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Boston Children's Hospital 2022 Community Health Needs Assessment Executive Summary

Submitted to:



Boston Children's Hospital

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EXECUTIVE SUMMARY

BACKGROUND

Boston Children's Hospital's community mission is to improve the health and well-being of children and families in the local community. In 2022, Boston Children's conducted its triennial community health needs assessment (CHNA) to identify health-related needs, strengths, and resources among Boston residents—including among children and families in its priority communities of Dorchester, Fenway, Jamaica Plain, Mattapan, Mission Hill, and Roxbury—as well as those living in communities served by its satellite clinics located in Brookline, Lexington, North Dartmouth, Peabody, Waltham, and Weymouth.

Boston Children's 2022 assessment coincides with and uses data from the 2022 Boston Community Health Needs Assessment (Boston CHNA). The Boston CHNA was led by the Boston CHNA-CHIP Collaborative, a group of Boston health centers, community-based organizations, community residents, hospitals, and the Boston Public Health Commission. Boston Children's Hospital was part of the planning and development of the Boston CHNA-CHIP Collaborative in 2017-2018, and has co-chaired the Communications Committee (2019-2020) and the Access Priority Area workgroup (2021-22). This 2022 Boston Children's CHNA report presents findings from data collection conducted for the Boston Children's CHNA and also integrates the key results of the larger citywide Boston CHNA process to provide a deeper perspective on the needs of Boston's children and their families.

APPROACH AND METHODS

This report focuses on the social determinants of health and is guided by a health equity lens¹. It should be noted that this 2022 CHNA report was conducted during an unprecedented time, including the COVID-19 pandemic and a reckoning with systemic racism. To identify priority community health issues as well as strengths and suggestions for future services and initiatives, the CHNA process drew on multiple data sources and engaged the Boston Children's Community Advisory Board to provide input.

Existing secondary data were reviewed from national, state, and city sources, including datasets such as the American Community Survey, the Boston Behavioral Risk Factor Surveillance System (BBRFSS), the BBRFSS COVID-19 Health Equity Survey, the Youth Risk Behavior Survey, and vital statistics (birth/death records), among other sources. Boston Children's patient encounter data were also reviewed.

For **new primary data collection**, as part of the Boston CHNA process, key informant interviews were conducted with 62 leaders across sectors (including 8 interviews conducted by Boston Children's) and 29 focus groups were facilitated with residents including 6 focus groups with families and parents and 8 focus groups with youth. To understand experiences and needs of those served by Boston Children's satellite clinics outside Boston, 9 interviews were conducted with community representatives from public health, health care, housing and homelessness, government, and social services sectors in Brookline, Lexington, North Dartmouth / New Bedford, and Peabody. Boston Children's also conducted a Community Health Survey, completed by 157 respondents and aligned with a similar Mass General Brigham survey, to inform the prioritization of needs.

¹ World Health Organization, Commission on the Social Determinants of Health, Towards a Conceptual Framework for Analysis and Action on the Social Determinants of Health, 2005.

A **related Boston Children’s report**, the 2022 Boston Children’s Hospital Route 128 Determination of Need (DoN) Community Health Needs Assessment (CHNA), was also referenced to include learnings from the Satellite and surrounding communities of Brockton, Framingham, Needham, Quincy, Randolph, Waltham, and Weymouth. This DoN CHNA utilized a robust community engagement process including: 20 key informant interviews, 6 Advisory Committee meetings, 2 community meetings, 8 focus groups, and a youth forum.

The following summary provides a brief overview of key findings that emerged from the 2022 Boston Children’s CHNA process.

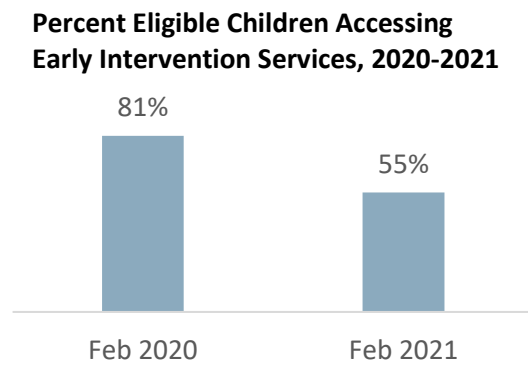
COMMUNITY ASSETS AND STRENGTHS

- Residents described their communities as deeply connected, resilient, and supportive, and specifically highlighted the strengths of young people.
- Boston-based focus group participants and key informants discussed a breadth of community-based institutions and services, including those focused on early childhood, youth, young men of color, food security, housing, mental health, health care, and the LGBTQIA+ population.
- Assessment participants from satellite communities echoed a strong sense of community and described the existence of social services and organizations that support families and children (such as health facilities, churches, and museums) as community strengths. Education, in particular strong schools, was also cited as an asset in some communities.

“The young people themselves are the strengths, who every day are trying the best they can to make it through difficult situations... Resilient, talented young people”
- Interviewee

COMMUNITY SOCIAL, ECONOMIC, AND PHYSICAL CONTEXT

- **Population Overview:** Boston’s population is incredibly diverse in terms of race and ethnicity, country of birth, and language use. According to Census estimates, approximately 3 in 5 (60.0%) Boston residents identify as people of color. Key informants and focus group participants noted many languages spoken among residents, including Cantonese, Mandarin, Russian, Spanish, Haitian Creole, Cape Verdean Creole, and indigenous languages. About 1 in 5 Boston residents are 19 years old or younger. Charlestown (8.8%), Jamaica Plain (7.3%), and Mattapan (6.9%) have the highest proportion of children under 5 years old. The proportion of school-aged children (between the ages of 5 and 17) in Boston has declined over time.
- **Education:** Education is an important issue to Boston families and a critical factor affecting health. Assessment participants discussed how many children struggle in school, especially during the pandemic. In a survey during the pandemic, nearly 15% of Boston adults with children reported that they had unmet educational needs for children or teens during the COVID-19 pandemic.
- **Early Childhood Services:** In focus groups and interviews, early childhood and childcare services emerged as a growing need exacerbated by the pandemic. Between December 2017 and March 2021, there was an 11.3% decrease in the number of available childcare seats for children 0-5 years old across Boston. Between February 2020 and



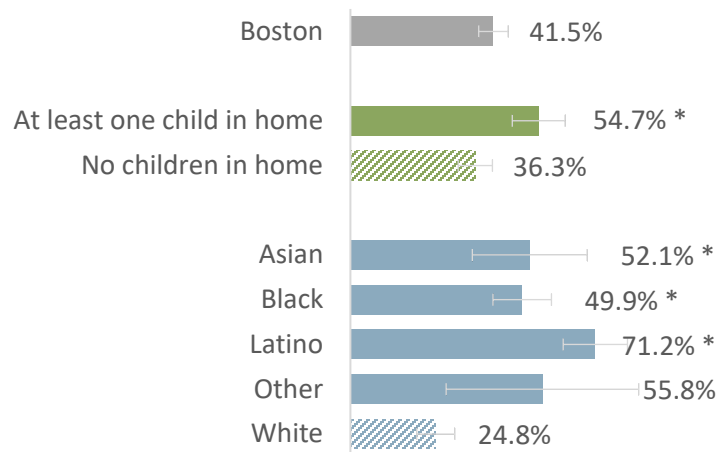
DATA SOURCE: Boston Opportunity Agenda Analysis, 2021

February 2021, the percent of eligible children referred to Early Intervention Services who actually received services decreased from 81% to 55%.

- **Employment and Workforce:** Jobs that pay well make it easier for families to afford childcare, high quality education, health care, and healthy food. However, interview and focus group participants described significant job loss linked with the pandemic and noted that finding and securing stable jobs is more difficult for residents of color, immigrants, people with disabilities, and residents with a criminal record. According to the Bureau of Labor Statistics, the Boston metro area’s unemployment rate was 16.0% during the early stages of the pandemic in April 2020 and dropped to 3.7% nearly two years later in February 2022.
- **Income and Financial Security:** Community leaders and residents described financial stability as critical for health and shared that low-wage work and minimum wage is insufficient for many families to survive in Boston. Participants noted that the pandemic has worsened poverty for low-income residents across Boston. While 12.8% of families in Boston live below the poverty level, there are stark differences by race and ethnicity; for example, 3.2% of white families compared to 24.6% of Hispanic or Latino families are living below the poverty level.

- **Housing and Homelessness:** Interview and focus group participants cited housing affordability as a dominant concern that has been exacerbated by the pandemic and that directly impacts children. In the COVID-19 Health Equity Survey, 41.5% of adults overall and 54.7% of adults with at least one child in the home reported having trouble paying their rent or mortgage during the pandemic. Boston Children’s Hospital Emergency Department Social Work records show a substantial increase in the annual number of families needing social work assistance with housing or homelessness from 51 families in 2014 to 411 families in 2021.

Percent Adults Reporting Having Trouble Paying Their Rent or Mortgage During the COVID-19 Pandemic, by Boston and Selected Indicators, December 2020-January 2021



DATA SOURCE: Boston Public Health Commission, Boston Behavioral Risk Factor Surveillance System, COVID-19 Health Equity Survey, December 2020 - January 2021

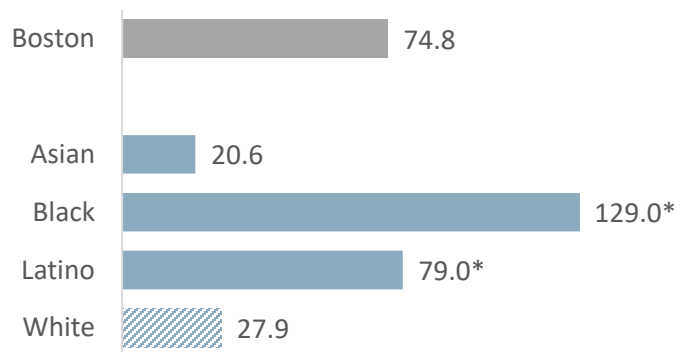
Community leaders and residents described housing assistance as insufficient to meet the needs of low-income residents and families. Additionally, housing quality and in particular exposure to lead and asthma triggers were highlighted by a few interviewees as specific concerns for children and families.

- **Transportation:** Boston-based participants discussed transportation in the context of accessing services. Reports of transportation difficulties in the past year were highest among residents of Dorchester (02121 and 02125 zip codes; 20.4%), Mattapan (17.2%), and South Boston (16.2%). Many participants from satellite communities noted that public transportation options are often unreliable and cumbersome, and that transportation poses a challenge for coordinating school, childcare, and medical care for children.

COMMUNITY HEALTH ISSUES

- Obesity and Related Risk Factors Including Food Security:** Concerns related to obesity and diabetes were frequently raised during interviews and focus group discussions. While the percentage of high school students who are considered obese or overweight has stayed relatively stable, inequities remain. For example, in 2019, about 1 in 5 (19.1%) Boston Public High School students were overweight; this rate was higher among Black (17.2%) and Hispanic/Latinx (24.3%) students. Barriers to accessing healthy, affordable food emerged as a priority issue for families, which worsened during the pandemic and by the rising cost of food. According to the COVID-19 Health Equity Survey, food insecurity is greatest among residents of color and adults with children at home (36.5% of respondents with at least one child at home reported during the pandemic that the food they purchased did not last and they did not have money to get more).
- Asthma:** In 2020, among Boston children under 18, the rate of asthma hospital patient encounters per 10,000 residents was significantly higher among Black (129.0) and Latino (79.0) patients compared to White patients (27.9). Several interviewees shared concerns related to pediatric asthma prevention and control, particularly given the high cost of medications and refills, and the need for education around asthma management.
- Mental and Behavioral Health:** Mental health was a key issue pre-pandemic and the impact of the pandemic only heightened that concern, particularly for children, youth, and caregivers. Many interviewees stated that they have witnessed an increase in mental health issues among children and families due to the COVID-19 pandemic; impacts of the pandemic on children and youth described by participants included the disruption of their routines and trauma, despair, adverse childhood experiences, overcrowded housing, and addiction. Initial results from the 2021 Boston High School and Boston Middle School Youth Risk Behavior Survey (YRBS) indicate that the percentage of students reporting persistent sadness has increased from 27.0% (2019) to 35.6% (2021) among Boston middle school students and from 35.0% (2019) to 43.9% (2021) among Boston high school students. Notably, 29.2% of LGBTQIA+ Boston YRBS high school student respondents reported having had suicidal thoughts in 2015-2019, compared to 13.9% of students overall. Participants discussed several barriers to accessing mental health care, including a limited number of mental health providers in community and school settings, financial barriers, a lack of culturally appropriate and linguistically

Asthma Hospital Patient Encounters (Children Under 18 Years), by Boston and Selected Indicators, Age-Adjusted Rate per 10,000 Residents, 2020



DATA SOURCE: Massachusetts Center for Health Information and Analysis, Acute Hospital Case Mix Databases, 2020

DATA ANALYSIS: Boston Public Health Commission, Research and Evaluation Office

NOTE: Hospital patient encounters (HPEs) include both emergency department visits and hospitalizations

“Everything is so interwoven. [There are] a lot of young people with significant depression and anxiety, but [we’re] also talking about a lot of PTSD, implications related to trauma, poverty, and neglect.”
- Key informant

congruent care, and stigma surrounding mental health care. Substance use was less commonly discussed in recent focus groups and interviews; concerns that did emerge included misuse of drugs, overusing prescriptions and over-the-counter medicines, and smoking nicotine and marijuana, particularly among LGBTQIA+ residents and youth.

- **Violence and Trauma:** The mental health of caregivers is one of many potential sources of childhood trauma. About 18.0% of Boston residents report having lived with a caregiver with mental illness as a child. Neighborhood safety concerns were also a discussion topic among focus group and interview participants, and the impact of community violence on youth was noted. Data from the 2019 Boston High School Youth Risk Behavior Survey indicate that approximately one in ten Boston high school students (11.2%) reported being bullied on school property in the past year.
- “...young people are absolutely impacted by community violence. A lot of it is cyclical – hurt people hurt others.”*
- Key informant
- **Birth Outcomes:** In 2019, low birth weight and preterm births were significantly higher among Black (12.9% and 12.8%, respectively) and Latino (9.4% and 10.2%, respectively) mothers in Boston compared to White mothers (6.4% and 7.8%, respectively). Combined 2017-2019 data show that in Boston the infant mortality rate is significantly higher among Black and Latino births compared to White births.
 - **Sexual Health:** According to 2019 YRBS results, 37.6% of Boston Public High School students reported ever having sex. About half (51.8%) of students who identified as LGBTQ had ever had sex, which was significantly higher than students who identified as heterosexual/non-transgender (36.0%). According to an analysis from the BPS Office of Health and Wellness, sexual risk behaviors among high school students have decreased over time.
 - **Overall Mortality and COVID-19:** COVID-19 was the leading cause of death for Black, Latino, and Asian residents in Boston in 2020. Between January 2020 to November 2021, more than 2,097 children under 18 in Massachusetts lost a parent or in-home caregiver to COVID-19; these children and families may be experiencing grief and trauma.

ACCESS TO CARE AND SOCIAL SERVICES

- **Accessing Health Care Services:** Access to health care services remains a concern for families, particularly those with limited resources. Barriers to accessing health care include: income, health insurance, language barriers, and limited culturally relevant care. Persistent barriers to accessing pediatric healthcare services, including high costs of care and long wait times, were a cross-cutting theme in conversations with organizational stakeholders and providers from satellite communities.
 - **Accessing Youth-centered Programming and Other Social Services:** Boston Children’s interviewees shared the perception that extracurricular and afterschool programming for youth is limited and, for some families, unaffordable. Participants noted that the pandemic has increased isolation and made it harder to engage youth, and also noted a lack of funding for the youth development workforce. Relative to other social services, residents and community leaders discussed rising and acute social and economic needs among a growing segment of low-income residents and significant barriers to accessing services, such as: transportation, difficulty navigating application processes, limited
- “...you have to pay for whatever sport or extracurricular your child is getting into, people can't afford it because it's expensive.”*
- Key informant

Internet, and lack of eligibility due to immigration status. Several participants also discussed systemic racism, racial injustice, and discrimination.

COMMUNITY'S VISION AND COMMUNITY SUGGESTIONS FOR THE FUTURE

Participants in interview and focus group discussions for the Boston CHNA were asked for their suggestions to address identified needs. These included:

- Promote Child and Youth Development
- Improve Access to and Quality of Behavioral Health Care
- Strengthen Health Care Policies and Improve Health Care Access and Quality
- Create Opportunities that Foster Economic Stability and Mobility
- Improve Housing Affordability
- Create a Healthier Environment
- Focus on Dismantling Systemic Racism
- Deepen Partnerships with Local Communities and Collaborate to Promote Health Equity

Additionally, participants in the Boston Children's Route 128 DoN CHNA provided suggestions for future strategies to address needs related to four child health priorities: Early Childhood Education and Care; Mental Health and Wellbeing; Housing and Transportation; and Food Access and Obesity.

KEY THEMES

Several overarching themes and conclusions emerged from this synthesis:

- **Boston is a diverse city with many community strengths and a breadth of community-based institutions and services.** Boston's population is incredibly diverse in terms of race and ethnicity, country of birth, and language use. About 1 in 5 Boston residents are younger than 19 years old.
- **Boston families are grappling with a high cost of living; the COVID-19 pandemic has worsened income inequalities and the level and severity of poverty for low-income residents across Boston.** Over 4 in 10 Boston adults (43.7%) and almost 3 in 5 residents (57.1%) with at least one child in the home reported that they had experienced a loss of income during the COVID-19 pandemic. During interviews and focus groups, residents described the cost of living as high and rising. Several residents also noted the difficulty of finding secure and stable jobs, particularly for residents of color and immigrants.
- **A need for more affordable, high-quality, and stable housing for families remains and has increased due to the pandemic.** Housing instability, the stress of unaffordable housing costs, and poor housing quality increase the risk of adverse health outcomes for children and families. More than 4 in 10 (41.5%) residents and over half (54.7%) of residents with at least one child in the home reported that they have had trouble paying their rent or mortgage during the COVID-19 pandemic.
- **Access to early childhood services is a problematic barrier for families to achieve health and economic stability.** Affordable, quality childcare was difficult to find before the pandemic, but assessment participants noted that finding care for young children was even more challenging during the pandemic. Between December 2017 and March 2021, there was an 11.3% decrease in the number of available childcare seats for children 0-5 years old across Boston.
- **Mental and behavioral health needs, including for youth, remain high and have been exacerbated by the pandemic.** Pre-pandemic (in 2019), 35.0% of high school students in Boston reported feeling sad or hopeless almost every day for more than two weeks in a row; initial results from the 2021 Youth Risk Behavior Survey indicate that the percentage has risen to

43.9%. Assessment participants described a need for culturally appropriate and linguistically congruent mental health care and additional mental health providers in school and community settings.

- **Chronic disease, including asthma and obesity, remain a concern for children and families; food insecurity has increased due to the pandemic.** While the percentage of high school students who are considered obese or overweight has stayed relatively stable, inequities by race and ethnicity remain, and assessment participants continued to describe childhood obesity concerns. Food insecurity, namely barriers to accessing healthy, affordable food, emerged as a key priority issue across many interviews and focus groups. Several interviewees also shared concerns related to asthma prevention and control; quantitative data show that asthma inequities remain.
- **While birth outcomes have stayed relatively stable since Boston Children’s 2019 CHNA, inequities remain.** In 2019, low birth weight and preterm births were significantly higher among Black and Latino mothers compared to White mothers in Boston. Additionally, combined 2017-2019 data show that the infant mortality rate is significantly higher among Black and Latino births compared to White births.
- **Boston has many health care and social service assets, but gaps and inequities remain; gaps in youth extracurricular activities, afterschool programs, and workforce development programs were noted in particular by participants.** A number of participants across conversations also discussed systemic racism, racial injustice, and discrimination as interwoven into U.S. social, economic, educational, and health care systems.
- **Concerns related to housing, mental health, and childcare were also prominent in satellite communities (Brookline, Lexington, North Dartmouth, Peabody, Waltham, Weymouth).** While there is variation in the sociodemographic profiles across Boston Children’s satellite communities, many key informants across these communities described concerns related to affordable housing, increased mental health needs for children and families, and staffing shortages related to mental health care and childcare.

PRIORITY HEALTH NEEDS

Community Health Survey: To gather input from residents specifically around prioritization of health needs, Boston Children’s fielded a 2022 Community Health Survey using a convenience sample (n = 157). Community respondents were asked to select the top five areas that the hospital should focus on to help make their community healthier and identified the following:

- Mental health services
- Affordable childcare
- Healthy child development
- Housing stability and homeownership
- Healthy food access

It should also be noted, this Boston Children’s 2022 Community Health Survey aligned with a similar survey fielded in early 2022 by Mass General Brigham (n = 494); “*Mental health services*” was also the top area selected by respondents in this Mass General Brigham survey.

Community Advisory Board Presentation and Prioritization: On May 10, 2022, Boston Children’s presented preliminary findings from the CHNA and the Community Health Survey results to the Boston Children’s Hospital Community Advisory Board (CAB). The CAB offered specific reflections on findings including the need to look at youth development staff salaries, the impact of social media on youth mental health, the pediatric boarding crisis, and the continued engagement of youth in this process. Through a facilitated conversation with the CAB, the following eight areas of need were identified for prioritization: Mental health prevention and services; Affordable housing; Early childhood education; Youth supports; Asthma care; Food access; Healthy weight; and Youth development workforce and salaries.

At this meeting, 8 members of the CAB then participated in a voting process to select their top five areas for prioritization, based on specified Selection Criteria and ranking among the eight areas of need listed above. Boston Children’s staff also met with 3 additional CAB members who were not in attendance on May 10th to discuss and select priority areas. The Top Five areas for focus were as follows:

- Mental health prevention and services (11 votes)
- Affordable housing (9 votes)
- Food access (9 votes)
- Youth supports and youth development workforce salaries (8 votes)
- Early childhood (7 votes)

Additionally, the CAB affirmed “asthma” and “healthy weight” as areas of continued need.

Parallel and Related Efforts: Boston Children’s also reviewed the priority areas and needs identified through the Boston Children’s Route 128 Determination of Need Community Health Needs Assessment (child health priorities: 1. Mental health and well-being; 2. Access to early education and care; 3. Housing and transportation; 4. Food security and obesity) and the 2022 Boston CHNA-CHIP (priority areas: 1. Housing; 2. Financial Security and Mobility; 3. Behavioral Health; and 4. Accessing Services).

Based on the aforementioned activities and after further definition and refinement, Boston Children’s identified the following priority areas for its 2022-2025 community health implementation strategy (CHIP):

2022-25 Community Health Implementation Plan Priorities:

- 1. Promote mental health and emotional wellness**
- 2. Support affordable and stable housing for children and families**
- 3. Promote healthy youth development**
- 4. Increase access to affordable and nutritious food**
- 5. Improve early childhood education, health, and developmental supports**
- 6. Improve the health of children and families managing asthma and obesity**

These priorities remain consistent from the previous CHNA-CHIP processes, and Boston Children’s will continue to address these areas of need.