

# Children's Hospital Colorado

2022

## Annual Community Benefit

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Children's Hospital  
Colorado

# Executive Summary

When it was founded in 1908 in Denver, Children's Hospital Colorado (Children's Colorado) set out to be a leader in providing the best healthcare outcomes for children. That calling has consistently made us one of top children's hospitals in the nation. Our modern-day mission is to improve the health of children through the provision of high-quality coordinated programs of patient care, education, research, and advocacy. In addition to providing the best possible care for kids who need it, we also work hard to keep kids out of the hospital. Through medical research and advocacy efforts, we are working towards a world where kids are safer and healthier and will one day have less need for a hospital.

As a not-for-profit hospital, Children's Colorado is proud to provide investments that respond to community needs and serve our community. Children's Colorado provides more healthcare services to children covered by Colorado Medicaid than any other provider. In 2021, the health insurance coverage-mix among our patient population included 48% of patients covered by Medicaid, 43.6% commercial insurance, 6.5% other government programs, and 1.8% self-pay, indigent, or uninsured. In 2021, the Children's Colorado system of care had more than 18,000 inpatient admissions, 619,193 outpatient visits and 147,562 emergency and urgent care visits. Children's Colorado's operating margin in 2021 was 6.1%, and our margin in 2020, inclusive of federal provider relief funds received as a result of the COVID public health emergency, was 2.7%.

Children's Hospital Colorado reports our community benefit activities as a hospital system inclusive of all facilities. CHCO strives to apply a uniform, consistent approach to the spread of our high-quality approaches to care across the whole system, inclusive of all of physical locations. Accordingly, there are many leaders, staff, and other resources serving the entire system, rather than allocated to location-specific resources. This integrated system of care allows Children's Colorado to leverage system resources to ensure consistent approaches and cost efficiencies to support the delivery of patient-centered and equitable healthcare to over 600,000 children each year.

## 2021 Community Benefit Investment

In 2021, Children's Hospital community benefit investment totaled \$301,516,894 with community building activities totaling \$902,042.

### Community Benefit: \$301,516,894

- Financial Assistance (\$220,537,561): The Children's Charity Care program provides financial assistance for patients who are uninsured or underinsured and demonstrate financial need. Financial assistance also covers unreimbursed costs for patients enrolled in Medicaid, Child Health Plan Plus (CHP+) and other government programs.
- Community Health Improvement (\$26,119,546): Includes activities addressing CHNA priorities, parent education, community health screening, and advocacy for improving child health.
- Health Profession Education (\$25,304,919): Includes graduate education for medical residents and fellows, nursing students and continuing professional education for other



health professionals such as community pediatricians, community emergency medical providers.

- Research (\$20,763,062): Includes laboratory science and applied research related to providing the best care for children.
- Subsidized Health Services (\$7,636,541): Covers unreimbursed costs for operating pediatric specialties that meet community need, such as behavioral health.
- Cash and in-Kind Contributions (\$1,156,265): Includes cash and in-kind donations to community non-profit organizations, donations of meeting space and donations of health and safety educational materials, and service on community boards and coalitions addressing community health.

### **Community Building: \$902,042**

Includes environmental improvements, workforce development, coalition building and advocacy for health improvements.

#### **In 2021, major community benefit investments included:**

- Expanding capacity to treat children and youth with behavioral health needs, an area of extreme and persistent need in Colorado
- Responding to the public health emergency triggered by the global COVID-19 pandemic
- Providing free and discounted healthcare services
- Provision of school nurse consultation to more than 350 schools and childcares
- Development of the Virtual Integrated Pediatric Behavioral Health Program
- Advocating to advance health equity and reduce health disparities
- Addressing social determinants of health through Resource Connect and our Healthy Roots Food Clinic, including through mobile food distribution with Aurora Public Schools
- Supporting an evidence-based Community Health Navigation team
- Addressing health behaviors and risks
- Supporting the Black Health Initiative, which centers community voices and experiences to improve African American patient and family experiences and health outcomes
- Funding extensive injury prevention work, including car seats and safe sleep
- Providing oral health services through the school-based dental center

- Offering health professional education for community-based healthcare providers
- Funding ongoing medical research
- Supporting community building activities

Key 2021 community benefit activities are highlighted throughout the report

## Addressing Community Health

To address the depth and breadth of community health, Children's Colorado continues to build on our long and strong record of collaborating with community-based organizations, schools, academic institutions, and governmental and non-governmental organizations, with the goal of improving health outcomes and reducing health disparities for children and their families. Additionally, significant resources were allocated in 2021 to support efforts to engage community members advocating for access to healthcare as well as providing educational sessions for both policymakers and advocates on child health issues of importance.

The COVID-19 pandemic has presented challenges that will have long lasting effects on both the field of pediatric healthcare and the lives of the patients and families we serve. Since March 2020, Children's Colorado has remained committed to a systematic response to the COVID-19 pandemic. In addition to maintaining our focus on providing exceptional, quality care for patients and families, Children's Colorado has dedicated financial, people and physical resources to support pandemic emergency response and mitigate the effects of the pandemic on our community.

### COVID-19 Response Infrastructure

The state has been able to rely on Children's Colorado's dedicated partnership to support the COVID-19 response and to improve the health of Colorado's children and families. At the request of the governor and state public health department, Children's Colorado rapidly instituted a COVID-19 response infrastructure that included mobile testing sites, lab services, public health education resources and webinars for medical professionals as well as community members, mask decontamination for community-based providers, lab services for community-based testing, and shared medical supplies to manage statewide needs.

Children's Colorado opened a COVID-19 vaccine clinic in December 2020, initially serving frontline healthcare workers and community providers, then school staff and eventually opened our clinic to patients and the general public throughout 2021. We administered more than 140,000 COVID-19 vaccines in 2021. Additionally, we hosted the Colorado Department of Public Health and Environment's mobile vaccine busses on each of our hospital campuses during the pediatric vaccine rollouts in late 2021 and throughout the summer of 2022, when the youngest age group (6 months+) was authorized.



## COVID-19 Clinical Care

In 2021, Children’s Colorado treated more than 4,000 COVID-19 positive patients throughout our system of care, with more than 1,300 of those patients requiring inpatient hospitalization. Our telehealth department continued to expand the use of telemedicine to enable continuity of high-quality care for our pediatric patients. Since the beginning of the pandemic, our telehealth visits have increased more than 2,000%.

## COVID-19 Resources for Caregivers, Providers, and Schools

Throughout the pandemic, our system was committed to providing the most up-to date family-friendly information and resources to support kids and families through the pandemic including operating a coronavirus hotline where our clinical teams answered questions about COVID-19 symptoms, vaccines and where to access healthcare. In 2021, there were 12 pages on our website dedicated to sharing the latest information on essential COVID-19 topics with parents and caregivers, with more than 551,000 unique visitors to those pages. COVID-19 vaccine deliberation resources were also created for caregivers and translated into the top eight languages of patient families who utilize our primary care clinics.

In recognition of the challenges primary care providers (PCPs) faced during the initial stages of the pandemic we worked with PCPs in addressing operational concerns regarding the health and safety of their patients and staff, services for patients, telehealth functionality, and personal protective equipment (PPE) leading to the development of an on-line resource guide to implementing telemedicine services and other health and safety protocols.

We provided COVID-19 support and resources to 65,000 medical providers through 16 provider town halls virtual meetings, 25 podcast episodes with more 75,000 unique downloads, and other clinical resources on our website including a COVID-19 Vaccine Deliberation Toolkit to support providers in addressing vaccine hesitancy or deliberation.

The 2020-2021 and 2021-2022 school years were particularly challenging for the school and childcare sites we serve. Early in the pandemic, the school health nursing team found that some needs - like fielding calls from educators and parents with questions about how to manage a child’s diabetes or asthma - could be met virtually, via telehealth. The school health nursing team continued to serve as an advisory partner for school staff and parents throughout the pandemic, delivering trainings and consultations virtually for both individual health needs and systemwide safety guidance.

Complicating the COVID-19 dynamic, students went virtual mid-March 2020, but state public health guidance for schools was not released until September. During that six-month gap, Children’s organized virtual biweekly town hall meetings with school administrators and their health staff, providing them access to our infectious disease doctors who began to advise schools how to safely operate during the pandemic. After the state issued their public health guidance to schools in September 2020, Children’s continued to offer these town halls and participation grew to nearly 700 registered participants from across Colorado. These town halls became an effective venue to share the latest information on the COVID-19 vaccine and equip school leaders with the information they need to encourage it among their staff and school community. This school leader town hall series conducted 34 virtual meetings between April 2020 and December 2021.

## Advocacy

In 2021, our Government Affairs team coordinated virtual or written testimony from 3 experts on pending legislation at committee hearings, trained 154 130 new advocates at our 10th Annual Speak Up for Kids Day, and empowered constituents to send almost 200 emails to state lawmakers on pending kids' health legislation. Examples of our statewide advocacy work include:

### ***Advocating to advance health equity and reduce health disparities***

The Black Health Initiative was convened at Children's Colorado in 2019 to promote quality healthcare and behavioral well-being by increasing positive patient experiences and empowerment for Black mothers, babies, and families. We advocated for the passage of Senate Bill 193 and Senate Bill 194, viewed as critical policies that will help improve birth equity and reduce health disparities that women and infants of color in Colorado often face.

### ***Advocating to improve behavioral healthcare services for kids***

In 2021, we worked with partners to build a better system of care for all children, youth, and families. We supported House Bill 1097 to help implement a key recommendation of the Colorado Behavioral Health Task Force to create a Behavioral Health Administration, a new state agency to lead, promote and coordinate Colorado's behavioral health priorities. We also worked to expand access to behavioral healthcare for children and youth by supporting House Bill 1021 to fund behavioral health services provided by peer support professionals and House Bill 1258, which provided access to up to six telehealth therapy appointments for all school aged children regardless of insurance coverage.

In 2020, Senate Bill 137 allocated \$100 million in American Rescue Plan Act of 2021 (ARPA) funds toward behavioral health, including urgently needed funding for residential and other step-down levels of care that are in short support for Colorado's youth. We also successfully advocated for the restoration of funding cuts due to COVID-19 in order to implement Senate Bill 195 from 2019 to enhance the behavioral health system of care for children and youth through the creation of standardized screening and assessments and a high-fidelity wraparound benefit through Medicaid.



# Addressing Social Determinants of Health

The immediate impact of the pandemic imposed complex social and economic challenges for many families. The complexity of needs continued to be paramount throughout 2021. Critical needs included baby formula, diapers, food, utility assistance, housing and eviction prevention, and public benefits. Prior to the pandemic, Children's Colorado had systems in place to address social determinants of health within our walls and in the community and we were able to rapidly adjust to address the most pressing needs of our families and the community. Data is collected and evaluated continuously to inform our work to ensure we are being responsive to the needs of our community.

## Community Health Navigation

The health navigation team plays a critical role in addressing social determinants of health for patients and families in a variety of clinical and community settings addressing needs which became more prevalent during the pandemic. The team provided resource support to more than 12,000 families in 2021.

## Resource Connect

In August 2019, Children's Colorado opened its new Health Pavilion. On the first three floors are outpatient primary care and specialty providers, dentists, and behavioral health therapists. Through a universal psychosocial screening tool delivered to each patient, patients and families seen in the Health Pavilion who indicate an unmet social need—such as accessing regular meals or uninterrupted electricity at home—are referred to the facility's fourth floor, Resource Connect, where a network of community health navigators and partners are ready to provide wraparound care and support.

Resource Connect comprehensively addresses social needs, including food security, energy assistance, and eligibility for public benefits, legal services, community resource navigation and more. The services provided through Resource Connect promote equitable access to the resources that all families, including families of color and families with low incomes, need to improve their comprehensive picture of health and well-being. This is all accomplished through robust partnerships between Children's Colorado and community-based organizations.

Any patient who is seen at the Children's Colorado Health Pavilion—which has seen approximately 551,707 healthcare visits since opening—can be referred to Resource Connect by their provider. Patients and families can access Resource Connect on the same day and within the same building as their clinic visit. Community health navigators and clinical social workers identify families' particular needs and connect them to partners who are co-located a few doors down in a shared space.

In 2021, Children's Colorado providers and other team members referred nearly 1,700 families to Resource Connect. Of those referrals, 1,150 referrals were for the Healthy Roots Food Clinic; 529 referrals were for assistance with public benefits; 212 referrals for legal services; 209 for Women, Infants and Children (WIC) program; 200 for housing assistance; and 176 for energy assistance.

More than 85% of Children's Colorado's Health Pavilion patients are insured by Medicaid/publicly funded insurance or underinsured/not insured. Families seen at the Health Pavilion are ethnically

and racially diverse; many identify as Latino and there is a growing population of immigrant families from Africa, Nepal, and southeast Asia. Approximately 60% of children seen are age 3 and under.

## Food as Medicine

Children's Colorado is acutely aware of the inextricable link between access to quality, affordable, nutritious food, and health. This is particularly important in serving communities with higher rates of poverty who struggle with food security. The Food as Medicine initiative at Children's Colorado aims to integrate the importance of nutrition and health by not only providing food, but also education to help make connections about how healthy food can contribute to healthy children and families. By screening families, Children's Colorado can help identify those who identify as food insecure and provide resources and education to help overcome barriers to access.

In 2021, the Healthy Roots Food Clinic received 1,149 referrals from primary care clinics in our Health Pavilion and served 2,851 people (1,237 children and 1,614 adults). One hundred percent of visits were "successful," meaning that all families who sought food were provided nutritious groceries and basic food education. Most of these referrals came from our Health Pavilion's primary care clinic which provides comprehensive, team-based, family-centered primary care in a medical home model to more than 12,000 children annually from birth to 18 years, regardless of their ability to pay. Additionally, our Healthy Roots community garden produced over 1,500 pounds of fresh produce that was distributed in our food clinic.

In the summer of 2021, with generous philanthropic support, we launched pilot replications of the Healthy Roots Food Clinic and Resource Connect model in two schools within the Aurora Public School district (APS). The program is implemented in partnership with the communities we serve. At Children's Colorado's Aurora Public School food clinic partnership sites, Crawford Elementary and Central High School, we served approximately 1,185 students in 2021. Both schools are part of the APS ACTION Zone, a network of five schools that serves 4,200+ students, roughly 10% of all APS students, and demographics include: Students come from 50+ different countries and speak over 150 languages, 66% of students are Hispanic, 15% Black, 12% Asian, 1% Native American and 4% White, 82% qualified for Free or Reduced Lunch, 75% English Language Developers.

## Medical Legal Partnership

The Colorado Medical-Legal Partnership (CMLP) provides free civil legal aid to the patients and families who are seen in the clinics in the Health Pavilion. In 2021, CMLP was staffed by a part-time attorney and part-time paralegal. The patients and families who receive referrals to the CMLP are primarily insured by Medicaid and oftentimes would not otherwise be able to afford an attorney. In 2021, CMLP received 284 referrals for legal assistance. Of those cases, the top needs were help with obtaining guardianship for adults (for parents of children turning 18 who do not have the capacity to be their own decision-makers); family law issues (divorce, custody, child support); housing issues (unsafe or unhealthy living conditions in rental units, or evictions); and education issues (Individualized Education Plan or 504 Plan advocacy). CMLP also helped with myriad miscellaneous legal issues such as clearing criminal warrants, making birth certificate changes, negotiating with a collection agency, etc.





## Diversity, Health Equity & Inclusion

For many, 2021 was filled with experiences which will carry direct and long-lasting health effects for marginalized communities across Colorado and our seven-state region. As a caring community, we continue to show up in the service of our vision and mission, breaking down barriers of inequity so that we can truly reimagine child health for all. Supporting our team members' ability to thrive by building a foundation of equity in recruitment, education, retention and professional advancement remains a vital pillar of that charge. Although much work remains to be done, here is a snapshot of the advancements we've made together this past year can give us shared strength for our future initiatives.

### **Diversity**

We know teams of individuals with different identities and backgrounds can nurture creativity and innovation – and we know we can see, treat and heal children better when our team reflects the diversity of our patient population. That's why this past year we formally launched a process to develop standardized diverse hiring, recruitment, and retention practices to be implemented across our system of care. These practices are being developed by our Human Resources Department in consultation with the consultant Willis Towers Watson (WTW). The new practices will be formalized and announced this summer, and details will become available immediately after.

Children's Colorado has committed to expanding the diversity of our leadership by 15% within the next three years. Our leadership team is working closely with Human Resources and WTW to define how we will measure success under this goal, and our strategies for continuously making progress toward it.

### **Health Equity**

Children's Colorado's Black Health Initiative continues to address the disproportionate nationwide rate of premature births and infant deaths experienced by Black parents and families. Thus far, 54 team members and community healthcare providers have completed live simulation training under the initiative, and Congress has awarded the program \$500,000 to continue its ongoing work.

### **Inclusion**

In 2021, 30 new Captains of Inclusion graduated from Children's Colorado's flagship in-person Diversity, Health Equity & Inclusion learning series, joining alumni from 2019 and 2020 in continuing to plan and advance projects designed to improve diversity, health equity and inclusion. This year, the Captains of Inclusion program expanded to include a new, accelerated model for up to 10 participants.

Over 1,000 team members have engaged with the Diversity, Health Equity & Inclusion Department through individual and team-based trainings, facilitated conversations, and development opportunities – exploring in depth the topics of unconscious bias, equity, oppression and inclusion. This includes 12 hours of unconscious bias training completed by each member of our executive team.

Three team member resource groups have officially completed the chartering process in 2022. T.A.N. (The Afrocentric Network), Unidos, and Spectrum ALLYance continue to share heartfelt and engaging expressions of identity, history, and culture for team members during Black History Month, Pride Month and Hispanic Heritage Month. Look for upcoming news from

our resource groups as they announce cultural activities on and off campus for upcoming events this summer and fall.

Recognizing that our community health outcomes are driven by perceptions, environments and practices we create together, the launch of Children’s Colorado’s four-part “Toward Equity” learning series this year will enable interested team members to adopt new, vitally important tools and skills in the service of advancing diversity, health equity and inclusion.

## **Black Health Initiative**

Another endeavor that addresses health behavior and risk is Children’s Colorado’s Black Health Initiative (BHI), which centers around community voices and experiences to develop a framework for interrelated projects and services to improve African American patient and family experiences and health outcomes. At the forefront of this work, Children’s Colorado collaborates directly with Black families and community members to conceptualize and pilot programs to address infant mortality. Simply put, the lived experiences of Black families and community members are integral to this effort, which includes two key components: 1) peer-to-peer support for African American moms, and 2) joint simulated scenario training for providers and community advocates.

The Kindred Mamas Mentorship Program supports expecting mothers by connecting them with women who have been there before. Mentors provide extra support outside of our clinical services for mothers. As part of our larger Black Health Initiative, the Kindred Mamas Program aims to help mothers navigate the healthcare system and reduce infant mortality rates among Black families in several zip codes surrounding our hospital on Anschutz Medical Campus in Aurora. Mentees’ children need to be patients of Children’s Colorado to participate in this Program. In 2021, we trained 8 new mentors and paired them with 8 new mentees.

Borne out of the crucial need to have community members’ experiences inform how healthcare providers address issues of healthy equity in healthcare settings, BHI partnered with the Center for Advancing Professional Excellence (CAPE) within the University of Colorado School of Medicine to develop provider trainings that immerse providers in simulated scenarios developed by community members. These trainings are an effort to shine a light on the challenges that African American women face in clinical settings and bridge the gaps that can result in negative patient experiences and poor patient outcomes. By engaging providers in practice-based simulated visits, providers are immersed in situations that increase their appreciation for the needs of their patients, while building their skills around how to meaningfully address their patients’ needs in a culturally responsive manner. In 2021, we trained 27 providers (MD’s, PhD’s, PA’s, APN’s, MSW’s), 26 community advocates (BS, BA, RN, MSN, MS, MPH), and laid the groundwork to require this training for all new pediatric residents beginning in 2023.



# Addressing Health Behavior and Risk

## Pediatric Mental Health Institute

At Children's Colorado, our commitment to behavioral health has been longstanding and unwavering. Child and youth behavioral health is a top priority for us across the entire organization. But the behavioral health crisis in Colorado is still growing and continues to challenge children and families, as well as Children's Colorado's care teams and our system's capacity.

Children's Colorado is one of the most comprehensive providers of youth behavioral health services in Colorado, treating kids from all 64 counties. Across four hospitals, we treat the most children in crisis through our emergency departments, are one of the largest providers of outpatient care and provide inpatient care to the most complex pediatric patients.

- In 2021, there were more than 6,500 emergency department behavioral health visits across our system from children in crisis; this was three times as many patients treated for behavioral health needs in our emergency department than any other hospital-based system in Colorado.
- There are more than 600 behavioral health professionals employed by Children's Colorado and our partners at the CU School of Medicine. More than half of these professionals are providing integrated behavioral healthcare to patients seen in clinics and inpatient settings.
- We have increased our capacity for behavioral health inpatient, outpatient, and partial hospitalization between 2015 and 2021. Our Anschutz campus is expanding inpatient psychiatric services from 22 beds to 32 beds.
- Approximately 60% of outpatient services shifted to telehealth during the pandemic, improving access and convenience of care.

Children's Colorado is stepping up as a trusted community resource to help fill the gaps in Colorado's public systems.

- We hosted 53 virtual lunch-and-learn sessions reaching more than 520 providers.
- More than 60 community behavioral health education events were hosted, directed toward parents, schools, coaches, and other adults.
- More than 70,000 kids are reached by our school nurse consultation program, which provides behavioral health consultations across hundreds of schools and childcare centers.
- Our autism co-managing program has increased to have more than 18 community partners.

- Over the course of several years, we crafted and supported more than 20 major state policy initiatives aimed at prevention and comprehensive, community-based youth behavioral health treatment options.

## School Nurse Consultation

In 2021, Children's Colorado's team of 36 School Nurse Consultants (SNCs) felt their workload double during the pandemic. The stress of the pandemic left many of the more than 350 school and childcare sites we serve overwhelmed. The team took on an onslaught of new responsibilities while still performing the Essential School Nurse Services.

The SNC team expanded important alliances with Local Public Health Authorities (LPHA), CDPHE partners, and school administrators to help interpret CDPHE Practical Guide for Operationalizing the CDC's school guidance. Over the course of the pandemic those recommendations changed repeatedly, often without much notice. The constant switch-ups and inconsistencies between counties have taken a toll on many nurses, who not only quickly learn the latest protocols but then relay those messages to parents and school teams.

Advocating for and providing education that vaccines are safe and effective has been a key strategy our nurses used to keep schools open and students at school in-person and ready to learn. Children's Colorado created a variety of creative assets for schools to use to instill COVID-19 vaccine confidence among their staff and students. Children's Colorado partnered with several local school districts and more than 100 independent schools and childcare centers to provide COVID-19 vaccination to more than 34,000 teachers and school staff.

The effects of closed schools go far beyond learning loss. Our SNCs have utilized their skills in assessment and resource referral to help the many children and youths experiencing behavioral health problems, aggravated by the isolation and disruption of the pandemic. Our nurses also work with school teams to address the uptick in disruptive behaviors like vandalism, fighting, abusive language to school staff, and the increase in gun violence. In addition to the high behavioral health support needs for students, school nurses have utilized additional support and training to respond to parents that feel a loss of control and confused by the school guidance.

Schools are often the first place to detect trouble at home, including neglect and abuse. Connecting children with needed resources has increased as children are back to in-person learning. Kids with food insecurity get more than half of their daily calories from school meals. Our nurses work with school teams to provide lunches, even during remote learning, for low-income children to receive the nutrition they need.

The bi-weekly COVID-19 town hall meetings for school leaders that Children's Colorado initiated in 2020, continued throughout 2021. Participation increased to reach nearly 700 unique members from across Colorado, and a few from Wyoming. As schools became increasingly proficient in COVID-19 mitigation strategies, town hall topics pivoted toward addressing the emerging consequences of the pandemic such as COVID-19 long hauler syndrome, return-to-sports, support for teacher and student behavioral health needs, and the sharp increase in obesity.



## Building Resiliency for Health Kids

Suicide is the leading cause of death for youth ages 10 to 24 in Colorado. In southern Colorado, the numbers are among the worst in the state, with Children's Colorado, Colorado Springs experiencing a 145% increase in youth behavioral health visits to the Emergency Department between January and April 2021, compared to those same four months in 2020. Children's Colorado has made robust investments into the behavioral health and wellbeing of our youth. Most notably, in 2020 we launched the Building Resiliency for Health Kids program (Healthy Kids) in Colorado Springs to ensure all children have the opportunity to survive - and thrive - in the face of life's inevitable and predictable adversities.

The Building Resilience for Healthy Kids program is an innovative, upstream, school-based resilience program that partners 6<sup>th</sup> grade students with a Children's Hospital Colorado trained health coach. The coach works 1:1 with students to develop and foster resiliency skills, utilizing motivational and strengths-based techniques over a 6-week period. During each 15-20 minute weekly coaching session, the health coach assists the student in developing goals and skills to improve resilience and provides non-judgmental support to the child along the journey. Students who complete the program demonstrate increased resilience, self-efficacy, emotional self-regulation, and they experienced decreased symptoms of anxiety and depression.

In 2021, with a staff of 13 health coaches and two behavioral health providers, Healthy Kids served a total of 1,600 students, from 12 schools and six districts in El Paso County. For some students, participation in the program reveals acute behavioral health needs; those students are then referred to the program behavioral health providers. In 2021, Healthy Kids behavioral health providers delivered therapeutic services to 120 students. Students who complete the program demonstrate increased resilience, self-efficacy, emotional self-regulation, and they experienced decreased symptoms of anxiety and depression. Results are particularly discernable in underserved, racial/ethnic minority communities where access to behavioral health services are typically scarce. In fact, racial minority students exhibited greater improvement in resilience as compared to white students, illustrating that Health Kids is not only a universal program, but an equitable one.

### Publications

Lee, J. A., Heberlein, E., Pyle, E., Caughlan, T., Rahaman, D., Sabin, M., & Kaar, J. L. (2021). Evaluation of a resiliency focused health coaching intervention for middle school students: Building resilience for Healthy Kids program. *American Journal of Health Promotion*, 35(3), 344-351.

## Virtual Integrated Pediatric Behavioral Health Program (VIPBHP)

Limited access to skilled behavioral healthcare for children, especially access to therapy and child psychiatrists, is a major systems problem that impacts most of Colorado. Since there are long wait lists for psychiatry and other behavioral health specialists, primary care providers (PCPs), who already have established relationships of trust with youth and their caregivers, are often the de-facto principal behavioral healthcare provider. PCPs are conducting more behavioral health visits than ever before, and many have reported that more than half of their daily appointments are now behavioral health related. Schools offer a range of services and supports and school personnel play major roles in identifying children

with behavioral health needs, but often don't access the tools for screening and face fragmented systems contributing to significant barriers in getting children the behavioral healthcare they need. Moreover, schools are often reactionary only after a student's behavioral health needs manifest through disruptions to the learning environment.

In early 2021, Children's Colorado convened an expert workgroup of specialists and community providers to develop a new approach to support the behavioral health needs of children. This program's working name is the Virtual Integrated Pediatric Behavioral Health Program (VIPBHP). The VIPBHP is a holistic approach to behavioral healthcare that considers the valuable expertise and resources of PCPs and schools while addressing significant barriers to care (e.g., adequate access, worries of absenteeism, parent's inability to take time off from work, financial and transportation costs, overall healthcare expenditures associated with provider visits, etc.) and fragmentation that exists when trying to access behavioral healthcare for children. The intent is to maximize existing services, not supplant.

There are three main components to the VIPBHP. First, is the primary care provider. VIPBHP will enhance the behavioral health services available in the child's medical home by establishing new learning collaboratives for PCPs where they will increase their knowledge of behavioral health diagnoses, therapies appropriate for primary care settings, and pharmacological interventions. The goal of the learning collaborative is to increase the PCPs confidence in managing low acuity behavioral health needs thereby reducing referrals to higher levels of care where there is a dearth of resources.

The second component is enhanced care coordination by partnering with schools. Schools often have built-in behavioral health providers: school psychologists, social workers, and licensed counselors. The VIPBHP aims to establish communication pathways, that satisfy HIPAA and FERPA, between PCPs and schools so that when behavioral health needs are identified for a mutual patient/student, and where the school-based provider has bandwidth to provide psychotherapy, the patient/student will receive those services at school, thereby avoiding the lengthy waitlists of community providers and benefit from the convenience of the school locale.

Third, the VIPBHP will provide psychotherapy for patients/students who need care above the ability of their PCP and do not have access to services at school or otherwise. The VIPBHP will be exclusively virtual, which is not the solution for everyone; however, the rapid innovations in telehealth and remote learning that occurred during the COVID-19 pandemic created broad acceptance of the modality.

Children's Colorado plans to begin a pilot of the VIPBHP in 2022.

## **Injury Prevention**

In 2021, the car seat program at Children's Colorado distributed 205 harnessed car seats and 42 booster seats. Additionally, car seat installation/inspections were conducted for more than 350 children in conventional car seats and consultations were provided for more than 50 children with special healthcare needs requiring adaptive car seats; it was discovered that 97% of caregivers misused of their car seat illustrating the importance of this program for parent education. Car seat checks were conducted in 14 languages with help from Spanish-speaking Child Passenger Safety Technicians (CPST) along with virtual and in-person translation support. Comprehensive efforts to assess and restructure our program resulted in



an immediate increase in the car seat voucher redemption rate from 37% in 2020 to 90% in 2021. Three Safe Kids CPST certification courses were conducted, certifying 15 hospital employees and 34 community partners as CPSTs to support car seat education in the community.

Safe sleep initiatives included distributing 37 pack-n-play cribs to families without safe sleep spaces and 1,380 sleep sacks to patient families through the Child Health Clinic. Forty medication lock boxes and 60 gun trigger locks were donated to community partners who work directly with populations in need of these resources. Educational resources were also provided to families on poison prevention and gun safety. Sixty-three bike helmets were distributed to families and 189 low-cost bike helmets were sold through our hospital-based Safety Store.

Additionally, we led Safe Kids Colorado. Safe Kids Colorado is a partnership of statewide and regional organizations dedicated to preventing unintentional injuries to Colorado children from birth to 19 years of age.

## **School-Based Dental Center**

The Child Health Advocacy Institute provides various oral health services to increase access to dental care, help address barriers, and improve the oral health of children in our community. The strategies include oral health promotion through community outreach, increasing access to care by providing preventive oral health services at the School-Based Dental Clinic (SBDC) and increasing preventive dental services at primary medical visits.

### ***Oral Health Promotion and Community Outreach***

Over 3,000 oral health promotion items have been distributed within the community including toothbrushes, toothpaste, oral health education, toothbrushing charts, and books. Four virtual parent coffees and school events, three Back-to-School events, and a city-wide community event were attended. Screening events happened at three schools. A total of over 300 students received oral health education and 134 students received screenings. Planning for an additional 5 school screening events for the remaining 2021- 2022 school year also occurred.

### ***Increase Access to Care***

There were approximately 440 patient encounters in the SBDC with 444 referrals from the SBHCs. The majority of referrals (44%) qualified for the APS Dental Program Fund, followed by Medicaid (24%). Because cost has been identified as a large barrier to care, a new MOU with APS was approved that eliminated out-of-pocket costs to uninsured students but with a funding cap of \$40,000 for the school year (double the amount that previous SBDC had invoiced) under the pretense of student approval by the district. Over \$11,000 in specialty care treatment was provided to APS students at no cost to them in partnership with CU School of Dental Medicine, with over \$14,000 in uncompleted treatment underway.

### ***Preventive Oral Health Services at Pediatric Visits***

Twenty-five providers in monthly lectures and quarterly lectures received training and education in providing preventive oral health services through the Cavity Free at Three model, and over 2050 patients received preventive oral health services at their pediatrician visit in the Child Health Clinic compared to 1800 in 2020, surpassing the goal of 1100. Due to the pandemic, the Special Care Clinic after a two -year stall, restarted the planning phases of

the Cavity Free at Three program in the fall of 2021. One hundred fluoride kits were ordered, training for providers and support staff, billing, providers, and process improvement, and EPIC analysts occurred along with feedback from CHC support staff and Dental Center at Children's Colorado. Implementation is scheduled to begin in the Spring of 2022.

## Health Professional Education

Part of our mission is to improve the health of children, and as an academic medical center Children's Colorado offers a broad spectrum of training, education and certification programs aimed at developing, strengthening, and sustaining knowledge and expertise in the pediatric medical field. It's estimated that up to 87% of health professionals trained in Colorado stay in Colorado. We offer a wide variety of advanced training and learning opportunities for future healthcare professionals and today's clinicians. Health profession education addresses regional and national workforce needs, serves to increase access to healthcare and improve health outcomes. In 2021, Children's Colorado supported 265 pediatric residents and fellows, and 1,152 nursing students.

As a Level One Trauma Center, we also have an emphasis on education and outreach. The Children's Colorado Emergency Medical Services (EMS) Outreach Education team provides education to first responders, hospital providers, and other medical facilities across a seven-state region. Across the region many of the first responders they train live in rural communities. The team uses evidence-based research and guidelines from the hospital, oftentimes changing the way EMS teams respond to situations to achieve improved pediatric outcomes. In 2021, the team conducted 68 educational events covering all four quadrants of the state and reached 3,049 EMS providers.

The Medical Career Collaborative (MC<sup>2</sup>) program is an internal pipeline program offering career and youth development opportunities to underrepresented high school students in the Denver metro area. Increasing diversity and providing opportunity to underrepresented populations in the health professions has become identified as paramount to the nation's need to eliminate inequities in the quality and availability of healthcare for underserved populations. In the 2021-2022 academic year, MC<sup>2</sup> served 125 high school students (67 juniors and 58 seniors) from 53 high schools. 85% of graduates plan to attend a 2- or 4-year college and 76% of graduates declared a health or pre-health major. Ninety-eight percent of MC<sup>2</sup> participants are students of color; 48% Hispanic/Latino, 28% Black/African American, 14% Asian/Pacific Islander, 10% multi-racial, 2% Middle Eastern, 2% White/Caucasian, and 1% American Indian/Alaskan Native.

## Community Respiratory Health Education

The community-based asthma programs in the Breathing Institute within Children's Colorado focuses on reducing emergency department visits and inpatient admissions among asthma patients by improving families' ability to appropriately manage their children's asthma at home. Research shows that the incidence of asthma and outcomes for children with asthma are related to the environments in which they live, their social determinants of health, and their ability to make healthy choices. To assist with all of these, Just Keep Breathing and AsthmaCOMP work with families in the home and school settings, respectively.





### ***AsthmaCOMP***

This program has demonstrated significant improvement in clinical asthma outcomes including improved school attendance rates, reduced frequency of asthma symptoms and decreased ER/Urgent Care visits for asthma. The program has also helped train school nurses to become certified asthma educators. In 2021, this team completed 162 visits with students in 41 elementary schools. Of these students, 94% are eligible for free or reduced school lunch, 84% are insured by Medicaid, 87% identify as Black, Indigenous, or other people of color, and one in four have a caregiver who is Spanish speaking only.

### ***Just Keep Breathing***

The Breathing Institute has four community health navigators and a nurse dedicated to conducting asthma education in the home setting. The navigators represent the Just Keep Breathing program, which provides asthma management education in the home setting. The program focuses on improving care for pediatric patients with high-risk asthma in Metro Denver; this year they were able to serve families in rural communities using telehealth. The navigators conduct multiple home visits with each family, focusing on tailored health education, care coordination, barrier identification and navigation, and environmental assessment and remediation. They have conducted home visits with hundreds of children and have demonstrated improved asthma control, improved medication device technique, and reduced emergency department and inpatient utilization for asthma. In 2021, 183 eligible patients were identified, 87 of those patients enrolled in the program, and the team completed 79 home visits. Due to the COVID-19 pandemic, all visits were completed by telehealth.

### **Research**

Research is woven into Children's Colorado's mission: To improve the health of children through the provision of high-quality, coordinated programs of patient care, education, research and advocacy. We offer our patients the most innovative treatments today. Children's Colorado, in affiliation with the [University of Colorado School of Medicine](#), has been a national center for pediatric research for more than 50 years. Our [Pediatric Clinical Translational Research Center \(CTRC\)](#) accelerates the translation of innovative science to get advanced treatments to patients more quickly. Our physician-scientists have pioneered seminal research in the treatment of [pediatric liver disease](#), [infectious disease and vaccines](#), [pediatric and adolescent HIV/AIDS](#), [cystic fibrosis](#), [pulmonary hypertension](#), [pediatric cardiology](#) and [neonatology](#).

Together, through our campus partnership and commitment to child health research, we aim to profoundly transform the lives of children and the populations we serve across the lifespan. As an integrated health system, our research benefits all of our patients at each Children's Colorado site.

### ***Kids are our bottom line***

We welcome your content and continued feedback both on the content of this reports and our strategies for addressing community health needs. Please email comments, questions and suggestions to [communitybenefit@childrenscolorado.org](mailto:communitybenefit@childrenscolorado.org).

