

### Tufts Medical Center

2016 Community Health Needs Assessment



### Acknowledgements

We would like to take this opportunity to thank the members of the Asian and Dorchester Health Initiatives who helped to ensure that the health needs of their respective communities were well understood and that the foci for the Medical Center's two grant-funded initiatives would be addressing the most critical health issues in their communities.

We would also like to extend our appreciation to the many community stakeholders in Chinatown, Dorchester, South Boston and the South End for their insights into the critical issues affecting the health and well-being of their neighbors and constituents.

Throughout the community health needs assessment process and the development of the Community Benefits Implementation Plan we were guided by the leadership from the Board of Governors Outreach Committee.

Tufts Medical Center welcomes your comments on its most recently completed CHNA and implementation strategy. Comments may be submitted by email to <u>TuftsMCCHNAcomments@tuftsmedicalcenter.org</u> or by mail to the Office of Community Health Improvement Programs at 800 Washington Street, Box 116, Boston, MA 02111.



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### **Executive Summary**

Tufts Medical Center is a full-service tertiary and quaternary referral, teaching and research hospital and as the principal teaching hospital of Tufts University School of Medicine. Tufts Medical Center, located in the heart of Downtown Boston, in Chinatown and the Theater District, has been providing health care to Boston residents since 1796, and continues with that mission today with a focus on four Boston neighborhoods. The neighborhoods of Chinatown, Dorchester, South Boston and South End are situated in close proximity to the Medical Center and have historically been communities reflecting the diversity of the city: newcomers, linguistic minorities, working families and under-served populations. In recent years each neighborhood has continued to experience changes, new industries drawing new people to the city and the respective neighborhoods triggering economic development, new housing and displacement of long-time residents. To identify emerging or continuing health issues for each neighborhood, Tufts Medical Center undertakes a community health needs assessment (CHNA) every three years to guide its efforts in addressing critical health needs or health disparities. This most recent CHNA identified the following health issues:

- Chinatown: Lung cancer continues to be the leading cause of mortality for Boston's Asian community and community members. Mortality data from the Boston Public Health Commission for years 2000-2015 have indicated that the leading cause of death for Asians is lung cancer.
- Dorchester: Substance abuse and substance abuse disorder has been identified along with youth violence as two factors which affect the physical and emotional health of community residents
- South Boston: Substance abuse and substance abuse disorder continue to be a major health issue for the community
- South End: Preventable chronic diseases such as diabetes, heart and kidney disease affect the neighborhood's two major ethnic communities, Latinos and Asians

Based on the needs identified above, community benefits initiatives will include grant-making through the Asian and Dorchester Health Initiatives to support services addressing to prevent tobacco use and its related health risks and help with smoking cessation and prevent substance use and promote recovery from substance use disorder and youth violence prevention respectively. The Medical Center's Leadership and Community Benefits Team will confer with community service providers in South Boston and the South End to coordinate resources to address the health issues within each of those communities.

### Introduction

Founded in 1796 as the Boston Dispensary, Tufts Medical Center is the oldest permanent medical facility in the United States. Tufts Medical Center's mission is provide high-quality accessible care to Boston residents while fulfilling its tripartite mission of healthcare service delivery, educating the next generation of healthcare providers as the principal teaching hospital for Tufts University School of Medicine, and research.

Tufts Medical Center is committed to meeting the needs, and addressing the health disparities, in the communities we serve both in the city of Boston and in the Greater Boston area.

#### Context

Tufts Medical Center conducts and uses its community health needs assessments (CHNA) to guide its community health and benefits programming. Since 1994, when the Boston Public Health Commission began publication of annual reports on the health of Boston and specific neighborhoods, this CHNA has been the primary source of health data for Boston residents.

The health issues and/or health inequities that affect our patients and the residents of our core communities - the Boston neighborhoods of Chinatown, Dorchester, South Boston and South End - are reviewed on a tri-annual basis to guide departmental efforts, community partnerships and grant-funded initiatives.

The community voice is important to our CHNA and grant-giving process: community leaders and direct service provider serve as advisors for the Asian and Dorchester Health Initiatives along with Medical Center and healthcare representatives. Key community stakeholders also contribute to the Medical Center's efforts to address health disparities in each of the communities we serve.

### Methodology

Our CHNA utilized a multidisciplinary approach to:

- allow for the use of secondary data from sources such as the Boston Public Health Commission (BPHC)
- provide the opportunity to assess the needs of under-served, or over-looked populations for whom data is not readily available
- generate timeline information about the communities to be served by the Medical Center's community benefits efforts
- engage community stakeholders as key informants because of their broad knowledge and perspectives about community health needs
- enable the Medical Center to address health concerns that are considered priorities by the community.

The tri-annual community health needs assessment (CHNA) was launched in October of 2015 and included the following:

- Compilation of updated demographic information for the neighborhoods of Chinatown, Dorchester, South Boston and South End
- > Summation of new housing construction for the four priority neighborhoods
- > Review of quantitative health data from the Boston Public Health Commission
- > Analysis of Boston patient zip codes
- > Interviews of key community stakeholders from the four priority Boston neighborhoods

The compilation of updated demographic information and the proposed construction and availability of new housing was undertaken to:

- 1. help with estimates on how much the population within each neighborhood has changed since the 2010 Census
- 2. ensure that the health issues of the long-time residents who occupy market-rate and affordable housing are not overshadowed by new residents who occupy luxury housing
- 3. acknowledge that the new residents' health was influenced by a different set of social determinants

Data sources included the American Community Survey, Nielsen-Claritas Population Facts Dataset, the Boston Redevelopment Authority and the Department of Neighborhood Development. The source for housing information was the Boston Redevelopment Authority and its listings for neighborhood development projects.

The two primary sources for health data were the BPHC's "Health of Boston, 2014-2015" and "Health of Boston: A Neighborhood Focus 2012-2013".

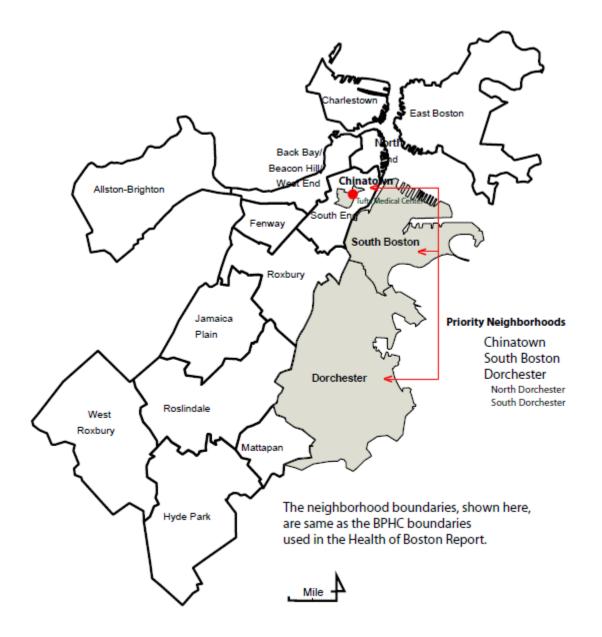
The analysis of Boston patient zip codes confirmed that a high percentage of patients seeking emergency, out-patient and in-patient care had come from the three neighborhoods of Chinatown, Dorchester and South Boston. The analysis also indicated that a large number of patients came from the South End, zip code code, 02118. Given the demographic information available for the patients and the demographics of the neighborhood, the South End has been added to the Medical Center's "catchment" area.

Key community stakeholders were identified and interviewed because of their knowledge and deep insights into the health of their communities. Key informants were community residents, community leaders and/or service providers. Oftentimes a key informant was an individual who had multiple roles within their community/neighborhood, which contributed to their extensive knowledge of community issues and community health. Data obtained from interviews is summarized by neighborhood. Key issues are identified and ranked according to the frequency and ranking by the key informants. In large neighborhoods such as Dorchester and South Boston, efforts were made to ensure that key informants from major sub-neighborhoods were identified and interviewed.

Neighborhood profiles have been developed for Chinatown, Dorchester, South Boston and the South End. Each profile includes a brief description of the neighborhood and highlights key findings for advisors and the Leadership Team to consider.

### **Priority Neighborhoods and Neighborhood Boundaries of BPHC**

(BPHC – Boston Public Health Commission)



## **Neighborhood Profile: Chinatown**

Boston's Chinatown is located in Downtown Boston bordered by the Surface Artery/Greenway and Leather District on the east, Essex Street and Downtown Crossing on the north, the Theater District and Bay Village on the west and the Mass Turnpike on the south. The neighborhood is approximately 41 acres and encompasses part of the old South Cove neighborhood.



Image via Ingfbruno, Wikimedia Commons

The first Chinese settlers were railroad workers who arrived in the 1870s after the completion of the Transcontinental Railroad in the Western U.S. They sought to take advantage of the growing need for workers in manufacturing such as the shoe industry. One group of workers was brought in to work at the Sampson Shoe Factory in North Adams, MA, to replace striking workers. Early arrivals settled in what was then the South Cove neighborhood on what is now known as Ping On Alley. The Chinatown neighborhood was concentrated between Essex and Kneeland Streets until the late 1950s when the community began to grow because of the War Brides Act and the end of the Chinese Exclusion Act which had limited immigration from China and had kept Chinatown as a mostly male, "bachelor" community.

Chinatown gradually expanded south across Kneeland Street to available housing on Albany, Hudson, Tyler and Oak Streets. While this was occurring so was urban renewal and the first of the mega-projects, the construction of the Central Artery/Southeast Expressway which forced hundreds of families from Hudson and Albany Streets to relocate from Chinatown/South Cove to other city neighborhoods in the late 1950s. Displacement of residents from Tyler and Oak Streets and Harrison Avenue occurred again in the mid-1960s, and again for urban renewal and the second mega-project, the extension of the Mass Turnpike into Boston.

Limited land for the development of housing in the core area of Chinatown has restricted the growth of the Chinese community. New housing construction over the last seven years has created hundreds of new housing units on the perimeter of Chinatown and has had an impact on the community's population and demographics. With the addition of new luxury rental units the percentage of whites in Chinatown increased from 7% in 1990 to 38% in 2010.

The following table illustrates the changes since the 2010 Census. The demographic data below is derived from the 2010 Census and the American Community Survey Data set (2005-2009) and reflects the use of the neighborhood boundaries as defined by the elected Chinatown-South Cove Neighborhood Council, Boston Redevelopment Authority's Neighborhood Statistical Area (planning district sub-area). The reader should note that the comparative data does not provide a good illustration of the changes in population and that there is a margin of error because the (data) areas are not geographically identical. The

challenges of obtaining good data for communities such as Chinatown and the Asian community will be discussed in greater detail in a later section of this neighborhood profile.

	2010 Census	2015 Nielsen-Claritas	Change*
Total Population	6,323	5,838	-8%
White	2,385	2,294	-4%
Black/African	232	249	7%
American			
Hispanic/Latino	217	221	2%
Asian/Pacific	3,514	3,080	12%
Islander			
Multiracial	117	125	7%
Other Race	71	85	20%
Ages (0-17 years)	561	560	0%
Ages (18-64 years)	4,880	4,427	-9%
Ages (65 years and	882	851	-4%
over)			
Unemployment Rate	13.7%	14.3%	.6%
Median Household	\$14,706	\$23,277	58%
Income			
Percent of Poverty	43.0%	N/Available*	

\* Estimated percentage of families below poverty is 25.7%.

**Data challenges:** In the five years since the 2010 Census, new housing has been constructed in and around Chinatown and the expectation was that the comparative data table would show an increase in the overall population, not a decrease. The data sources used to construct the data tables illustrates the challenges of obtaining good data for small geographic areas, particularly as the decennial census has entered a period of transition in the gathering of population data. The use of data providers whose methodologies vary and rely on smaller samples leads to estimates that do not accurately reflect reality. Adding to the challenge is the fact that Chinatown's boundaries do not fully incorporate whole census tracks. Comparative data tables for the 2013 CHNA reflected population data using the Neighborhood Statistical Area (NSA) from the Boston Redevelopment Authority (BRA) which most closely aligned with the Chinatown the boundaries. The BRA no longer uses the NSA.

Since the last community health needs assessment in 2013, a number of luxury housing developments have been completed on the perimeter of Chinatown. These include the Kensington Apartments, AVA, Radian, the three developments within the Ink Block and Troy Boston. The arrival of more affluent renters to the neighborhood has already influenced one social determinant of health: median household income which has increased 58%. It is therefore important to identify characteristics of the Chinatown community:

Chinatown has a high percentage of seniors due to the number of housing developments specifically for seniors such as Hong Luck House, Quincy Towers, and South Cove Plaza. The percentage of residents 65 years and over has been as high as 19.3% in 2000 and doe 2015 is estimated to be 15%.

- > 38% of households have incomes less than \$15,000
- > 13.7% of households have incomes between \$15,000 and \$24,999
- The median household income for Asians is \$18,805 as compared to a median household income for Whites which is \$110,938
- > Historically, 39% of residents indicated that they spoke English "not well"

Obtaining data for Chinatown across a number of issues is difficult because the neighborhood boundaries are defined differently by different layers of government. For example, the Boston Police Department has Chinatown's western boundary as the Park Plaza/Park Square area which is beyond the Theater District. The most challenging data to obtain is health data. The Boston Public Health Commission (BPHC), since 1994, has imbedded Chinatown data within reports for the South End. Disaggregating health data for Chinatown from the neighborhood specific reports has been beyond the capacity of community organizations and data users. The community has therefore relied on the BPHC for periodic reports on the health of Asians across the city. In its "Health of Boston: 2014-2015" the BPHC attempted to isolate data for Chinatown – but again, because of how they defined Chinatown extending the northern border to Summer Street and the eastern border to Atlantic Avenue which included the Leather District, the data was very limited. Selected health indicators charts reflected rates that were based upon counts that were less than 20, or numbers less than 5. The following charts have been based upon health data for Asians across the city of Boston.

For Boston's Asian population the five leading causes of death for the most recent five years of data are:

	Boston Asian Residents				
	2008 2009		2010	2011	2012
1	Cancer	Cancer	Cancer	Cancer	Cancer
2	Diseases of the	Diseases of the	Diseases of the	Diseases of the	Diseases of the
	Heart	Heart	Heart	Heart	Heart
3	Cerebrovascular	Cerebrovascular	Cerebrovascular	Alzheimer's	Cerebrovascular
	Disease	Disease	Disease	Disease	Disease
4	Other Injuries	Pneumonia/	Alzheimer's	Cerebrovascular	COPD
		Influenza	Disease	Disease	
5	Pneumonia/	Diabetes	Essential	Nephritis/	Other Injuries
	Influenza		Hypertensive and Hypertensive	Nephrosis	
			Renal Disease		

Since the leading cause of death for Asians is cancer, the following chart was constructed to identify the different cancers contributing to the mortality of Boston's Asian residents. Two of the leading cancers have been the subjects of public health campaigns in the general population – smoking cessation, a leading cause of lung cancer, and promotion of regular

screenings (colonoscopies), early diagnosis and treatment for colon cancer. The high incidence of liver cancer may be related to the high incidence of Hepatitis B among Asians.

	Boston Asian Residents: Leading Types of Cancer Deaths				
	2008 2009 2010 2011 2012				2012
1	Lung	Liver	Lung	Lung	Lung
2	Colon	Lung	Liver	Pancreas	Colon
3	Liver		Colon	Liver	Liver
4	Non-Hodgkin Lymphoma	Not calculated	Not calculated	Colon	Not calculated
5	Not calculated	Not calculated	Not calculated	Not calculated	Not calculated

Other information of note from the "Health of Boston 2014-2015":

- 27% of Asian public high school students reported a diagnosis of asthma
- The incidence of diabetes among Asian adults is 6.4%
- Heart disease is the second leading cause of death among Asians
- Hypertension among Asian adults by selected indicators is 16.2%
- The rate of obesity among Asian public high school students is 6.5%; the rate for adults is 15.3%
- 14.7% of Asian adults who smoke
- 11.4% of Asian adults reported binge drinking
- There is no information available for substance abuse by Asians
- Persistent sadness among Asian public high school students is 19.8%; among Asian adults 9.1%
- The incidence of Hepatitis B among Asians remains the highest with a rate of 325.4 per 100,000 compared to the general population which has a rate of 57.9 per 100,000 residents
- The life expectancy for Asians is the highest in the city at 87.2 years and had the lowest all-cause mortality

Selected health indicators from the Boston Public Health Commission's "Health of Boston 2012-2013: A Neighborhood Focus" for Chinatown are included in appendices.

Despite the overall positive report from the BPHC it is important to evaluate the health needs of the Asian community to identify disparities and inequities that exist within the population and to ensure that there is adequate representation when the behavioral risk factor surveys are being conducted.

Key stakeholders interviewed for this community health needs assessment have identified cigarette smoking and its consequences as the most critical health issue for the Chinatown and Boston Asian community. Depression/mental health issues, cancers, diabetes and other chronic diseases were identified as additional health issues for the Asian community and their rankings indicate that these three major issues as equal in importance after cigarette smoking.

## **Neighborhood Profile: Dorchester**

Dorchester, Boston's largest neighborhood, was established in the early 1600s by Puritans who had emigrated from Dorchester, Dorset England. Different sections of Dorchester were gradually annexed by the City of Boston and the final annexation was completed in 1870. With the construction and availability of rail and trolley lines Dorchester quickly became a major residential neighborhood – at first serving as popular country retreat for wealthy Bostonians and in the early 20<sup>th</sup> century the destination for an influx of immigrants from Ireland, French Canada, Poland, Italy and African Americans from the south.



Image via Mapio.net

Within Dorchester's six square miles are 32 census tracts, 4 zip codes and a neighborhood that reflects the racial/ethnic and economic diversity of Boston with a mix of African Americans, European Americans, Irish Americans, Caribbean Americans (from Haiti, Jamaica, Barbados, Trinidad and Tobago), Latinos and East and Southeast Asians. Languages spoken by residents include Spanish, Vietnamese, French-Creole and Portuguese. The major sub-neighborhoods include: Adams Village, Ashmont, Codman Square, Fields Corner, Grove Hall, Harbor Point, Lower Mills, Neponset Circle, Savin Hill and Uphams Corner.

Because of its size, Dorchester is divided into North and South Dorchester by many city departments for data collection and planning purposes. It should be noted that boundaries vary slightly as does the demographics for residents and that the Boston Public Health Commission (BPHC) compiles health data separately for North and South Dorchester.

The demographic information in the following table will illustrate changes since the 2010 Census. Data for North and South Dorchester have been combined. The source of 2015 estimates is the Nielsen-Claritas Population Facts Database.

	2010 Census	2015 Nielsen-Claritas	Change
Total Population	119,545	130,624	9.0%
White	30,923	33,350	7.8%
Black/African	56,881	59,546	4.7%
American			
Hispanic/Latino	20,754	25,317	22.0%
Asian/Pacific	10,789	12,133	12.4%
Islander			
Multiracial	2,940	7,894	168.5%
Other Race	17,498	17,014	-2.7%
Ages (0-17 years)	30,563	32,067	4.9%
Ages (18-64 years)	77,989	84,745	8.6%
Ages (65 years and over)	10,993	13,812	25.6%
Unemployment Rate	15.1%	16.8%	+1.7%
Median Household Income	\$49,876	\$45,483	-\$4,393
Percent of Poverty	22.0%	21.2%	-0.8%

Social indicators that may influence the health of Dorchester residents include:

- The median household income for Hispanic/Latinos is \$25,583. For all households in Dorchester the median household income is \$45,483 and for the city of Boston it is \$52,527
- 27.3% of households with children have a female head of household compared to the city-wide percentage of 19.6%
- 16.7% of families with children are below poverty as compared to a city-wide rate of 12.0%
- Approximately 22.5% of the population in Dorchester over the age of 25 do not have a high school diploma compared to 14.9% in general population

The following tables have been constructed to illustrate the similarities between North and South Dorchester and to highlight one leading cause of death that stands out in South Dorchester - homicides.

The three leading causes of death for North Dorchester residents are:

	Leading Causes of Death – North Dorchester 2008-2010					
	Asians Blacks Latinos White					
1	Cancer	Cancer	Cancer	Diseases of the Heart		
2	Diseases of the Heart	Diseases of the Heart	Diseases of the Heart	Cancer		
3	Other Injuries	Cerebrovascular Disease (incl. Stroke)	Other Injuries	Other Injuries		

The three leading causes of death for South Dorchester residents are:

	Leading Causes of Death – South Dorchester 2007-2010				
	Asians*	Blacks	Latinos*	White	
1	Cancer	Cancer	Cancer	Cancer	
2	Diseases of the Heart	Diseases of the Heart	Diseases of the Heart	Diseases of the Heart	
3		Homicide	Other Injuries	Cerebrovascular Disease (incl. Stroke)	

Since the leading cause of death in Dorchester has been cancer, the following table was constructed to identify the different cancers contributing to the mortality of Dorchester and Boston residents. It was not possible to isolate this information to the neighborhood level – but it was possible to obtain data for the major racial/ethnic groups city-wide. Two of the leading cancers, lung and colon, have been subjects of public health campaigns to reduce cigarette smoking, a leading cause of lung cancer, and to promote regular screenings (colonoscopies) and treatment for colon cancer.

	Leading Types of Cancer Deaths City-Wide 2008-2012				
	Asians	Latinos	White		
1	Lung (4 yrs); Liver (1 yr)	Lung	Lung	Lung	
2	Colon (2 yrs); Lung, Liver, Pancreas ( 1 yr ea)	Colon (4 yrs); Prostrate (1 yr)	Colon (3 yrs); Liver and Pancreas (1 yr ea)	Colon	
3			Prostrate (2 yrs); Colon, Pancreas and Female Breast ( 1 yr ea)	Pancreas (4 yrs) Female Breast (1 yr)	

The "Health of Boston 2012-2013: A Neighborhood Focus" identifies the following health issues for Dorchester:

- North Dorchester has an adolescent birth rate of 25.8 per 1,000 females ages 15-17 higher than the city average of 20.1 per 1,000 females ages 15-17
- Both North and South Dorchester experience low birth weights and preterm births that are higher than the city average
- Asthma emergency department visits are high for both North and South Dorchester, with North having the highest rate
- The incidence of hepatitis C is 77.2 (North Dorchester) and 69.7 (South Dorchester) per 100,000 residents ages 15-25 against a city-wide rate of 45.7 per 100,000 residents
- The rate of non-fatal gunshot/stabbing emergency department visits is twice the citywide rate
- The rate of homicides is more than double the city-wide rate

Community stakeholders identify crime, violence and prostitution as the most critical health issues for Dorchester. Other health issues such as diabetes, obesity, domestic violence, substance abuse, asthma, poor diets and inactivity were all rated the same in importance by the frequency they were identified and the ranking provided by each key informant.

One key informant pointed out that the rising housing costs in Downtown Boston have begun to affect the neighborhood. As people who cannot afford downtown rents move to Dorchester, there is a corresponding increase in housing costs and gentrification in Dorchester. This has, in turn, impacted the economic, emotional and physical health of long-time residents who worry that they cannot keep up with the rising housing costs or face potential displacement from their homes.

Selected health indicators for North and South Dorchester from the Boston Public Health Commission are in the appendices.

# **Neighborhood Profile: South Boston**

South Boston which is situated on a peninsula east of the Fort Point Channel was gradually annexed by the City of Boston. When the annexation was completed in 1804, a bridge was constructed to connect it to the rest of the city.

South Boston was, and continues to be, a diverse community and a residential hub for the generations of workers and their families who were employed in the industrial economy based there. Most commonly known as an Irish American community, South Boston has also



Image via Jameslwoodward, Wikimedia

been home to Boston's Polish and Lithuanian communities. The traditional industries which employed South Boston residents included iron foundries, shipyards, machine shops, railroads and commercial fishing. In recent years, the restoration of the Boston Harbor for recreational use has spurred development in the Waterfront area and fostered a transition to technology, financial and hospitality services and new developments for commercial and residential use. The many new developments in the Waterfront area encompassing the Innovation and Seaport Districts and South Boston's continuing housing boom overall, have contributed to a new wave or residents, raising concerns about the impact of gentrification in this very large neighborhood which has been a traditional working class community, artists' enclave and home to four public housing developments.

Because it is situated on a peninsula, South Boston's boundaries are easily identified by residents and government agencies. It has only one zip code and all census tracks fall entirely within the neighborhood's defined boundaries. A comparison of demographic data from the 2000 and 2010 Census showed that the population of South Boston had increased by 7% and had begun to reflect the demographics of the new residents who relocated to the neighborhood to be closer to their work either in South Boston or adjoining neighborhoods such as the Financial District. Between the 2000 and 2010 Census, the median household income had increased 43% from \$40,865 in 2000 to \$58,611 in 2010. A comparison of data from the 2010 Census and estimates from the 2015 Nielsen-Claritas Population Facts Database include the following:

	2010	2015 Nielsen-Claritas	Change
Total Population	32,011	37,475	17%
White	26,520	30,513	15%
Black/African	1,764	2,403	36%
American			
Hispanic/Latino	2,925	3,951	64%
Asian/Pacific	1,595	1,888	18%
Islander			
Multiracial	171	924	440%
Other Race	1,908	1,647	-14%
Ages (0-17 years)	4,515	5,165	14%
Ages (18-64 years)	25,874	28,375	10%
Ages (65 years and	3,285	3,935	20%
over)			
Unemployed	4.0%	Not available	
Median Household	\$58,611	\$73,779	29%
Income			
Percent of Poverty	15.3%	17.9%	2.6%

Health data for the neighborhood of South Boston is drawn from the Boston Public Health Commission's "Health of Boston 2012-2013: A Neighborhood Focus" and community key informants.

The three leading causes of death for South Boston residents for years 2006 through 2010 are:

	Leading Causes of Death for South Boston Residents				
	2006 2007 2008 2009 2010				
1	Cancer	Cancer	Cancer	Cancer	Cancer
2	Diseases of the	Diseases of the	Diseases of the	Diseases of the	Diseases of the
	Heart	Heart	Heart	Heart	Heart
3	Other Injuries	Other Injuries	Other Injuries	Other Injuries	Other Injuries

The leading causes of death for South Boston residents, by race are:

	Leading Causes of Death – South Boston 2006-2010			
	Asians Blacks Latinos Whites			
1	Cancer	Cancer	Diseases of the Heart	Cancer
2	Not Available	Diseases of the Heart	Cancer	Diseases of the Heart
3	Not Available	Not Available	Not Available	COPD

The following Selected Health Indicators for South Boston are higher than the city-wide rates:

- > Hepatitis C incidence is almost 6 times higher
- > Heart disease hospitalizations are higher
- > Cerebrovascular hospitalizations are slightly higher
- > Cerebrovascular disease deaths (including stroke) are approximately 29% higher
- Substance abuse deaths 42% higher than the city-wide rate

There are indications that the suicide rate may be 50% higher in South Boston that the city-wide incidence

BPHC provides the following selected health indicators by race/ethnicity but cautions that the "rates are based on counts less than 20 and should be interpreted with caution":

- Latinos have an adolescent birth rate that is 22.9 per 1,000 females between the ages of 15-17 while the rate for Whites is 9.1
- Blacks and Latinos have a higher incidences of babies with low birth weights (8.2% and 9.3% respectively) while Whites in South Boston have an incidence of 6.2%
- Asians have the highest incidence of preterm births at 9.8%, followed by Blacks and Latinos at 8.2% and 7.1%. The rates incidence for Whites is 8.4%
- Blacks and Latinos may have the highest incidences of asthma emergency department visits, 48.8 and 27.2 respectively per 1,000 children under the age of 5 while the rate for Whites is 11.5
- Cerebrovascular hospitalizations for Blacks is 5.4 per 1,000 residents, 2.3 per 100,000 residents for Whites
- Whites have the highest occurrence of cerebrovascular disease deaths at 58.0 per 1,000 residents and substance abuse deaths of 61.6 per 100,000 residents
- The suicide rate for Whites is 11.1 per 100,000 residents. No information was available for other groups because the numbers were less than 5

Key stakeholders from the South Boston community were long-time residents and/or direct service providers and whose knowledge about community issues was extensive.

These stakeholders overwhelmingly identified substance abuse as the major health issue and concern for the neighborhood of South Boston. One key informant raised the issue of suicide as an associated health issue – citing the co-morbidity of substance abuse and mental illness.\*

The second major health issue identified was cancer, both lung and breast cancer. One stakeholder expressed the opinion that besides cigarette smoking, another contributing cause to lung cancer for community members in their 60s was their exposure to the emissions from the coal burning power plant that was situated near the residential areas and continued to operate into the 1980s.

A number of stakeholders expressed concerns about the impact of the housing boom that is occurring in South Boston. They cite economic and emotional stresses for residents whose incomes cannot keep pace with the rising housing costs and the displacement, especially of seniors, who have been lifelong residents in South Boston. These key informants also noted the limited number of affordable housing units available, the changes in neighborhood cohesiveness, and the emerging economic and health disparities between new and long-time residents.

<sup>\*</sup> One key informant suggested that the available data undercounts the substance abuse, overdose and deaths because South Boston residents who experience an overdose outside of the neighborhood are counted in the statistics for the neighborhood/municipality where the overdose, and/or death, occurs. South Boston service providers maintain logs of death notices and other records to supplement the available public health data to determine the true rates of overdoses, deaths and possible suicides for community members.

## **Neighborhood Profile: South End**

The South End neighborhood which lies immediately to the south of Tufts Medical Center is bordered by the neighborhoods of Back Bay on the west, Chinatown on the north and Roxbury on its southern border. The streets that help to define the neighborhood include Herald Street on the north, Albany Street on the east, the Southwest Corridor on the west, and Melnea Cass Boulevard on the south.

The South End was created 1849 when the city's growth resulted in the filling in of tidal marshes for development. It is a neighborhood known for its large Victorian house district and



Image via Payton Chung, Wikimedia

for the diverse communities who live or have lived there including the original white middle class of English ancestry, Irish, Lebanese, Jewish, African American, Greek, Chinese and Puerto Rican. The diversity was the result of economic circumstances in the 1880s and the availability of new residential housing in the Back Bay and Roxbury which resulted in a steady decline in the original residents who were replaced by immigrants and middle class African Americans. The neighborhood gradually became a tenement district and continued so into the late 1960s when the neighborhood was considered one of the poorest in the city.

In recent years the South End has been a neighborhood best described as a "hot neighborhood" because of its central location and many amenities. Condominium prices have soared in recent years due to a limited inventory of available units for sale. This has contributed to the conversation of many older single family brownstones into condominiums and the conversion of light industrial space to market rate and luxury housing.

As an example of how high the demand for market and high end housing has contributed to a building boom is occurring in the area known as the New York streets which is adjacent to the Southeast Expressway and sits between the northern part of the South End and the SOWA district and Chinatown. This area was cleared of housing in the late 1950s and early 1960s for light industrial use. Within the last two years, over 400 units of luxury housing have been constructed replacing the Boston Herald's former site and parking area. The pre-construction prices for condominiums at the new Ink Block started at \$600,000. Another 400 units are currently under construction.

These new units are within 2 blocks of a shelter, public and family housing and, rather than contributing to the economic diversity of the neighborhood, this new luxury housing is creating an economic divide between new and the many long-time residents and artists who have helped to revitalize the neighborhood. Health data has yet to include the new residents but it is expected that with their inclusion with their social determinants of health, the available aggregated health data may masque the health issues for many long-time residents.

An analysis of Boston patient zip codes indicates that a significant number of patients from zip code 02118 obtain emergency, out-patient and inpatient services from the Medical Center. There continues to be a large number of Asians, especially Chinese, residing in the many housing developments for senior citizens located in the South End, as well as a large Latino population.

Creating a neighborhood profile for the South End presents a number of challenges:

- The Boston Public Health Commission's (BPHC) definition of the northern boundary extends well beyond the generally accepted one and encompasses Chinatown and parts of the Downtown Retail/Midtown Cultural District up to Summer Street
- The Boston Redevelopment Authority (BRA) and the Department of Neighborhood Development (DND) are currently redefining the boundaries with the BRA acceding sections beyond Massachusetts Avenue, to the neighborhood of Roxbury
- Although the major zip code for the South End is 02118, parts of the neighborhood are assigned to 02116, normally attributed to the Back Bay – this includes a portion of the Castle Square Apartments complex
- The BPHC's eastern boundary extends up to South Dorchester, Columbia Road, while the Boston Police Department uses Albany Street as the eastern boundary

Acknowledging the above listed challenges the basic demographics which follow are taken from the Department of Neighborhood Development's (DND's) South End Data Profile. The DND boundaries for the South End are: northern boundary is Herald Street (which encompasses the Castle Square Apartments), eastern boundary is Albany Street, parts of Frontage Road to Melnea Cass, with Melnea Cass continuing as the southern boundary and the Southwest Corridor as the western boundary.

The DND population demographics and data profile for the South End are as follows:

- A population of 34,669, a 22.9% increase from the 2000 Census
- Median household income is \$51,870
- The major racial/ethnic groups are: Whites (49.5%), Black or African American (17.1%), Hispanic/Latino (16.6%) and Asian (13.9%)
- 41% of the housing units in the South End are categorized as affordable compared to a city-wide rate of 19.4% (The units include 10 developments owned by the Boston Housing Authority such as the Cathedral Housing Project, Eva White, Camden and Lenox, Unity Tower/Torre Unidad and many developments owned by non-profits such as IBA's Villa Victoria, Tenants Development Corporation and others)

The data challenges were the greatest for the South End because the neighborhood boundaries are in flux due to different city planning initiatives, thus making it difficult to obtain data from the different city departments that could provide a clear comparison between different periods of time, in the same way that we had done for the other priority neighborhoods. City sources such as the BRA publication all relied upon the 2010 Census, but may have used slightly different boundaries that affected the data and the variations in population size. And given that no maps

were included in the DND's publication, it made it more difficult to identify where the discrepancies occurred.

Health data for South End, as defined by the Boston Public Health Commission (BPHC) indicates that the leading causes of death for the years 2005-2010 were cancer, diseases of the heart and other injuries.

	Leading Causes of Death – South End 2008-2010				
	Asians	Blacks	Latinos	White	
1	Cancer	Cancer	Cancer	Diseases of the Heart	
2	Diseases of the Heart	Diseases of the Heart	Diseases of the Heart	Cancer	
3	Cerebrovascular Disease (incl. Stroke)	Other Injuries	Other Injuries	Other Injuries	

- The average annual rates for low birth weights and preterm births are both 9.2% which approximates the city averages of 9.3% and 9.9% respectively
- The incidence of diabetes hospitalizations is greater than the city average at 3.1 per 1,000 residents
- Substance abuse deaths at 49.1 per 100,000 residents surpasses the city rate of 33.9
- > The suicide rate at 8.5 per 100,000 residents is higher that the city rate of 5.7
- Blacks experienced the highest incidence of asthma emergency department visits for children under the age of 5
- Latinos experienced the second highest incidence of asthma emergency department visits for children under the age of 5
- Latinos' rate of hospitalization for heart disease was the highest among all racial/ethnic groups at 17.1 per 1,000 residents
- > Asians experienced the highest rate of cerebrovascular disease deaths
- Blacks accounted for the highest number of substance abuse deaths at 109 per 100,000 residents

### **Setting Priorities**

Health data for the priority neighborhoods have been reviewed by senior managers and community advisors. For the Chinatown and Dorchester communities, Advisory Committees have recommended priority health issues for the next funding cycles for the Asian and Dorchester Health Initiatives.

The Asian Health Initiative Advisory Committee identified cancer, especially lung cancer, and as a priority for the upcoming Request for Proposals (RFP). This recommendation was based upon health data that indicates that for a five-year period, lung cancer was the leading cause of death among Asians in the city of Boston. Advisors attributed this to the continuing abuse of cigarettes and noted that smoking also contributes to or exacerbates other chronic diseases such as asthma, heart disease and diabetes. The recommended priority for the RFP would be to solicit services to not only educate the Chinatown and Boston Asian community about the life threatening effects of substance abuse, especially cigarette smoking and its many potential consequences for the individual, his/her family members and co-workers, but provide services to help with the addiction and associated health issues including mental health.

The Dorchester Health Initiative (DHI) Advisory Committee identified violence and substance abuse as the two priority issues affecting the community. The DHI recommends that the overarching priority for the next round of DHI funding be substance abuse, and the related health issues and consequences for individuals, their family members and community members. Advisors indicated that related issues associated with substance abuse included family and youth violence, behavioral and mental health issues, and physical health. The recommended goal of the RFP would be to solicit services that not only promote prevention but support resiliency and recovery services.

Partnerships between the Medical Center and the communities of South Boston and the South End will be developed by Tufts Medical Center Community Benefits Leadership Team and focus on the specific health needs of the most vulnerable populations within each community. The primary partners in these two communities will be the respective health centers.

South Boston is at the epicenter of the opioid epidemic. The proposed partnership with the South Boston Community Health Center will be developed to address this and other critical health issues for the community. The South End neighborhood's most vulnerable populations includes linguistic minorities (Chinese and Spanish speakers) - whose incomes fall well below the median household income of \$51,870 and for whom cancer and diseases of the heart are the leading causes of death. The proposed partnership with the South End Community Health Center would focus on promoting increased health knowledge and promote prevention, and support at-risk individuals with screenings and access to early treatment to improve health outcomes for cancer, heart disease and diabetes.

All recommendations based upon this community health needs assessment will be reviewed and approved the Medical Center's Board of Governors Outreach Committee.

### **Implementation Plan**

The community health needs of four communities of importance to Tufts Medical Center were assessed, reviewed and prioritized by the Board of Governors. The following Implementation Plan identifies the steps that the Medical Center will initiate to respond to the priority health needs of the Chinatown, Dorchester, South Boston and South End neighborhoods of Boston.

Timeline:	Action:
April, 2016	<ul> <li>Dorchester: Begin development of a Request for Proposals to solicit services that prevent opioid abuse or support recovery and resiliency for individuals and/or their family members</li> <li>South Boston: Develop collaboration with the South Boston Community Health Center to address critical health issues for their patients and neighborhood residents</li> <li>South End: Evaluate the impact of the collaboration with the South End Community Health Center in providing services to neighborhood residents who are low-income, uninsured and linguistic minorities at risk for chronic illnesses</li> </ul>
May-June, 2016	<b>Dorchester:</b> Finalize and release Request for Proposals soliciting community partners and services for a three-year funding cycle
July-August, 2016	<b>Dorchester:</b> Review proposals submitted to the Dorchester Health Initiative (DHI) and identify grantees to provide services related to opioid abuse <b>Tufts MC:</b> Review departmental efforts that have been addressing health disparities for patients and/or community members
September, 2016	<i>Chinatown:</i> Develop Request for Proposals for a new funding cycle and the priority of preventing the consequences of cigarette smoking and lung cancer <i>Dorchester:</i> Announce DHI grantees for Fiscal Years 2017-2019 <i>Tufts MC:</i> Evaluate opportunities to address patient and community members' health disparities through advocacy and/or public policies
October, 2016	<i>Chinatown:</i> Issue Request for Proposals for the Asian Health Initiative (AHI) <i>Dorchester:</i> DHI grantees begin their first program year
November, 2016	<ul> <li>Chinatown: AHI proposal reviews and identification of grantees for</li> <li>Program/Calendar Years 2017-2019</li> <li>South Boston: Evaluate health center's efforts to improve identified health</li> <li>issues for their patients and community members</li> <li>South End: Evaluate health center's efforts to reach and serve identified target</li> <li>population</li> </ul>
December, 2016	Chinatown: Announce AHI grantees
January, 2017	Chinatown: AHI grantees begin their program year
February, 2017	Dorchester: Prepare to evaluate DHI grantees' first six months of programming
March, 2017-Sept., 2019	<b>All Neighborhoods:</b> Evaluate grantee efforts, assist with program adjustments/corrective actions as needed, monitor emerging health issues and consider appropriate responses and available resources

### **Review of 2013 CHNA Activities and Outcomes**

Every three years Tufts Medical Center (Tufts MC) conducts a Community Health Needs Assessment (CHNA) to identify and prioritize health needs of our priority communities and guide our community health improvement efforts.

Tufts MC's 2013 CHNA reviewed multiple sources of data including health data from the Boston Public Health Commission's (BPHC) "Health of Boston" reports and available neighborhood-specific reports from the BPHC, other community coalitions such as the Boston Alliance for Community Health (BACH), census data, Tufts MC patient data, and key informant interviews with community stakeholders.

Guided by the 2013 CHNA, Tufts Medical Center focused resources in Chinatown, Dorchester and South Boston. Health data for the communities were summarized and reviewed by members of the Medical Center's senior leadership and Board of Governors. Tufts MC also established community advisory committees to further guide two health initiatives, the Asian Health and Dorchester Health Initiatives, comprised of community, public health and hospital representatives. Based on review of available data, thoughtful discussion, and their knowledge of the respective communities, Tufts MC's community advisory committees identified priority health issues that would become the focus of the 2013-2016 Tufts MC implementation plan. Through a public Request for Proposals process, community partners were identified to address those health priorities.

#### Chinatown:

Improving the physical and emotional health of Chinatown residents and members of the Boston Asian community was the focus of community health education, outreach and prevention programs and activities. Health data indicated that the leading causes of death for Boston's Asian community included cancer (lung, liver and colorectal), heart disease, stroke, chronic obstructive pulmonary disease and Alzheimer's disease.

Key community stakeholders and advisory committee members also identified emotional and mental health as major health concerns. They provided insights to the stresses associated with the immigration process, limited employment opportunities and/or job losses, undiagnosed mental health issues, and the impact and consequences of addictive behaviors, most notably gambling.

Based upon the recommendations of the Asian Health Initiative's (AHI) Advisory Committee and endorsement from Tufts MC's Board of Governors, a Request for Proposals (RFP) was issued in the fall of 2013. The RFP sought innovative strategies and programs to address the overarching priorities of maintaining or improving physical and emotional health for the grant years of Calendar 2014-2016.

The AHI identified seven community partners to provide a range of services to maintain and/or improve the health of Boston's Chinatown and Asian community during the next three years. Two partners provided health education through local print and electronic media, focusing on

chronic diseases, including breast cancer and diabetes. Three community partners focused on improving the health and wellness of seniors through educational and/or exercise programs. One program focused on helping youth, teens and young adults to better understand healthy food choices and the importance of regular physical activities, which they emphasized could take various forms. The seventh organization received support in year one to initiate support services for new adult immigrants to help them cope with the stress being in a new country/culture, of learning a new language, obtaining employment and/or dealing with everyday issues including navigating school services for their children.

During the three year period, AHI programs were able to reach over 3,300 individuals through health education workshops, support groups, case management services and outreach activities. Additionally, through cultural and language capacity and understanding, and vast networks and services in the Chinatown and Asian communities, our partners reached thousands of community members through print and visual media. They developed health segments on a Chinese language cable program and captured all the segments onto DVDs distributed widely. Health articles were written and published in the community's only bilingual newspaper, also available on their website.

#### Dorchester:

The Dorchester health priorities established from the 2013 CHNA were physical and emotional health and youth violence prevention. Health data indicated high incidences of asthma, hepatitis C and chronic diseases that accompany obesity and diabetes, and hospitalizations for heart disease, diabetes and cerebrovascular diseases were higher in Dorchester than city-wide averages. Economic stress and poverty are factors that affect an individual or family's physical and emotional/behavioral health, housing stability, food security, access to healthy foods and activities which promote good health and well-being. The Dorchester community continued to experience a high rate of violence including homicides and non-fatal gunshot and stabbings. There was also data that indicated a high rate of youth reporting persistent sadness.

With the recommendations of the Dorchester Health Initiative (DHI) Advisory Committee and support from Tufts MC's Board of Governors, a Request for Proposals (RFP) was released in the summer of 2013 that sought partnerships and programs with community-based organizations to address the identified health priorities for the three years of grant funding, Fiscal Years 2014-2016.

The DHI identified five community partners to provide a range of services to improve physical and emotional health and prevent youth violence among Dorchester residents through an open and competitive application process. Three partners focused on improving physical health and reducing the burden of obesity through physical exercise and nutrition education, serving a wide range of clients from youth to seniors. Two community partners provided youth violence prevention services for area youth, including case management and mentoring as well as exercise programs in collaboration with local police to foster positive youth-police relationships.

Over the course of the three-year period, DHI programs served an estimated 4,600 individuals to improve physical and emotional health and prevent youth violence through workshops, classes, case management services, and outreach activities.

#### South Boston:

Tufts Medical Center has supported health care providers in the South Boston community since the early 1990s, when substance abuse rose to epidemic proportions. Based on public health data analysis and critical insights from key community stakeholders, we continued to prioritize and provide funding support for programs that focused on reducing substance use, supporting recovery services and access to educational and prevention efforts and health care. Of particular concern were the effects of drug and alcohol abuse on family stability, the emotional and economic impact on multiple generations of families and concerns about the ramifications for children whose parents abused drugs and alcohol, including mental health and behavioral issues, which place children and youth's physical health and well-being at risk.

Tufts MC-funded programs focused on smoking cessation, substance use treatment, behavioral health services, and a youth ambassador program, in which youth develop leadership skills and receive education about tobacco, substance use, and violence prevention. One notable program is a residential substance use treatment program for young men who are unable to be served in a less restrictive environment. The program implements a holistic approach to substance use treatment, emphasizing physical and emotional health support to target the underlying issues that may influence substance use and other risky behaviors. The program served more than one hundred young men each year and had a completion rate of 58%, substantially higher than the 39% state average for a long term recovery home.

Over the 2014-2016 period, Tufts MC-funded programs in South Boston served more than 2,200 individuals to address smoking, substance use, behavioral health, and youth violence prevention, and screened thousands of teens and adults about their smoking status, offering cessation resources as applicable.

Tufts MC was able to carry out its implementation plan in partnership with the communities we serve to address the most pressing health issues in our priority neighborhoods of Chinatown, Dorchester, and South Boston.