October 30, 2019

# Boston Children's Hospital 2019 Community Health Needs Assessment Executive Summary

Submitted to:





## **EXECUTIVE SUMMARY**

## **Background**

Boston Children's community mission is to improve the health and well-being of children and families in the local community. In 2019, Boston Children's conducted its triennial community health needs assessment (CHNA) to identify health-related needs, strengths, and resources among residents in Boston—Dorchester, Fenway<sup>1</sup>, Jamaica Plain, Mattapan, Mission Hill, and Roxbury—as well as those living in communities served by its satellite locations in Lexington, North Dartmouth, Peabody, Waltham, and Weymouth.

Boston Children's 2019 assessment coincides with and uses data from the Boston Collaborative Community Health Needs Assessment. In 2018, a wide variety of Boston stakeholders—community organizations, community development corporations, health centers, hospitals, and the Boston Public Health Commission—formed the Boston CHNA-CHIP Collaborative to engage in Boston's first large-scale collaborative city-wide assessment and plan. While community health assessment and planning work have been long-standing endeavors within individual organizations, the Boston CHNA-CHIP Collaborative aligns and coordinates resources between multi-sector stakeholders across Boston. Boston Children's has been strongly engaged in the city-wide assessment, having representation on both the Steering Committee and work groups. The Boston Children's assessment integrates findings from this collaborative CHNA, along with the specific issues affecting children and families.

# **Approach and Methods**

Boston Children's 2019 assessment used a participatory, collaborative approach and examined health in its broadest context. The assessment draws on data collected for the larger Boston CHNA that includes data from the Massachusetts Department of Public Health, vital records, and surveillance systems. In addition, a community-wide survey was conducted for the Boston CHNA that engaged over 2,400 residents including 548 parents/caregivers of children 18 or younger and 201 youth under 18. Seven of the 13 focus groups conducted for the Boston CHNA emphasized parent and family experiences, and there was one youth specific focus group. Forty-five key informant interviews were conducted for the Boston CHNA, 18 of which focused on issues related to parents, families, or children in Boston. To understand experiences and needs of those served by Boston Children's satellite locations outside Boston, 11 key informant interviews were conducted with clinic staff such as nurses, social workers, and administrators, as well as staff of community-based partner organizations.

The following provides a brief overview of key findings that emerged from this assessment.

# **Community Social, Economic, and Physical Context**

• **Demographic Characteristics:** Boston is a growing and diverse community. In the last several years, the population has increased by 8% overall. Twenty-three percent of Boston residents identify as Black, 19.4% identify as Latino, and 9.4% identify as Asian. About 20% of Boston's residents are 19 years old or younger, with 5% under the age of 5. The Boston Public School (BPS) system is more diverse than the city overall, with nearly 42% of students who identify as Latino and 32% who identify as Black.

<sup>&</sup>lt;sup>1</sup> Fenway is a priority neighborhood of Boston Children's due to its proximity to the hospital and the hospital's impact on the neighborhood.

- Education: Boston is a well-educated community (48% of Boston adults have a college degree or more); yet, two in ten Black and Latino adults have a college degree or more compared to seven in ten White adults. High school graduation rates are lower and drop-out rates are higher among Latino students, English Language Learners, and students with disabilities. The educational needs of these students as well as variable educational quality across lower income neighborhoods were discussed in several focus groups and interviews conducted for the Boston CHNA.
- Employment and Workforce: Boston's 2018 unemployment rate was 3.0% according to the Bureau
  of Labor Statistics. Over the past several years, unemployment rates have been significantly higher
  in Boston Children's priority neighborhoods of Roxbury and Dorchester primarily communities of
  color that experience disproportionate economic challenges compared to Boston overall. Focus
  group participants discussed challenges for workers with lower educational levels or skills in
  securing well-paying jobs and remarked on stark class divides between Boston residents.
- Income and Financial Security: Similar to Boston Children's 2016 CHNA, financial insecurity was a major theme across many focus groups conducted for the 2019 Boston CHNA. Across all indicators of income and financial security, there are substantial differences among Boston neighborhoods and racial and ethnic groups. The median household income in Boston is highest among White residents (\$98,317) and lowest among Latino residents (\$36,998). While less than one in five Boston families (16.0%) live below the federal poverty line; the proportion of

"Kids can feel when their parents are stressed because maybe the landlord raised the rent or something broke in the house. They're one situation away from eviction."

- Focus Group Participant

families living in poverty is among the highest citywide in Boston Children's priority neighborhoods of Dorchester (26.6%) and Roxbury (25.7%). Boston CHNA community survey results indicate that respondents with children under 18 were significantly more likely to report challenges paying for most expenses than those without children under 18. Boston CHNA community survey respondents with children under age 18 were also asked how frequently their children were exposed to challenging family situations and most often reported financial hardship (38.7%).

- Housing and Homelessness: The high and rising cost of housing in Boston was a key theme in focus group and interview discussions; participants reported that housing costs comprise a large and increasing portion of household budgets. These perceptions are mirrored in the statistics. The majority of housing units across Boston are renter-occupied (65%) and more than half of those in renter-occupied units are housing cost-burdened, meaning they spend more than 30% of their income on housing. Boston community survey respondents with children under age 18 (23.7%) were significantly more likely than respondents without children under age 18 (16.1%) to report having trouble paying their mortgage or rent. Of the 3,527 homeless households in Boston in 2018, over three in ten included at least one adult and one child.
- Transportation: Nearly one in five (19.2%) Boston CHNA survey respondents identified availability of
  public transportation as a barrier and 15.5% cited cost of transportation as a barrier. Respondents
  with children under age 18 were significantly more likely to report cost of transportation as a barrier
  and significantly less likely to report availability of public transportation as a barrier compared to
  respondents without children under age 18. One in five youth respondents identified availability of
  public transportation as a barrier.

• Social Environment and Discrimination: Focus group and interview participants described strong social networks in Boston, citing cohesion among immigrant groups and others who share similar racial, cultural, linguistic and religious backgrounds. Two-thirds of CHNA community survey respondents believed that people in their neighborhoods help each other and three-quarters perceived that they and their neighbors want the same thing for their neighborhoods. Respondents with children under age 18 were more likely to report positive perceptions of community cohesion than those without children under 18. At the same time, focus group participants mentioned a decline in community social ties, due to lack of time and generational differences; gentrification has likewise changed the "feel" of some neighborhoods. CHNA community survey results and conversations in focus groups indicate that subtle and overt discrimination is an issue in Boston.

# **Community Health Issues**

**Perceptions of Community** Health Concerns: When asked to identify the top five most important concerns in their community or neighborhood that shape their community's health, all respondents and those with children under 18 listed housing quality and affordability, alcohol/drug abuse, mental health, and community violence. Respondents with children under age 18 identified obesity as a top five health concern. In addition, youth participants identified smoking and employment opportunities among their top five concerns.

Percent Boston CHNA Survey Respondents Reporting Top Five Most Important Concerns in Their Community or Neighborhood That Affect Their Community's Health, All Respondents, Respondents with Children Under 18, Youth. 2019

Toutil, 2019			
	All Respondents (N=2,053)	Respondents with Children Under 18 (N=544)	Youth (N=197)
1	Housing quality or affordability	Housing quality or affordability	Alcohol/ drug abuse
2	Alcohol/ drug abuse	Alcohol/ drug abuse	Smoking
3	Mental health	Mental health	Mental health
4	Community Violence	Community Violence	Housing quality or affordability
5	Environment	Obesity	Employment/ job opportunities

DATA SOURCE: Boston CHNA Community Survey, 2019

- Obesity and Related Risk Factors: Childhood obesity was a common theme that emerged among Boston CHNA focus group and interview discussions. Over 40% of BPS students were overweight or obese in 2017, a rate that has remained constant since 2013. Participants linked obesity to limited access to healthy eating and physical activity. About one-third of Boston CHNA community survey respondents indicated in the past 12 months they felt it was sometimes or often true that they worried that their food would run out before they had money to buy more. Respondents who had children under 18 (45.8%) were significantly more likely to report this than respondents without children under 18 (25.1%).
- Asthma and Allergies: After obesity and diabetes, pediatric asthma was
  the most frequently cited chronic disease concern among focus group
  and interview participants, especially for those who lived or worked in
  Dorchester and Roxbury. Concerns about asthma in these communities
  were also noted in Boston Children's 2016 CHNA. 2019 participants
  shared that young children living in poverty are disproportionally affected

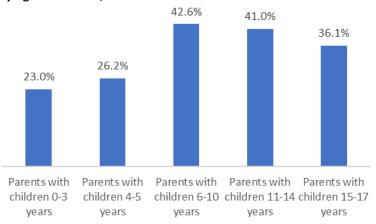
"So many of our kids...are suffering from chronic and active asthma, where they need their inhalers every single day."

- Interviewee

by pediatric asthma as a result of poor environmental factors and/or poor living conditions (e.g., air pollutants, rodents, mold, and tobacco smoke). One in four BPS students reported an asthma diagnosis. Additionally, 2016 and 2017 Boston Children's patient encounter data indicate that Black and Latino children experienced a significantly higher rate of asthma hospital encounters— at least three times that of White children.

Mental Health: Similar to Boston Children's 2016 CHNA, mental health issues were described as a priority concern across almost all focus groups and interviews conducted for the 2019 Boston CHNA. Stress, anxiety, and depression were the most frequently cited mental health challenges among Boston CHNA participants and were often discussed in relation to social determinants of health (e.g., poverty, employment, safety). Responses from the Youth Risk Behavior Survey indicate 33.4% of Boston public high school students reported feeling persistent sadness; this rate rose from 24.8% in 2011. Nearly one in eight Boston public high school students has reported seriously considering suicide.

Percent Boston CHNA Survey Respondents Reporting That They Have Needed Mental Health Services but Could Not Access Them, by Age of Children, 2019



DATA SOURCE: Boston CHNA Community Survey, 2019

Stigma and systemic challenges, such as insufficient workforce, were seen as barriers to improved mental health in the community. Among Boston CHNA community respondents who reported that they have needed mental health services but could not access them, the highest proportion—over 42%—were those with children 6-10 years.

• Substance Use: Substance use was considered a priority health issue in many focus group and interview discussions. Participants mentioned marijuana, prescription drug use, and opioids as being among the most concerning, and were especially concerned about the impact of substance use disorders on young people. Over a quarter of high school youth reported current alcohol consumption (26.6%), with rates significantly higher among Boston female students

"Children are vaping because they fruity flavors are enticing, and they do not know there are other chemicals involved."

- Interviewee

(31.0%) than male students (21.8%); LGBTQ students (38.4%) reported higher rates of alcohol use than heterosexual youth (24.9%). Youth cigarette smoking rates in Boston have significantly declined over time, but vaping is a growing concern. The rise in marijuana use since legalization was discussed in multiple focus groups conducted for the Boston CHNA; this was also of concern in 2016. BCH hospital patient encounters due to marijuana dependence and misuse show that Black youth experience a significantly higher rate than White youth (41.9 and 29.6 encounters per 10,000 residents ages 13-18, respectively). As in the 2016 Boston Children's CHNA, lack of providers and services were reported as barriers to addressing substance use issues in the community.

 Violence and Trauma: Violence and trauma were frequent concerns reported by focus group and interview participants in the 2019 Boston CHNA; this was also prominent in Boston Children's 2016 CHNA. Many focus group participants expressed concern about personal safety in their communities. About 27% of youth under 18 characterized their neighborhood as unsafe or extremely unsafe, which was similar to that of other age groups. However, a higher proportion of respondents with children under 18 (32.0%) than respondents without children under 18 (21.1%) considered their neighborhoods unsafe or extremely unsafe.

- Maternal and Child Health: Quantitative data indicate that since 2011 the overall birth rate in Boston has significantly declined for women 15-44 years old to 41.6 births per 1,000 female residents in 2017. Rates of low birthweight infants and preterm births—while less than 10% overall are significantly higher among Black (13% and 12%, respectively) and Latino mothers (9% and 11%, respectively). Access to prenatal care has improved over time, and currently over eight in ten Boston mothers receive adequate or adequate plus prenatal care (83%); however, Asian, Black, and Latino mothers (84%, 76%, 79%, respectively) are significantly less likely than White mothers (89%) to receive adequate or adequate plus prenatal care. Childcare challenges were frequently discussed in focus groups and interviews, including cost, long waitlists, and lack of summer childcare as primary issues. Preliminary analyses of the 2019 Language, Disability, and Childcare Survey indicate that affordability and accessibility were the most frequent childcare challenges for survey respondents.
- Sexual Health: While sexual health was not a prominent theme discussed across focus groups or interviews, according to 2013-2017 Youth Risk Behavioral Survey results, 43.9% of Boston public high school students reported ever having sex and about one third reported that they were currently sexually active (have had sex in the past three months). About 85% of Boston high school youth reported that they used some form of contraception during the last time they had sex; condoms were by far the most frequently used form of birth control, with nearly half of Boston high school youth reporting that they used these.

#### **Access to Care**

- Use and Perceptions of the Health Care System: Boston is a city with many health care resources and a high proportion of residents have health insurance. Focus group participants, interviewees, and Boston CHNA survey respondents indicated satisfaction with health care in their community. BBRFSS results show that approximately eight in ten respondents have a personal doctor.
- Barriers and Facilitators to Accessing Health Care Services: According to focus group participants, interviewees, and community survey respondents, several barriers to accessing health care remain. According to interview and focus group participants, challenges include: underinsurance, language, immigration status, navigation and care coordination, transportation, and lack of culturally-sensitive approaches to care. For CHNA community survey respondents, long wait times for appointments and lack of evening or weekend services were the top two factors that made it difficult for them to access health care (44% and 38% of survey respondents, respectively). When Boston CHNA survey respondents were asked what factors made it easier for them to get the health care services they needed, having a regular source of care (63.3%), insurance cover what they needed (49.7%), and providers taking their insurance (47.8%) were the top three factors cited.

#### **Community Assets**

• Perceptions of Community Strengths and Assets: Boston has numerous strengths according to focus group participants, interviewees, and CHNA community survey respondents. Neighborhoods were described as "tight-knit" with substantial cultural diversity and strong faith communities. The top five community strengths chosen by all respondents, respondents with children under 18 and youth were largely similar and included: racial and cultural diversity, proximity to medical services, access to resources, and residents who speak the same language as among the top five of their communities' strengths.

"There's so much that the city of Boston has to offer; it has some of the best colleges and universities, best teaching hospitals and traveling [health care]."

- Focus Group Participant

• Services and Organizational Resources: Survey, focus group, and interview participants all noted proximity and abundance to health care services as major strengths of their community. Across the city, there are 22 hospitals and 33 health center access sites. Nearly 70% of community survey respondents identified proximity to medical services as a top strength of their communities. Additionally, more than three-quarters of BPS schools offer additional supports for students experiencing trauma, students experiencing homelessness, and English Language Learners. Many focus group and interview participants also described the city of Boston as having a strong network of social services with strong partnerships and collaborations.

#### Community Suggestions for the Future: Initiatives, Programs & Services

Participants in interview and focus group discussions were asked for their suggestions for addressing identified needs and their vision for the future. Suggestions included the following:

## Community Social, Economic, and Physical Context

- Employment and Workforce: Reduce employment barriers by making minimum education requirements more inclusive of those with valuable lived experience; subsidize childcare cost for low-income parents to have upward mobility through education and job training; and increase youth employment opportunities.
- **Education:** Focus resources on early childhood education; increase social supports in public schools; train educators on trauma-informed approaches; use restorative justice approaches; and address chronic absenteeism by bolstering wraparound services.
- **Food Insecurity:** Increase access to healthy and affordable food through: urban farming and community gardens; farmer's markets that accept SNAP benefits; and strengthen initiatives that address food access from a clinical perspective.
- Housing: Mitigate the negative impacts of gentrification and displacement through increased home
  ownership in non-White communities to build generational wealth; and long-term renewable leases
  for nonprofits and social services agencies strained by rising operating costs.
- Transportation: Focus on transportation equity in lower income communities with longer commuting times; invest in speedy bus lanes to reduce traffic; continue making the city bikeable; and explore fee structures for ride share programs to generate revenue for local operational costs.

#### **Community Health Issues**

- **Chronic Disease:** Focus on prevention strategies and chronic disease management—particularly to prevent diabetes and obesity; and increase affordable gym and healthy food options.
- **Mental Health**: Invest in more mental health supports in public schools; reduce cultural stigma around mental health services, and recruit clinicians who reflect Boston's diversity.
- Substance Use: Focus prevention efforts on marijuana and prescription drug use among youth.
- **Violence and Trauma:** Restore trust among government, police, and health care institutions by strengthening community linkages and improving community cohesion.
- Maternal and Child Health: Provide more supports to learn positive parenting skills; and subsidize the cost of childcare for low-income families, especially for single-headed households.
- **Health Care Access:** Increase supports for navigating the complex health system and delivering culturally-sensitive care and linguistically appropriate services to diverse groups.

# **Key Themes and Conclusions**

This assessment report describes the social and economic context of Boston Children's priority neighborhoods, key health issues and concerns, and perceived assets and opportunities for addressing current needs and gaps. Interviewees at BCH satellite locations (Lexington, North Dartmouth, Peabody, Waltham, and Weymouth) and quantitative data point to similar health concerns among residents of these communities. Several overarching themes and conclusions emerged:

- Boston is a young, diverse city that continues to experience population growth. Boston experienced an 8% increase in population over the past decade, with greater growth among people of color. About 20% of Boston's residents are 19 years old or younger, with about 5% under 5 years old. The wide-ranging diversity of Boston residents presents challenges when delivering health and social services that aim to meet the multitude of needs across the city.
- Boston has a well-educated population although opportunities and outcomes differ across groups.
  Nearly half of Boston adults hold a college degree or higher, although the proportion of Asian and
  White residents who are well-educated is higher than that of Black or Latino residents. High school
  graduation rates are also higher among Asian and White youth compared to Latino or Black
  students. Addressing issues of educational equity across Boston neighborhoods and the needs of
  specific population groups were seen as needing more attention.
- There are substantial differences in financial security across Boston neighborhoods and racial and
  ethnic groups, factors that affect the overall well-being of children and families. In Dorchester and
  Roxbury, over one in four families live below the federal poverty level. Focus group and interview
  participants discussed the challenges of making ends meet and affording goods and services that
  promote health. Similarly, Boston CHNA survey respondents identified saving money as their most
  common financial challenge.
- Lack of affordable housing emerged as a particular challenge for children and families. As noted in the 2016 CHNA, the high cost of housing is a substantial challenge for Boston residents, particularly those most vulnerable. Of all social determinants identified as imperative to health and well-being, housing stability emerged as a top priority among focus group participants, interviewees, and Boston CHNA survey respondents. More than half of those in renter-occupied units across the city are housing cost-burdened, meaning they spend more than 30% of their income on housing.
- Behavioral health, specifically mental health and drug use among young people are growing concerns among residents; opioids, prescription drugs, and marijuana use were most concerning.
   Co-occurring mental health and substance use issues were frequently discussed among key

informants, as well as the interrelationship between trauma, mental health, and substance use. Among youth CHNA survey respondents, alcohol/drug use, followed by smoking, were identified as the highest community concerns. While alcohol and tobacco use among Boston youth has declined over time, focus group and interview participants expressed concern about rising rates of vaping and marijuana use among young people. Participants also identified a need for expanded mental health services and trauma-informed programs for youth. Quantitative data show that about one-third of Boston high school youth report persistent sadness and this rate has risen over time.

- Chronic disease, including asthma and obesity, remain a concern for children and families. As in 2016, obesity and asthma continue to be top community health concerns. One in four BPS students are overweight or obese. Access to healthy food was described as a concern in some Boston neighborhoods, including Jamaica Plain, portions of Roxbury, and Dorchester. Food security likewise is a concern, especially among those with children under age 18. Participants described a need for programs and services, ranging from providing health education to addressing safety concerns that impede physical activity. One in four Boston high school youth reported an asthma diagnosis; asthma emergency department data show Black and Latino children experience significantly higher rates of ED visits than White children.
- Violence-based trauma was identified as a major factor of negative community health outcomes, and there is a need for more trauma-informed approaches to care, particularly for children and communities of color. One in four Boston CHNA community survey respondents described their neighborhoods as unsafe or extremely unsafe, with Black and Latino respondents more likely to describe their communities this way. Exposure of children and youth to unhealthy relationships and violence (adverse childhood experiences) is also of concern; focus group and interview participants urged integration of more trauma-informed care in health services and early childhood education.
- Boston's birth rates have declined over time, while the proportions of low birth weight babies and
  preterm births have remained steady. Rates of low birth weight infants and preterm births were
  significantly higher among Black and Latino mothers compared to White mothers. While about 83%
  of Boston women received prenatal care, rates of access to prenatal care are lower among Asian,
  Black, and Latino women compared to White women. Accessing affordable childcare is also a
  prevalent challenge for families with young children.
- Boston has many health care and social service assets to be leveraged, but access to those services
  is a challenge for some residents. Proximity of health care services and education institutions,
  diversity and multiculturalism, and engaged residents were noted as key strengths among
  Bostonians that can be leveraged in future planning. Multifaceted barriers to care included
  underinsurance, language, immigration status, navigation and care coordination, transportation,
  and lack of culturally-sensitive approaches to care.