

NORTH CAMPUS IN BROOMFIELD





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Overview and Purpose

Overview of Children's Hospital Colorado

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 Children's Hospital Colorado North Campus, Broomfield. Each year, the network has more than 15,000 inpatient admissions and more than 600,000 outpatient visits. This community health needs assessment (CHNA) is an assessment for Children's Hospital Colorado's North Campus, located in Broomfield, Colorado.

Purpose of the assessment

Children's Colorado embraces 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 better inform how we fulfill our mission of improving the health of all Colorado children. We will also use the information gathered from this assessment to inform the work of the Division of Population Health and Advocacy. The Division of Population Health and Advocacy includes the Child Health Advocacy Institute (CHAI), Government Affairs, School Health, Partners for Children's Mental Health (PCMH), and the Office of Diversity, Health Equity, and Inclusion (DHEI). Our vision is to implement a model of "whole child, whole health," which includes considering all clinical aspects as well as social determinants of health (SDoH).

This report is focused on identifying and quantifying community health needs and will be followed by a plan to address the needs. The Community Health Implementation Plan will be completed no later than May 15, 2023, and will guide the implementation of the hospital's strategies for addressing identified needs. In addition, this report fulfills the requirements of the Affordable Care Act of 2010. Internal Revenue Service (IRS) Section 501(r) requires that nonprofit community hospitals conduct a community health needs assessment (CHNA) every three years. This is a report for the Children's Hospital Colorado North Campus, Broomfield. The IRS requires a newly licensed hospital to meet the CHNA requirement by the last day of the second taxable year.



Methods and Process

Children's Colorado used the following process to complete our assessment, which is in full compliance with IRS requirements and builds on approaches we have used for previous assessments for our other licensed facilities.



Defining the community

For the purposes of this assessment, Children's Colorado has defined community as all children aged 0 to 25 living in the two-county area in which most of the hospital's patient population resides and in which we have a facility: Adams and Broomfield counties. Within these counties, Children's Colorado has a licensed hospital facility located at the Children's Hospital Colorado North Campus in Broomfield.

Consistent with the Internal Review Service (IRS) guidelines, Children's Colorado considered three criteria to select the geographic area included in the assessment:

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

The hospital's mission is "to improve the health of children through the provision of high-quality, coordinated programs of patient care, education, research and advocacy." To understand the geographic area served by the hospital facility, we reviewed our patient population data and found that most inpatient admissions and outpatient visits are from children who live in two counties, which we ultimately decided to include in our definition of our community: Adams and Broomfield counties. In 2021, Children's Colorado saw 23,880 patients from Adams and Broomfield ages 0 to 25 years old across inpatient, emergency department or urgent care (ED/UC) and outpatient settings, representing 41% of all patients seen that year.

Unique patients ages 0-25 seen at Children's Hospital Colorado North Campus, Broomfield by Patient's County of Residence, January 2021-December 2021

County	Inpatient, n (%)	Emergency / Urgent Care, n (%)	Outpatient, n (%)	Total, n (%)
Adams	464 (38.7%)	11,037 (43.1%)	10,322 (29.5%)	19,819 (33.8%)
Broomfield	94 (7.8%)	2,184 (8.5%)	2,262 (6.5%)	4,061 (6.9%)
Total patients in two-county region	558	13,221	12,584	23,880
% of total patients	47%	52%	36%	41%

Source: Epic, 2021

New data collection approach

Since this is the first assessment for Children's Hospital Colorado North Campus, Broomfield, we followed similar approaches based on our methods in our needs assessment for our Anschutz Medical Campus and Colorado Springs locations. Children's Colorado revised our prior data collection approach in two main ways: First, we gathered secondary data first to inform our primary data collection strategy and second, we developed a more dedicated approach to equity in our data collection process.

More depth, less breadth

For this assessment, we gathered primary data focused on topic based on top needs from our secondary data (e.g., indicators of greatest difference at the county level compared to the state) or where there are gaps in the secondary that could be explored through primary data (e.g., health and social indicators for youth in the lesbian, gay, bisexual, transgender, and queer communities). Using this approach, the primary data collection process focused on the following populations and topics:

Populations:

- · Families in the military
- · Families who were born outside the U.S.
- · Families who identify as Black, Indigenous or other person of color
- · Families with diverse languages used at home
- · Children with medical complexity
- · Youth in the lesbian, gay, bisexual, trans and queer communities

Topics:

- · Education and early childhood
- Housing
- Mental health and suicide prevention
- Respiratory health
- · Intentional and unintentional injury

As part of this approach, our primary data collection tools used more in-depth and focused questions to deepen understanding of community needs in these populations. (See Appendix A for data collection instruments) In addition, the primary data provided context behind the greatest needs that were identified in the secondary data.

^{1.} Secondary data refer to data that has already been collected from another organization or source, such as public health surveillance data or patient healthcare utilization data. Primary data refer to data that a person or team gathered directly from a specific population, in the form of survey, interview, focus group, etc.

Applying a data equity lens

For this assessment, we applied equitable approaches to our data, with the aim of playing a part in changing the status quo and utilization of data to advance equity and inclusion for the communities we serve. A data equity lens works to bring awareness to historical impacts, potential biases and exploration of demographic data, such as race, ethnicity, sexual orientation and the intersectionality of varying demographics. Children's Colorado revised our assessment approach by identifying concrete and actionable ways to gather, analyze and communicate our data more equitably. Below is a table that highlights some of the approaches we committed to in order to ensure a more equitable approach to our CHNA work.

Equitable approaches to data and Children's Colorado examples

	Equitable approach	Children's Colorado example
Data collection	Design data collection tools with inclusive language, at the appropriate literacy level	Used person-first language to describe specific populations in our data collection tools and reviewed with diverse team members for literacy and culturally responsive language
	Translate data collection tools into community preferred languages	Offered caregiver survey in several languages, including Amharic, Arabic, Burmese, English, Chinese, French, Hmong, Karen, Somali, Spanish and Vietnamese
	Analyze data by multiple demographics (e.g., gender and race or ethnicity) to understand the intersection of multiple identities	Gathered demographic data for secondary sources, when available
Data analysis	Include both individual- and system-level measures to limit internal bias	Individual-level: Analyzed data using our electronic medical records data (e.g., Epic) System-level: analyzed regional data from secondary sources
	Assess commonalities and differences in qualitative data using team-based approach which limits bias	Had data and evaluation team members review groupings and themes in the stakeholder interviews
	Provide relevant historical or cultural context for a more complete picture of the data	Discussed barriers such as language, discrimination and racism, stigma around accessing services and culturally responsive education for providers
Data communication	Ensure information is presented with appropriate literacy and language	Presented findings to various audiences using narratives, graphics and one to two data points to describe the data rather than complex tables of numbers and percentages

The Child Opportunity Index

There are a number of measures that have been developed to help understand the types of social determinants a person may experience where they live (e.g., census tract, zip code, county). However, many of these measures do not have a child-specific focus. The Child Opportunity Index (COI) was developed by Diversity Data Kids in collaboration with the Kirwan Institute for the Study of Race and Ethnicity at Ohio State University in 2014 and measures the quality of resources and conditions that are essential for children to develop and thrive in the neighborhoods where they live. The COI is a composite index of 29 neighborhood-level indicators across three domains: education, health and environment, and social and economic. The scale range is as follows: very low, low, moderate, high, and very high child opportunity. This can be calculated for a given geographic area. As we start to describe our hospital data, we will reference the COI to help connect to the social and economic conditions of the patients we serve.

Child Opportunity Index domains and sub-domains

Education	Health and Environment	Social and Economic
Early childhood education	Healthy environments (e.g., walkability, green space)	Economic opportunities
Elementary education	Toxic exposures (e.g., hazardous waste dump sites)	Economic and social resources (e.g., poverty rate, employment)
Secondary and post-secondary education	Health resources (e.g., health insurance coverage)	
Educational and social resources		

Source: diversitydatakids.org



Secondary data sources

Our team identified relevant secondary indicators both internally and externally to identify health and social inequities and needs within our defined community. In total, we collected and analyzed data from more than 20 data sources. For a list of specific data sources see Appendix B.

Primary data sources

For our primary data sources, we conducted stakeholder interviews, collected survey data from parents and caregivers, and participated in community meetings in both Adams and Broomfield counties. Below is a summary of our collaborations, stakeholders, survey analysis and community meetings.

Stakeholder interviews

Stakeholders provide critical insights regarding the root causes of community health needs as well as providing context and nuance that is often missed in secondary data. Our stakeholders were identified based on the community or communities they worked in and the population and topics outlined in the methods section of this report. Some of our stakeholders serve one or more of the counties identified as our community. Other stakeholders serve the entirety of Colorado, including our counties of focus. Additionally, when we conducted stakeholder interviews, we solicited suggestions from the stakeholders for additional informants. In total, we conducted 33 interviews with 31 organizations representing a diverse range of communities. For a detailed list of stakeholder names, roles and organizations, please refer to Appendix C. We are deeply grateful to the many organizations who participated in the interviews:

- · A Precious Child
- · Adams County Health Department
- APS Impact Zone
- Aurora Community Connection
- Broomfield Community Foundation
- · Broomfield Early Childhood Council
- Broomfield FISH
- · Broomfield Public Health and Environment
- · Centennial Elementary
- City of Aurora, Office of International and Immigrant Affairs
- · Colorado Access
- Colorado Department of Education and Denver Public Schools
- Colorado Department of Local Affairs, Division of Housing
- Colorado Department of Public Health and Environment (CDPHE), Emergency Medical and Trauma Services
- Colorado Department of Public Health and Environment (CDPHE), Office of Suicide Prevention

- · Community Food Share
- Culture of Wellness
- Developmental Pathways
- Early Childhood Council Leadership Alliance
- · Early Childhood Partnership of Adams County
- · El Grupo Vida
- Emerald Elementary
- · Mental Health Partners
- Metro Denver Homeless Initiative (MDHI)
- Montebello Organizing Committee
- One Colorado
- · Safehouse Progressive Alliance for Non-violence
- · The Colorado Health Foundation
- Tri-County Health Department
- University of Colorado, Office of Diversity, Equity and Community Engagement
- · Youth Move

Surveys

In the caregiver survey that we administered, we asked respondents to rate a list of issues as not important, a little important, important or very important. We then applied a weighting system where issues rated as very important received four points, issues rated important received three points, issues rated a little important received two points and issues rated not important received one point. The combined points for each issue were then compared to determine the top issues for each set of respondents.

We offered our caregiver survey in 11 different languages: Amharic, Arabic, Burmese, English, Chinese, French, Hmong, Karen, Somali, Spanish and Vietnamese. We distributed the survey with the help of our stakeholders and contracted with a polling firm to send text-to-web messages to registered and nonregistered voters in Adams and Broomfield counties. The polling firm sent a text message that included an invitation to participate with a link to our caregiver survey to 22,000 cell phone users in Adams and Broomfield counties in English and Spanish. This method achieved a 0.68% response rate. Overall, there were 314 survey responses. Using the polling method and outreach through the help of our stakeholders, we were able to achieve a representative sample from both counties.

Interviews

For our stakeholder interviews, interviewees were selected based on the communities they serve (Adams and Broomfield counties) and included both state and local agencies. A total of 33 interviews were conducted. Some of the populations identified by stakeholders include but are not limited to families with diverse languages used in the home; families born outside of the U.S.; families who identify as Black, Indigenous, or other person of color; families with members who identify as lesbian, gay, bisexual, transgender, queer or questioning and other (LGBTQ+) youth; and children with medical complexities.

Respondents were asked to identify the top needs of the populations they serve, barriers that these populations face, and the impact of the COVID-19 pandemic in addition to other organization-specific questions.

Community meetings

To help prioritize needs, we held two meetings with community leaders in Adams and Broomfield counties to review our secondary and primary data findings and rank the top needs. In Broomfield, we met with community leaders who are part of the Broomfield Community Services Network, and in Adams County, we met with members of the Adams County Health Alliance. In total, there were 45 community members who participated in the presentation and community-need ranking.

Collaborations

Children's Colorado collaborated with several partners to inform our CHNA. Below is a brief description of the partnerships and collaboration approach.

Adams County Health Alliance (ACHA): Children's Colorado partnered with ACHA to present findings and have a community prioritization meeting with members of the Alliance.

Broomfield Public Health and Environment (BPHE):Children's Colorado partnered with BPHE to join the
Broomfield Community Services Network (BCSN) for
a community meeting, identify community partners
to engage in stakeholder interviews and assist with
distributing the caregiver survey.

Broomfield Community Services Network (BCSN):

Children's Colorado partnered with UCHealth and Centura to have a joint community prioritization meeting with input from members of the BCSN.

Colorado School of Public Health (CSPH): As part of an internship with Children's Colorado, Colorado School of Public Health graduate student Meghan McGee helped to conduct, transcribe and synthesize findings from key stakeholder interviews.

Limitations

Due to being relatively new to the Broomfield community, we are still in the process of establishing relationships and learning more about the key community organizations and leaders. We are grateful to our partners at Broomfield Public Health and Environment who played a significant role in introducing the CHNA team to many community partners and opportunities to engage community members in Broomfield County. While we were very successful in getting stakeholders to participate in our CHNA process, we know there is a lot we still have to learn about the community beyond those interviews and look forward to those opportunities during our implementation plan phase.

For our caregiver survey, we partnered with community organizations to send out our survey to their networks and tested a new approach to data collection by contracting with a polling firm to reach out to community residents. Polling is limited to cell phone users with an active line and the message was sent in English and Spanish only. While we will consider using polling in future needs assessment, we will expand and enhance our approaches to ensure we get a diverse and representative sample.

Similar to prior assessments, there was a data lag with some secondary data, which limits our interpretation of community needs. This was especially true during the COVID-19 pandemic. To adjust for these limitations, Children's Colorado included questions in our surveys and stakeholder interviews that focused on the impact of the pandemic on community needs and barriers to addressing those needs.

Additionally, some health estimates were suppressed for Broomfield County due to a smaller sample size or events, which limited our understanding of certain health needs in the community. Some of the data are presented as Health Statistics Regions (HSR)₂ for some of the summary findings to allow for sufficient sample size for reliable estimates. As a result, Broomfield is a part of HSR 16 and bundled with Boulder County.

The 21 Colorado Health Statistics Regions are aggregations of counties developed by the Colorado Department of Public Health and Environment
Health Statistics Program in partnership with state and local public health professionals; developed using statistical and demographic
criteria. https://data-cdphe.opendata.arcgis.com/datasets/75e32548d3b24169adb942ecb7424937/explore?location=38.980788%2C105.550900%2C7.88

Summary Findings

Description of community served

The populations that are included in this assessment are the residents of Adams and Broomfield counties, ages 0-25 years old. Data may be presented with slightly different ages groups, depending on the data source and age groupings available.

Child population

Across Colorado, there are approximately 1.3 million children under the age of 18, representing 22% of Colorado's residents. This figure is slightly higher in both Adams County (27%) and Broomfield County (23%). Approximately three in 10 households in Colorado have children².

Child population, 2019

	Colorado	Adams	Broomfield
Total population under 18 years (N, %)	1,259,031 (22%)	135,307 (27%)	15,762 (23%)
% of households with one or more children under 18 years old	30%	39%	31%

Source: American Community Survey 5-Year Estimate, 2020



Births and deaths

There has been a steady decline in birth rates in Colorado since 2006. In 2021, there were 62,928 live births in Colorado.³ While Colorado's birth rate has been declining for over a decade, there has been a positive net migration into Colorado, particularly among people of childbearing age⁴.

When looking at deaths in the less-than-1-year age group, Colorado's infant mortality rate has hovered between 4.5 and 5.1 per 1,000 live births since 2012³. By race and ethnicity, infant mortality rates in Colorado are highest among Black and African American mothers at 10.1 per 1,000, followed by Native Hawaiian/other Pacific Islander mothers at 8.7 per 1,000 from 2020-2021³.

Strikingly, between 2015 and 2019, suicide was the leading cause of death among Colorado youth ages 10-17, exceeding motor vehicle and other transportation⁵. Among children under 10, sudden unexpected infant death (SUID) remains the leading cause for the less-than-1 age group, child maltreatment for kids 1-4 years old, and motor vehicle and other transportation for kids 5-9 years old⁵.

Leading cause of death by age group, 0-17 Years in Colorado, 2015-19

All	Less than 1	1-4	5-9	10-14	15-17
Suicide	Sudden unexpected infant death	Child maltreatment	Motor vehicle and other transportation	Suicide	Suicide
Child maltreatment	Child maltreatment	Motor vehicle and other transportation	Child maltreatment	Firearm	Firearm
Sudden unexpected infant death	Unintentional drowning	Unintentional drowning	Unintentional drowning	Motor vehicle and other transportation	Motor vehicle and other transportation
Motor vehicle and other transportation	Other	Asphyxia	Firearm	Child maltreatment	Homicide
Firearm	Motor vehicle and other transportation	Fire	Fall or crush	Homicide	Child maltreatment

Source: Child Fatality Prevention System, Colorado Department of Public Health and Environment, 2015-2019

Race and ethnicity

While Colorado is predominantly white, 41% of the population identifies as non-White when looking at the 0 to 24-year-old population. Adams County has a higher non-White population than the state, while Broomfield County has a smaller non-White population (63% and 29%, respectively). For both Adams and Broomfield counties, the Hispanic or Latinx group is the largest non-White population by a wide margin, and in Adams County they are the majority population (53.6%).

Race and ethnicity ages 0-24, 2020

	Colorado	Adams	Broomfield
American Indian	0.8%	0.6%	0.6%
Asian/Pacific Islander	4.1%	4.5%	8.1%
Black	5.7%	4.5%	2.2%
Hispanic	30.8%	53.6%	18.1%
White	58.5%	36.9%	70.9%

Source: Colorado Department of Local Affairs, 2020

Education

In school year 2020-21, the average graduation for Colorado high school students was 81.7%. For our two-county area, the graduation rate for Adams County students was 79.3% and 92.8% in Broomfield.

Across counties, graduation rates vary by race and ethnicity ⁷. In Adams, American Indian or Alaska Native students had the lowest graduation rate (56.4%) whereas Hispanic or Latinx students had the lowest in Broomfield (85.9%). Additionally, the high school graduation rates vary by socioeconomic status with rates being the lowest among students experiencing homelessness ⁷. See Appendix D for details.

Graduation rates by race and ethnicity, 2020-21

	Colorado	Adams	Broomfield
American Indian or Alaska Native	64.5%	56.4%	100.0%
Asian	91.5%	92.3%	96.1%
Black or African American	76.0%	74.3%	90.0%
Hispanic or Latinx	74.2%	74.3%	85.9%
Native Hawaiian or Other Pacific Islander	76.5%	83.3%	100.0%
Two or more races	81.6%	81.4%	92.3%
White	86.6%	85.3%	94.4%
Total	81.7%	79.3%	92.8%

Source: Colorado Department of Education, 2020-2021

Children with a disability

The percentage of children under 18 living with a disability₃ in Colorado is 3.6%². Adams County has a higher percentage of children living with a disability. When looking specifically at cognitive disabilities, Adams (3.7%) has a higher percentage of children living with a cognitive disability compared to the state (3.3%)².

Children with a disability, 2020

	Colorado	Adams	Broomfield
% of children under 18 years old with a disability	3.6%	4.0%	2.5%

Source: American Community Survey 5-Year Estimate, 2020

According to the Colorado Department of Education, for school year 2019-20, the percentage of students in Colorado with a disability among children ages 6-21 year old was higher for non-English learners (83%) compared to English learners (17%)⁷. When looking at race and ethnicity among students with disabilities, White students comprise 48.8%, followed by Hispanic or Latinx at 38.3%, and Black or African American at 5.7% ⁷.

^{3.} Disability is defined as someone who has a serious difficulty with four basic areas of functioning – hearing, vision, cognition, and ambulation. https://www.census.gov/quickfacts/fact/note/US/DIS010219

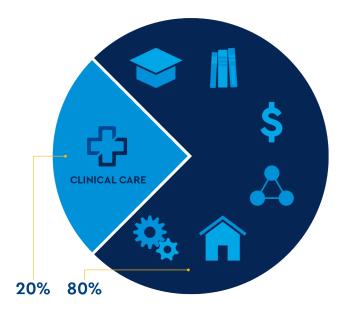
Social determinants of health

Social determinants of health (SDoH) are the social, economic and physical conditions in which people are born and live that impact their health 8. Social determinants of health can range from families not being able to access medical care because of their immigration status to structural issues with their housing that impact their child's asthma.

When looking at a child's overall health, only 20% is impacted by clinical care, while approximately 80% comes from other factors, including education, income and the home dynamic.

Below we highlight the following SDoH topics and measures:

- Socioeconomic status
- · Access to benefits
- Housing
- · Physical activity
- Food access















Socioeconomic status

While Colorado's median household income is about \$93,000, more than one in 10 households with children live in poverty (11.5%), representing approximately 143,000 children². In Colorado, 27.6% of children are being raised in single-parent households². Like the distribution of income and poverty, these figures are slightly higher in more urban areas and notably lower in more suburban areas².

Socioeconomic indicators, 2020

	Colorado	Adams	Broomfield
Total Population	5,684,926	509,844	69,444
Children (under 18) living in poverty	143,390 (11.5%)	17,984 (13.5%)	800 (5.1%)
Median Household Income	\$92,752	\$83,853	\$129,207
% children (under 18) living in single-parent household	27.6%	32.4%	21.2%

Source: American Community Survey 5-Year Estimate, 2020

Access to benefits

Access to benefits — and health insurance in particular — can promote health at any age through routine check-ups, preventive screenings and immunizations. Public insurance benefits, such as Medicaid, Child Health Plan Plus (CHP+) and Advance Premium Tax Credits (APTCs), provide no-cost or low-cost options for health insurance for families with lower incomes. Many eligible families are not enrolled in these programs. At the state level, from ages 0 to 18 years old, the number of eligible but not enrolled individuals (EBNE) in Medicaid, CHP+ or APTCs is 7.3% 9. Broomfield County's rate is almost double that of the state at 13.3% 9. When looking at the data by race/ethnicity and income statewide, 46.3% of those who are eligible but not enrolled in any of the programs are Hispanic9.

Eligible but not enrolled, ages 0-18, 2019

	Colorado	Adams	Broomfield
% EBNE*	7.3%	5.68%	13.3%

Source: 2019 Colorado Health Institute calculation using data from the Department of Healthcare Policy and Financing; Connect for Health Colorado; American Community Survey 2019; 2019 Colorado Health Access Survey; 2015 Medical Expenditure Panel Survey *Eligible but not enrolled (EBNE) in Medicaid, CHP+, or APTCs

Housing and homelessness

Coloradans experiencing challenges with the lack of housing affordability and/or housing instability may also experience negative impacts on their physical health and may have trouble accessing healthcare¹⁰. Colorado ranks as the eighth least affordable state in the U.S. when median income is compared to median home sales prices¹¹. Across Colorado, 13.6% of households spend 50% or more of their household income on housing. This rate is slightly higher in Adams County (13.8%)². According to the 2021 Broomfield Community Survey, affordable housing was the top issue that respondents thought the City and County of Broomfield should prioritize. In the same survey, only half of respondents reported that they believed equal access to housing was provided to residents of all backgrounds¹².

Housing cost burden, 2020

	Colorado	Adams	Broomfield
Percent of households that spend 50% or more of their income on housing	13.6%	13.8%	10.6%

Source: American Community Survey 5-Year Estimate, 2020 following the County Health Ranking methodology for severe housing cost burden

Physical activity

The role of physical activity can affect both a child's physical and mental well-being. Physical activity can help reduce the risk of developing heart disease, type 2 diabetes and high blood pressure¹³. It has also been shown that physical activity can be associated with fewer or less severe symptoms of depression¹⁴. The Physical Activity Guidelines for Americans, written by the U.S. Department of Health and Human Services (DHHS), recommends that children ages 6-17 should do 60 minutes or more of moderate-to-vigorous physical activity each day¹⁵.

In Adams County, students had a lower percentage of being physically active for a total of at least 60 minutes per day on five or more days in the past week compared to the state¹⁶. Lack of physical activity can also negatively impact a child's academic performance and may lead to lower levels of concentration and memory¹⁷. Both Adams (76.5%) and Broomfield (74.0%) reported the same or higher rates compared to the state of students spending more than three hours in front of an electronic device for something other than homework¹⁶.

Physical activity, 2021

	Colorado	Adams	Broomfield
Percent of students who were physically active for a total of at least 60 minutes per day on five or more days in the past week	49.0%	42.9%	55.4%
Percent of students who spent more than three hours in front of a TV, computer, smart phone or other electronic device for something other than schoolwork	74.0%	76.5%	74.0%

Source: Healthy Kids Colorado Survey, 2021, data is presented as HSR

Food access

Children experiencing food insecurity can be at an increased risk for a variety of negative health outcomes, including obesity. They also face a higher risk of developmental problems compared with food-secure children. In addition, reduced frequency, quality, variety and quantity of consumed foods may have a negative effect on children's mental health ¹⁸. In 2020, about 11% of Colorado children under 18 experienced food insecurity ¹⁹.

The COVID-19 pandemic took economic tolls on many individuals and families and disrupted many food systems for children in Colorado, leading to increased food insecurity. Hunger Free Colorado conducted a quarterly survey across the state to determine the impact of Coloradans' access to food and financial security²⁰. In December 2020, the third statewide survey in the series found that "almost two in five (38%) Coloradans are food insecure"²⁰. This was found to be the highest incidence rate of food insecurity in the state since the Great Recession ²⁰.

In Adams County, an estimated 15.5% of children under 18 were food insecure in 2020, representing 20,940 children ¹⁹. In Broomfield County, 7.4% of children were food insecure, representing 1,160 children. According to the 2021 Healthy Kids Colorado Survey, 12.5% of Adams County students and 8.1% of Broomfield/Boulder students reported sometimes, most of the time, or always going hungry in the past 30 days because of a lack of food at home. In Adams County, a higher proportion of students who reported going hungry identified as East/Southeast Asian, whereas in Broomfield County they identified as multi-racial ¹⁶. See Appendix E for details.

Food insecurity, 2020-2021

	Colorado	Adams	Broomfield
2020 child food insecurity rate ¹	11.2%	15.5%	7.4%
Percent of students who went hungry in last 30 days sometimes/mostly/always because of lack of food ²	12.4%	12.5%	8.1%

Source: ¹Feeding America, 2020, ²Healthy Kids Colorado Survey, 2021, data is presented as HSR

Health and healthcare indicators

After looking at how social factors can influence a child's well-being, the section below summarizes how some of the following health and healthcare indicators impact our counties:

- Health status
- · Asthma and respiratory health
- · Child abuse and neglect
- · Mental health and suicide prevention
- Substance use
- Mother and infant health
- Oral health
- · Unhealthy weight

- · Unintentional injury
- · Health access
- · Healthcare utilization

Health status

Most parents in Colorado report that their children's health is either excellent (57.0%) or very good (31.4%) ²¹. Statewide, parent-reported health status varies slightly by race or ethnicity. Slightly fewer parents that identify as Hispanic report that their children's health is either excellent or very good (51.6% and 29.9% respectively) while a slightly higher percentage of parents that identify as non-Hispanic White reported excellent or very good health (60.6% and 31.4% respectively). In Adams County, 46.7% of parents reported their children's health as excellent and 38.2% reported very good. In Broomfield and Boulder counties 4, nearly all parents reported their children's health as excellent or very good: 71.1% reporting excellent and 26.2% reporting very good ²¹.

Asthma and respiratory health

Children are more likely than adults to be seen in the emergency department or hospital for asthma and/or upper respiratory infections. In 2021, Adams County has had higher rates of asthma emergency department and hospitalization rates compared to the state among kids 0-14 years old ²².

Socioeconomic indicators, 2020

	Colorado	Adams	Broomfield
Asthma emergency department rate per 10,000, kids 0-4 years old	41.0	60.6	36.9
Asthma emergency department rate per 10,000, kids 5-14 years old	38.1	63.3	21.0
Asthma hospitalization rate per 10,000, kids 0-4 years old	17.0	17.9	8.5
Asthma hospitalization rate per 10,000, kids 5-14 years old	8.5	14.4	*

Source: Colorado Department of Public Health and Environment, Colorado Environmental Public Health Tracking, 2021 *Indicates suppressed or unavailable data

Children who identify as Black and children who live below 250% of the poverty line have greater health disparities in asthma prevalence, treatment and outcome ²³. Black and Latino children are less likely to receive preventive care and more likely to visit the emergency department and be hospitalized than White children ²⁴⁻²⁶.

Barriers to asthma management may be related to the disease itself. However, national studies show that more than 50% of the patients of all ages whose asthma is uncontrolled have barriers that are not related to their disease or even their healthcare. Access to healthcare and medications are cited as barriers to asthma treatment, but U.S. families also report barriers such as poverty, stress, poor housing conditions and increased exposure to environmental triggers. These factors are associated with increased asthma prevalence, worse control and increased hospital admissions ²⁷⁻²⁹.

^{4.} Broomfield and Boulder County data were combined to allow for sufficient sample size for reliable estimates.

Child abuse and neglect

Child maltreatment is one of the leading causes of death among youth under 18 years in the state. Young children (under 1 year) experience higher rates of child maltreatment death compared to older children ³⁰. Between 2018 and 2021, Adams County had a higher rate (87.8 per 100,000) of emergency department visits tied to abuse among children 0-18 years old compared to the state's 75.5 per 100,000 ³¹. Adams County also had a higher rate of child maltreatment deaths compared to that of the state at 5.0 per 100,000 ³⁰.

When looking at race and ethnicity in Adams County, Hispanic or Latino youth had the highest rates of child maltreatment deaths compared to other groups (5.3 per 100,000) from 2018 to 2020 30.

Child abuse, maltreatment and neglect, 2018-21

	Colorado	Adams	Broomfield
Crude rate of emergency department visits per 100,000 mentioning injuries due to child or adult abuse among Colorado residents under 18 years old ¹	75.5	87.8	35.2
Crude rate of child maltreatment deaths per 100,000 among Colorado residents under 18 years old²	3.1	5.0	*
Child abuse and neglect (incidence of maltreatment of children younger than 18 including physical abuse, sexual abuse, emotional abuse and/or neglect) rate per 1,0003	9.0	14.1	3.3

Source: ¹Colorado Department of Public Health and Environment, Injuries in Colorado Dashboard, 2018-2021; ²Colorado Department of Public Health and Environment, Child Fatality Prevention System, 2018-2020; ³Kids Count, Division of Child Welfare Services, Colorado Department of Human Services, 2020; *indicates suppressed or unavailable data

Mental health and suicide prevention

Mental health impacts emotional, psychological, and social well-being and is important at every stage of life, from childhood and adolescence through adulthood 32. In the two-county area, between 38% to 41% of high school students felt sad or hopeless almost every day for two or more weeks in a row during the past 12 months in 2021. According to the 2021 Healthy Kids Colorado Survey, self-reported poor mental health was higher for students who identified as transgender and African American/Black, East/Southeast Asian and multi-racial students. Despite the prevalence of mental health issues, access to mental healthcare continues to be a challenge for all Coloradans. More than one in 10 Coloradans reported not getting needed treatment for mental health issues in 2019.

Mental health is also a risk factor for suicide. For several years, suicide has been the leading cause of death for Colorado youth aged 10 to 17³⁰. In 2021, 7.2% of Colorado students reported that they attempted suicide one or more times in a 12-month period ¹⁶. In Colorado and in Adams and Broomfield counties, self-reported suicide attempts were four to six times higher for students who identified as transgender versus cisgender.

At Children's Colorado, patients are increasingly presenting with mental and behavioral needs as well as self-harm and suicide attempts, particularly since the start of the pandemic. Between January and May 2021, behavioral health emergency department visits across the Children's Hospital Colorado health system were up 73% compared to the same time period in 2019. During the spring of 2021, suicide continued to be a leading chief complaint in Children's Colorado emergency departments and Children's Colorado emergency transportation teams were receiving three to four suicide attempt calls per week. Experts at Children's Colorado expect to see increases in other diagnoses, including disordered eating and substance use and abuse.

Mental health indicators, 2018-2021

	Colorado	Adams	Broomfield
Percent of high school students who felt sad or hopeless almost every day for two or more weeks in a row so that they stopped doing some usual activities during the past 12 months ¹	39.6%	40.7%	38.3%
Percent of high school students who attempted suicide one or more times during the past 12 months ¹	7.2%	6.7%	6.6%
Percent of students who sometimes/most of the time/ always had poor mental health during the COVID pandemic ¹	68.5%	71.1%	67.6%
Percentage of high school students who had an adult to go to for help with a serious problem ¹	73.5%	70.2%	75.3%
Average annual crude rate of emergency department visits per 100,000 mentioning self-harm injuries among Colorado residents under 18 years old ²	218.2	219.8	243.5
Average annual crude rate of emergency department visits per 100,000 mentioning self-harm injuries among Colorado residents 18-24 years old ²	324.4	347.1	221.7

Source: ¹Health Kids Colorado Survey, 2021, data is presented as HSR; ²Colorado Department of Public Health and Environment, Injuries in Colorado Dashboard, 2018-2020

Substance use

There are many factors that may lead to substance use among children and youth, including behavioral, emotional and environmental factors ³³. Substance use can be associated with risky behaviors as well as experience of violence and mental health or suicide risk ³⁴. In Adams County, 12% of students reported that they binge drank on one or more days in the past 30 days, similar to the state at 12.5%. In Broomfield County, a higher percentage of students, 16.6%, reported binge drinking. In Adams County and Colorado, a similar percentage of students reported using substances to experiment or see what it felt like in the past 12 months, while Broomfield had a higher percentage reporting using substances (16.2%). A similar percentage of students reported using marijuana one or more times during the past 30 days in Adams and the state (13.4% and 13.3%), while Broomfield had a slightly higher percentage (14.8%) ¹⁶.

Substance use, 2021

	Colorado	Adams	Broomfield
Percentage of students who binge drank on one or more of the past 30 days	12.5%	12.0%	16.6%
Percentage of students who used marijuana one or more times during the past 30 days	13.3%	13.4%	14.8%
Percentage of students who used substances to experiment or see what it felt like in the past 12 months	12.2%	11.7%	16.2%

Source: Healthy Kids Colorado Survey, 2021

Mother and infant health

Mother and infant health, also known as maternal and child health, is focused on the health and well-being of people who are pregnant and their infants. There are a myriad of factors that are critical to the health of pregnancies, childbirth, the postpartum period and infant outcomes, including behavioral and environmental factors. The table below provides a snapshot of some key indicators for this population. In Colorado, the infant mortality rate in 2019 was 4.7 per 1,000 live births. Across the state, infant mortality rates among people who identify as white Hispanic, Black/African American, and American Indian/Alaskan Native were about twice as high compared to non-Hispanic White populations ³⁵. In Adams and Broomfield counties, infant mortality rates were higher than the state (5.7 and 6.6 per 1,000 live births, respectively).

Mother and infant health indicators, 2019 and 2021

	Colorado	Adams	Broomfield
Percent of births where pregnant person smoked during pregnancy, 2021	3.7%	4.3%	2.0%
Percent of births where pregnant person had no prenatal care, 2021	1.5%	1.7%	0.0%
Percent of births with a low birth weight, 2021	9.5%	9.5%	9.2%
Infant mortality rate per 1,000 live births, 2019	4.7	5.7	6.6

Source: Colorado Department of Public Health and Environment, Vital Statistics

Oral health

Oral health is essential to a person's overall health and well-being. However, not everyone has access to preventative care, such as visiting a dentist or dental hygienist which can lead to greater rates of oral diseases. Individuals with lower incomes or education levels are less likely to access oral health services ³⁶. In Adams County, a higher percentage of parents reported their child's teeth condition as fair or poor compared to the state ²¹. The proportion of children ages 0-18 who did not visit the dentist or dental hygienist in the past year was higher in Adams County than the state ³⁷.

Oral health, 2021

	Colorado	Adams	Broomfield
Percentage of parents who reported child's teeth condition as fair or poor ¹	6.8%	10.6%	3.7%
Children ages 0-18 who did not visit the dentist or a dental hygienist in the past year ²	19.2%	27.0%	16.4%

Source: 1 Child Health Survey, 2018-2019; 2 Colorado Health Access Survey, 2021

Unhealthy weight

People who are obese are at a higher risk for many serious health conditions. Furthermore, those who experience childhood obesity are more likely to be obese and experience more severe risk factors into adulthood ³⁸. The percent of high school students in our two-county area who are overweight or obese ranges from 12.4% to 26.5%. Broomfield County students had a higher rate of being underweight compared to the state ³⁹.

Unhealthy weight, 2019

	Colorado	Adams	Broomfield
Percent of students who are overweight or obese	21.6%	26.5%	12.4%
Percent of students who are overweight 2019	11.9%	15.1%	8.0%
Percent of students who are underweight 2019	4.6%	4.3%	5.5%

Source: Healthy Kids Colorado Survey, 2019, data is presented as HSR

Unintentional injury

Unintentional injuries make up some of the top leading causes of death among youth in Colorado. Unintentional injuries can include motor vehicle accidents, unrestrained child seats, falls or drownings. Motor vehicle and other transportation injuries are the fourth leading causing of death in Colorado for children less than 18 years old. Adams County had a higher rate of emergency department visits (570.1 per 100,000) compared to the state (410.3 per 100,000) among residents under 18 years ³¹. In addition, the number of students who reported never/rarely wearing a seat belt was slightly higher in Adams (4.1%) compared to the state (3.9%) ¹⁶.

Unintentional injuries, 2018-2021

	Colorado	Adams	Broomfield
Average annual crude rate of emergency department visits per 100,000 due to all traffic-related motor vehicle deaths among Colorado residents under 18 years old¹	410.3	570.1	296.4
Percent of students who never/rarely wore a seat belt when riding in a car driven by someone else ²	3.9%	4.1%	1.8%

Source: ¹Colorado Department of Public Health and Environment, Injuries in Colorado Dashboard, 2018-2021; ²Healthy Kids Colorado Survey, 2021, data is presented as HSR

Health access

Statewide, the percentage of children enrolled in Medicaid is 33.4% in 2020². In Adams County, a higher percentage of children use Medicaid compared to the state (41.1% compared to 33.4%, respectively). In Adams County, the uninsured rate among children is higher than the state average (5.3% vs. 4.8%)².

When looking at access to care, cost can be a major contributing factor for families to not seek medical care. Adams County had higher rates of families indicating that they did not seek care from a doctor, specialist and dentist due to costs, compared to the state. Boulder/Broomfield counties had higher rates of not seeking care from a specialist due to cost, compared to the state³⁷.

Health access and affordability, 2019-2020

	Colorado	Adams	Broomfield
Access			
Uninsured children (under 19) ¹	4.8%	5.3%	3.6%
% Medicaid (under 19)¹	33.4%	41.1%	18.4%
Affordability			
Did not fill a prescription for medication due to cost ²	9.7%	12.0%	7.5%
Did not get needed doctor care due to cost ²	12.3%	13.9%	10.5%
Did not get needed specialist care due to cost ²	12.5%	13.6%	13.8%
Did not get needed dental care due to cost ²	17.5%	23.7%	15.5%

Source: ¹American Community Survey 5-Year Estimate, 2020; ²Colorado Health Access Survey, 2021, data is presented as HSR

The healthcare workforce shortage remains a staggering issue, as there are not enough providers, especially for mental and behavioral health, compared to the population.

Healthcare workforce, 2021

	Colorado	Adams	Broomfield
Ratio of population to primary care physicians	1,210:1	2,170:1	1,020:1
Ratio of population to dentists	1,220:1	1,530:1	1,040:1
Ratio of population to mental health providers	270:1	290:1	600:1

Source: County Health Rankings & Roadmaps, 2021

Healthcare utilization

When looking at our own patient volumes from Adams and Broomfield counties in 2021, the majority of patients across emergency department/urgent care (ED/UC), inpatient/observation and outpatient settings were identified as either Hispanic/Latinx or White.

Healthcare utilization at Children's Hospital Colorado (Adams and Broomfield), by setting, race and ethnicity, 2021

Clinical setting	Race ethnicity	Percent
	American Indian/Alaska Native	<1.0%
	Asian	2.0%
	Black/African American	2.0%
ED/UC	Hispanic/Latinx	47.9%
ED/OC	More than one race	3.1%
	Native Hawaiian/Other Pacific Islander	<1.0%
	Other	1.6%
	White	35.9%
	American Indian/Alaska Native	<1.0%
	Asian	2.1%
	Black/African American	2.8%
Inneticut/Observation	Hispanic/Latinx	43.8%
Inpatient/Observation	More than one race	3.2%
	Native Hawaiian/Other Pacific Islander	<1.0%
	Other	2.0%
	White	37.6%
	American Indian/Alaska Native	<1.0%
	Asian	2.3%
	Black/African American	2.4%
Outrations	Hispanic/Latinx	44.5%
Outpatient	More than one race	3.3%
	Native Hawaiian/Other Pacific Islander	<1.0%
	Other	1.8%
	White	34.0%

Source: Epic, 2021

COMMUNITY HEALTH NEEDS ASSESSMENT

The most common language for Children's Hospital Colorado patients in the Adams and Broomfield areas is English, followed by Spanish. Additional top languages include Vietnamese and Chinese-Mandarin. Half of the patient population seen in 2021 used Medicaid as their primary insurance and approximately 43% used private insurance.

Top diagnoses by clinical setting

The top diagnoses for ED/UC encounters for patients from the two-county area in 2021 included respiratory-related illnesses and viral infections.

Top five diagnoses - ED/UC, 2021

Diagnosis description	Percent
Acute upper respiratory infection, unspecified	11.3%
Acute obstructive laryngitis (croup)	3.9%
Noninfective gastroenteritis and colitis, unspecified	3.3%
Fever, unspecified	3.2%
Vomiting, unspecified	3.1%

Source: Epic, 2021

In the inpatient or observation settings, the top diagnoses in 2021 were similar to those of ED visits and included respiratory-related diagnoses and viral infections. Another of the top five diagnoses was visits for chemotherapy.

Top five diagnoses - Inpatient/observation, 2021

Diagnosis description	Percent
Acute bronchiolitis due to respiratory syncytial virus	6.9%
Acute bronchiolitis due to other specified organisms	4.3%
Viral pneumonia, unspecified	3.0%
Encounter for antineoplastic chemotherapy	2.2%
Other acute appendicitis without perforation or gangrene	2.1%

Source: Epic, 2021

In the outpatient setting, the top diagnoses in 2021 for Adams and Broomfield patients included encounters for immunizations, exposure to COVID-19 and well-child checks.

Top five diagnoses - Outpatient, 2021

Diagnosis description	Percent
Encounter for immunization	5.8%
Encounter for preprocedural laboratory examination	2.1%
Muscle weakness (generalized)	1.8%
Contact with and (suspected) exposure to COVID-19	1.6%
Encounter for routine child health examination without abnormal findings	1.6%

Source: Epic, 2021

Emergency department utilization and the Child Opportunity Index (COI)

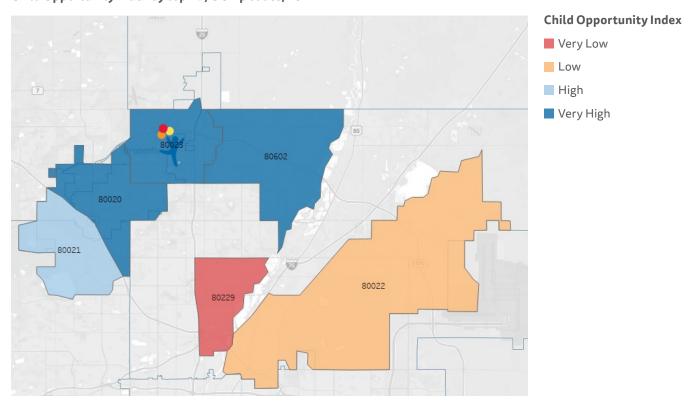
In order to gain a better understanding of where we see the highest patient volumes from our ED and the level of child opportunity in those respective zip codes, we looked at both the COI and ED utilization among our patient population ⁴⁰. When looking at the top zip codes where we see our highest patient volumes for ED/UC visits, there are areas of low and very low child opportunity in the surrounding zip codes of the hospital in Adams. For Broomfield, although a majority of ED/UC visits come from 80020 and 80023, these zip codes have very high child opportunity.

Top zip codes by county - ED/UC Visits, 2021

County	ZIP	соі	% Total ED/UC encounters per county
	80022	Low	15.8%
Adams	80229	Very Low	11.5%
	80602	Very High	10.8%
Broomfield	80020	Very High	56.8%
	80023	Very High	42.8%
	80021	High	<1.0%

Source: Epic, 2021

Child Opportunity Index by top ED/UC zip codes, 2021



Source: Epic 2021 and diversity datakids.org

Community engagement

To help prioritize our community engagement work, we identified focus areas for our primary data collection based on where there were health disparities and inequities in our secondary analysis when comparing the two counties to the state or within populations living in the two-county area (see Appendix A). 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 of the assessment. Through collaborations, surveys, interviews and community meetings, we were able to get the input of hundreds of people. We found both consistencies and differences in the issues that concerned those with whom we spoke.

Data collection

Children's Colorado engaged in a community outreach process to assess the interests and concerns of caregivers with children in the home who live in the two-county area. Through our primary data collection approaches, which included surveys, interviews and community meetings, we were able to gain the input of hundreds of people.



Surveys

Of our 314 respondents, most completed the survey in English (71%), followed by Spanish (17%), Karen (6%), Burmese (4%) and French (2%). Among respondents, 18% reported primarily using a language other than English or Spanish at home. In addition, 15% of respondents had children that identified as Asian, 6% as Black or African American, 32% as Hispanic or Latinx, 40% as White, and 6% as multiple races or ethnicities. Approximately 27% of families have children with complex medical needs, such as chronic physical, developmental, mental, emotional or behavioral conditions.

In the caregiver survey, respondents ranked the following as the top five health issues for children in their community:

Caregiver survey: Top five Issues (in rank order)

- 1. Mental health, including suicide prevention
- 2. Access to healthcare and mental health services
- 3. Hunger and access to healthy food
- 4. Mother and infant health
- 5. Child abuse and neglect

Among respondents with annual incomes of less than \$50,000, hunger or access to healthy food was the most critical need. Mental health, including suicide prevention, was the most critical need for respondents who reported annual incomes of \$50,000 or more.

Income distribution of survey respondents

Income distribution of survey respondents		
\$0 to \$24,999	23%	
\$25,000 to \$49,999	26%	
\$50,000 to \$74,999	10%	
\$75,000 to \$99,999	8%	
\$100,000 or more	25%	
Don't know/prefer not to answer	9%	

Top needs by income

	#1 Critical Need	#2 Critical Need	#3 Critical Need	#4 Critical Need	#5 Critical Need
\$0 to \$24,999	Hunger or access to healthy food	Mother and infant health	Affordable housing	Dental care	Access to benefits
\$25,000 to \$49,999	Mother and infant health	Mental health, including suicide prevention	Dental care	Hunger or access to healthy food	Affordable housing
\$50,000 to \$74,999	Access to healthcare and mental health services	Hunger or access to healthy food	Mental health, including suicide prevention	Child abuse and neglect	Access to or cost of childcare
\$75,000 to \$99,999	Mental health, including suicide prevention	Child abuse and neglect	Access to healthcare and mental health services	Dental care	Hunger or access to healthy food
\$100,000 or more	Mental health, including suicide prevention	Access to healthcare and mental health services	Child abuse and neglect	Mother and infant health	Hunger or access to healthy food
Don't Know/ Prefer not to answer	Child abuse and neglect	Mother and infant health	Access to healthcare and mental health services	Mental health, including suicide prevention	Hunger or access to healthy food

When looking at race and ethnicity, for non-White respondents, the top needs included hunger or access to healthy food, followed by mother and infant health, and mental health including suicide prevention.

Race and ethnicity distribution of survey respondents

Race and ethnicity distribution of survey respondents	Percent
American Indian or Alaska Native	<1%
Asian	15%
Black or African American	6%
Hispanic or Latinx	32%
More than one race	6%
Native Hawaiian or Other Pacific Islander	<1%
White	40%

Top needs by race/ethnicity

	#1 Critical Need	#2 Critical Need	#3 Critical Need	#4 Critical Need	#5 Critical Need
Asian	Mother and infant health	Mental health, including suicide prevention	Respiratory health, including asthma	Child abuse and neglect	Affordable housing
Black or African American	Mother and infant health	Hunger or access to healthy food	Affordable housing	Access to or cost of childcare	Access to benefits
Hispanic or Latinx	Hunger or access to healthy food	Access to healthcare and mental health services	Dental care	Mental health, including suicide prevention	Mother and infant health
More than one race	Hunger or access to healthy food	Mental health, including suicide prevention	Access to healthcare and mental health services	Child abuse and neglect	Mother and infant health
White	Mental health, including suicide prevention	Access to healthcare and mental health services	Child abuse and neglect	Mother and infant health	Hunger or access to healthy food

When asked about the impact of COVID-19 pandemic on their children's ability to be healthy and thriving, the top three impacts of the pandemic were: feeling connected with family and friends who live outside their home, changes in mood for their child(ren) and accessing healthcare when needed.

Stakeholder interviews

Two key questions in the stakeholder interviews were:

- 1. What are the top two or three health or social needs?
- 2. What are the top two or three barriers to addressing those needs, for their populations of focus in the community?

Below are summary findings from the interviews for these two questions.

Community needs

Stakeholder interviews: Top five needs (in rank order)

- 1. Mental health
- 2. Access to care
- 3. Affordable housing
- 4. Access to culturally responsive care
- 5. Food security and nutrition

Mental health was a top concern for many stakeholders for children, youth, and their parents or caregivers. For many stakeholders, access to mental health services was of particular concern in their community for families who spoke diverse languages, families with lower incomes, and families who identify as Black, Indigenous or other person of color. While mental health was a need before the pandemic, stakeholders highlighted how the stressors and social isolation from the pandemic has worsened social and mental health needs for children, youth and their families.

Stakeholders identified access to care for both primary care and mental health services as a top need. Access to care included needs tied to affordable and comprehensive health insurance, limited primary care clinics versus urgent care clinics or emergency rooms, and limited mental health providers. The COVID-19 pandemic has resulted in delayed care, including immunizations, for many children and youth, according to stakeholders. The economic impact of pandemic, including job loss, has also affected families' ability to afford health insurance and the cost of care.

For stakeholders who discussed housing, some highlighted how the pandemic impacted jobs and economic security for many, which in turn affected stable housing. Additionally, stakeholders highlighted overall rising costs of housing and challenges faced in the Broomfield community to access affordable housing. One stakeholder highlighted how housing costs in Broomfield were impacting staff retention for mental health services, which further impacted an already significant need.

Many stakeholders highlighted the need for culturally responsive care for both primary care and mental health services. Stakeholders described culturally responsive care as having services available in the family's primary language, and characterized these services as being offered with humility, understanding and respect for how families define health and interact with the healthcare system. Culturally responsive care also requires having providers for whom families can trust to provide affirming and inclusive care, particularly for children and youth who identify as LGBTQ+. Additionally, stakeholders highlighted the limited number of providers of color or providers with a similar background as families in their community and how that affects a family's experience and sense of trust in the healthcare setting, especially when seeking mental health services.

Food security — and specifically access to nutritious, high-quality and culturally appropriate food — was also a top need among many stakeholders. This need was particularly high among families who speak diverse languages in the home and families who identify as Black, Indigenous or other person of color. Stakeholders also highlighted the need to educate parents on nutrition and obesity to prevent or manage chronic health conditions among children and youth.

Barriers to addressing needs

Stakeholder interviews: Top five barriers (in rank order)*

- 1. Language or literacy barriers
- 2. Access and affordability of healthcare
- 3. Access to culturally responsive, affirming and inclusive care
- 4. Discrimination and racism
- 5. Navigation support
- 6. Transportation

*Discrimination, Navigation support, and Transportation had the same number of mentions

When stakeholders were asked to identify the top barriers these populations face, language or literacy barriers and access and affordability of healthcare were the most frequently cited. Barriers to accessing healthcare and affordability included the high cost of care, limited insurance options and challenges finding affordable mental healthcare. Access to culturally responsive, affirming and inclusive care was a top barrier among stakeholders. This barrier has also been highlighted in the 2021 Colorado Health Access Survey, where one in 17 Coloradans reported needing healthcare that was responsive to a particular need or part of their identity, most often due to their disability, language, sexual orientation, or experience with violence or abuse ³⁷. Discrimination and racism, navigation support and transportation all had the same number of mentions in the stakeholder interviews.

Community Meetings

After identifying top needs from our secondary data and primary data, we discussed the following for our community meetings:

Summary of the health and social needs



We held two community prioritization meetings: one with Broomfield Community Services Network (BCSN) in partnership with two health systems (Centura and UCHealth) and one with the Adams County Health Alliance (ACHA). There were 45 attendees between the two community meetings held. Participants included community-based organization leaders and advocates in Adams and/or Broomfield counties.

In both meetings, attendees were presented data from secondary and primary sources and given the chance to ask questions and give feedback on the needs that came up in the data. They were asked to vote for their top health and social issues — the results of which would be shared with hospital leadership.

They then were asked to vote for their top health and social issues. For these meetings, we divided the identified needs into two categories: those tied to medical needs and those tied to broader social health needs. Participants answered the following questions: What are the top medical needs for your children and/or young people in your community (select up to two)? What are the top social needs for your children and/or young people in your community (select up to two)?

When asked what the top medical needs were, the top identified need was mental health, followed by substance use, and mother and infant health. When asked what the top social needs were, the top identified need was access to healthcare and mental health services, followed by housing costs and not having enough food.

Medical Need

Category	Votes
Mental health	38
Substance use	18
Mother and infant health	12
Unhealthy weight	8
Child abuse and neglect	8

Social Need

Category	Votes
Access to healthcare and mental health services	29
Housing costs	26
Not having enough food	11
Access to culturally responsive care	10
Not getting enough exercise	8

Findings from these community meetings were presented to leaders in the Children's Colorado Division of Population Health and Advocacy to inform them of our final prioritization.

Impacts of racism on health

The Centers for Disease Control and Prevention defines racism as "structures, policies, practices and norms that assign value and determine the opportunities based on the way people look or the color of their skin" ⁴¹. Racism is a public health issue as it negatively impacts mental and physical health and has led to health inequities. Racial and ethnic minority groups experience higher rates of illness and death from health conditions, including diabetes, obesity, hypertension, heart disease and asthma when compared to their White counterparts. Additionally, social determinants of health such as where one lives, learns or works, are crucial drivers of health inequities experienced by communities of color. ⁴¹ This impact is critically important for us to acknowledge and understand as we work to enhance health equity in our communities.



After more than two years, stakeholders continued to highlight the long-term impacts of the COVID-19 pandemic on the health and well-being of people in their community. When asked about the types of impacts, the three most common responses were: job loss and limited income; increased need for housing; and disproportionate impacts on communities of color, families who spoke diverse languages in the home and lower income communities. Delayed care (e.g., fewer wellness checks, families not going to appointments and hesitancy to seek services) was also highlighted, as well as increased amounts of stress. For some communities, the ease of accessing things virtually (e.g., telehealth) was improved, but for many, challenges with having to use technology, such as for remote learning, generally had a negative impact on their communities.

Stakeholders also highlighted the direct impacts of the pandemic on their communities, including how mitigation tactics for the COVID-19 pandemic inadvertently created inequities and implications which disproportionately affected racial and ethnic minority groups. For instance, essential-work settings increased exposure due to lack of benefits such as paid sick days. Other unintended consequences may include lost wages, unemployment, increased exposure to older adults in multi-generational households, and stress and social isolation. 42







Prioritization

Once both secondary and primary data collection were completed, the final step of the assessment was to seek input on how to prioritize among the needs identified between the primary and secondary data. The Children's Colorado Division of Population Health and Advocacy leadership, which includes Children's Colorado clinical and non-clinical team members, worked to select prioritization criteria and, after careful consideration, determined that the following six factors were most important: impact, community importance, viability, sustainability, scale and health equity.

Impact

How significantly does the issue impact the lives of those touched by it?

Scale

How many children are impacted by this issue?

HEALTH EQUITY

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?

Description of Identified Priority Needs

After reviewing the needs assessment findings and prioritization factors, the Children's Colorado Division of Population Health and Advocacy leadership selected three priority areas:

- · Mental health
- Access to care
- · Food insecurity

All three topics were among the top five rankings in our primary data sources (stakeholder interviews, caregiver survey and community prioritization). In addition, we found that:

- Mental health is a top need across all data sources and the No. 1 need in all three of our primary data sources.
- Access to care is the second-ranked need in our primary data in stakeholder interviews and caregiver survey and the No. 1 social need in our community prioritization meeting.
- Food insecurity is a top need across primary data sources. When stratifying our caregiver data by income and by race and ethnicity, food insecurity was the No. 1 need among respondents with household incomes less than \$75,000 and among non-White respondents.

In response to these identified needs, Children's Colorado will draft and publish a community health implementation plan (CHIP) in May 2023 that will outline our approaches to work to address these community health needs. Please see Appendix F for resources available to address mental health, access to care and food insecurity.

Conclusion

This report is the culmination of an inclusive and far-reaching effort to gather input from a wide range of stakeholders. We wish to thank the hundreds of families and community members who lent their voices to this assessment. Through surveys, community meetings and one-on-one conversations, we gathered important insights into the issues about which families are most concerned. Our promise is that we will act collaboratively on what we learned by continuing to partner with the communities we serve and improve the health and well-being of all children in Colorado

As a first step, we will incorporate the findings of this assessment into an implementation 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. 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 community benefit@childrenscolorado.org.

Appendices

Appendix A: Data collection instruments

Caregiver survey

Children's Hospital Colorado 2022 Caregiver Survey

Thank you for participating in the Children's Hospital Colorado Caregiver Survey. The goal of this survey is to hear from parents and caregivers of children about the most important community health needs for families in our surrounding community. This survey should take about 10 minutes. The results of the survey will be summarized into a report, called a Community Health Needs Assessment, and available on our website (www.childrenscolorado.org) by the end of December 2022. Your responses will remain confidential with others in the overall report. If you have questions, please contact Julie Beaubian at julie.beaubian@childrenscolorado.org.

Tell us about your community

Please answer the following question about children in your community.

1. Thinking about what children in your community need to be healthy and thrive, please share how **important** you think it is to address the following needs for **children in your community:**

	Not important	A little important	Important	Very important
Access to benefits (e.g., Medicaid, WIC, food stamps, TANF)				
Access to healthcare and mental health services				
Access to or cost of child care				
Affordable housing				
Child abuse and neglect				
Dental care				
Hunger or access to healthy food				
Injury				
Mental health, including suicide				

Mother and infant health				
Obesity / overweight				
Respiratory health, including asthma				
Other (please specify):				
Covid-19 impact				
Please answer the following question about how much the Covid-19 p	andemic has imp	acted your fam	ily.	
2. Please share how much you think the Covid-19 pandemic has ii	npacted the fol	lowing areas fo	or your FAMILY	' :
	Not impacted	A little impacted	Impacted	Very impacted
Accessing healthcare when needed (medical, dental, or mental health)		·		·
Accessing stable child care				
Changes in mood for my child/children (sadness, fatigue, irritability, loneliness)				
Family member (including child) diag-nosed with Covid-19				
Internet access and technology				
Keeping health insurance for my child/children				
Being able to pay rent or mortgage				
Paying for basic needs, such as food or utilities				
Feeling connected with family and friends who live outside our home				
Other (please specify):				
Tell us about yourself				
Please answer the next set of questions about yourself and the children	en livina in vour h	ome		
rieuse unswer the next set of questions about yourself and the children	it tiving in your n	onte.		
3. What county do you live in?				
□ Adams	□ Douglas			
□ Arapahoe	□ El Paso			
□ Broomfield	□ Other – ple	ase specify		
□ Denver				
4. What ZIP code do you live in? (free text)				

COMMUNITY HEALTH NEEDS ASSESSMENT

5.	What language do you primarily use in your home?	
	□ American sign language	□ German
	□ Amharic	□ Karen
	□ Arabic	□ Nepali
	□ Burmese	□ Russian
	□ Chinese	□ Spanish
	□ English	□ Somali
	□ Hmong	□ Vietnamese
	□ French	□ Other - please specify
6.	What age are the children living in your household? (Check all th	nat apply)
	□ Infant to 2 years	□ 12 to 14 years
	□ 3 to 5 years	□ 15 to 17 years
	□ 6 to 11 years	□ 18 to 24 years
7.	Which racial and ethnic groups are the children in your home?	
	□ Asian	□ Hispanic/Latinx
	□ South Asian	□ Middle Eastern/Arab American
	□ East Asian	□ American Indian or Alaska Native
	□ Pacific Islander	□ White
	□ Black or African American	□ Other - please specify
8.	Do any of your children have complex medical needs (chronic phenoditions)?	nysical, developmental, mental, emotional, or behavioral
	□ Yes	
	□ No	
9.	What is your household income? Mark one response.	
	□ \$0 to \$24,999	□ \$75,000 to \$99,999
	□ \$25,000 to \$49,999	□ \$100,000 or more
	□ \$50,000 to \$74,999	□ Don't know / Prefer not to answer

Stakeholder interview guide

Stakeholder interview introduction

Thank you for taking the time to speak with me today. As shared in the outreach email to you, the purpose of this interview is to inform Children's Colorado's Community Health Needs Assessments (or CHNAs for short) for the **North Campus in Broomfield** which will be completed and published in **December 2022.**

Do you have any questions about the information provided in the consent form?

[Overview and purpose] As a reminder, the purpose of the CHNA is to understand what the most important community health needs for our surrounding community to inform how we prioritize our community health work. Another critical component of this work is understanding what is already happening in the community to address health or social needs, so we are not duplicating efforts, and understanding what Children's role from the community's perspective, if any, to help address a specific need. In addition, non-profit hospitals are required to completed CHNAs every three years.

[About the interview and how information will be used] The interview will take up to 60 minutes and your participation is completely voluntary. We will keep your individual responses confidential. We will be conducting roughly 20 interviews per facility and aggregating the findings to report in our CHNA. As part of the CHNA process, we are required to include a list of all interviewees, including their name, role, and organization in the report. None of your individual responses will be attributed to you in the published report. The results of the interview will be summarized into a report, and available on our website (www.childrenscolorado.org) by the end of December 2022.

If you have questions, please contact Claire Peters (claire.peters@childrenscolorado.org).

Any questions before we get started?

Questions

[Prior to starting the interview, review the stakeholder's pre-survey results. If they did not complete the survey, use the first part of the interview to complete **the survey**.]

1.	1. In our pre-interview survey, you indicated that your organization is most familiar with or primarily serves/outre	eaches to
	the following populations:	
	• Population1	
	Population 2	
	 Population 3 	

For most of today's discussion, we will focus on those populations. You may answer these questions for all the populations you included in your survey, or we can return to these questions if you feel your responses would differ by population.

Community needs

- 2. What would you say are the top 2 or 3 health or social needs overall for [name the Populations 1-3]?
- 3. What are some of the barriers that this/these population(s) faces to address the needs you identified?

COMMUNITY HEALTH NEEDS ASSESSMENT

4.	Covid has impacted different populations in different ways. How would you say Covid has impacted [name the Populations 1-3] in particular?
5.	We are focusing on the following health or social topics in this phase of our CHNA: early childhood / education, food insecurity, housing, mental and behavioral health, including suicide, respiratory health, and injury. Among these topics, are there any that stand out as impacting [name the Populations 1-3], that we haven't already discussed? If so, how? □ Early childhood / education □ Food insecurity □ Housing □ Mental / behavioral health, including suicide □ Respiratory health □ Intentional and unintentional injury
6.	Is there anything else that would help [name the Populations 1-3] achieve better health?
7.	[If interviewee listed more than one population, but in the interview only focuses on one population, proceed wit this question] Would you respond differently to any of these questions for the other populations you identified? [If yes, repeat questions 2-6 for populations 2 and 3.]
Ex	cisting work and collaboration opportunities
8.	What is your organization already doing to address the top needs for these populations?
9.	What are other organizations doing, that you're aware of?
10	. What role do you see Children's playing, if any, to help address these top needs?
11.	[Optional, if time]: Do you have any other feedback or ideas about how to address these health and social needs?

Appendix B: Data sources

American Community Survey

Centers for Disease Control and Prevention

Child Fatality Prevention System

Child Health Survey

Child Opportunity Index

Children's Colorado Epic

City and County of Broomfield Colorado Community Survey

Colorado Department of Education

Colorado Department of Healthcare Policy and Financing

Colorado Department of Human Services, Division of Child Welfare Services

Colorado Department of Local Affairs

Colorado Department of Public Health and Environment, Environmental Public Health Tracking

Colorado Department of Public Health and Environment, Injuries Dashboard

Colorado Department of Public Health and Environment, Vital Statistics

Colorado Health Institute (CHI) Access to Care Index and Colorado Health Access Survey

Colorado Hospital Association

County Health Rankings

Feeding America

Healthy Kids Colorado Survey

Health Resources and Services Administration (HRSA)

Kids Count Data Center

Medical Expenditure Panel Survey

Appendix C: Stakeholder list

Name	Role	Organization
Nichole Everman	Chief Operations Officer	A Precious Child
Adam Anderson	Director of Epidemiology and Data Science	Adams County Health Department
Kate Garvin	Director of Family Advocacy and Community Engagement	APS Impact Zone
Teresa Torres	Program Manager	Aurora Community Connection
Marianna Williamson	Executive Director of Advancement	Broomfield Community Foundation
Jessica Jones	Director	Broomfield Early Childhood Council
Jelithza Minaya	Resources Program Manager	Broomfield FISH
Deb Federspiel and Sarah Mauch	Deputy Director and Health Planning and Systems Manager	Broomfield Public Health and Environment
Monica Camargo Garcia	Community Family Liaison	Centennial Elementary School
Minsoo Song	Admin Specialist	City of Aurora, Office of International and Immigrant Affairs
Rene Gonzalez	Community & External Relations Strategy	Colorado Access
Christy Haas-Howard	Asthma Nurse Specialist	Colorado Department of Education and Denver Public Schools
Zac Schaffner	Supportive Housing Services Manager	Colorado Department of Local Affairs, Division of Housing
Kelly Dougherty	Injury Prevention Coordinator	Colorado Department of Public Health and Environment (CDPHE), Emergency Medical and Trauma Services
Lena Heilmann	Office of Suicide Prevention Strategies Manager	Colorado Department of Public Health and Environment (CDPHE), Office of Suicide Prevention
Kim Da Silva	Chief Executive Officer	Community Food Share
Deanna Laflamme	Program Director	Culture of Wellness
Michele Coates	Early Intervention Director	Developmental pathways

(continued)

Name	Role	Organization
Maegan Lokteff	Executive Director	Early Childhood Council Leadership Alliance
Lisa Jansen Thompson	Executive Director	Early Childhood Partnership of Adams County
Elisa Aucancela	Executive Director, Infant Family Specialist	El Grupo Vida
Samara Williams	Principal	Emerald Elementary School
Susan Bellas	Regional Director, Broomfield and East Boulder County	Mental Health Partners
Jamie Rife	Executive Director	Metro Denver Homeless Initiative (MDHI)
Greg Allen	Community Member - Montbello, Green Valley Ranch, Parkview	Montebello Organizing Committee
Marvyn Allen and Alexander Wamboldt	Health Equity and Training Director; Youth & Schools Program Manager	One Colorado
Anne Tapp	Executive Director	Safehouse Progressive Alliance for Nonviolence
Chris Bui	Senior Program Officer	The Colorado Health Foundation
Greta Allen	Regional Health Connector	Tri-County Health Department
Vicki Swarr	Nursing Division Manager	Tri-County Health Department
Jaclyn Blitz	Nutrition Manager	Tri-County Health Department
Gabriela Jacobo	Community Connector	University of Colorado, Office of Diversity, Equity, and Community Engagement
Kippi Clausen	Project Director	Youth Move

Appendix D: Graduation Rates by Various Demographics, 2020–2021

	Colorado	Adams	Broomfield
% Limited English Proficiency	67.5%	67.3%	77.3%
% Economically disadvantaged	70.6%	71.2%	76.7%
% Migrant	67.0%	65.2%	*
% Students experiencing homelessness	53.6%	55.2%	71.4%

Source: Colorado Department of Education, 2020-2021; * indicates suppressed or unavailable data

Appendix E: Percentage of students hungry in the last 30 days, 2021

% of students who went hungry in the past 30 days sometimes, most of the time, or always because of a lack of food at home	Colorado	Adams	Broomfield
American Indian/Alaska Native	20.3%	*	*
Black/African American	23.6%	*	*
East/Southeast Asian	13.8%	29.7%	*
Hispanic/Latinx	15.1%	13.8%	11.8%
Middle Eastern/North African/Arab	11.3%	*	*
Multi-Racial	15.2%	13.7%	15.9%
Native Hawaiian/Other Pacific Islander	11.3%	*	*
Other	20.5%	*	*
South Asian	10.2%	*	*
White	9.6%	9.6%	6.5%
Total	12.4%	12.5%	8.1%

Source: Healthy Kids Colorado Survey, 2021, data is presented as HSR; *indicates suppressed or unavailable data

Appendix F: Resources to address prioritized needs

Community stakeholders identified resources (including other stakeholders interviewed for this CHNA) potentially available to address the identified community needs. This is not a comprehensive list of all available resources. For additional resources refer to Colorado 2-1-1 at https://www.211colorado.org/

Health need	Resource
Mental health	 A Precious Child Aurora Mental Health Center Broomfield Early Childhood Council Broomfield FISH Broomfield Public Health Colorado Association for Infant Mental Health Colorado Crisis Services Line Early Childhood Council Leadership Alliance Office of Suicide Prevention, Colorado Department of Public Health and Environment Colorado Follow-up Project Inside Outside Office of Behavioral Health, State of Colorado One Colorado Mental Health Partners Zero Suicide
Access to care	 Adams County Health Alliance Broomfield Early Childhood Council Broomfield Public Health Salud Family Health Centers Clinica Tepayec
Food insecurity	 A Precious Child Asian Pacific Development Center Aurora Public Schools Impact Zone Broomfield FISH Community Food Share Cooking Matters Culture of Wellness GrowHaus Hunger Free Colorado Montbello Organizing Committee, FreshLo Hub

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