COMMUNITY HEALTH NEEDS ASSESSMENT

Executive Summary

October 2015

Introduction & Purpose of Needs Assessment

Joseph M. Smith Community Health Center (JMSCHC) is a federally qualified community health center (FQHC) serving Allston, Brighton, and Waltham, MA and surrounding areas. JMSCHC sought to undertake a community health needs assessment (CHNA) of its service areas in follow up to the needs assessment it conducted in partnership with our hospital affiliate in 2013. In addition to meeting the Health Resources and Services Administration (HRSA) health center program requirements (Section 330(k)(2) and Section 330(k)(3)(J) of the PHS Act), the CHNA process was undertaken to achieve the following overarching goals:

- To support JMSCHC staff in developing a comprehensive portrait of the health status of JMSCHC's service area using a social determinants of health framework
- To describe both overall trends and unique issues by sub-populations, and to compare these trends and issues to local and state data
- To generate action-oriented data that informs service and program planning and development as well as strategic planning

JMSCHC undertook a community health needs assessment to ensure that it is addressing the most pressing health concerns among residents of Allston-Brighton, where it has been serving the community for over 40 years; and in Waltham, where it opened a site in 2004, as well as its general patient population.

Approach and Methods

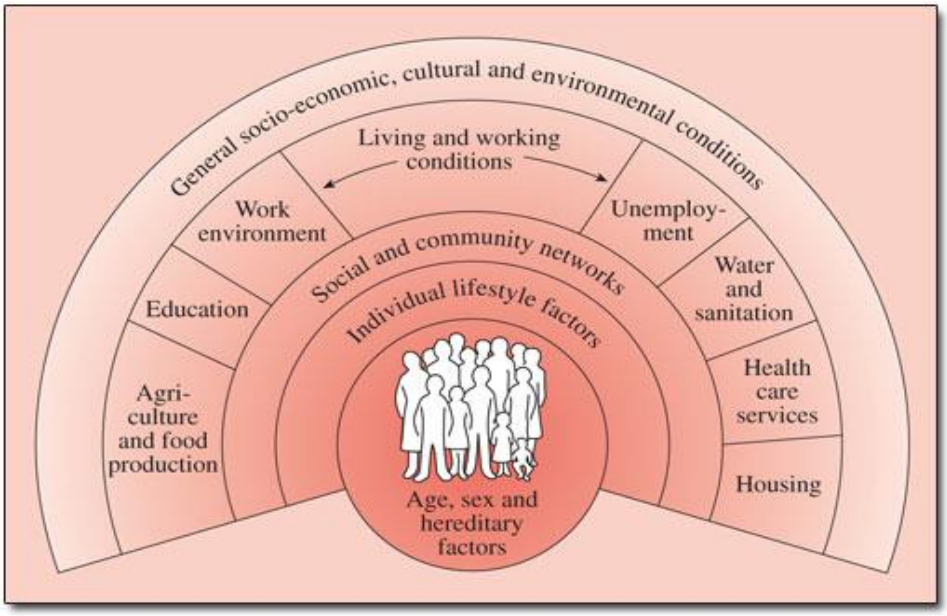
This section describes how data for the community health needs assessment was compiled and analyzed, as well as the broader lens used to guide this process. Data was collected and analyzed by the Health Center ourselves as well as by a consultant, Health Resources in Action. The CHNA defines health in the broadest sense and recognizes that numerous factors at multiple levels impact a community's health — from lifestyle behaviors (e.g., diet and exercise), to clinical care (e.g. access to medical services), to social and economic factors (e.g., employment opportunities), to the physical environment (e.g., air quality). This section discusses the larger social determinants of health framework which helped guide this overarching process.

Social Determinants of Health Framework

It is important to recognize that multiple factors have an impact on health and there is a dynamic relationship between real people and their lived environments. Where we are born, grow, live, work, and age—from the environment in the womb to our community environment later in life—and the interconnections among these factors are critical to consider. That is, not only do people's genes and lifestyle behaviors affect their health, but health is also influenced by more upstream factors such as employment status and quality of housing stock. The social determinants of health framework addresses the distribution of wellness and illness among a population.

The following diagram provides a visual representation of this relationship, demonstrating how individual lifestyle factors, which are closest to health outcomes, are influenced by more upstream factors such as educational opportunities and the built environment.

Social Determinants of Health Framework



DATA SOURCE: World Health Organization, Towards a Conceptual Framework for Analysis and Action on the Social Determinants of Health: Discussion paper for the Commission on the Social Determinants of Health, 2005.

Review of Secondary Data

In an effort to develop a social, economic, and health portrait of Allston-Brighton, Waltham and JMSCHC's patient population, the Health Center and a consultant reviewed existing data drawn from national, state, county, Community Health Network Areas and local sources. Health center specific data – such as patient demographics, services provided, and clinical indicators – were obtained from the Bureau of Primary Health Care Uniform Data System (UDS). Additional sources of data included the UDS Mapper, U.S. Census, Massachusetts Department of Public Health, F.B.I. Uniform Crime Reports, and Massachusetts Department of Elementary and Secondary Education, among others. Data analyses were generally conducted by the original data source (e.g., U.S. Census, Massachusetts Department of Public Health). Types of data included self-report of health behaviors from large, population-based surveys such as the Behavioral Risk Factor Surveillance System (BRFSS), as well as vital statistics.

It should be noted that aside from population counts, age and racial/ethnic distribution, other data from the U.S. Census are derived from the American Community Survey comprised of data from a sample of a given geographic area. Per Census recommendations, aggregated data from

the past five years was used for these indicators to yield a large enough sample size to look at results by city/town.

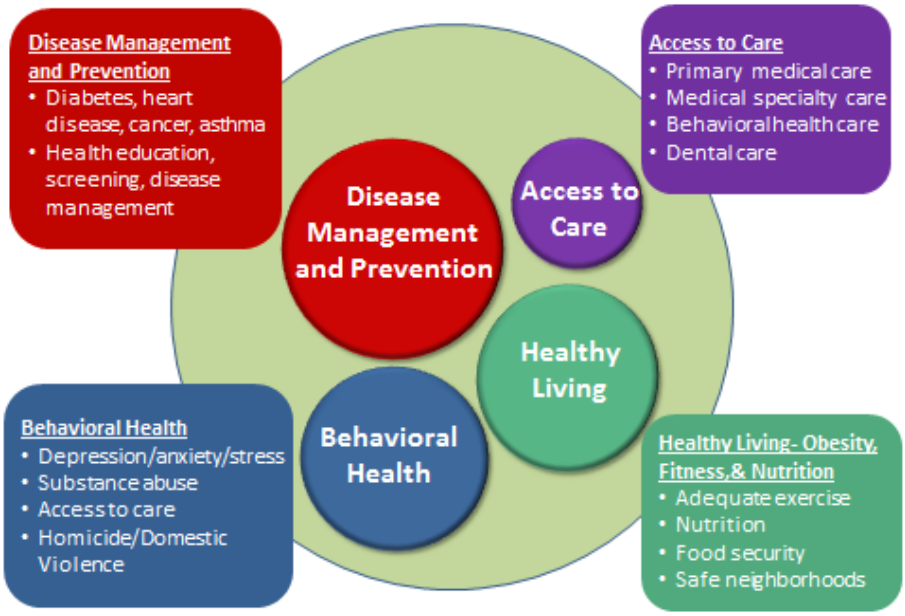
Collection and Analysis of Primary Data

In addition to reviewing secondary data, JMSCHC collected primary data through multilingual community needs assessment surveys completed by residents and patients from within the Allston, Brighton, and Waltham communities. The same survey tool was used as we used in our 2013 needs assessment, to allow for comparison to identify any new health needs of the community or changing community demographics. The survey included 62 questions (approximately 10-pages depending on the language) and captured information related to health status, social determinants of health, health risk factors, prevalence of disease, access and care seeking behaviors, and barriers to care from 100 residents living in Allston-Brighton or Waltham. Focus group and key stakeholder interviews were also conducted. The focus groups were geared to identifying the strategies and programs that would promote care coordination and service integration as well as more effective chronic disease management.

These primary and secondary data efforts culminated in development of this report for JMSCHC to use for further service and program planning as well as strategic planning to better meet the needs of the community, as well as meet Health Resources and Services Administration (HRSA) health center program requirements.

Summary of Findings: Community Health Priorities

Ultimately, there was little debate that the most significant health-related issues facing the communities that are part of JMSCHC's service area were the broader social and economic determinants of health (e.g., poverty, unemployment, food scarcity, violence, health/disease literacy, etc.), which prevent many residents, particularly low income, racial/ethnic minority, and older adult residents from maintaining a healthy lifestyle and/or accessing the regular preventive and acute health services they need.



Executive Summary of Health Data & Related Findings – Allston-Brighton

Large proportions of individuals residing within Boston and JMSCHC's Allston-Brighton service area live in poverty, have limited formal education, are unemployed, and struggle to afford food and other essential household items. These populations are disproportionately from racial/ethnic minority groups and, partly as a result of their poverty, face disparities in health and access to care outcomes. It is critical to note that there is a multitude of individual, community and societal factors that work together to create these inequities. It is insufficient to talk solely about race/ethnicity, foreign born status, or language; as the underlying and correlative issues related to health and well-being involve economic opportunity, education, crime, and community cohesion.

- **Demographic Characteristics:** According to 2014 UDS data, JMSCHC's patient population is predominantly Hispanic/Latino (59.6%) compared to Allston-Brighton, which identifies as 66.1% White, non-Hispanic and only 9.9% Hispanic/Latino. According to a 2014 report by the Allston-Brighton Health Collaborative, while Allston and Brighton mirror Boston in that the majority of residents speak English, there is incredible diversity of language beyond that. Allston contains a larger percentage of Spanish speakers than Brighton, and Brighton has more Portuguese speakers than the Boston average. Chinese speakers in both Allston and Brighton top the Boston average and are a larger population than Portuguese speakers. JMSCHC's patient population is even more linguistically diverse. In 2014, 54% of JMSCHC patients were best served by a language other than English compared to 39.1% of health centers in Massachusetts overall, and those languages ranged from Spanish and Portuguese to Thai and Vietnamese. We are serving less of the local Chinese speaking community because there is an FQHC in Boston's Chinatown neighborhood with Chinese speaking providers and staff serving the majority of this population at this time.

Table 1. Language Spoken at Home (2007-2011) [1]

Language Spoken at Home (%)				
	Allston	Brighton	Boston	JMSCHC (2014)
Speak only English	62.6	66.0	63.9	29.4
Spanish	12.3	6.8	15.5	50.3
Chinese	7.0	8.3	3.8	1.1
French	2.1	1.1	4.9	0.1
Portuguese	1.8	3.3	2.1	7.7

[1] Allston/Brighton Demographics and Health Data: 2014, September 2014.

- **Income, Poverty, and Employment:** The median income for Allston-Brighton households is $50,634, the same as Boston, but 27% less than the state overall ($64,509). UDS data indicates JMSCHC serves a patient population in which 93.0% of families are below 200% of the poverty level. In terms of unemployment, Latinos in Boston a have higher unemployment at 11.4% compared to 9.6% for Boston overall, and 6.0% across the state. In addition, JMSCHC's community needs assessment survey found 78% of Allston-Brighton respondents reported an annual household income of under $35,000 a year, indicating significant pockets of poverty in the community.
- **Housing and Transportation:** Given its mix of transient students, young professionals, and immigrant communities, a very high percent of housing units in Allston-Brighton are renter-occupied. According to the 2014 Allston-Brighton Health Collaborative report, 90% of Allston housing units and 75% of Brighton housing units are renter occupied, compared to 65.4% in Boston and to Massachusetts (37.3%) per U.S. Census data.[2] [3]This Collaborative report also indicates lower use of vehicles as transportation for Allston residents compared with Brighton and Boston, with public transit bus use on par with Brighton and Boston, and higher subway use.

Table 2. Housing and Public Transit Distribution by City and Community

Housing Unit (%)				
	Allston	Brighton	Boston	State
Owner occupied housing units	10.2	25.1	34.6	62.7
Renter occupied housing units	89.9	74.9	65.4	37.3
Mode of Commuter Transportation (%)				
Work at home	4.4	4.2	3.5	
Car, truck or van	24.7	49	46.1	
Bus	14.4	13.5	12.6	
Subway/elevated	21.2	14	17.5	
Commuter rail	0.1	0.5	1.3	

- **Access to Medical Care:** JMSCHC's community needs assessment survey found a lower rate of health insurance in Allston-Brighton compared to Boston overall (82% vs. 97%). In addition, over 1 in 4 Allston-Brighton respondents reported a high rate of financial barriers to fill prescription drugs (26%).
- **Emergency room use:** Although Massachusetts implemented health care reform in 2006 and the Affordable Care Act in 2010, coverage does not necessarily equal access to services. Emergency Department outpatient visits in Massachusetts increased by more than 7% from 2005 (2.3 million) to 2007 (2.5 million). Additional data collected at four Boston-area

[2] Allston/Brighton Demographics and Health Data: 2014, Allston Brighton Health Collaborative, September 2014.

[3] Department of Commerce, Bureau of the Census, 5 year estimate American Community Survey, 2009-2013

hospitals from 2006 to 2008 also reflects the rising trend of ER use: Teaching Hospital (9.6% increase); Safety-Net Hospital Group (8%); Boston Hospital: Low-Income Area (4.9%); and Community Hospital (11.4%). Emergency Department utilization among those state-subsidized patients with the lowest incomes is 27% higher than the state average.[4] In addition, a 2014 story in the Boston Globe[5] reported people newly enrolled in a health insurance program for the poor were more likely to seek emergency room treatment than people who remained uninsured, Boston-area researchers have found, providing the best evidence to date that the national Medicaid expansion that began that year was unlikely to lead to a decline in emergency services. JMSCHC's community needs assessment found nearly 1 in 4, or 22% of Allston-Brighton respondents reported 1 or 2 emergency room visits in the last 12 months.

- **High prevalence of chronic conditions**: JMSCHC's community needs assessment survey found 28% had diabetes, 41% had hypertension, and 38% had high cholesterol, and roughly two-thirds of Allston-Brighton survey respondents with chronic disease have been taking less medication than prescribed. See the UDS Mapper map of Allston-Brighton in Appendix A indicating the prevalence of chronic conditions in the community.
- **High need for additional mental health screening**: 24% of Allston-Brighton community needs assessment survey respondents indicated they had little interest or pleasure in doing things nearly every day, and 23% reporting they felt depressed for several days within the past 2 weeks.
- **Lack of access to healthy food:** JMSCHC's community needs assessment survey found 1 in 5 Allston-Brighton respondents go hungry due to cost, and over 50% are not able to buy fresh fruits and vegetables most of the time in their neighborhood.

Executive Summary of Key Health Data & Related Findings – Waltham

Findings

The following provides a brief overview of key findings for the Waltham community.

Community Social and Economic Context

- **Demographic Characteristics:** According to the American Community Survey, Waltham and

Table 3: Racial/Ethnic Composition by State, County, City, and Health Center, 2009-2013* and 2014**

Geography	White, non-Hispanic	Black	Asian	Hispanic/ Latino	Other	More than One Race
Massachusetts	75.7%	6.3%	5.5%	9.9%	0.8%	1.8%
Middlesex County	76.3%	4.4%	9.7%	6.8%	0.6%	2.2%
Waltham	67.9%	5.1%	10.3%	13.2%	0.9%	2.6%
JM Smith CHC	16.5%	8.8%	9.2%	59.6%	2.8%	40.8%

*DATA SOURCE: US Department of Commerce, Bureau of the Census, 5 year estimate American Community Survey, 2009-2013

**DATA SOURCE: US Department of Health and Human Services, HRSA Health Center Program, 2014 Health Center Profile, Joseph M. Smith Community Health Center, 2015

[4] Massachusetts Health Care: ED Utilization I

[5] Study sees rise in ER use by newly insured, Boston Globe, January 3, 2014.

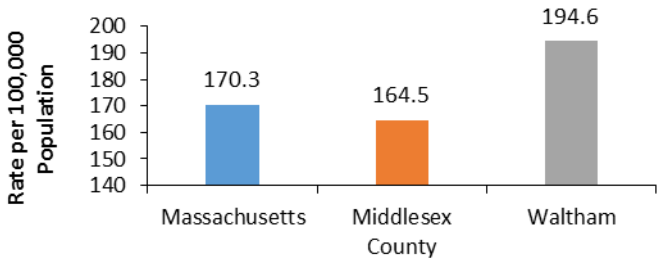
the region have experienced slight population growth over the past 10 years (approximately 3-4%). According to 2014 UDS data, JMSCHC's patient population is predominantly Hispanic/Latino (59.6%) compared to the City of Waltham, which identifies as 67.9% White, non-Hispanic and only 13.2% Hispanic/Latino, as seen in Table 3. Spanish and Chinese are the most common non-English languages spoken at home in Waltham. In 2014, 54% of JMSCHC patients were best served by a language other than English compared to 39.1% of health centers in Massachusetts overall.

- **Income, Poverty, and Employment:** While US Census data shows a small percent of Waltham families are below the federal poverty level (6.3%), UDS data indicates JMSCHC serves a patient population in which 93.0% of families are below 200% of the poverty level. In addition, JMSCHC's community survey found 92% of Waltham respondents had annual household incomes below $35,000 a year, significantly below the median income for Waltham households ($74,198), and the state overall ($66,866). In addition, 94% of Waltham respondents reported receiving no rental assistance despite this low income, which could speak to the large community of immigrants in Waltham who have varying statuses. In Waltham overall unemployment data aggregated over the years of 2009 to 2013 demonstrate that 3.8% of employment-eligible Waltham residents are unemployed, compared with 5.1% across the county, and 6.0% across the state. However, JMSCHC's community survey found 8% of respondents out of work for a year or more, and only 61% employed.
- **Housing and Transportation:** A higher percent of housing units in Waltham are renter-occupied (50.5%) compared to Middlesex County and Massachusetts (37.3% each). Quantitative data also indicate that similar to the State and County, the primary mode of transportation for the majority of Waltham residents was a car, truck, or van (79.3%), with less than 10% reporting the use of public transportation (6.7%), and walking (8.1%).

Community Health Issues

- **Mortality:** For both Waltham and the State as a whole, cancer is the leading cause of death, followed by heart disease. As seen in Figure 1, adults in Waltham experienced a higher mortality rate due to all cancers (196.4 deaths per 100,000 population) than the County and State overall (164.5 and 170.3 deaths per 100,000 population, respectively).

Figure 1: All-Site Age-Adjusted Cancer Death Rate per 100,000 Population by State, County, and City/Town, 2010

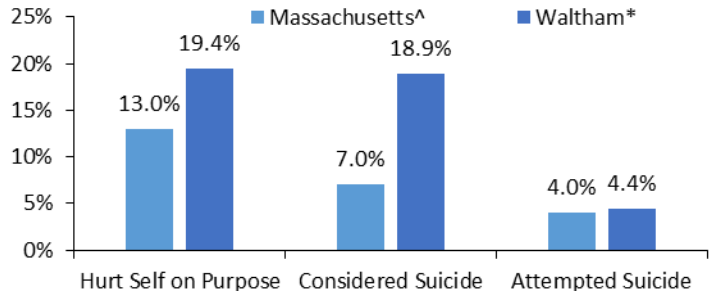


DATA SOURCE: 2010 Mortality (Vital Records) ICD-10 based, Massachusetts Department of Public Health, MassCHIP

- **Chronic Diseases and Related Risk Factors:** UDS data indicates the most prevalent chronic conditions among JMSCHC patients are hypertension and diabetes. Chronic disease management rates at JMSCHC are comparable to other Massachusetts program grantee sites. While city-specific data are not available among adults, rates of healthy eating and active living (predictors of obesity) as well as obesity are similar for Middlesex County and Massachusetts, where approximately 1 in 4 adults is obese. Youth data indicate that more Waltham public school youth are physically active compared to their peers statewide; however, they experience higher rates of overweight and obesity. Adolescent and adult weight screening and follow-up has increased at JMSCHC over the past three years

- **Behavioral Health:** Substance abuse and mental health are significant issues in Waltham, particularly among the youth population. Waltham public school students reported higher rates of intentional self-harm, suicide ideation and suicide attempts than their peers statewide(Figure 2). Substance abuse is also a concern among youth in Waltham, where more than 4 in 10 public high school students reported current alcohol use and nearly 1 in 4 reported current marijuana use in 2012. In addition, JMSCHC's community needs assessment found 38% of Waltham respondents, who were adults, reported little interest or pleasure in doing things nearly every day and 33% reported feeling depressed several days in the past 2 weeks.

Figure 2: Percent of Students (Grades 7-8) Reporting Self-Harm, Suicide Ideation and Attempt, by State and City/Town, 2012



DATA SOURCE: Waltham Public Schools Youth Risk Behavior Survey, 2012

- **Reproductive and Maternal Health:** In 2010, more mothers in Waltham received inadequate or no prenatal care (10.8%) than those across Massachusetts (8.5%). Unlike Massachusetts Program Grantee Sites overall, JMSCHC data show that since the percent of prenatal patients who had their first prenatal visit in the first trimester has decreased from 79.7% in 2012 to 77.7% in 2014.
- **Health Care Access and Utilization:** Over 40.9% of JMSCHC patients were uninsured in 2014 compared to 15.0% across all Massachusetts Program Grantee sites. In addition, nearly half of Waltham respondents reported a high rate of financial barriers to fill prescription drugs (48%). In terms of utilization at JMSCHC and other program sites, the most widely used service among site-specific patients as well as patients overall was the medical service (80.1% at JMSCHC and 85.2% across all MA program grantee sites) followed by dental services (47.6% at JMSCHC and 24.0% statewide).
- **Emergency room use:** JMSCHC's community needs assessment found nearly 1 in 3, or 27% of Waltham respondents reported 1 or 2 emergency room visits in the last 12 months.
- **Lack of access to healthy food:** JMSCHC's community needs assessment survey found 27% of Waltham respondents go hungry due to cost, and nearly 75% are not able to buy fresh fruits and vegetables most of the time in their neighborhood.

Conclusions

Allston-Brighton

- *Diversity:* Allston-Brighton is more racially, ethnically, and linguistically diverse than Boston or Massachusetts. This diversity is also seen in JMSCHC's patient population, of which nearly 60% are Hispanic/Latino and over half reported being best served in a language other than English.
- *Poverty*: Allston-Brighton residents are poorer than the state overall, with significant pockets of poverty as indicated by the community needs assessment survey. JMSCHC is serving those with the lowest income.
- *Access to Care*: Allston-Brighton has a higher rate of uninsured residents than Boston, and significant numbers of residents face financial barriers to prescription costs. Allston-Brighton

residents also use the emergency room, with those who are low income having the greatest rates of emergency room utilization.

- *Mental Health*: Continued screening is needed to identify Allston-Brighton adults who are depressed and connect them with appropriate services and supports at JMSCHC and elsewhere.
- *Access to healthy foods*: Significant numbers of Allston-Brighton residents cannot afford to purchase healthy foods, and cannot regularly access healthy foods in their community.

Waltham

Through a review of the secondary social, economic, and epidemiological data in Waltham as well as JMSCHC's patient population, this assessment report provides an overview of the social and economic environment of the area, and the health conditions and behaviors that most affect the population. While Waltham is more diverse and has a more affordable cost of living, its residents experience disproportionately worse health outcomes compared to the County and State:

- *Diversity:* Waltham is more racially, ethnically, and linguistically diverse than Middlesex County or Massachusetts. This diversity is also seen in JMSCHC's patient population, of which nearly 60% are Hispanic/Latino and over half reported being best served in a language other than English.
- *Cancer and heart disease:* Cancer and heart disease are the leading causes of death in Waltham and across Massachusetts. Additionally, Waltham residents are more likely to die from cancer compared to residents across the County and State. Hypertension, a risk factor for heart disease, is the leading diagnosis among the JMSCHC patient population; and improvements are needed to ensure JMSCHC is working with patients to help them better manage their chronic conditions.
- *Adolescent obesity*: Despite engaging in physical activity more often than their peers statewide, youth in Waltham are more likely to be overweight and obese. From 2012-2014, the percent of adolescent patients receiving weight screening and follow-up at JMSCHC more than tripled, because we were able to resolve an issue with our Electronic Health Record system that made collecting this data previously very cumbersome.
- *Mental health and substance abuse:* Youth in Waltham Public Schools were more likely to report self-harming behavior as well as suicidal ideation and attempts compared to their peers statewide.
- *Access to prenatal care:* Approximately 1 in 10 mothers in Waltham either received inadequate or no prenatal care, which is above that of the State. Furthermore, the percent of prenatal health center patients who had their first prenatal visit in the first trimester has decreased from 79.7% in 2012 to 77.7% in 2014.