single-parent households and about 3% are being cared for by grandparents. Like the distribution of income and poverty, these figures are slightly higher in more urban areas and notably lower in more suburban areas.

	Children living in a single-parent household[xi]	Children living with a grandparent who is responsible for caring for them[xii]
Adams	33%	4%
Arapahoe	31%	2%
Denver	38%	3%
Douglas	15%	1%
State	29%	3%

Health Status

Most parents in Colorado report that their children's health is either very good (26%) or excellent (62%.) While there is some slight variation by county, few parents feel their children are in poor health.[xiii] However, there are some notable differences in health status, as reported by parents, when race and income are considered. While 91% of Non-Hispanic White families report their child's health is either very good or excellent, only 84% of Hispanic families and 87% of Black families say that is the case for their children[xiv]. Similarly, 92% of parents with

household incomes greater than $50,000 say their child's health is very good or excellent, compared to just 75% of parents with household incomes below $25,000[xv].

Health Access

Colorado has made substantial progress in recent years in ensuring that children have some type of medical coverage, and the number of uninsured children has dropped from 9% statewide when we completed this assessment 3 years ago, to just 6% statewide currently[xvi]. At the same time, the percentage of children enrolled in Medicaid has increased from 38% three years ago to 46% today. However, disparities do remain between counties, with lower income counties having higher percentages of both uninsured children and children on Medicaid[xvii].

County	Uninsured Children (Under 18) (2012-16)	Children (ages 0 to 18) enrolled in Medicaid at least some point during FY16-17
Adams	8%	58%
Arapahoe	7%	44%
Denver	6%	59%
Douglas	3%	15%
State	6%	46%

Despite gains statewide in coverage for children, not all children are accessing high quality care. Fewer than 2/3 of children statewide have a medical home[xviii], which the Colorado Department of Public Health and Environment defines as a practice that is patient-centered, comprehensive, coordinated, accessible and committed to quality and safety. Essentially, this means that a child has a regular doctor who understands the whole needs of the child and helps to coordinate any care the patient may receive in addition to the child's primary care. Having a medical home is widely consider an indicator of quality of care.

And, while most children are receiving the basic care they need, cost remains a barrier for some. The statewide average for out of pocket medical spending is more than $3,000 per

family, and in Douglas County is more than $4,600[xix]. High costs are preventing some children from seeing doctors, dentists and specialists and from getting prescription medications.

	Statewide Percentage
Children (ages 0 to 18) who did not get needed doctor care due to cost (2017)	5%
Children (ages 0 to 18) who did not get needed specialist care due to cost (2017)	5%
Children (ages 0 to 18) who did not get needed dental care due to cost (2017)	5%
Children (ages 0 to 18) who did not fill a prescription due to cost (2017)	5%

Health Conditions

While considering the general demographics, health status and access to care for children in Colorado is important for understanding the context in which Children's Colorado operates, it is important to also look more closely at specific medical conditions. The prevalence and severity of these conditions is a key factor in determining what issues the hospital might prioritize.

Primary Admissions Diagnosis

As noted above, one of the factors that Children's Colorado considered in selecting its priority needs was the conditions that bring children to the hospital. While not all of these conditions can be prevented, it is valuable to consider whether community efforts might help with reducing the number of hospital visits for these conditions.

Principal Reason for Care

Inpatient

- Respiratory Health (23%)
- Digestive Health (11%)
- Cancer Care (9%)
- Neurosciences (i.e. seizures) (8%)

- Mental Health (7%)

Outpatient

- Rehabilitation (i.e. therapy services) (20%)
- General Medicine (16%)
- Orthopedics (10%)
- Mental Health (6%)
- Neurosciences (i.e. headache) (5%)

Obesity, Nutrition and Physical Activity

Clearly, one of the most pressing health issues facing children in our state is obesity. This was one of the priority issues identified in the 2015 community health needs assessment. Nearly one quarter of children in Colorado are overweight or obese. The figures in Adams County are significantly higher, and are slightly lower in the other three counties in the defined community[xx].

	Underweight	Healthy Weight	Overweight	Obese
Adams	13%	52%	27%	7%
Arapahoe	11%	69%	8%	11%
Denver	10%	71%	9%	10%
Douglas	11%	79%	8%	2%
State	10%	65%	14%	10%

While the causes of obesity are complex, it is well known that proper nutrition and exercise can help protect against children becoming overweight. Unfortunately, only about 1 in 5 children in Colorado consumes five or more servings of fruits or vegetables a day, and less than half get the recommended 60 minutes of daily physical activity[xxi].

	Children (ages 1-14) whose parents report their child drank 1 or more sugar-sweetened beverage per day (2014-2016)	Children (ages 1-14) whose parents report their child consumes at least 5 total servings of fruits and/or vegetables per day (2014-2016)
Adams	17%	17%
Arapahoe	15%	21%
Denver	13%	19%
Douglas	9%	18%
State	15%	19%

Mental and Behavioral Health

Another issue of ongoing concern, which was also a priority identified in the 2015 assessment, is the mental health of children in Colorado. Data indicates that many parents are struggling with their children's mental and behavioral health, with nearly 1 in 5 reporting their child has social and emotional challenges, and 15% reporting that their child requires mental health care or counseling.[xxii]

	Children (ages 1-14) whose parents report their child has difficulties with one or more of the following areas: emotions, concentration, behavior, or being able to get along with other people (2014-2016)	Children (ages 4-14) whose parents reported their child had at least one day in the past month when their child's mental health was not good (2014-2016)	Children (ages 4-14) whose parents reported their child needed mental health care or counseling within the past 12 months (2014-2016)
Adams	19%	23%	13%
Arapahoe	19%	24%	15%
Denver	21%	25%	20%
Douglas	17%	21%	12%
State	19%	26%	15%

Of note, access to mental health care remains a significant challenge, while the specific barriers to access are difficult to identify. Of children ages 4-14 whose parents reported their child needed mental health care or counseling during the past 12 months, 25 percent did not receive all needed care. When asked why the child did not receive the needed care, most parents

responded with “other,” meaning that the obvious issues of cost or convenience were not the main barriers.

Of children (ages 4-14) who needed and did not get all needed care, reasons why child did not receive all needed mental health care (2014-2016)	
Cost too much	5%
No health insurance	1%
Health plan problem	11%
Not available in area	1%
Transportation problems	2%
No convenient times	4%
Doctor did not know how to treat or provide care	10%
Other	66%

Mental health concerns are also significant for high school students, with close to a third of all Colorado high school students reporting feeling sad or hopeless. [xxiii] More than one out of six high school students has considered suicide.

	Statewide
High school students who reported feeling so sad or hopeless for at least two weeks that it interfered with their usual activities (2015)	30%
High school students who reported they had seriously considered attempting suicide during the past 12 months (2015)	17%
High school students who made a suicide attempt during the past 12 months that resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse (2015)	3%

Closely related to mental health issues are concerns about substance use and abuse. Substance use among teenagers has been shown to have long term effects on youth’s growth and development. Injuries due to accidents, physical diseases, and overdoses are among the health-

related consequences of teenage substance abuse. With the legalization of marijuana in Colorado in 2014, parents and caregivers have been concerned about potential increases in substance use among teens. According to the Colorado Department of Public Health and Environment, 2015 Healthy Kids Colorado Survey, close to 1 in 3 high school students in Colorado reported having had a drink in the past 30 days, and more than 1 in 5 had used marijuana in that period. Those figures were within 1% of the same rate for the 2013 survey.

	State	Adams	Arapahoe	Denver	Douglas
High school students who report having had at least one drink of alcohol on one or more of the past 30 days (2015)	30%	33%	26%	28%	Douglas County Public Schools refused participation in this survey
High school students who report having used marijuana one or more times during the past 30 days (2015)	21%	21%	20%	26%	
High school students who report having taken a prescription drug (such as OxyContin, Percocet, Vicodin, codeine, Adderall, Ritalin, or Xanax) without a doctor's prescription one or more times during their life (2015)	14%	13%	12%	10%	
High school students who used prescription drugs in the last 30 days without a prescription (2015)	7%	7%	8%	6%	

Injury

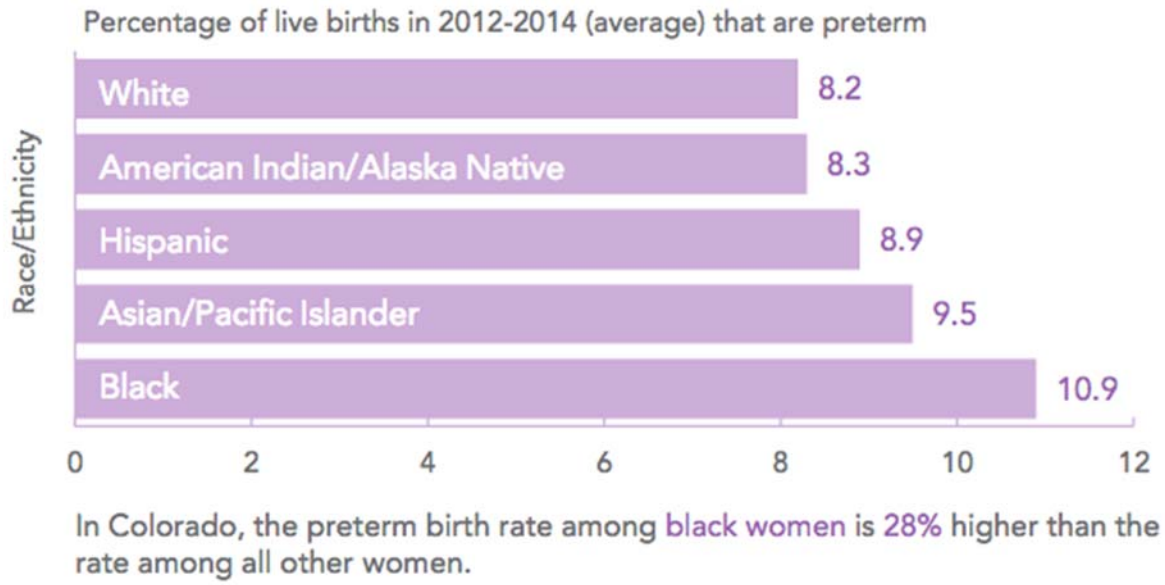
Unintentional injury is the leading cause of death for children in Colorado from ages one through 24[xxiv]. Motor vehicle accidents and accidental drownings are the most common unintentional injuries resulting in death. Injury is also the leading cause of hospitalization for children ages 1 to 14 in Colorado, with falls and motor vehicle accidents as the most frequent incidents[xxv]. In a typical week in Colorado, 1,152 children ages birth to 14 years old sustain an injury serious enough to require care in the Emergency Department. Twenty-seven are hospitalized, and one dies[xxvi]. In 2017, Children's Hospital Colorado saw 32 trauma related deaths.

Leading Causes of Death by Age

> 1	1-4	5-9	10-14	15-24
Congenital Abnormalities	Unintentional injury	Unintentional injury	Unintentional injury	Unintentional injury
Short gestation	Congenital abnormalities	Malignant neoplasms	Suicide	Suicide
SIDS	Malignant neoplasms	Congenital abnormalities	Malignant neoplasms	Homicide
Maternal pregnancy complication	Homicide	Homicide	Homicide	Malignant neoplasms
Unintentional injury	Heart disease	Heart disease	Congenital abnormalities	Heart disease

Prematurity

8.7% of births in Colorado in 2016 were preterm. Short gestation is the second leading cause of death for Colorado children under the age of 1, with more than a third of all infant deaths related to prematurity. Babies born before 37 weeks of gestation can also suffer from lifelong health problems and developmental challenges. Of note, premature births are more prevalent for women of color in Colorado, with the highest rates occurring among black women[xxvii].



Asthma and Respiratory Illness

Asthma is the most common chronic condition for children in Colorado. In 2016, there were more than 7,300 asthma-related emergency department visits statewide for children under the age of 19[xxviii]. In all, 8.2% of children in Colorado have been diagnosed with asthma. That figure is notably higher for children in Adams County, at 11.2%. The causes of the disparities among counties in Colorado are not clear.

County	Percent of children with current asthma, aged 1-14 years, 2014-2016[1]
Adams	11.2
Arapahoe	6.0
Denver	8.9
Douglas	6.2
Colorado	8.2

Community Input

As described in the methodology section of this report, Children's Colorado engaged in a significant community outreach process to assess the interests and concerns of caregivers in the neighborhoods and counties that the hospital serves. Through surveys, focus groups, interviews and community meetings, we could get the input of hundreds of people. We found remarkable consistency in the issues that concerned those we spoke with.

From our 44 stakeholder interviews with community leaders, we found the most interest in mental and behavioral health. We also found significant interest in nutrition and obesity which, if combined, would have been the second most frequently mentioned issue. Care for children with special needs was also a top issue.

Stakeholder Interview Results – Top 5 Issues

Issue	Number of Mentions
Mental or behavioral health	40
Early child care and education	17
Care for children with special needs	14
Nutrition	11
Obesity	10

The 48 participants in our focus groups also frequently cited mental and behavioral health as a top concern. Focus group participants, who were generally lower income than those who participated in the stakeholder interviews, were also concerned about access to care. In describing this concern, participants noted difficulty accessing caregivers outside of normal business hours, transportation challenges, and lack of cultural sensitivity as key issues.

Focus Group Results – Top 5 Issues

Issue	Number of Mentions
Mental Health	29
Access to Care	21
Substance use and abuse	19
Nutrition	19
Physical activity	14

In the surveys that we administered, we asked respondents to rate a list of issues as less critical, somewhat critical, or very critical. We then applied a weighting system, giving those issues rated as very critical 3 points, somewhat critical 2 points, and less critical 1 point. The combined points for each issue were then compared to determine the top issues for each set of respondents.

For the provider survey, mental and behavioral health was again a top concern. Providers were also concerned about issues such as asthma and diabetes, while the community members who responded to the survey were less concerned about these issues. Both groups listed nutrition,

obesity and physical activity as key issues.

Provider Survey Results - Top 5 Issues (in rank order)

- Mental or behavioral health
- Care for children with special needs (physical, emotional, developmental or behavioral)
- Suicide prevention
- Asthma
- Obesity

English Language Parent Survey Results – Top 5 Issues (in rank order)

- Mental/Behavioral Health
- Suicide Prevention
- Care for children with special needs
- Early care and education
- Immunizations

Spanish Language Parent Survey Results – Top 5 Issues (in rank order)

- Obesity
- Teen pregnancy
- Suicide Prevention
- Nutrition
- Physical activity

Because the online survey included questions about demographics, we were also able to determine if the issues of most concern varied by income level, county of residence, or race and ethnicity. We found the greatest variation among top issues when disaggregated by income level.

When considering income levels, we noted that mental health was one of the top five concerns for all groups, but higher income respondents ranked the issue highest. Cost of care was a concern for respondents from middle income brackets who likely did not qualify for Medicaid and were most impacted by insurance premiums, deductibles and co-pays. Nutrition was also a top concern in nearly all income brackets.

Parent Survey Results – Top 5 issues by Income Level

	#1 Critical Need	#2 Critical Need	#3 Critical Need	#4 Critical Need	#5 Critical Need
$0 to $24,999	Suicide prevention	Nutrition	Obesity	Teen pregnancy	Accidents and injuries
$25,000 to $49,999	Early child care and education	Obesity	Suicide prevention	Teen pregnancy	Care for children with special needs
$50,000 to $74,999	Early child care and education	Mental or behavioral health	Suicide prevention	Care for children with special needs	Healthy pregnancies and childbirth*
$75,000 to $99,000	Suicide prevention	Mental or behavioral health	Care for children with special needs	Accidents and injuries	Asthma
$100,000 or more	Mental or behavioral health	Suicide prevention	Early child care and education	Care for children with special needs	Immunizations (vaccines) and infectious diseases
Don't know/prefer not to answer	Suicide prevention	Sexual health	Early child care and education	Healthy pregnancies and childbirth**	Mental or behavioral health**

We also reviewed the highest priority issues for residents in the three zip codes nearest to the main campus. It is worth noting that that teen pregnancy and diabetes were higher priorities for those respondents than for the broader group.

Top 5 Issues for Zip Codes: 80010, 80011, 80012

- Obesity
- Suicide prevention
- Teen pregnancy
- Nutrition
- Diabetes

In addition to asking parents about particular medical conditions that they were concerned about, we also asked about community issues that were potentially impacting the health of their children. Again, many of the issues identified as “critical” were related to mental health and obesity:

English Survey Results – "Very Critical"

- Mental/Behavioral Health
- Suicide Prevention
- Care for children with special needs
- Early care and education
- Immunizations

Spanish – "Muy Critica"

- Obesity
- Teen pregnancy
- Suicide Prevention
- Nutrition
- Physical activity

This information, along with other data that was collected about where respondents access care and which community resources they most frequently utilize will help inform our action plan as we consider ways to address the priority health needs.

Once the community input was collected, those who had participated in the stakeholder interviews were invited to participate in of two scheduled presentations of the data and were asked to help prioritize the issues that Children's should focus on during the next three years. At those community meetings, the top issues identified were:

1. Mental or behavioral health
2. Nutrition
3. Suicide prevention
4. Care for children with special needs
5. Physical activity

Finally, the internal hospital leadership analyzed the community feedback, internal data, and public data and applied the selection criteria they had previously adopted. This group made a final determination of the priority needs for the coming years.

The 2018 needs, in no particular order, are:

- Mental health
- Obesity, nutrition and physical activity
- Injury prevention
- Asthma and respiratory care

- Prematurity

It is notable that the needs that were selected were also named priority needs in 2015. While we approached this assessment with a clean slate and made every effort to not bias the issues that stakeholders discussed by informing them of the 2015 priorities, we were not surprised that community concerns remain largely unchanged. The public health issues that we are addressing are complex and intransient and we did not expect to fully resolve them in three years.

Description of Priority Needs

Mental and Behavioral Health

Mental and behavioral health emerged as a top community concern through every method of data collection included in this assessment. Parents, caregivers, medical providers and community leaders all share a belief that the mental health of children is a critical issue. Public data also suggests that this is an important issue for Children's Colorado to prioritize.

Children's Hospital Colorado has dedicated substantial resources toward improving the mental health of our state's children. We remain steadfast in our commitment to this critical issue. Our Pediatric Mental Health Institute (PMHI) provides mental health services to children, adolescents and their families. We deliver evidence-based, family-focused and youth-centered services including outpatient care, partial hospitalization, inpatient care and emergency services. Our interdisciplinary teams include psychiatrists, psychologists, clinical social workers, licensed professional counselors, nurses and creative art therapists who specialize in addressing the unique treatment needs of each child and adolescent we serve. We treat children from birth through 18 years of age.

Services offered include:

- Diagnostic evaluations
- Individual, family and group therapy
- Parent counseling and education programs
- Consultation with other departments and services at Children's Hospital Colorado
- Educational programs for mental health and child healthcare professionals

We treat a broad range of conditions including ADHD, anxiety, depression, OCD and many other mental health disorders.

In addition to our clinical services, we are also dedicated to training the next generation of mental health professionals and conducting research to advance the field of child and adolescent mental health. We provide training for many professional disciplines, including psychiatry, pediatrics, psychology, social work and nursing. We also work with community partners to reduce the social stigmas associated with mental illness and increase awareness of

the effectiveness of mental health treatment. Our policy and advocacy team members work to advance policies and programs that support children's positive social, emotional and behavioral development, such as increased screening and early intervention services, integrated systems of behavioral and physical health care and expanded access to preventative and high-quality mental health care. Research and program evaluation efforts are integrated into our services and allow us to remain on the cutting edge of clinical innovation.

Our community efforts in mental health are focused on three priorities:

- Educate about and reduce stigma associated with mental health
- Promote healthy social-emotional development for children ages 3-18
- Increase access to mental health services

Specific activities we have undertaken to address these goals and some of the impact our work has had over the past three years include:

Goal 1: Education and Mental Health Stigma Reduction	
Strategy	**Highlights**
Increase community education and awareness of healthy social-emotional development	Children's Colorado disseminated healthy social-emotional development resources and materials to over 1,000 families and providers at community events.
	Children's Colorado added social-emotional and mental wellness content to Camp Champions summer camp program.
Reduce mental health stigma within the hospital and in the community	In May 2017, Let's Talk Colorado online messaging platform was launched with over 46 million impressions, including nearly 20,000 website page views to date.
	In 2017, the Hospital Mental Health Stigma Reduction Action Plan was implemented, resulting in an 82% increase in external media and 35% increase in internal communications about mental health. Between 2016 and 2017, there was an 8% reduction in the number of Children's Colorado employees who cited stigma as a barrier to accessing resources.
	Between 2016 and 2017, 100 Children's Colorado employees and family members were trained in Mental Health First Aid and 169 were trained in unconscious bias.

Goal 2: Healthy Social-Emotional Development	
Strategy	**Highlights**
Improve collaboration with community partners to promote social-emotional health	Refer to First 1,000 Days for social-emotional wellness efforts specific to children 0-3 years
	In 2017 and 2018, Children's Colorado partnered with Aurora Public Schools, Aurora Mental Health Center and Aurora Medical Center to host a mental wellness event and resource fair, reaching over 250 people in the Aurora community.
	In April 2018, Children's Colorado developed a social-emotional wellness toolkit for youth-serving organizations, which was released with nearly 500 copies distributed to schools and community-based organizations.
Goal 3: Access to Mental Health Services	
Strategy	**Highlights**
Lead state and federal policy efforts aimed at improving access to pediatric mental health services	In 2017, there was one Children's Colorado-led advocacy training conducted with two Children's Colorado mental health professionals.
and	In 2016, 12 mental health organizations collaborated to develop criteria for a State Pediatric Mental Health Impact Assessment, representing child health, education, advocacy, public health and government.
Improve collaboration with community partners to improve access to mental health services	In 2017, Children's Colorado began universally screening for suicide risk in youth ages 10 and older in all emergency and urgent care locations in our network of care. There have been over 30,000 patients screened to date.

Children's Colorado is also aware of many state and local organizations doing innovative work in the field of childhood mental health. We look forward to partnering with many of these organizations as we continue to work to improve the mental health of children. Key potential partners include:

- Tri-County Health Department and Denver Public Health. These departments both have a focus on decreasing mental health stigma and their "Let's Talk Colorado" public

awareness campaign is helping getting the word out that it is as important to talk about mental health as any other health issue.

- The Mental Health Center of Denver, Aurora Mental Health Center and other mental health providers. These front-line providers offer front line of care for many families and there is great potential for Children's to collaborate on both innovative treatments and improved access to care.
- Colorado Department of Human Services. The department has a unit dedicated specifically to early childhood mental health and implements numerous innovative programs focused on the social and emotional development of young children. They also oversee the Office of Behavioral Health which contracts with behavioral health providers, regulates the public behavioral health system, and provides training, technical assistance, evaluation, data analysis, prevention services and administrative support to behavioral health providers and relevant stakeholders.

Obesity, Nutrition and Physical Activity

Although Colorado enjoys a reputation as a fit, healthy, active state, the truth is that nearly one quarter our state's children are overweight or obese. Vulnerable populations are also more susceptible to obesity, with significantly higher rates among children who live with food insecurity, have household incomes of 250% of the federal poverty level or less, or who have no medical home[xxix]. While nutrition and physical activity are distinct issues, they are also closely correlated with obesity and we have therefore decided to think of them as a connected set of concerns. With fewer than half of children in the state getting the recommended 60 minutes of daily physical activity and only 1 in 8 consuming 3 or more servings of vegetables a day, there is clearly room for improvement.

Children's Hospital Colorado has an enduring commitment to decreasing childhood obesity rates and offers both clinical and community-based services to help address this pressing challenge. We are home to the region's leading pediatric weight management program, Lifestyle Medicine. This program is led by a multidisciplinary team with pediatric-trained experts, including psychologists, dietitians, an exercise physiologist, recreational therapists and

physicians with specialty training in endocrinology, gastroenterology, nutrition, cardiology and surgery. We see children ages 0 to 18, and treat obesity-related conditions including:

- Sleep problems
- High blood pressure (hypertension)
- Cholesterol problems (high cholesterol, high triglycerides, low HDL or family history)
- Irregular periods (polycystic ovarian syndrome)
- Abnormal liver labs (non-alcoholic fatty liver disease)
- Risk of diabetes (insulin resistance, Type 2 Diabetes)

After an initial medical evaluation, each patient meets with a team of providers, including a dietitian and an exercise physiologist to address the individual needs of each child and/or family. In addition, we offer many resources for patients and families that include:

- Free weekly exercise classes on Tuesdays, Wednesdays and Thursdays
- Access to the Wellness Center, which includes a yoga room and fitness room
- Outpatient nutrition counseling by a registered dietician
- Medication and supplements (fish oils, vitamin E, multivitamin, calcium, iron, vitamin D)
- Clinical research and trials for patients who meet criteria
- Radiologic studies, sleep studies and blood tests
- Access to a variety of activities, including the annual "Walk for the Stars" for all weight management patients
- Treatment options for severely obese patients may include inpatient stays, special diets or other intensive interventions

While we are proud of the clinical services we offer, we also know that the most effective weight management programs are based in the community, not at a hospital. We have made a significant investment in community programs related to obesity prevention, and will continue this work in the future. Our goals for our work in nutrition, physical activity and obesity are:

- Educate and empower families across the lifecycle with the skills and information they need to make behavior changes that support a healthy lifestyle
- Improve access to healthy foods and physical activity for children and their families, particularly in underserved communities

- Advance the field of childhood obesity research through collaboration and dissemination

Our community-based activities in this arena include:

Goal 1: Obesity Prevention Education	
Strategy	**Highlights**
Increase community knowledge through healthy lifestyle resources	In June 2017, Children's Colorado's Lifestyle Medicine formally endorsed the Camp Champions curriculum and Parent Workbook, which will be available online by end of 2018. In August 2017, CHAI become a contributing member to the Crawford Elementary Wellness Committee.
Train providers on healthy lifestyle behaviors	In 2017, 100% of Camp Champions staff were trained and hired in obesity prevention positions. The staff training program has been formalized and is now available to community providers.
Lead education classes and programs for families to build knowledge and skills about healthy lifestyles	In 2016 and 2017, 105 children were enrolled in Camp Champions. On average, Campers increased their vigorous physical activity by 31.5 minutes and 34.0 minutes in 2016 and 2017, respectively.
	In 2017, Children's Colorado taught 110 families cooking education through the Cooking Matters curriculum.
Goal 2: Access to Food	
Strategy	**Highlights**
Engage in local, state and federal policy advocacy efforts to impact access to healthy lifestyle and obesity prevention services	In June 2017, Children's Colorado convened a group of experts, the Food Security Council, to develop and implement a unified strategy for the organization to address hunger for Colorado kids.
Pursue internal hospital policy changes affecting nutrition and physical activity environment	In December 2016, Children's Colorado achieved Platinum Status for the Colorado Healthy Hospital Compact. Among the policy changes achieved, on March 1, 2017, the hospital eliminated the sale of sugar-sweetened beverages from all locations.
Increase access to healthy food, physical activity and healthy lifestyle services and supports	In 2016, Children's Colorado and Hunger Free Colorado partnered to use a validated questionnaire to universally screen families for food insecurity and refer to services and supports in the Child Health Clinic, which serves 11,000 patients annually. In 2017, 93 children were enrolled in the hospital's Bikes for Life program, which distributes bikes to overweight or obese children

	(who do not currently own a bike) and promotes goal-setting, safety and cycling as a regular activity and means of active transport.
Increase collaboration with community partners to improve access to healthy food, physical activity and healthy lifestyle services and supports	In 2017, Children's Colorado collaborated with Crawford Elementary School to offer wrap-around healthy eating, active living programming on site at the school. This included 23 classes conducted off-site for Camp Champions, Bikes for Life and Cooking Matters.
Goal 3: Childhood Obesity Research	
Strategy	**Highlights**
Enhance information-sharing regarding Anschutz Medical Campus-driven childhood obesity prevention efforts and improve process for disseminating childhood obesity prevention research	In 2017, Children's Colorado created a database of community programs from 17 local organizations tied to physical activity and obesity prevention, to be used by Lifestyle Medicine as a resource for patients' activity and nutrition goals.
	The Familias Saludables (FS), a multi-stakeholder group established to ensure that low-income Hispanic children achieve a healthy weight, celebrated its third year of participation in its research grant.

As with most community health needs, we acknowledge that there are many other organizations addressing childhood obesity and we look forward to continuing to partner with these and other leaders in the field:

- Colorado Department of Public Health and Environment. CDPHE has named obesity as one of its 10 Winnable Battles and has multiple initiatives aimed at reducing childhood obesity.
- Hunger Free Colorado – a leading organization in the fight to end hunger, this nonprofit connects families and individuals to food resources and drives change in systems, policies and public awareness.
- SHAPE Colorado (Society of Health and Physical Educators) – this nonprofit membership association is comprised of hundreds of educators and aspiring educators who are

committed to promoting practices and programs that educate and inspire people to achieve active, healthy lifestyles. Through educator training and public advocacy, they are working to improve the health of Colorado students.

Injury Prevention

Because unintentional injury is the leading cause of death for children between the ages of 1 and 24 in Colorado, Children's Hospital Colorado his deeply committed to injury prevention. While our Level I Pediatric Trauma Center offers the most sophisticated care in the region for complex medical problems, we would prefer to never see an injured child. Because we hope to prevent, rather than treat, injuries, we lead a variety of community-based approaches designed to keep our most vulnerable kids injury-free.

Our injury prevention goals are to:

- Strengthen the hospital-based and community-based education and outreach components of the Child Passenger Safety (CPS) Program through leadership, funding, data, policy and evaluation to support the needs of community partners serving children and families in targeted communities.
- Expand programmatic efforts and facilitate opportunities for collaborative injury prevention initiatives focusing on teen driver safety that provides leadership, funding, data, policy and evaluation to support the needs of schools and community partners serving families and students in targeted communities.
- Expand programmatic efforts, and facilitate opportunities for collaborative injury prevention initiatives focusing on the four leading causes of unintentional injury among children residing in neighborhoods at disproportionate risk.

Our current injury prevention efforts include:

Goal 1: Child Passenger Safety (CPS) Program	
Strategy	**Highlights**
Expand CPS program efforts Children's Neonatal Intensive Care Unit, Child Health Clinic, and in neighborhoods at disproportionate risk for motor vehicle collision (MVC) injuries	In 2016, 590 car seat inspections were completed, 125 of which came from the community at a local WIC site.
	In 2017, 1,054 car seat inspections were completed, 192 of which were completed for families residing in targeted Aurora neighborhoods and 538 subsidized-cost car seats were provided to families in need.
	In 2016 and 2017, 206 CPS inspection station surveys were completed with promising results, including 97% of survey respondents reporting that they were either confident or very confident in choosing the safest position to install their child's car seat.
	In 2016, Children's Colorado partnered with Tri-County Health Department, Street-Smart and Aurora Public Schools for CPS education and outreach. In 2016, over 800 car seats were inspected, including 449 car seats provided to families through these partnerships.
	In 2017, Children's Colorado led two National Child Passenger Safety Technician trainings, in which 18 Children's Colorado staff became nationally certified CPS technicians. Children's Colorado now has 65 CPS technicians, the most of any organization in Colorado.
	Children's Colorado provides monthly education sessions to pediatric medical residents during their rotation in the Child Health Clinic.

Goal 2: Teen Driver Safety	
Strategy	**Highlights**
Integrate Teen Driver Safety program efforts to parents and teens residing in neighborhoods at disproportionate risk for MVC injuries	In 2016, Children's Colorado led four teen driver safety events with 387 participants, including teens and parents in target communities. These events were at Parker Adventist Hospital, Swedish Medical Center, The Medical Center of Aurora and Chaparral High School.
	In 2017, Children's Colorado collaborated with 22 program partner organizations to engage over 5,400 teens and parents in education booths, classroom-based presentations and teen driver safety events.
Goal 3: Leading Causes of Injury	
Strategy	**Highlights**
Concentrate Safe Kids Denver Metro coalition efforts to target parents and caregivers of children residing in neighborhoods at disproportionate risk for the unintentional injuries	In 2017, 49 Children's Colorado families received infant safe sleep awareness messaging and were provided with a portable crib to allow for a safe sleeping environment for their baby, most of whom resided in the targeted zip codes.
	Three clients referred by Tri-County Health Department's Nurse Family Partnership program were provided with home safety inspections and installation of prevention hardware for families residing in targeted zip codes.
	Two initiatives through Safe Kids Denver include Safe Kids Ride and Walk This Way and Safe Kids Live and Play, which aim to reduce the number of children who experience car, bike or pedestrian injuries and educate families about reducing injury in the home.
Monitor federal and state legislation that impacts the prevention of injuries and enhancement of opportunities to improve children's health and aligns with anticipatory guidance and best practices	CHAI's injury leadership engaged in several federal and state policies aimed at preventing injury, including three state bills involving child restraint in vehicles, lead testing, and automated vehicles.

While we will continue to lead statewide efforts to prevent injury, we also recognized that community-based interventions are best delivered through community partners. We recognize that many other organizations are doing important work in this arena and look forward to collaborating on this important issue. Key potential partners include:

- Colorado Department of Public Health and Environment. The department, along with local public health agencies, conducts multidisciplinary child fatality reviews and makes recommendations to the state legislature about policies that impact childhood deaths, including accidents. In addition, their Mental Health Promotion Branch coordinates state and local efforts to prevent unintentional and intentional injury and violence.
- Program for Injury Prevention, Education and Research (PIPER). The Program for Injury Prevention, Education and Research (PIPER) is a collaborative initiative of the Colorado School of Public Health and the University of Colorado School of Medicine. PIPER links research, training and practice to prevent injury in Colorado, nationally and around the world.
- National organizations including Safe States, the CDC National Center for Injury Prevention and Control, and the Children's Safety Network. These organizations offer information about best practices, research and access to like-minded partners in other states.

Asthma and Respiratory Care

Asthma and respiratory illness is one of the leading causes of both inpatient and outpatient visits at Children's Hospital Colorado. At our Breathing Institute, our experts treat children with common and complex breathing problems. Our pediatric pulmonologists care for children with shortness of breath, wheezing, cough, noisy breathing, oxygen dependency, recurrent pneumonia and other conditions. We are also nationally recognized for our work with patients who have asthma, cystic fibrosis and complex breathing problems. Our asthma program offers multidisciplinary care for kids both at home and in school, with a focus on technological and environmental innovations.

We are committed to reducing the impact of respiratory illness and asthma on Colorado's children. Our community efforts in this arena address three goals:

- Increase access to routine care for respiratory illnesses
- Strengthen the support network in clinical and community settings
- Decrease the health impact of environmental exposure to air particulate matter

Specific efforts include:

Goal 1: Access to Respiratory Health Care	
Strategy	**Highlights**
Increase rate of follow-up visits after hospitalization for asthma	Children's Colorado 30-day follow up rates: 2016: 55% 2017: 58% 2018 YTD (January-April): 72%
Standardize patient and family educational materials for respiratory health	There were five educational sessions for Children's Colorado and community healthcare providers held in 2016 and 11 in 2017.
Goal 2: Strengthen Support Network in Respiratory Health	
Strategy	**Highlights**
Improve quality and frequency of asthma case management in public schools	Number of schools and districts served by Colorado Step Up school-centered asthma program: 2015-2016: 20 schools; 1 district 2016-2017: 32 schools; 5 districts (4 schools in priority zip codes) 2017-2018: 32 schools; 5 districts (4 schools in priority zip codes)
Improve access to home-based support	Results from Just Keep Breathing (JKB) asthma home visitation program: 55 patients have received at least one visit 212 visits completed JKB patients have demonstrated significantly improved medication device technique and improved asthma control.
Improve communication between families, providers and specialists	Breathing Counts asthma medication adherence monitoring program enrolled 65 patients to test feasibility and acceptability of medication adherence monitors.

Goal 3: Environmental Impact on Respiratory Health	
Strategy	**Highlights**
Improve tobacco screening and intervention by providers	Funding to establish a tobacco cessation clinic for patients and caregivers begins July 2018.
	In April 2017, Children's Colorado hosted the first Breathe Better Conference with 110 multidisciplinary team members to review recent best practices for prevention and management of pediatric and adult lung disease.
	The second Breathe Better Conference will be held in September 2018.
	In 2016, 29 Children's Colorado providers were trained in motivational interviewing and tobacco cessation.

Our partners in these efforts are primarily the public schools in our community.

Prematurity

Premature birth is the second leading cause of infant mortality in Colorado and can create life-long challenges for those babies who survive. Children's Hospital Colorado is a national leader in preventing and treating premature birth. Our neonatal intensive care unit (NICU) offers 82 critical care beds and we care for more than 1,400 infants each year.

We are also unwavering in our belief that we can decrease prematurity in our state and are working hard to increase awareness about the importance of prenatal care. Our specific goals related to prematurity are:

- Increase public awareness about the importance of prenatal care and early childhood development
- Advocate for local and state policy changes that would positively influence conditions in pregnancy and early childhood
- Expand partnerships with pre-natal providers in order to reduce premature births

Some of our efforts in this area include:

Goal: Public Awareness	
Strategy	**Highlights**
Create universal awareness through public engagement and shared messaging campaign	The 2016 First 1,000 Days (FTD) campaign raised awareness through the following milestones: Website Reach – 23,085 impressions Community Reach – 16,574 impressions Media Impressions – 7,530,697 (broadcast television) Promotional Reach– 30,802 posters and brochures distributed to OB/GYN, Pediatric care practices, community-based organizations Children's Colorado Internal Communications– 1,077,848 impressions
	The 2017 FTD campaign raised awareness through the following milestones: Website Reach – 28,165 impressions Community Reach – 13,041 impressions Media Impressions – 22,778,402 (broadcast television) Promotional Reach – 131,186 posters and brochures distributed to OB/GYN, Pediatric care practices, community-based organizations Children's Colorado Internal Communications – 1,080,760 impressions
Goal: Policy and Advocacy	
Strategy	**Highlights**
Propose appropriate policy revisions at local and state levels	During the 2018 legislative session, newborn screening was identified as a policy priority by the Children's Colorado Government Affairs team, who worked with partners to pass House Bill 18-1006, a bill that strengthens the program by expanding testing to cover new diseases, improving the follow-up process for babies needing additional testing and ensuring the program receives adequate resources. In addition, Children's Colorado co-leads the Early Childhood Mental Health (ECMH) Policy Task Force to partner with community organizations to address ECMH policy levers.

Goal: Pre-Natal Partnership Expansion	
Strategy	**Highlights**
Extend "warm handoffs" to pediatric clinics beyond the Child Health Clinic	FTD is aligning its efforts with the Children's Colorado Neonate Strategic Plan, the Provider Care Network and the Medicaid Clinically Integrated Network with participating pediatric clinics, to start in 2018.

Other organizations that we believe are doing important work in Colorado to prevent prematurity include:

- Families Forward Resource Center. This nonprofit organization that focuses on community health runs a Healthy Start program aimed at reducing prematurity and infant mortality specifically with African American families. Participants are assigned an advocate who works with families to provide resource referrals, assistance in accessing health care, parenting education and support, and family advocacy.
- Colorado Department of Public Health and Environment. The Department developed evidence-based recommendations for reducing preterm births in the state and is a leader in ensuring those recommendations are adopted by providers, patients and policy makers.

Other Needs

Children's Hospital Colorado knows that the needs and the concerns of the community are extensive and that our ability to address those needs is limited. While our five priorities areas will be the focus of our community efforts for the next several years, we will also continue to listen to the community and to identify new opportunities to address public concerns. Some of the specific issues that the community raised through this process, but that were not selected as top priorities, include:

- Care for children with special needs. We believe that caring for children with special needs is the core of our business and is best addressed through our daily operations rather than through our community efforts.

- Early care and education. We acknowledge that quality early childhood care is a foundation of lifelong health. We will continue to advocate for access to quality care for all families. However, we feel that we are not well positioned to take a leadership role on this issue.
- Safe neighborhoods. We heard very clearly from our community stakeholders that lack of access to safe places to play was a key deterrent to childhood health and wellbeing in many neighborhoods. While we were troubled and disheartened to learn that so many children do not feel safe, and will support any efforts to increase access to play areas, we also feel that we are not the best organization to take the lead on this issue.
- Oral Health. While oral health remains an important public health issue, and was one of our priority needs in 2016, the rates of children in Colorado who are visiting dentists has steadily improved, and as of 2016, 86% of children ages 1 to 14 had a seen a dentist for preventative care in the past 12 months[xxx]. Fewer than 10% of parents statewide reported that they had delayed needed dental care for their child in the past year[xxxi]. Children's Colorado remains committed to this issue but is gratified that more children are receiving the care they need.

Conclusion

Children's Hospital Colorado is proud of its work with the community and the leadership role it plays in supporting the mental, emotional and physical health of every child in our great state. We wish to thank the hundreds of parents and community members who lent their voices to this health needs assessment. Through surveys, focus groups, community meetings and one-on-one conversations, we gathered important insight into the issues that families care about. Our promise is that we will act on what we heard and will continue to partner with the community to improve the health and wellbeing of all children in Colorado.

As a first step, we will incorporate the findings of this assessment into an action plan that will guide our community-based efforts for the next three years. We will consult with our many partners in the development of that plan, and will have a final version available by May 2019.

We look forward to documenting ways that we can continue the successful programs we have already established as well as exploring new ways to effectively address the priority issues. We also welcome continued feedback both on the content of this report and our strategies for addressing community health needs. Comments, questions and suggestions can be sent to communitybenefit@childrenscolorado.org.

Appendix A - Key Informant Interview Guide

Name:
Title:
Organization:
Date of Interview:

ORGANIZATION

1. I would like to confirm that your organization's primary business is _____?

2. What target population (s) do you primarily serve?
    a. [*Prompt: age range and type of population*]

3. What geographic area do you primarily serve?

4. Approximately how many individuals do you serve annually? *[If applicable, separate estimates by adult and child]*

HEALTH NEEDS

5. When you consider the children (birth to 17) in the geographic area that you serve, in your opinion, what are the **top three** most critical health needs or concerns for children? Please select from the list below, or you can select health needs that are not listed here.

- ☐ Accidents and injuries
- ☐ Asthma
- ☐ Care for children with special needs (physical, emotional, developmental or behavioral)
- ☐ Dental care
- ☐ Diabetes
- ☐ Early child care and education
- ☐ Healthy pregnancies and childbirth (not teen pregnancy)
- ☐ Immunizations (vaccines) and infectious diseases
- ☐ Mental or behavioral health
- ☐ Nutrition
- ☐ Obesity
- ☐ Physical activity
- ☐ Respiratory health other than asthma
- ☐ (COPD, cystic fibrosis)
- ☐ Sexual health
- ☐ Suicide prevention
- ☐ Teen pregnancy

Other (please specify) _____

- Critical Health Need #1 _____
- Critical Health Need #2_____
- Critical Health Need #3_____

6. Why do you consider these high priority needs or concern?
    a. Issue #1:

    b. Issue #2:

    c. Issue #3:

7. Which subgroups are at a higher risk or are disproportionately affected by this need / concern in this community?

Age Groups

Ages	**Issue #1**	**Issue #2**	**Issue #3**
Infants (0 to less than a year)			
Toddlers (1 to 2)			
Preschoolers (3 to 5)			
Middle childhood (6 to 11)			
Young Teens (12-14)			
Teenagers (15-17)			
All age groups (0 to 17)			

Vulnerable Populations

Population	**Issue #1**	**Issue #2**	**Issue #3**
Low-income children			
Children of color			
Children with special health care needs			
Children or teens who identify as lesbian, gay, bisexual or transgender			
Homeless children			
Immigrant children			
Refuge children			
Other (please specify)			

8. Based on your experience and expertise, what are the key factors that create barriers to addressing this critical health need? *[Select the top 3 responses.]*

	Issue #1	Issue #2	Issue #3
Access to benefits (Medicaid, WIC, food stamps)			
Access to or cost of child care			
Bullying and other stressors in school			
Child abuse and neglect			
Crime and community violence			
Domestic violence			
Educational needs			
Family member alcohol or drug use			
Housing			
Hunger or access to healthy food			
Lack of employment opportunities			
Legal problems			
Parenting education (parenting skills for child development)			
Safe neighborhoods and places for children to play			
Social media			
Traffic safety			
Transportation challenges			
Other (please specify)			

9. Does your organization provide programs, services or supports to address these needs? If yes, what does your organization do to specifically address this need?
   - ☐ Yes
   - ☐ No

   If yes, please describe the programs / services / supports.

   a. Issue #1:

   b. Issue #2:

   c. Issue #3:

10. What are other organizations or efforts in the community that specifically address this need?
    a. Issue #1:

    b. Issue #2:

    c. Issue #3:

11. Does your organization partner with these organizations (mentioned in question 10) to address similar needs? If yes, how?
    a. Issue #1:

    b. Issue #2:

    c. Issue #3:

The next set of questions asks about how Children's has and can help address these issues in partnership with your organization.

12. Does your organization have a strategic plan? If so, does the strategic plan have goals or objectives aims at population health and/or partnerships with hospitals?

13. Over the next three years (2019-2021), what are ways in which Children's and your organization could partner to address

    a. Issue #1:

    b. Issue #2:

c. Issue #3:

14. Do you have any other feedback on approaches to address these needs?

a. Issue #1:

b. Issue #2:

c. Issue #3:

Conclusion

We are looking for additional input for our community health needs assessment. Would your organization be interested in helping us with any of the following?

- Referring individuals to focus groups
- Providing lists of individuals we could include in an online survey
- Providing input on how to prioritize the current needs once we have completed our data collection?

Are there any other resources we should consider as part of this assessment?

Appendix B – Focus Group Discussion Guide

Facilitator and Assistant roles:

- **Facilitator –** Welcome participants, use small talk to create a warm and welcoming environment for early arrivers, lead a quick introduction, ask questions, pause and use probes, control your reactions to participants (to avoid biases), use group control techniques to manage "experts", dominant talkers, shy participants, and ramblers, debrief with assistant after meeting
- **Assistant –** Help with set-up and signs to help participants find their way to the room, arrange room, welcome participants, take notes and/or manage the records, do not participate in discussion, help with time-keeping, distribute gift cards and evaluation to participants and debrief with facilitator after focus group

Tips for facilitator

- Address everyone by their first name when you probe them or ask them a clarifying question which will help build comfort and help with transcriptions.
- Treat your participants as experts especially when you tell them why they are here.
- Listen for inconsistent comments and probe for understanding.
- Listen for vague or cryptic comments and probe for understanding.
- Keep your questions open-ended to encourage more elaborate and meaningful answers.
- If there are non-verbal cues that demonstrate agreement with a comment that is said, ask others who nodded their head to further elaborate and/or ask participants who agree with the topic (e.g., obesity is a critical health need) to raise their hand and then announce the participant count, "8 of you agree that obesity is a critical health need."
- When a major point is made, summarize what you hear and also engage others to provide insights, "So what I hear you saying is…" "What do other people think?"
- Call on people who are not speaking up. If calling on people feels uncomfortable or does not promote talking, you can also do this by asking a question and going around the circle of people so everyone can speak in turn. Or, you can say more generally, "for the next few minutes, let's all listen to people who haven't spoken yet." Reiterate that each participant is an expert in the topic and has something to contribute.
- For questions 2 and 3, make sure you have heard from everyone.
- For dominant talkers, politely acknowledge them and ask to hear from others, "John, it seems like you've had a lot of experience with this topic. I'd like to hear what others hear about it. Who else would like to share?"
- If you are concerned that early responders will influence others, you can ask participants to make a list on paper before responding and then list all responses on a flip chart followed by group discussion.
- For disruptive talkers, remind the group of the ground rules of not talking over one another and listening to other people speak.
- For ramblers, discontinue eye contact after 20-30 seconds. As soon as he/she pauses, ask the next question or repeat the question for others to answer. You can redirect them by asking, "Can you tell me how that relates to [topic]?" "Earlier you said X. Can you tell me a bit more about that?"

Focus Group Facilitator Guide

Arrival (5 min)

- Check-in with greeter.
- Ensure room is set up and there is signage up to help participants find their way.
- As participants arrive, ask them to write their first name on a name card and place it in front of them where they decide to sit.
- Show participants where they can get food, drink, and restrooms.
- Use this time to set the tone for the focus group – have casual dialogue with early arrivers.

Welcome (5 min)

- Introduce yourself and assistant
- Explain topic, what results will be used for, and why this group was selected (emphasize their expertise in the topic)
- Thank everyone for volunteering their time
- Guidelines
    - Ask participants to turn off / silence phones
    - Assure anonymity and that we will used first names only during discussion
    - Assure that there are no right or wrong answers
    - Explain why we are recording, ask for one person to speak at a time and ask participants not have side conversations
    - Tell participants that they do not need to agree with one another, but respectfully listen as others share their views
    - To encourage participation, tell the group "to make the most of our time together and because we want to hear from all of you, we are going to ask everyone to participate".
    - Explain the role of the facilitator, which is to guide the discussion and will jump in to redirect the conversation if it goes off-topic, if there is need for further explanation, and to encourage participation
    - Logistics – length of session, where the bathroom is, where refreshments are
    - Have fun!

Introductions (5 min – assistant should start recorder)

- Ask participants to say their first name, how many children they have, and one important aspect a healthy childhood.
- Facilitator will start and then ask the person to their left or right to continue.

Questions (40 min)

1. **(5 min)** Let's continue the discussion about healthy childhoods. When you think about children and youth in your community, what does a healthy childhood look like?

2. **(15 min)** What are the most critical health needs impacting children in your community? [*Make sure you have heard from everyone and tally votes for health needs that several participants are in agreement about.]*

    a. Probes:
        i. "Can you say more about why X is a critical health need in your community?"
        ii. "Can you explain what are the challenges with making children with X healthier?"

3. **(15 min)** What is needed for children in your community to lead a healthier life?
   [*Make sure you have heard from everyone.]*
    a. Probes:
        i. "What resources are needed that are not currently available?" Probing here should focus on more formal resources, such as health care, school, community centers, social services, recreation centers, community programs, library/books, online resources
        ii. "What kind of support is needed?" Probe for more informal support such as friends, family, neighbors, friends from church, coworkers
        iii. "What challenges currently exist to accessing these resources or this support?"
4. **(5 min)** Use this time to ask participants what they thought was the most important topic that was discussed overall, as a round-robin question that all respondents answer.
   If time, you can also ask the group what you have missed or if there are any additional comments anyone would like to make. Also, if there are any unclear points from the discussion, use this time to clarify those.

Wrapping up (5 min)

- Thank everyone for their time and let them know how / when they can find the completed CHNA.
- Ask participants to complete evaluation survey
- Assistant completes gift card forms with participants and distributes them

Appendix C – Parent Survey Questions

Note for graphics: Insert PDF

https://www.dropbox.com/s/9s6xglq8y0fshqy/Parent%20Survey%20PDF.pdf?dl=0

Appendix D – Spanish Language Survey

Graphics : Insert PDF

https://www.dropbox.com/s/ex8fh54gayfazbf/Spanish%20Language%20Survey%20PDF.pdf?dl=0

Appendix E – Provider Survey Questions

Graphics: Insert PDF

https://www.dropbox.com/s/zfws9tbqx8aevln/Provider%20Survey%20PDF.pdf?dl=0

Appendix F – Quantitative Data Indicators

- Demographic and Economic Indicators
  - Age distribution by county
  - Racial and ethnic breakdown of children under 18
  - Children (under 18) living in poverty
  - Median family income among households with children
  - Children (under 18) in a single-parent household
  - Children (under 18) living with grandparent who is responsible for caring for them
  - Residents (all ages) who are foreign-born
  - Children (under 18) who are foreign-born `
  - Residents (all ages) who are not U.S. citizens
  - Children (under 18) who are not U.S. citizens
  - Children ages 5 to 17 who speak a language other than English at home
  - Population 25 and over with less than a high school diploma
- General health status indicators
  - General health status of child (ages 1-14, reported by parents)
  - Percent of live births that are preterm (defined as <37 weeks)
- Health Care and Coverage Indicators
  - Uninsured children (under 18)
  - Children (ages 1-14) whose health care meets criteria for all five components of a medical home
  - How often doctor is sensitive to family values and customs
  - Children (ages 1-14) whose parents report their child does NOT have a place he/she usually goes when he/she is sick or when parent needs advice on child's health (
  - Type of place child goes to most often when he/she needs care
  - Children (ages 0 to 18) enrolled in Medicaid at least some point during FY16-17)

        - Children (ages 0 to 18) enrolled in CHP+ at least some point during FY16-17
        - Children (ages 0 to 18) who did not get needed doctor care due to cost (2017)
        - Children (ages 0 to 18) who did not get needed specialist care due to cost (2017)
        - Children (ages 0 to 18) who did not get needed dental care due to cost (2017)
        - Children (ages 0 to 18) who did not fill a prescription due to cost
        - Average out of pocket medical spending for families, including prescription, dental, vision and other medical expenses
    - Nutrition and Physical Activity Indicators
        - Children in food-insecure families
        - Households with children ages 1-14 who sometimes or often felt that the food they bought didn't last, and they didn't have money to get more
        - Households with children ages 1-14 who sometimes or often felt that they couldn't afford to eat balanced meals
        - Households with children ages 1-14 who sometimes or often could not afford the food they needed in the past year
        - Children (ages 1-14) whose parents report their child drank 1 or more sugar-sweetened beverage per day
        - Children (ages 1-14) whose parents report their child consumes at least 5 total servings of fruits and/or vegetables per day
        - "Children (ages 5-14) whose parents report their child is physically active for at least 60 minutes per day
        - Calculated BMI percentile for children (ages 2-14)
    - Mental health indicators

        - Children (ages 1-14) whose parents report their child has difficulties with one or more of the following areas: emotions, concentration, behavior, or being able to get along with other people
        - Children (ages 4-14) whose parents reported their child had at least one day in the past month when their child's mental health was not good
        - Children (ages 4-14) whose parents reported their child needed mental health care or counseling within the past 12 months
        - Of children (ages 4-14) whose parents reported their child needed mental health care or counseling during the past 12 months, the percent that did not receive all needed care
        - Of children (ages 4-14) who needed and did not get all needed care, reasons why child did not receive all needed mental health care
        - High school students who reported feeling so sad or hopeless for at least two weeks that it interfered with their usual activities
        - High school students who reported they had seriously considered attempting suicide during the past 12 months
        - High school students who made a suicide attempt during the past 12 months that resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse
    - Substance Use Indicators
        - High school students who report having had at least one drink of alcohol on one or more of the past 30 days
        - High school students who report having used marijuana one or more times during the past 30 days
        - High school students who report having taken a prescription drug (such as OxyContin, Percocet, Vicodin, codeine, Adderall, Ritalin, or Xanax) without a doctor's prescription one or more times during their life
        - High school students who used prescription drugs in the last 30 days without a prescription

- Sexual Health Indicators
    - High school students who have ever had sexual intercourse
    - Chlamydia cases (ages 13-24, rate per 100,000)
    - Gonorrhea cases (ages 13-24, rate per 100,000)
    - Syphilis cases (ages 13-24, rate per 100,000)
- Oral Health Indicators
    - Children (ages 1-14) who saw a dentist for preventive dental care during the past 12 months
    - Children (ages 1-14) whose parents report delaying or going without needed dental care in the past 12 months)
    - Parent's rating of the condition of child's (ages 1-14) teeth
- Community Environment Indicators
    - How often parents report feeling their child (ages 1-14) is safe in his/her neighborhood
- Health disparities indicators (disaggregated by race and by income)
    - General health status of child (ages 1-14, reported by parents)
    - Children (ages 1-14) whose health care meets criteria for all five components of a medical home
    - Calculated BMI percentile for children (ages 5-14)

Appendix G – Quantitative Data Sources

U.S. Census Bureau, 2010 Decennial Census

U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

Colorado Department of Public Health and Environment, 2014-2016 Child Health Surveys

Colorado Department of Public Health and Environment, Vital Statistics Section, 2015-2017 data

Colorado Health Institute and The Colorado Trust, 2017 Colorado Health Access Survey

Colorado Department of Public Health and Environment, 2015 Healthy Kids Colorado Survey

Colorado Department of Public Health and Environment, 2015-2017 NETSS files

Colorado State Demography Office

Appendix H – Internal Data Indicators

- Inpatient visits by facility by county
- Outpatient visits by facility by county
- Emergency visits by facility by county
- BMI distribution for all patient visits by county
- Inpatient visits for mental diseases and disorders by county
- Visits for behavioral health outpatient services by county
- Mortality by service line
- Top 10 diagnoses for inpatient visits by county
- Top 10 diagnoses for outpatient visits by county

Appendix I – Evaluation of the Children's Hospital Colorado Community Health Action Plan

Executive Summary

The Children's Colorado CHAP focused on six health priority areas, as identified in the 2015 CHNA:

- Mental Health
- Physical Activity, Nutrition and Obesity
- Oral Health
- Prematurity and Early Childhood
- Respiratory Health
- Injury Prevention

Each priority area included strategies focused on education and public awareness, trainings, screenings and improving access to care, policy and advocacy efforts and expansion of the workforce in community health. Below are some of the key outcomes from the CHAP:

- **Mental Health** - Children's Colorado worked to reduce mental health stigma within the hospital walls and across Colorado. In 2017, the Hospital Mental Health Stigma Reduction Action Plan was implemented, resulting in an 82% increase in external media and 35% increase in internal communications about mental health. In May 2017, Children's Colorado partnered with 20 statewide organizations to help launch the Let's Talk Colorado online messaging platform, which garnered over 46 million impressions, including nearly 20,000 website page views to date.
- **Physical Activity, Nutrition and Obesity -** In 2016 and 2017, over 100 children were enrolled in Camp Champions, a camp program for low-income, underserved youth who are overweight or obese. Camp Champions aims to improve healthy lifestyles through education and activities, during which Campers increased their vigorous physical activity by an average of 31.5 minutes and 34.0 minutes, respectively.
- **Oral Health –** Each year, more than 1,500 infants and toddlers receive care in the Cavity Free at Three clinic at Children's Colorado. Children are seen in the dental clinic, Child Health Clinic and through community-based clinics, where they receive important preventive services. Children's Colorado also serves as a resource for medical and dental providers training in infant oral health using the Cavity Free at Three model.
- **Prematurity and Early Childhood -** In 2016, Children's Colorado launched a universal psychosocial screening program to identify families with psychosocial needs and provide them with appropriate levels of intervention. In 2017, nearly 8,000 psychosocial screenings were completed in the Child Health Clinic and 68% of families with patients

under age 2 were screened. Through this work, Children's Colorado has learned about the evolving psychosocial and social determinants of health that our families face.

- **Respiratory Health -** Just Keep Breathing (JKB), a home-based asthma management program at Children's Colorado, aims to improve care for pediatric patients who are at risk for poor outcomes due to asthma. Since the program began in 2016, 55 patients have received at least one home visit and 36 have completed the program. JKB patients demonstrate significantly improved medication device technique and improved asthma control. Future efforts will focus on expanding to Children's Colorado's primary care clinic and securing sustainable funding.
- **Injury Prevention -** In 2016, 590 car seat inspections were completed, 125 of which came from the community (a local Women's, Infants, and Children (WIC) nutrition program site). In 2017, 1,054 car seat inspections were completed, 192 of which were completed for families residing in targeted Aurora neighborhoods, and 538 subsidized-cost car seats were provided to families in need.
- In addition to Children's Colorado's health priority areas, there were key milestones achieved in our partnerships, community health and policy and advocacy efforts. Below are some highlights of those efforts. **Partnerships**
    - **Schools -** In 2016, Children's Colorado partnered with eight statewide health and education organizations to form the Colorado Alliance for School Health (the Alliance). The Alliance aims to transform how healthcare and education partners collaborate to create sustainable systems that result in health equity among all Colorado students. The planning process will identify best practices and potential demonstration projects for collaborating across systems, as well as develop a policy and advocacy platform to drive sustainable systems change.
    - **Community -** Starting in 2015, Children's Colorado, Tri-County Health Department, Together Colorado and Assuring Better Child Health and Development partnered, as part of a BUILD Health Challenge, to improve health in communities that are adversely affected by upstream factors. Community Health Liaisons and mental health specialists work in a local WIC office, primary care clinic and other community settings to address resource and social-emotional needs for children and families by providing support and referrals to community resources. In the WIC office, the CHLs provided resource support for more than 300 families in 2017, assisting primarily with WIC benefits utilization, Medicaid assistance and diaper or baby supplies.
- **Community Health -** In 2016, Children's Colorado expanded its workforce to include, for the first time, Community Health Liaisons to help patients and families with barriers to care and resource needs, including financial and benefits assistance, food insecurity,

transportation and housing needs. In 2017, more than 1,000 Child Health Clinic patients were referred to a Community Health Liaison for resource support.

- **Policy and Advocacy -** Children's Colorado modernized Colorado's newborn screening program by partnering with other child health advocates to successfully advance House Bill 18-1006, a modernization of Colorado's newborn screening law which hadn't been updated in more than 20 years. Colorado's screening program aims to ensure every one of the 67,000 babies born each year in the state receives a screening for potentially life-threatening medical conditions and hearing problems. House Bill 18-1006 makes the newborn screening program more comprehensive, ensures timeliness of screening results and offers an enhanced program for the 2,000 babies each year who fail their hearing screening. The screening ensures that babies and families are swiftly connected to care if there is a risk for a medical condition or hearing loss that needs further evaluation.

This report highlights how Children's Colorado has impacted children and families in our hospital and into the community, with a focus on the six health areas identified in our Community Health Needs Assessment, as well as our partnerships in schools, community and primary care, our work in community health and our policy and advocacy efforts.

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