

Signature Healthcare 2016

- Community Health Needs Assessment
- CHNA Addendum
- Implementation Strategy, Community Benefits Plan:

Completed & Submitted: February 22, 2018

Addendum Submitted & Approved: February 22, 2018



SIGNATURE HEALTHCARE

www.MySignatureCare.org

Community Health Needs Assessment for Signature Healthcare

December 2016



SIGNATURE HEALTHCARE

www.MySignatureCare.org

Acknowledgments

The completion of this assessment would not have been possible without the participation of community organizations and residents in our Signature Healthcare service area. We would like to thank the residents who shared their thoughts on health in their community and the key informants who graciously provided their time and expertise. We would also like to thank the following organizations for their assistance with this assessment:

Old Colony YMCA
Greater Brockton Health Alliance
Stoughton Youth Commission
Community Connections in partnership with Stonehill College
Center for Community Based Learning
Community Organizing Class: Micro to Macro, Lee G. Farrow, Adjunct Professor
Support from: John Figueiredo, Sarah Gleason and Jaclyn Gigliotti



SIGNATURE HEALTHCARE

www.MySignatureCare.org

Cities and Towns part of Assessment



SIGNATURE HEALTHCARE

www.MySignatureCare.org

Table of Contents

Introduction.....	5
Executive Summary	6
Methodology	9
Section 1: Demographics	12
Section 2: Housing and Homelessness.....	14
Section 3: Health Care Access	16
Section 4: Safety	18
Section 5: Substance Use and Behavioral Health	20
Section 6: Maternal and Child Health.....	22
Section 7: Sexually Transmitted Infections and HIV/AIDS	24
Section 8: Risky Behaviors and Health Screening	26
Section 9: Chronic Illnesses	28
Community Profiles.....	31
Programs and Services Available in the Signature Healthcare Service Area	37



SIGNATURE HEALTHCARE

www.MySignatureCare.org

Introduction

Signature Healthcare Brockton Hospital is a private, not-for-profit, community-based teaching hospital serving more than 460,000 residents in more than 20 southeastern Massachusetts communities. Our mission is to be the leading community based healthcare delivery system in Southeastern Massachusetts, providing the full range of primary care, specialty care, hospital care and related ancillary services on a coordinated basis. Signature Healthcare physicians and Signature Healthcare Brockton Hospital strive to be recognized as the “providers of choice” by staff, patients and the community. Signature Healthcare is guided by these principles:

- Take a leadership role in assessing the health care needs of the Metro South area by committing to a hospital-community partnership and by collaborating with other providers and community members to offer a broad range of education, health services and other activities for all patients and, in particular, the underserved and disadvantaged populations.
- Develop new services and programs, and participate in alternative delivery and regional health care systems to respond to community need and enhance access to care.
- Participate in the education of health care professionals to enhance the Hospital’s access to medical expertise and to assure the most up-to-date approaches for providing care.
- Commit to an electronic medical record environment aimed at (i) reducing medical errors with more accurate and timely information for providers, (ii) enhancing physician productivity and job satisfaction, (iii) responding to consumer requests for electronic communication.
- Be an equitable employer that values and rewards excellence in its associates.
- Manage finances aggressively to remain cost effective and fiscally sound.

Part of Signature Healthcare Brockton Hospital’s community focus, and indeed the very core of our mission, is to care for those in greatest need. We are especially proud of our distinguished, century-plus tradition of reaching out to all patients in our community, from every walk of life, regardless of their ability to pay.

With the mission of Signature Healthcare in mind, we conducted a Community Health Needs Assessment to uncover community health needs, identify vulnerable community groups, and determine gaps in community health programming.

Executive Summary

Signature Healthcare conducted this Community Health Needs Assessment with the goal of identifying unmet community health needs, vulnerable populations, and gaps in existing community health services. This needs assessment used a three pronged approach to address these areas: 1) conducting community impressions sessions mainly with Brockton residents to examine their perceptions of social determinants of health problems in the area, 2) analyzing existing data to determine how health outcomes in Brockton and surrounding towns differ from the state's 3) conducting key informant interviews with people who work and live in some of the towns included in the assessment to discover what they see are the major issues in their communities.

Summary of Findings

Findings from each piece of the assessment contribute to the overall picture of area health needs in varying ways. Reviewing the results from the community focus group will assist in identifying how the residents experience health care services; perceptions about what they see are the largest health issues in their community, what they view as risky behaviors and problems they experience with healthcare access. Examining existing programs in the area will assist us in determining gaps in local services. Taking a look at the data from our area communities will where they fall compared to the state on Chronic Diseases such as Asthma and Diabetes. The data will also assist in highlighting social determinants including housing and homelessness and public safety. Lastly, the key informant interview responses will help provide perspective on what they feel are the largest health issues impacting their communities.

Data Analysis

Highlights of the Archival Data analysis include:

Demographics:

- The city of Brockton has considerably more racial and ethnic diversity than the rest of the towns researched. Additionally, Brockton has the lowest median income and is also significantly lower than the MA state average. Approximately 37% of the population in Brockton speaks English less than "very well".
- Brockton has approximately 33% of its population 200% below the federal poverty level. It is the highest level out of the towns/cities researched and is also higher than the state average of 21%.

Housing and Homelessness:

- Brockton has a 55.5% risk of foreclosure homes as of 2013, which is by far the highest percentage out of the towns/cities researched. Brockton also has a percentage of 54.5 which is the lowest for homeownership.
- The 2016 homeless trend analysis from Quincy, Weymouth, Brockton, Plymouth City and County indicates a total of 1,692 homeless people which is a 9% decrease from 2015.

Health Care Access:

- Brockton was the community with the highest percentage (6%) of individuals that do not have health insurance, as well as having the highest percentage (49.5%) for individuals with public health insurance.
- The age adjusted rate for emergency room usage for diabetes, mental health, and asthma was higher in the city of Brockton than any of the other researched towns/cities.

Safety:

- In the city of Brockton half of the weapon related violence happens on the streets which is higher than the state percentage of 42.9%.
- The 2011 assault-related firearm percent in the city of Brockton is higher than the state percent. However, in regards to sharp instruments the percent is lower than the state percentage.
- Brockton is the community with the highest number of registered sex offenders, followed by Taunton.

Substance Use and Behavioral Health:

- From 2012 through 2015, the upload-related overdose deaths have continued to increase. In 2012 there were a state total of 668 deaths and in 2015 there were 1,379 deaths.
- Abington has the highest rate for individuals admitted into the DPH funded treatment program along with the highest rate for the reason to be because of an injection drug addiction problem.

Maternal and Child Health:

- The overall teen birth rate for the city of Brockton (34.3 per 1000 women ages 15-19) was significantly higher than the other towns/cities. The birth rate for Hispanic women age 15-19 (57.2 per 100,000 women) was higher than the birth rate for White and Black, non-Hispanic women.
 - There were eight towns all below the area average; Abington, Bridgewater, East Bridgewater, Easton, Hanson, Stoughton, West Bridgewater and Weymouth.

HIV/AIDS:

- From 2008-2010, Brockton was the 5th ranked town for the *highest rate* of HIV infection diagnosis in Massachusetts. Brockton was ranked 3rd for the *highest number* of HIV infection diagnosis. As of December 31, 2011 Brockton was 12th for the highest rate of people living with HIV/AIDS (431.2).

Risk Behaviors and Health Screening:

- The Whitman-Hanson Essential School Health Services Program Data Report from the 2010 school year for grades 1, 4, 7 and 10 reported that their area percentage was higher than the state percentage for obese children. Children classified as overweight reported that only children in the first grade (18.1%) have a higher rate than the state percentage (15.5%).
- The city of Brockton has an estimated 23.7% of adults, 18+ smoke cigarettes. The adult smoking rate is 48% higher in Brockton than the state percentage of 16%. The rate for smoking during pregnancy is 8.3% in Brockton, and 6.8% for the state. Brockton has a 22% higher rate than the Massachusetts rate.

Chronic Illnesses:

- The city of Brockton has a higher rate of age adjusted death rates due to diabetes, ER visits due to diabetes and hospitalization due to diabetes than the CHNA 22 communities for 2012.
- Brockton and Holbrook both have higher ER rates due to asthma than the CHNA 22 ER rate of 602.9. Avon and also Brockton have a higher hospitalization rate than the CHNA 22 rate.
- Women in the town of Easton have a higher incidence of breast cancer than women in the state overall from 2004-2008. Individuals in the city of Brockton had a higher incidence of cervical cancer than the state overall for the same time period.

Community Impression Sessions

In addition to statistics, Signature Healthcare was also interested in learning about the health concerns of our community members. Signature Healthcare is part of the Greater Brockton Health Alliance (CHNA22) which provided funding to Community Connections. Community Connections goal was to develop a grassroots community planning, participation, and action process among residents, that informs, educates and identifies strategic priorities that will improve health and quality of life issues for all residents in the Brockton area.

Community Connections developed a conversation/survey instrument to conduct community “quality and knowledge” one on ones and neighborhood circle discussions/campaigns that informed, unpacked and discussed the four health priorities that were identified as previous issues in our communities. The conversation created the following interactions:

- Information sharing
- People spoke on health priorities from their own experience
- Began strategically thinking about community change
- Sought peoples visions for the future

As part of the work process, Community Connections hired three local leaders to conduct the Quality and Knowledge conversations. These conversations were conducted at Massasoit Community College, Stonehill College, at the South Shore Leadership Conference and Community Focus Groups. There were 171 survey conversations collected and each conversation lasted about 20 minutes.

The perception of the most important health conditions are as follows:

Out of 171 total interviews/Conversations:

1. Substance Abuse: 121 responses or 71%
2. Nutrition/Fitness: 33 Responses or 19%
3. Asthma: 21 Responses or 12.25%
4. Oral Health: 11 responses or 6.5%

Key Informant Interviews

In order to obtain a more sizeable amount of information from the communities being analyzed for the health needs assessment we identified key informants in a few of the surrounding towns to be interviewed about health concerns in their community. These interviews helped us identify major gaps in the communities and how these could possibly be filled. Due to confidentiality constraints, individual key informants are not identified in this report.

Major themes among health problems identified by key informants:

- Childhood peanut allergies
- Diabetes and Asthma for entire school district
- Mental health for adults and adolescents
- Anxiety is being diagnosed at younger and younger ages
- Opioid use among junior and senior high school students
- Childhood obesity
- Substance use among adults- mainly Fentanyl
- Synthetics
- Alcohol abuse among people of all ages
- Domestic violence.

Major social determinants of health identified by key informants:

- Lack of parents help for troubled children to access free resources readily available
- Lack of mental health providers for adolescents in certain school systems
- Need of homeless shelter in Stoughton
- Increased number of school adjustment counselors in certain school districts.

At the end of each interview, key informants were asked if they could identify one health problem in their community that they did not feel was being adequately addressed by existing services or a program/change that they feel would be a good asset to their community. **Below is a list of individual responses to this question:**

- One emergency department stated that they would like to add more interpreters to their department because the linguistic barrier between patient and provider is something they encounter every day. Interpreters play a large part in how long the patient stays/how quickly they get discharged, and also informing the patient when they need to come back for a follow up.
- A school staff member believes it would be a beneficial idea to schedule a life skills/coping skills class to educate children with behavioral issues how to cope with their anger, as well as having more than one classroom for the children with behavioral issues. Adding additional classrooms will help the children accomplish everything needed to be done at school and hopefully allow the students to excel to their full potential. Along with the increase in the classroom there needs to be additional staff added to the room allowing the children to get the support they need that in most cases is already missing from their home.
- A school district wants to identify the issues and needs of the students in regards to opioid addictions and hopefully prevent the addictions from happening once the students leave the district. Steps to begin this include forming a partnership with Bridgewater State University and also the local police department.

Section 1: Demographics

The Community Health Needs Assessment focuses on Abington, Avon, Bridgewater, Brockton, East Bridgewater, Easton, Hanson, Holbrook, Randolph, Rockland, Stoughton, Taunton, West Bridgewater, Weymouth and Whitman because these are primary service areas of Signature Healthcare Brockton Hospital. These towns are home to almost 412,000 people with a diverse population.

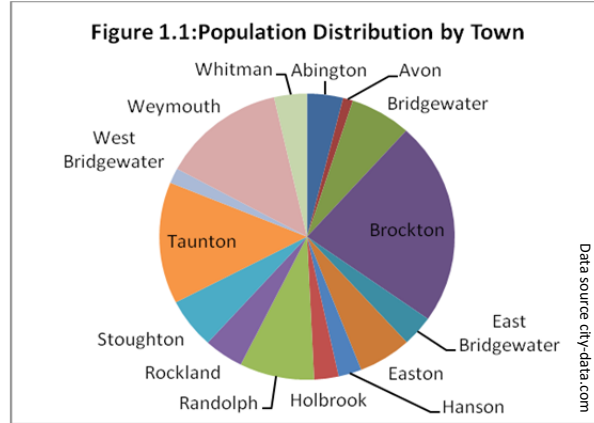


Figure 1.1 displays the total population distribution across all the towns observed. The city of Brockton has the largest population of 94,779 while also being one of the most diverse populations based on race/ethnicity. Table 1.1 displays the race/ethnicity composition differences between Brockton and the state. The African American population is approximately 5x more than the state total. Brockton also has a little less than half the white population of the state total. Additionally, according to the American Community Survey from 2010-2014, approximately 25.2% of Brockton's population are foreign born,

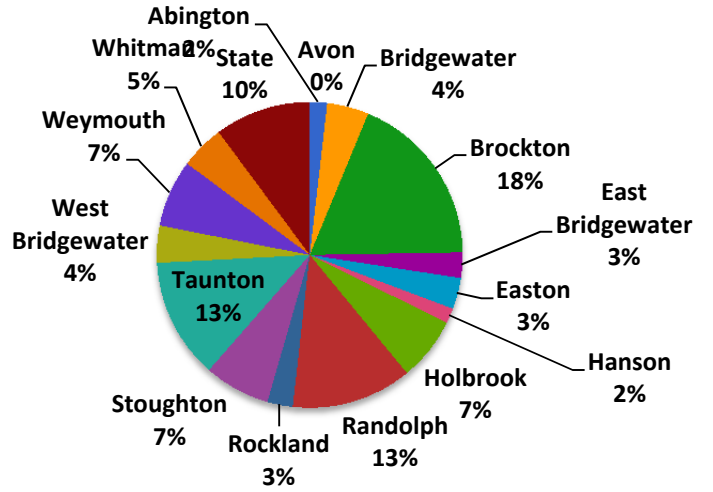
Table 1.1: Race/Ethnicity Composition, Brockton City, and MA Overall		
	Brockton	State
Race/Ethnicity		
White alone	44.2	74.6
Black alone	39.4	6.4
Hispanic	7.8	10.5
Asian alone	2.0	5.8
American Indian alone	0.4	0.1
Other race alone	3.2	0.5
American Indian alone	3.0	0.1
Native Hawaiian	0	0.02

Data Source: city-data.com

and an estimated 4,636 Veterans lived in the city. The U.S. Census Environmental Justice Populations are defined as communities that include any or all of the following criteria; households earning 65% or less of the statewide household median income, 25% minority residents, 25% foreign born residents, or 25% non-English speaking. As of 2000, out of the 15 towns researched, 3 were classified as Environmental Justice Populations - Brockton, Bridgewater, and Stoughton. Brockton is the only city that reported all four of the categories

The amount of families living below the federal poverty level varies by town (see figure 1.2.). Brockton, Taunton, and Randolph all have a higher percentage of families living below the poverty level than either the state average or other towns. For families with female householder and no husband present, Brockton and Taunton experience higher than state percentages. The 2000 census reported that Brockton has 14.5% of the population below 100% of the federal poverty level and 33.4% of the population 200% below poverty, both higher than the state percentage.

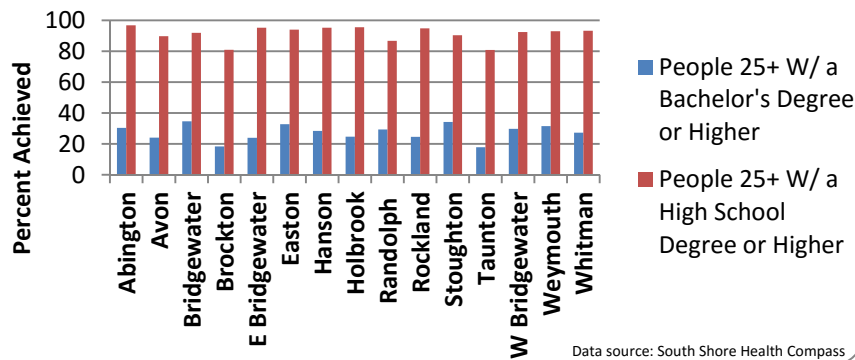
Figure 1.2 Percent of families Living Below Poverty



Data source: American Fact Finder

Based on the 2016 MassHealth Income Standards and Federal Poverty Guidelines, a family of 4 would make a yearly income of \$24,300 or \$2,025 per month to be classified as 100% below poverty. In order for a family of 4 to be 200% below the poverty level the yearly income would total \$48,600 or \$4,050 per month.

Figure 1.3: Educational Achievement for People 25+

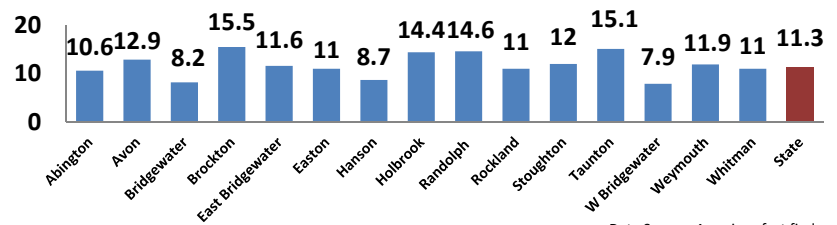


Data source: South Shore Health Compass

Levels of educational achievement differ among each town and city (see figure 1.3). Each town has 80% or more of their population 25 years or older with a Higher School degree or greater. Graduating High School is essential for someone's social and economic advancements.

Obtaining a bachelor degree varies between towns. Taunton has the lowest percent (17.8), while Bridgewater has the highest percent at (34.6). South Shore Health Compass notes it is estimated that someone who graduates college makes approximately 1 million more dollars in their life-time than a non-college graduate.

Figure 1.4: Percent of Population with Disability



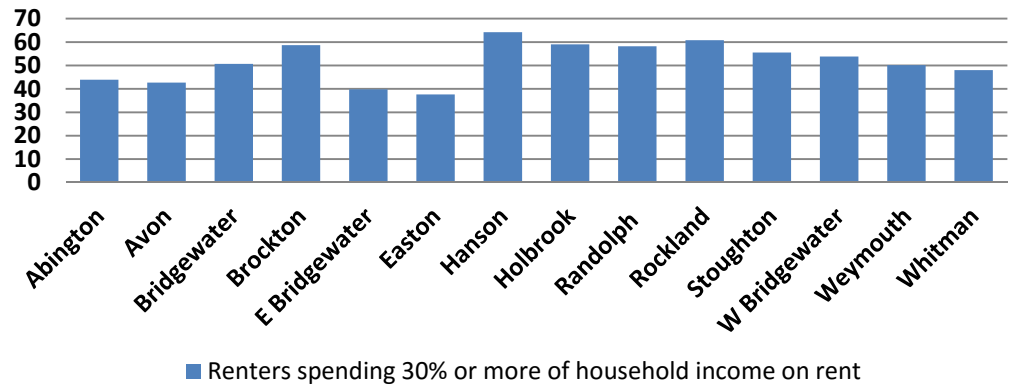
Data Source: American fact finder

The disability population varies from town to town. It is the highest in Brockton (15.5%) and the lowest in West Bridgewater (7.9%). In Brockton individuals 65 and older represent 67% of the city's disabled population. Children 18 and younger represent 10% of the population.

Section 2: Housing and Homelessness

The South Shore Health Compass provides data on renters who spend 30% or more of the household income on rent. The high percentage can create financial hardship for the renters. These renters may not be able to afford other important expenses such as food or

Figure 2.1: Renters spending 30% or more of household income on rent

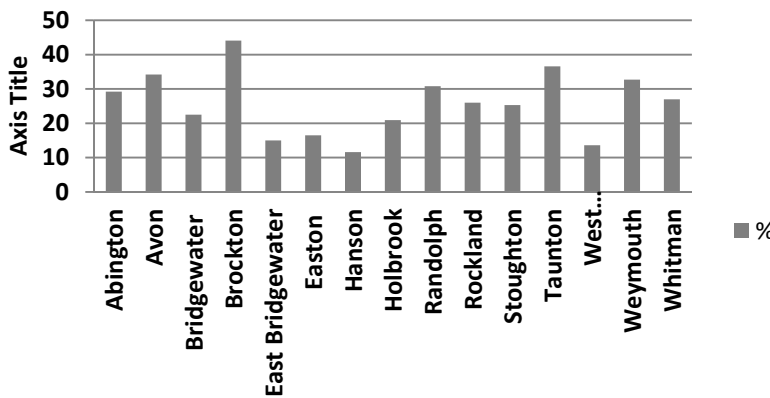


Data source: South Shore Health Compass

transportation. Figure 2.1 demonstrates Hanson has the highest percent of renters spending 30% or more on housing and Easton has the lowest percent.

Foreclosure risks in Brockton are extremely high, affecting more than half the housing in the city. Unfortunately, the city of Brockton contains 55.5% of citizens distressed and worried about losing their home. Homelessness can result from the loss of a home, and creates an even bigger financial issue. “Studies show that both the stress and forced relocation following home foreclosure have negative impacts on the health and well-being of individuals and families.” (SSHC)

Figure 2.2: Percent of Renter



Data Source: South Shore Health Compass

According to the most recent report from the U.S. Census Bureau on houses occupied with renters, Brockton has the highest percent (44.1) of renters and Hanson has the lowest (11.6). Renting homes in the City of Brockton can be costly due to the population having the lowest mean and median household income of the towns researched. The median per month rent cost

for the state is \$1,088; renters in Brockton pay \$14 dollars less (\$1,074) than the state average.

Table 2.1: 2016 Homeless Trends Analysis							
	Individuals	Families	# of Persons in Homeless Families	Veterans	Young Adults	Chronic Households	Total # of Homeless Persons in CoC
Emergency	340	415	1253	43	21	130	1593
Transitional	15	20	46	16	0	0	61
Unsheltered	38	0	0	1	3	16	38
Total	393	435	1299	60	24	146	1692
Annual change	1.5% increase from 2015	10% decrease from 2014	8% decrease from 2014	6% decrease from 2015	14% increase from 2015	13% decrease from 2015	9% Decrease from 2015

Data Source: Bridgewater State University

The homelessness trend analysis information is from Quincy, Weymouth, Brockton and Plymouth and was provided by a professor at Bridgewater State University. The trend analysis in table 2.1 displays a 9% decrease in total number of homeless people from 2015 to 2016.

The Place in Time report from 2007-2014 reported half of the U.S. homeless population is in 5 states; California (20%), New York (14%), Florida (7%), Texas (5%), and Massachusetts (4%). Between 2013 and 2014 Massachusetts experienced the second largest increase of 2,208 more homeless people. However, in terms of percentage, Massachusetts had the greatest increase along with Washington, D.C. Even with the largest increase in percentage of homeless people, MA is among the lowest rates of unsheltered homeless people with only 759 of 21,237 unsheltered in 2014.

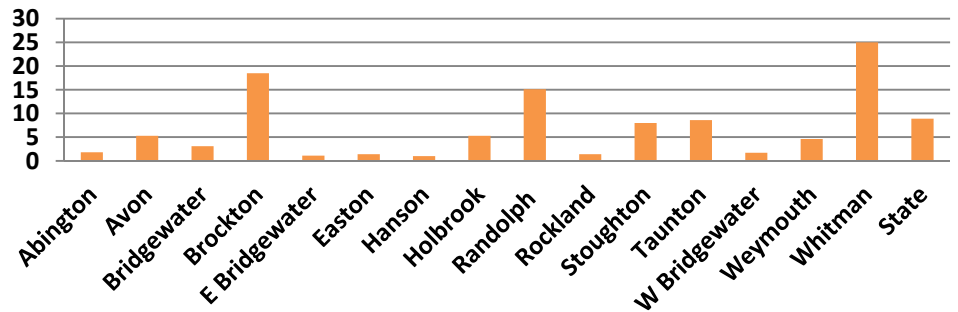
Children exposed to lead in older homes are still an ongoing health concern across the Commonwealth in Massachusetts. Approximately 71% of homes in Massachusetts were built before 1978, making it the state with the fourth oldest houses built. According to the MA Department of Public Health, owners in 90% of MA homes built before 1978 have reported they have not done anything to get the lead out of their homes. Based off the CDC's reference value regarding lead levels, 3,737 children were identified with Blood Lead Levels over the safe amount. Brockton is the only town from the research pool that is on the 2015 High-Risk Communities list. The MA Department of Health stated 60% of identified cases of children with elevated lead levels lived in the high-risk communities.

Section 3: Health Care Access

An individual's access to healthcare can be affected by many different reasons such as, different languages spoken at a healthcare facility, health insurance, affordability of doctor visits, or availability of medical providers along with transportation to the offices.

Speaking a language other than English is a factor that may influence health care access. Hospitals report that interpreters are used and needed every single day when it comes to properly communicating with patients.

Figure 3.1: Speak English Less Than "Very Well"



Data Source: American Fact Finder



The U.S. Census Bureau reported 18.5% of the Brockton population 5 years and older speaks English "Less Than Very Well." The linguistic barrier makes it difficult to access certain services only offered in English. This includes certain medical services, transportation and education along with employment opportunities. The

lack of these services in multiple languages continues to increase the barrier. South Shore Health Compass explains in a case such as a local emergency, the linguistically isolated households may not receive the important information and be able to keep themselves safe. Each year the linguistic barrier significantly elevates, in the 2007-2011 measurement periods the percent was just under ten at 9.7%. Increasing the number of medical interpreters could be one way to reduce the linguistic barrier Brockton and many other towns' experience.

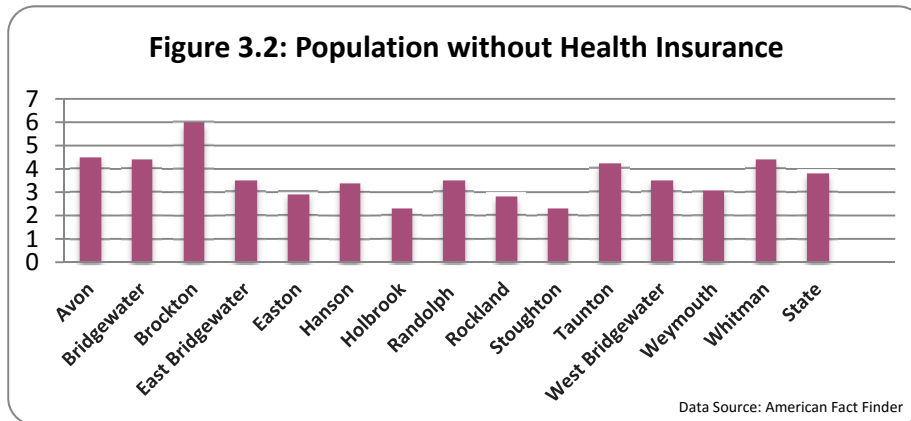
Literacy may have an impact on a person's ability to read prescription medications or a doctor's note with follow up or any information given in a written form. Table 3.1 displays the percent of individuals in each town that did not complete high school.

Table 3.1: Educational Achievement for Population 25 years and older

	High School, no diploma
Abington	1.80%
Avon	7.50%
Bridgewater	5.70%
Brockton	7.80%
East Bridgewater	2.90%
Easton	2.40%
Hanson	4.10%
Holbrook	3.10%
Randolph	6.40%
Rockland	3.30%
Stoughton	5.40%
Taunton	10.30%
West Bridgewater	5.50%
Weymouth	NA
Whitman	4.40%

Data Source: American Fact Finder

Taunton has the highest percentage, and Brockton has the second highest. The language barrier can be extremely frustrating and deters people from visiting with a healthcare professional. This can lead to the individual getting sicker and developing additional medical issues.



Transportation is also a barrier to appointment arrivals. Access to public transportation may be more difficult in smaller towns rather than in a city such as Brockton, where BAT bus stops are on telephone poles almost every other block. Local rides are

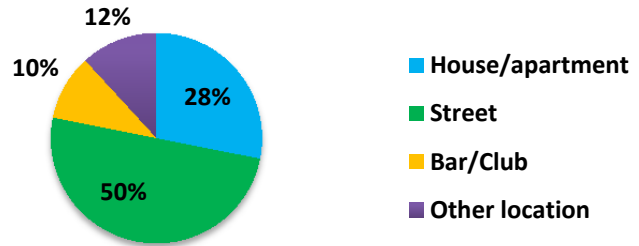
\$1.25 for adults and \$.60 for elderly or disabled and children under 12. The population with no insurance may second guess a visit to a primary care doctor for an ear ache or fever. The individual may not be able to pay the costly medical bills from the visit so most likely will not go to the doctor's office. Figure 3.2 displays the percent of the population in each town that does not have health insurance. Brockton has 6 % of the population without health insurance, almost half as much as the state percent.

Public health insurance is present in all towns, however; almost half of the Brockton population is covered by this insurance (49.5%). The city of Brockton rate is higher than the state percentage of 33.3%, and is the highest out of all towns researched.

Section 4: Safety

Overall safety is a concern for most communities. Violence in the city of Brockton is most prevalent on the streets where half of weapon related injuries occur. Figure 4.1 displays the top 4 places where weapon related violence happens in Brockton. The MA state percentage is 42.9% for street violence, similar to Brockton's numbers. Although half of the weapon related violence happens on the streets, there is also a high percentage of the violence happening in homes. According to MassCHIP, males are much more likely than females to be involved in weapon related injuries in Brockton. Males in Brockton and males in the state have the same percentage of injuries (88.1%).

Figure 4.1: Weapons-Related Injury by location, Brockton



Data Source: MA Dept. of Public Health

In addition to street violence, domestic violence is a concern that came up in a key informative interview. The 2015 Domestic Violence Count examined a 24 hour window of services in 52 programs. In Massachusetts 1,970 victims were served that day. Of that number, 742 domestic violence victims found refuge in emergency shelters or transitional housing, 372 were children and 370 were adults. 1,228 adults and children received non-residential assistance and services. These services included individual counseling, legal advocacy, and children's support groups.



According to City-data.com, Avon and Hanson are the only towns without any registered sex offenders in Massachusetts. Brockton has 74, the highest registered number, followed by Taunton with 38.

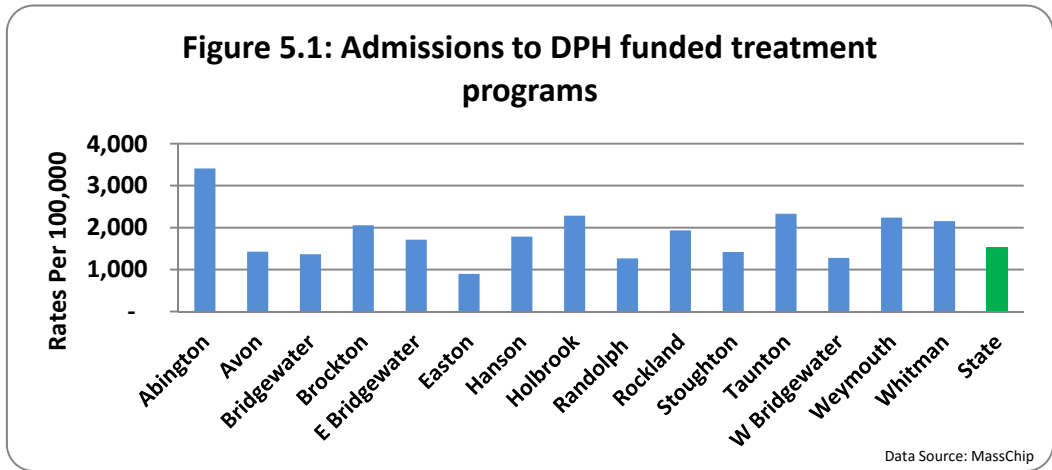
Table 4.1 displays the percent of services on the census day. Children’s support or advocacy had the highest percentage of support for programs that day. There were 322 unmet requests for services that day, 63% of these were related to housing. The main cause for unmet needs was due to 30 individual services in Massachusetts being reduced or eliminated. The largest program cut back was 23% due to government funding. The other cut backs were from private funding (21%), staffing cuts or reductions (10%), and fewer individual donors (8%).

Individual support or Advocacy	100%
Children's Support or Advocacy	74%
Emergency Shelter	54%
Bilingual Advocacy (services provided by someone who is bilingual)	52%
Support/Advocacy Related to Housing/Landlord	46%
Court of Legal Accompaniment/Advocacy	40%
Support/Advocacy Related to Public Benefits/TANF/Welfare	38%
Prevention Services and/or Educational Program	38%

Data Source: National Network to End Domestic Violence

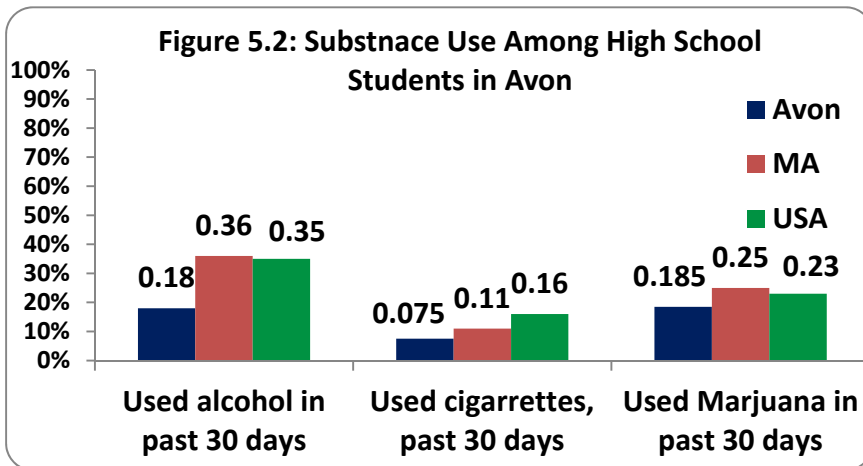
Section 5: Substance Use and Behavioral Health

Substance use is an ongoing issue in Brockton and all of its surrounding towns. Figure 5.1 compares the admissions to DPH funded treatment programs by town and to the



state rate. Admission is the highest in Abington (3,410 per 100,000) compared to the state overall (1,532 per 100,000). Easton is the only town that has a significantly lower rate than the state. However, Avon, Bridgewater, Randolph, and Stoughton all have rates lower than the state rate.

Community-level data on substance use and mental health in adolescents was limited however; Avon made their data available for the report (Figure 5.2). Substance use is a concern for adolescents at local schools surrounding Brockton. Preventative methods such as D.A.R.E. programs are in place to inform children at young ages of the dangers and risks of substance use. Avon had a lower percent for alcohol



use, cigarette use, and marijuana use in the past 30 days compared to the MA and State percent.

Stoughton High School students reported through the Youth Risk Behavior Survey that 16.6% of students had 5 or more drinks within the span of a few hours in the past 30 days. Additionally,

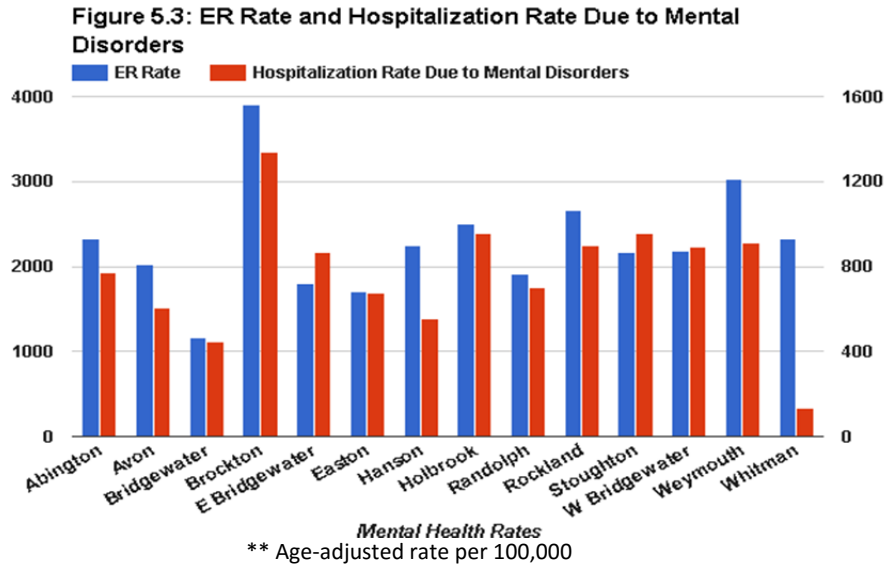
27.7% had 1 or more drinks within the past 30 days. Avon students reported that 18% of the high school students had drunk in the last 30 days.

Avon’s YRBS survey for the High School district* revealed that 7.5% of their students used nonprescription medications in their lifetime for something other than the intended purpose.

What the Community is saying...

“The Opioid epidemic is really frightening. There was always the stigma around drug addicts and now it’s everywhere, it does not matter your social or economic status it hits everybody. We need to identify those issues and needs while we have students with us to hopefully prevent things happening once they leave the district.” –Kev informant

Figure 5.3 displays the rates for all towns related to individuals brought to the emergency room or hospitalized due to a mental disorder. In the city of Brockton, emergency room visits and hospitalization were the highest all around. Whitman has the lowest rate (136.5 per 100,000) for hospitalization due to mental disorders. However, it also has the highest death rate (24.3 per 100,000) for death due to suicide.



Data Source: South Shore Health Compass

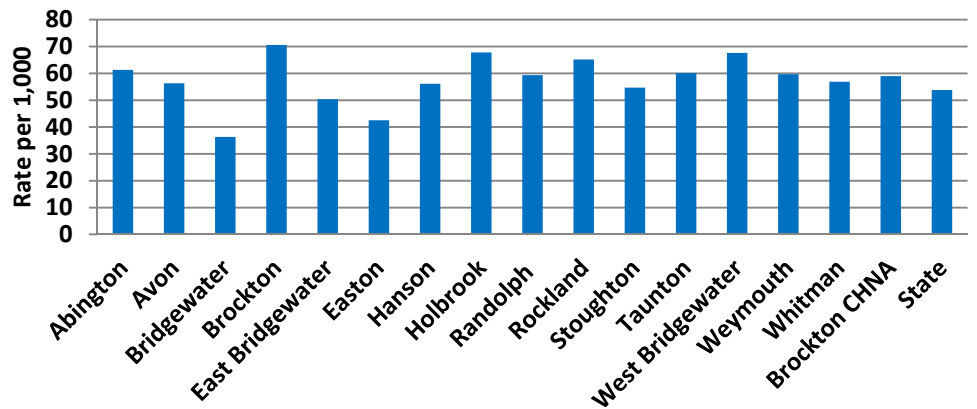
Section 6: Maternal and Child Health

The birth rate for women ages 15-44 in each town is displayed in figure 6.1. The city of Brockton has the highest rate for births followed by Holbrook.

Bridgewater, East Bridgewater, and Easton are all lower than the state rate of 53.8 per 1,000.

Bridgewater has the lowest rate for births to women between the ages of 15 and 44.

Figure 6.1: Births to Women Ages 15-44 by Town



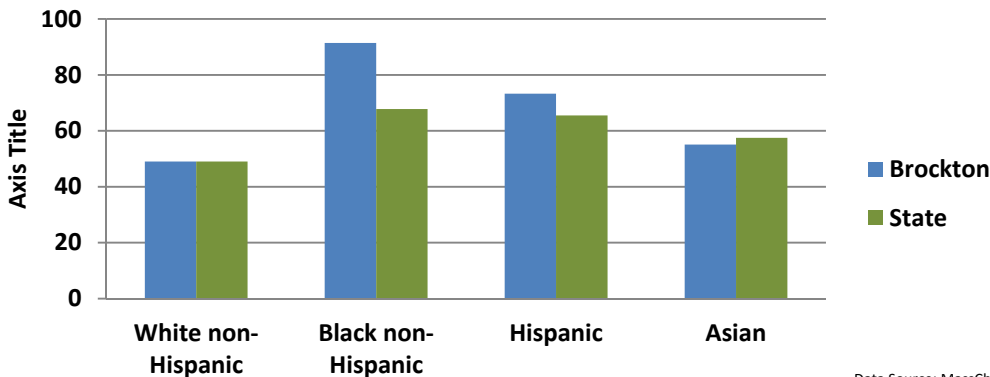
Data Source: MassChip

The city of Brockton and the state have the same rate for births by White women. The rate for African American births is 91.4, significantly higher than the state rate. The second highest birth rate regarding

race/ethnicity in Brockton is with Hispanic women.

Figure 6.2 displays the rate for White, Black, Hispanic, and Asian births.

Figure 6.2: Birth rate for women ages 15-44



Data Source: MassChip

A few other towns stood out for different race/ethnicities when compared to the

state rate. Taunton's birth rate for African American women is 109.2, much higher than the state rate of 67.8. Taunton also has a high rate for births to Asian women with 85, compared to the state rate of 57.5.

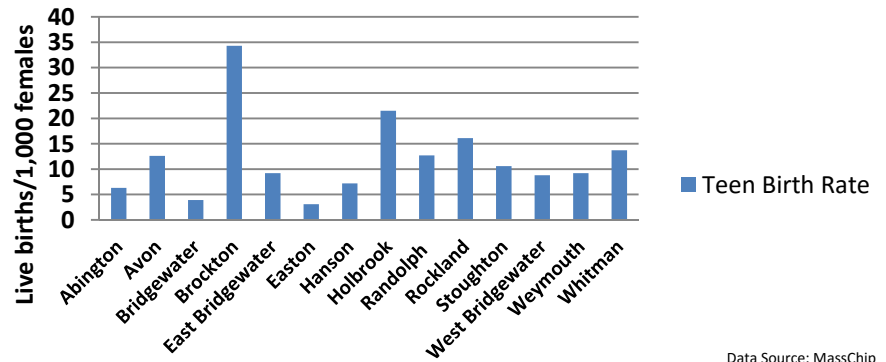
Abington has a 93.3 birth rate for women who are Hispanic, while the state rate for Hispanic births is 65.5.

The African American births for Abington were non-applicable.



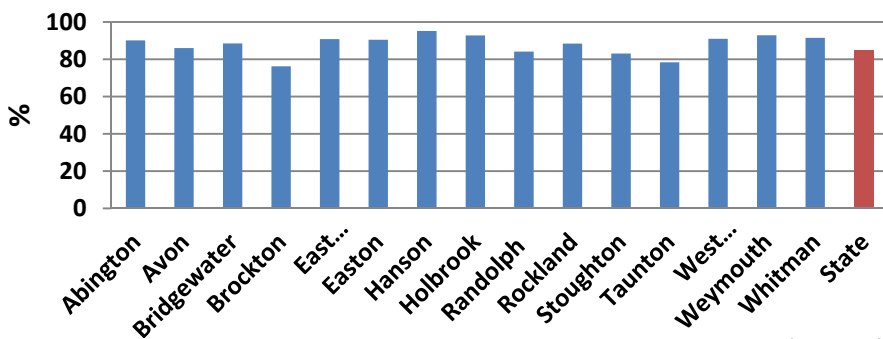
Teenage birth rates are a health concern when it comes to the health of the baby and the mother. Brockton has the highest rate (34.3 per 1,000) for adolescent births to females ages 15-19. Figure 6.3 displays the rates for the towns surrounding Brockton. The state rate for teen births in 2013 was 26.5 births per 1,000 teenagers aged 15-19. The CDC noted there was a 10% decline from 2012 teen birth rates. The majority of the teen births are to females ages 18-19, the rate for this age group was 47.1 per 1,000 females. Females ages 18-19 saw an 8% decrease from 2012 to 2013 - a low recording for the age group according to the CDC.

Figure 6.3: Live Birth Rate Females Ages 15-19



Data Source: MassChip

Figure 6.4: Mothers Receiving Adequate Prenatal Care

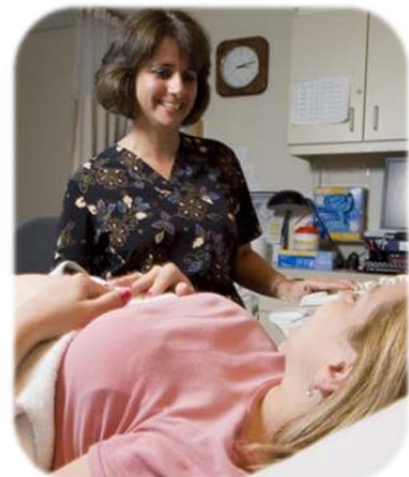


Data Source: MassChip

Receiving adequate prenatal care is important for the health of the baby. Figure 6.4 each town's percentage of mothers receiving adequate prenatal care. The city of Brockton has the lowest percent of 76.2 out of all the towns researched. The state percent is 84.9; in addition to

Brockton, Randolph, Stoughton, and Taunton all fall below the state percent for prenatal care.

Low birth weights less than 2500 grams vary in each town researched. Avon had 14% of births recorded as low followed by West Bridgewater at 12.8%. Brockton reported 8.8% or 125 infants born in 2012 with a low birth weight. The US Census Bureau states in 2012 that the percent of African American women who gave birth to a child with a low birth weight was 10.9% compared to the United States percent of 13.6%. However, Hispanics had a higher rate in MA of 8.6% compared to the US percent of 6.9% for low birth weight. Data shows that race/ethnicity are a key factor when it comes to low birth weight.

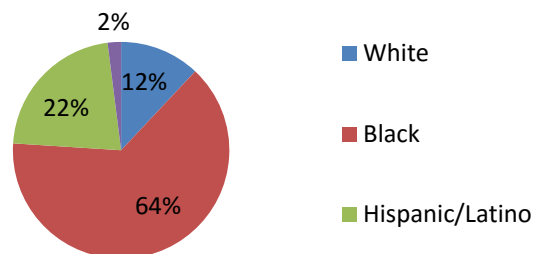


Section 7: Sexually Transmitted Infections and HIV/AIDS

From 2008-2010, Brockton was ranked as the 3rd highest city for average annual diagnosis rate of HIV in Massachusetts. The Massachusetts Department of Public Health reported Brockton had a total of 63 newly diagnosed cases in that time period.

Figure 7.1 displays the newly diagnosed cases of HIV & AIDS in Brockton from 2006-2008. The majority of the cases diagnosed are of the African American population.

Figure 7.1: Race/Ethnicity of Newly Diagnosed Cases of HIV/AIDS 2006-2008, Brockton



Data Source: MA Dept. of Public Health, HIV/AIDS Bureau

The most recent updated information on new diagnosed cases of HIV/AIDS in Brockton from 2008-2010 has limited data. The report outlines 78% of the new cases were African Americans and 16% were Hispanics.

The Massachusetts Department of Public Health provided Chlamydia rates per town. The area rate in

Abington	165.6
Avon	207.1
Bridgewater	232.8
Brockton	839.9
East Bridgewater	101.2
Easton	130.5
Hanson	131.1
Holbrook	222.9
Randolph	427
Rockland	151.3
Stoughton	220.3
Taunton	208.4
West Bridgewater	132
Weymouth	122.9
Whitman	138.7
State	322.1

Data Source: MA Dept. of Public Health

Brockton was 839.9 cases per 100,000; this rate is significantly higher compared to the state rate of 322.1 cases per 100,000 people. Table 7.1 displays all the rates for each individual town.

The incidence of gonorrhea was highest in Brockton, 172.4 cases per 100,000, which is also significantly higher than the state rate of 37.9 cases per 100,000 people.

The state crude rate for HIV/AIDS prevalence is 261 per 100,000 people, Brockton's rate is 393.6.

Among adolescents in Brockton, age 15-19, there were 2,920.2 per 100,000 people. This is more than half the state rate of 1,310.9.

Figure 7.2: Exposure Mode for Newly Diagnosed Cases of HIV/AIDS, 2006-2008, Brockton

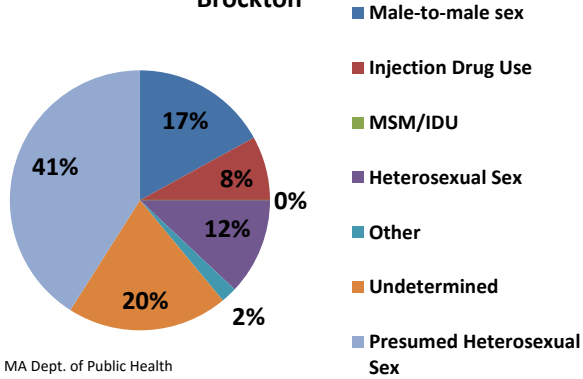


Figure 7.2 contains the exposure mode for newly diagnosed cases of HIV/AIDS in the city of Brockton

Updated data from 2008-2010 on exposure modes for HIV/AIDSs varied in terms of declining, increasing, or staying the same. Male-to-male exposure stayed the same at 17%, Heterosexual sex went up to 29% from 12%, presumed heterosexual sex went from 41% to 25% and undetermined increased from 20% to 24%.

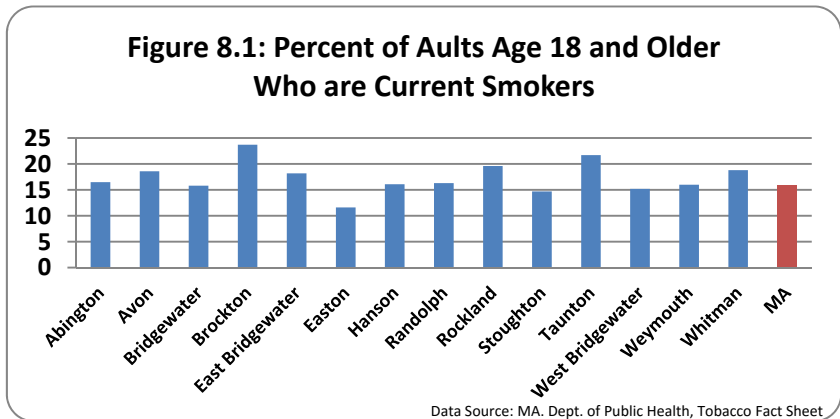
The newly diagnosed cases of people who contracted HIV/AIDS from 2008-2010 in the city of Brockton, were 62% foreign born population. The data from 2006-2008 for foreign born population who contracted HIV/AIDS was 58%.

Within data from 2008-2010 of people diagnosed with HIV infection in Brockton, 51% were men and 49% were women.



Section 8: Risk Behaviors and Health Screening

Many of the towns researched for the assessment have a rate of current smoking in adults higher than the state percent overall. Figure 8.1 contains smoking rates for each town. The city of Brockton has the highest percent of current smokers who are 18 and older. Brockton's percent is 48% higher than the state percent. Holbrook data is unavailable due to small sample size.



The state percent for women smoking during pregnancy is 6.8%, Brockton's percentage is 8.3. That is 22% higher than the state rate.

In correlation with Brockton's high rate of current smokers, lung cancer incidence is 18% higher among males compared to the state average. Lung cancer incidence in females is 16% higher compared to the state. Lung cancer mortality is 24% higher in Brockton compared to the state.

Table 8.1: Obese Children by Grades for Whitman-Hanson

	Area %	State %
1 st grade	20.3	14.3
4 th grade	20.1	17.8
7 th grade	18.6	17.8
10 th grade	17.2	15.2

For overweight and obesity in children, data was available from the Whitman-Hanson school district. Table 8.1 compares the Whitman-Hanson percentage to the state percent for grades 1st, 4th, 7th and 10th. The percentage for children of all four grades was higher than the state percentage.

the

Data Source: MassCHIP 2010 school year. Essential School Health Service

In regard to overweight children the school district compared favorably to the state percentage. First grade children had 18.1% overweight compared to the state percentage of 15.5%. However, grades 4th, 7th and 10th are all lower than the state percentage.

The Stoughton High School student body reported that 24.9% of the adolescents spend 5 or more hours of viewing time per day in front of a screen.





Only 6.1% of Stoughton High School students reported eating fruit 4 or more times per day. 31.1% of students reported eating fruit 1-3 times during the past 7 days while 9.7% reports that they did not eat any.

35.7% of high school students from Stoughton reported they drink 1-3 eight ounce glasses of water in a typical day. 18.4% reported they drink 6-8 eight ounce glasses of water during a typical day.

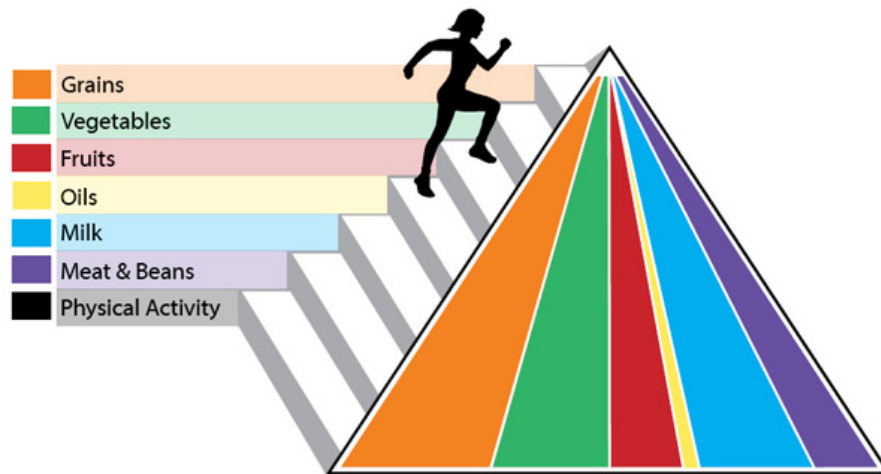
Table 8.2: Stoughton Student's Exercise Per Day

How many minutes of exercise do you get in a typical day?	High School Percent	Middle School Percent
I do not exercise in a typical day	13.8	9.6
1-10 minutes	8.7	12.1
11-20 minutes	7.4	10.9
21-30 minutes	11.9	16.6
31-45 minutes	11.1	11.1
45-60 minutes	12.5	11.7
more than 60 minutes	28.7	21.5

Data Source: Stoughton YRBS Data

The YRBS data for Stoughton High and Middle School on minutes of exercise in a typical day are displayed in table 8.2. The majority of high and middle school students exercised for more than 60 minutes.

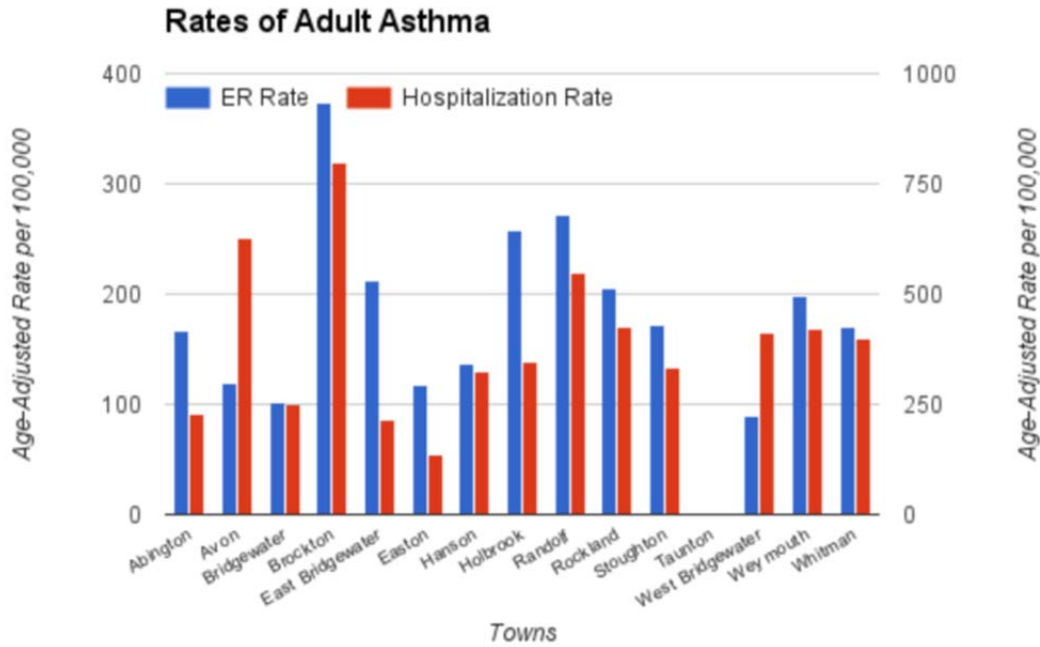
Only 9.6% of middle school students reported that they do not exercise in a typical day and 13.8% for high school students.



Section 9: Chronic Illnesses

Examining the diagnosis and management of a chronic illness reveals much about the state of health in a community. Problems with management of chronic illnesses may indicate lack of access to health care, inability to afford medications or inability to understand medical provider’s instructions for managing the illness.

When speaking with Brockton residents during neighborhood circle discussions, 12.25% of the individuals who participated stated that Asthma was a concern in their community. The numbers in the graph below show that Brockton has a higher rate of both ER visits and Hospitalizations due to Asthma than other communities in our service area.



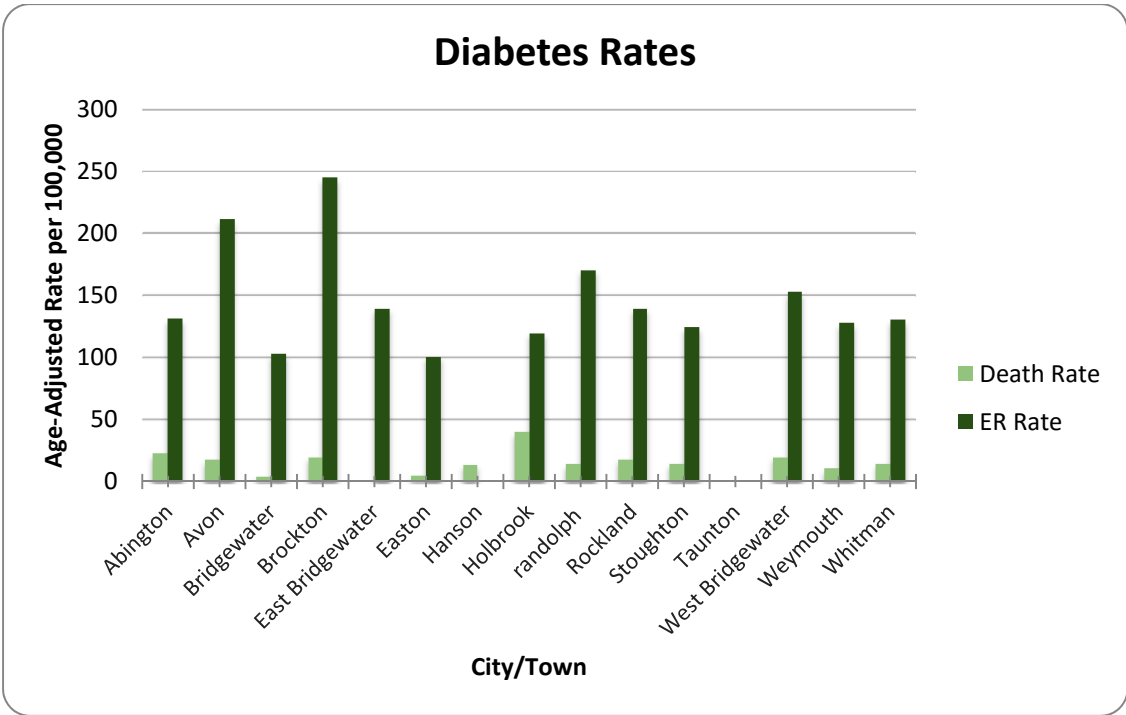
Data source: South Shore Health compass

According to the South Shore Health Compass, Brockton continues to have a high rate of Diabetes compared to other communities in our service area. An ED physician stated, “Many of our patients come into the Emergency Department for Asthma, diabetes and COPD and the majority of this is caused by un-healthy lifestyle which can also lead to other issues such as Heart and lung disease”.

SIGNATURE HEALTHCARE’S
Health & Wellness
 EXPO



Diabetes Rates



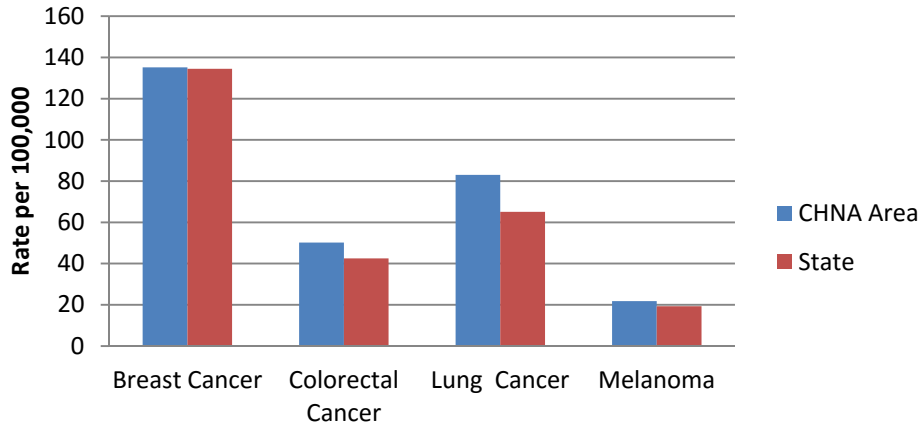
.Data Source: South Shore Health Compass

From a key informant interview with an individual from local school leadership, they were asked which health conditions are the most prevalent in their school district; their response was “As a district, peanut allergies are big; we have a completely peanut free kitchen. Diabetes and Asthma are high as well.”



Due to the high rates of diabetes in Brockton and its surrounding communities, Brockton Knocks Down Diabetes (BKDD) was formed. BKDD is a community initiative combating diabetes and has been going strong for 5 years. BKDD is a weeklong initiative to provide education and awareness around diabetes. Numerous local partners participate in this event including the Old Colony YMCA, Harbor One, Brockton VNA and the American Diabetes Association. This group has worked diligently on creating programming the community will find beneficial.

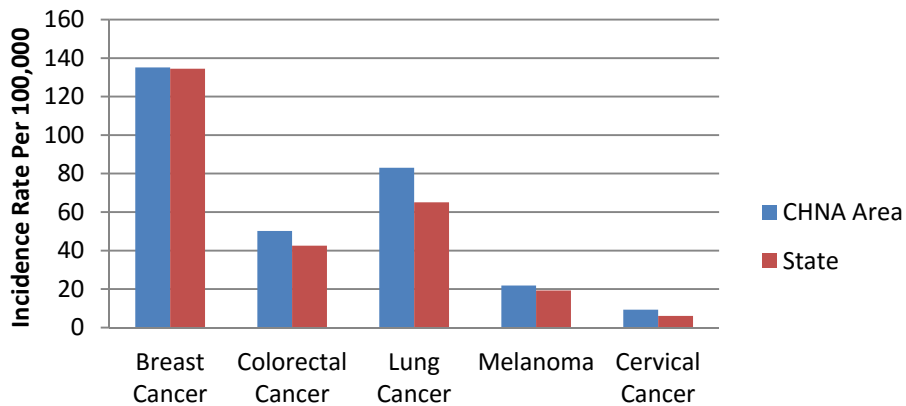
Cancer Incidence : Men



Data source: MassChip

The Figure above shows the various higher rates of cancers within our CHNA area compared to the State Average. After reviewing the data, we found that the communities of Hanson and Easton specifically had higher rates than the state average for Colorectal Cancer. Women in the Hanson community are at a rate of 51.3 per 100,000 versus the state average for women of 42.5. The Easton community was higher in Breast Cancer incidence with 181.9 per 100,000 versus the state average of 134.5.

Cancer Incidence: Women



Data Source: Mass Chip

This figure above shows that the CHNA area is actually lower or roughly the same as the state average for all cancers shown. When looking at the communities within the CHNA area though, it was noticed that the town of Hanson was significantly higher than the state average with 212.3 per 100,000 versus the state average of 163.8 per 100,000.

Community Profiles, Greater Brockton and Surrounding Communities

Race/Ethnicity	Abington	Avon	Bridgewater	Brockton	E. Bridgewater
White alone	91.10%	84%	87.20%	44.20%	94.30%
Black alone	3.10%	10%	4.60%	39.40%	1.50%
Hispanic	2.40%	2.80%	3.70%	7.80%	1.50%
Asian alone	2.10%	2.80%	1.80%	2%	0.80%
American Indian alone	0.20%	0.10%	0.20%	0.40%	0.20%
Other race alone	0.20%	1.50%	0.50%	3.20%	0.40%
Native Hawaiian	0%	0%	0%	0%	0%
Two or More Races	0.80%	1.70%	2.10%		1.30%

Household Income					
Less than \$10,000	2.80%	0.80%	2.30%	8.30%	0.80%
\$10,000 to \$14,999	3.40%	3.30%	3.40%	7.30%	3.30%
\$15,000 to \$24,999	5.60%	7.30%	5.60%	12%	5.40%
\$25,000 to \$34,999	6.10%	4.30%	8.80%	10.40%	5.80%
\$35,000 to \$49,999	8.80%	12.50%	8.10%	13.20%	10.90%
\$50,000 to \$74,999	18.80%	19.50%	14.30%	17.50%	16.10%
\$75,000 to \$99,999	18.60%	14.90%	15.20%	14.10%	14.50%
\$100,000 to \$149,999	21.30%	20.40%	24.10%	11.80%	25.10%
\$150,000 to \$199,999	8.60%	11.20%	9.60%	3.40%	12.10%
\$200,000 or more	6%	5.60%	8.30%	2%	6.10%
Median household income (dollars)	81,500	78,750	88,481	48,569	88,534
Mean household income (dollars)	94,612	92,056	109,880	61,096	101,144

Percent with Public Assistance					
With cash public assistance income	0.8	0.6	1.6	7.3	3.5
With Food Stamp/SNAP benefits in the past 12 months	5.8	6.7	7.5	26.1	5

Health Insurance Coverage					
With health insurance coverage	97.4	95.5	95.6	94	96.5
With private health insurance	82.3	78.3	84.9	54.4	83.8
With public coverage	28.4	10.9	22.3	49.5	28.8
No health insurance coverage	2.6	4.5	4.4	6	3.5

Estimates from American Fact Finder

Race/Ethnicity	Easton	Hanson	Holbrook	Randolph	Rockland	Stoughton	Taunton
White alone	89.90%	94.60%	80.80%	34.90%	90.80%	78.40%	84.50%
Black alone	3.10%	0.30%	8.50%	44.20%	2.50%	10.70%	4.50%
Hispanic	2.50%	1.20%	4.40%	5.30%	2%	3.20%	5.50%
Asian alone	2.40%	0.70%	2.90%	15%	1.10%	3.60%	1%
American Indian alone	0.07%	0.05%	0.20%	0.03%	0.10%	0.10%	0.20%
Other race alone	0.50%	0.40%	1%	0.50%	1.80%	1.70%	1.30%
Native Hawaiian	0.02%	0%	0.20%	0%	0.03%	0.01%	0.03%
Two or More Races	1.40%	0.90%	2.20%	1.40%	1.70%	2.30%	2.70%

Household Income	Easton	Hanson	Holbrook	Randolph	Rockland	Stoughton	Taunton
Less than \$10,000	2.10%	2.60%	4.30%	6.20%	2.20%	4.60%	6.80%
\$10,000 to \$14,999	2.20%	1.50%	2.90%	5.40%	2.50%	4.60%	8.30%
\$15,000 to \$24,999	4.60%	6.10%	6.50%	9.70%	7.80%	8.60%	10.50%
\$25,000 to \$34,999	5.80%	3.20%	8.80%	6.60%	12.90%	7.10%	8.80%
\$35,000 to \$49,999	8.50%	5.90%	11.50%	11.70%	13%	9.90%	15.20%
\$50,000 to \$74,999	14.40%	14.30%	25.90%	19.70%	16.90%	15.30%	18.80%
\$75,000 to \$99,999	13.70%	20.40%	11.30%	13.30%	15.60%	13.60%	11.70%
\$100,000 to \$149,999	20.80%	27.30%	14.30%	17.10%	16.40%	21.30%	13.50%
\$150,000 to \$199,999	15%	14.10%	6.50%	5.60%	8.50%	8.10%	4.30%
\$200,000 or more	13%	4.60%	7.40%	4.80%	4.10%	6.80%	2.10%
Median household income (dollars)	95,372	93,771	62,909	63,325	66,860	74,688	50,307
Mean household income (dollars)	119,254	100,254	84,024	76,187	79,837	87,767	63,201

Percent with Public Assistance	Easton	Hanson	Holbrook	Randolph	Rockland	Stoughton	Taunton
With cash public assistance income	2.2	1.9	1.4	4.6	3.1	2	5.4
With Food Stamp/SNAP benefits in the past 12 months	3.5	5.5	8.7	15.7	10.7	8	19.9

Estimates from American Fact Finder

Race/Ethnicity	W.		
	Bridgewater	Weymouth	Whitman
White alone	93.60%	94%	93.90%
Black alone	1.50%	1.40%	1.20%
Hispanic	1.70%	1.30%	1.80%
Asian alone	1.10%	1.60%	0.70%
American Indian alone	0.10%	0.20%	0.20%
Other race alone	0.60%	0.40%	0.60%
Native Hawaiian	0%	0.04%	0.03%
Two or More Races	1.30%	1.10%	1.40%

Household Income	W.	Weymouth	Whitman
Less than \$10,000	2.30%	4.20%	4.10%
\$10,000 to \$14,999	2.10%	4.40%	3.60%
\$15,000 to \$24,999	5.60%	8.30%	5.80%
\$25,000 to \$34,999	7.30%	10.60%	6.60%
\$35,000 to \$49,999	9.30%	8.90%	7.60%
\$50,000 to \$74,999	15.60%	17%	18.60%
\$75,000 to \$99,999	14.40%	16.30%	20%
\$100,000 to \$149,999	21.60%	16.60%	29.10%
\$150,000 to \$199,999	11.40%	9.70%	12.30%
\$200,000 or more	10.40%	4%	3.40%
Median household income (dollars)	86,695	70,414	76,494
Mean household income (dollars)	109,290	84,301	86,567

Percent with Public Assistance	W.	Weymouth	Whitman
With cash public assistance income	1.2	2.8	2.5
With Food Stamp/SNAP benefits in the past 12 months	3.5	11.2	8.1

Estimates from American Fact Finder

Health Insurance Coverage	Abington	Avon	Bridgewater	Brockton	E. Bridgewater
With health insurance coverage	97.4	95.5	95.6	94	96.5
With private health insurance	82.3	78.3	84.9	54.4	83.8
With public coverage	28.4	10.9	22.3	49.5	28.8
No health insurance coverage	2.6	4.5	4.4	6	3.5

Families Living Below Poverty Level	Abington	Avon	Bridgewater	Brockton	E. Bridgewater
All families	1.5	0	3.6	15.1	2.2
With related children under 18 years	1.8	0	5.9	22.5	2.2
With related children under 5 years only	0	0	12.7	19.4	7.9
Married couple families	0.5	0	1	5.4	1.1
With related children under 18 years	1.2	0	1.2	7.5	1.5
With related children under 5 years only	0	0	0	8.3	0
Families with female householder, no husband present	4.5	0	14.5	28.8	7.4
With related children under 18 years	3	0	20.2	37.4	5.5
With related children under 5 years only	0	0	18.1	39.1	33.3

Estimates from American Fact Finder

	Easton	Hanson	Holbrook	Randolph	Rockland	Stoughton	Taunton
Health Insurance Coverage							
With health insurance coverage	97.1	96.6	97.7	96.5	97.8	97.7	95.7
With private health insurance	92.6	86.9	77.7	68	78.9	79.8	66.5
With public coverage	6.3	23.9	33.6	39.5	32.2	31.6	41.5
No health insurance coverage	2.9	3.4	2.3	3.5	2.8	2.3	4.2

	Easton	Hanson	Holbrook	Randolph	Rockland	Stoughton	Taunton
Families Living Below Poverty Level							
All families	2.7	1.3	5.5	10.4	2.2	5.7	10.4
With related children under 18 years	3.4	2	9.2	17.9	4.6	9.9	15.8
With related children under 5 years only	1.6	0	0	21.9	5.3	7.6	18.4
Married couple families	1.5	0.4	3.9	4.7	1.4	1.3	2.8
With related children under 18 years	1.3	0.7	5.3	5.2	3.2	2.4	1.5
With related children under 5 years only	0	0	0	10.8	0	0	0
Families with female householder, no husband present	11.2	5.1	18.8	25.1	6.6	18	29.6
With related children under 18 years	16.7	4.9	32.4	43.4	11.9	28.5	39.9
With related children under 5 years only	14.3	0	NA	34.4	33.8	19	39.2

Estimates from American Fact Finder

Health Insurance Coverage	W.	Bridgewater	Weymouth	Whitman
With health insurance coverage		96.5	96.9	95.6
With private health insurance		86.7	77.9	79.7
With public coverage		21.9	36.7	26.9
No health insurance coverage		3.5	3.1	4.4

Families Living Below Poverty Level				
All families		3.2	5.8	3.8
With related children under 18 years		3.8	8.3	6.8
With related children under 5 years only		3.2	1.7	5.7
Married couple families		2.1	2.7	1.9
With related children under 18 years		2.6	0.4	3.5
With related children under 5 years only		0	0	6.5
Families with female householder, no husband present		9.9	15.7	14.6
With related children under 18 years		8.8	31.2	25.7
With related children under 5 years only		56.3	17.9	-

Estimates from American Fact Finder

Programs and Services Available in the CHNA Catchment Area

The following is a list of area health programming, grouped by broad health topics that are offered by area agencies in our catchment area. This list was compiled by using the Brockton Church and Ministry Directory, Brockton Community Resource Guide, Signature Healthcare Community Benefit Report as well as resources identified through key informant interviews and focus groups.

General Health Services and Health Screening:

Brockton Neighborhood Health Center
Signature Healthcare Brockton Hospital
Good Samaritan Medical Center
Brockton Family Planning
VA Medical Center

Insurance Services:

MassHealth
MassHealth Family Assistance
BMC Health Net Plan
Network Health
Neighborhood Health Plan

Elder Services:

24 hour Elder Abuse Hotline
Brockton Visiting Nurse Association
Councils on Aging in each town
Dorn Davies Senior Center – a program of BAMSI
Emmanuel House Residence
L.I.F.E. Center
Old Colony Elder Services

Housing and Homelessness Services:

Father Bills & Mainspring
Housing Authorities in Each town
Self-Help, Inc.
The Ruth House Teen Living
BAMSI Housing Assistance Program

HIV/AIDS Services:

Brockton Area Multi-Services, Inc. (BAMSI)
Brockton Family Planning
Brockton Neighborhood Health Center
Catholic Charities
Latin American Health Institute
Health Imperatives HIV Integration Services

Mental Health Services:

Department of Mental Health
South Bay Mental Health
High Point Treatment Center

Disability Services:

Disabled Persons Protection Commission
Massachusetts Rehabilitation Commission
Department of Developmental Services
L.I.F.E. Center
BAMSI's Developmental Disabilities Services
Dial-a-bat
South Bay Mental Health – Early Intervention Program
Brockton Area ARC

Substance Abuse Services:

Alcoholics Anonymous
Alanon Family Groups of Massachusetts
Brockton Addiction Treatment Center – a program of High Point
Communities Mobilizing for Change on Alcohol in Brockton
Highpoint Methadone Treatment Center
Habit OPCO
Narcotics Anonymous
South Bay Mental Health
Stairway to Recovery
Teen Challenge
The Salvation Army

Emergency Services:

American Red Cross

Domestic Violence/Sexual Assault Crisis Services:

A New Day

Brockton Family and Community Resources

David Jon Louison Family Shelter

Safelink

South Bay Mental Health Trauma Program

Maternal and Child Services:

Boys & Girls Club of Brockton

Center for Healthy Beginnings at Signature Healthcare

Department of Children and Families

Healthy Start

Self Help

My Turn, Inc.

Old Colony YMCA

Brockton Family and Community Resources

School on Wheels

Nutrition Resources:

Department of Transitional Assistance – SNAP program

Project Bread

Meals on Wheels

WIC

Food Pantries:

Bridgewater Town Food Pantry

Brockton Family and Community Resources

Brockton Seventh Day Adventist Church

Catholic Charities

Charity Guild

Coyle & Cassidy High School Food Pantry Taunton

East Bridgewater Town Food Pantries

Four Square Gospel Church

Full Gospel Tabernacle

Main Spring

Mt. Moriah Baptist Church

My Brothers Keeper
Salvation Army
Trinity Baptist Church
West Bridgewater Food Pantry

Multi-Service Agencies:

Cape Verdean Association
Community Connections of Brockton
Latin American Health Institute
Department of Transitional Assistance
BAMSI
Brockton Family and Community Resources
Catholic Charities
Haitian Community Partners
Self-Help Inc.
United Way

Employment:

Careerworks
My Turn Inc.
YouthBuild Coalition of Massachusetts
Catholic Charities Certified Nursing Assistance and Home Health Aide Training Program
Lincoln Technical Institute
Self Help Inc.

Financial Assistance:

Bay State Gas, Southeastern Massachusetts
Brockton DTA Office
Citizens Energy Oil Heat Program
Massachusetts Electric/National Grid
Self-Help, Inc.

Signature Healthcare's process used in determining which health needs are significant and are a priority are:

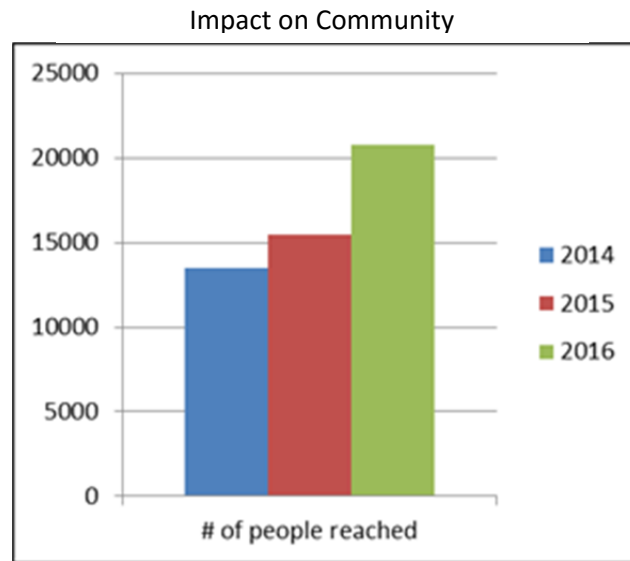
- Review of Compiled data
- Key informant interviews
- Established focus groups to examine perceptions regarding priority areas and their impact in the service area.
- Aggregated data and findings
- Developed strategy recommendation
- Signature Healthcare Board of Trustees reviews and approves report
 - Approval of Governing Body- Signature Healthcare Brockton Hospital benefits from the talents and foresight of countless individuals – staff and volunteers – who are committed to our mission of compassionate care and community service. The Board of Trustees sets and approves the overall strategic direction and goals of the Hospital, meeting monthly to review plans and progress on all projects to further the Hospital's mission of service and care.
 - Management Structure- Each year the Signature Healthcare Brockton Hospital Board of Trustees reviews and considers the health needs of the community and goals are set to impact community health. Progress is monitored throughout the year and a formal presentation of progress is offered to the Board of Trustees annually.

Developing our annual Community Benefits plan is a process based on analysis of the many health care needs facing those who live in southeastern Massachusetts. Input is gathered from diverse sources including but not limited to, the Massachusetts Department of Public Health, Public Schools, Church Groups and the Community Health Network Area (CHNA).

From this work comes a plan with a comprehensive picture of service and needs in the Brockton area. This data and feedback were collected by various organizations within Signature Healthcare's service area.

Impact

The impact of Signature Healthcare's actions taken since the 2013 CHNA report is as follows:



By providing a variety of educational presentations, screenings and tools to the underserved population in our service area, we have been able to reach thousands of individuals to assist them with their healthcare needs and educate them on the best path to personal wellness.

Signature Healthcare has contributed to the health needs of the community by providing:

- Free Screenings – 1200
- Free Medical Educational and Awareness Events – 100

The initiatives taken to address the needs identified based on the 2013 CHNA are:

FY14 Initiatives

- Wellness Wednesday – Free Zumba classes are offered each Wednesday evening from 5-6pm at Massasoit Community College, a community partner. These classes are attended by 10-30 people each week and are extremely well received by the community.
- Diabetes Day – A Health expo offered at no cost to the community with many components including:
 - Free Screenings (Vascular, Glucose, Cholesterol, A1C, Blood Pressure, Dental Screenings)
 - Healthy Cooking Demonstration
 - Exercise Demonstrations
 - Children's Activities (obstacle course, craft area)
 - "Ask the Expert" stations staffed by Signature Healthcare clinicians

More than 250 community members attended with more than 100 of those screened. If any screening values were considered high, education was provided and they were immediately linked up with a provider to assist them with their health. The Vascular Screening results were given to the individual being screened and a copy of those results were also sent to their Primary Care Physician.

- Brockton Knocks Down Diabetes – A community-wide initiative aimed at providing education and awareness around Diabetes and pre-Diabetes. Signature Healthcare is a partner by

providing clinicians where needed, assisting with coordination and staffing for various events and offering health education classes throughout the initiative.

- During FY 14 Signature Healthcare staff participated in more than twenty-five community events to promote the topics of Diabetes, Nutrition and Obesity.
- Signature Healthcare began providing education to a local employer, GE Oil and Electric. There were two sessions provided including free cholesterol and glucose screenings as part of a “Know your numbers” program. Secondly, a nurse went out to discuss the results from those screenings and provided wellness information on how to stay heart healthy and keep sugar levels under control.
- Kids Road Races – Signature Healthcare supports this local grassroots initiative that holds two 8 week sessions, one in the fall and one in the spring. Children come each week to run a 2 mile road race at DW Field Park. By Signature Healthcare providing funding, the program coordinator is able to keep the costs minimal for all participants. Additionally, Signature Healthcare provides education and healthy snacks at each race.

FY15 Initiatives

- Wellness Wednesday – Free Zumba classes are offered each Wednesday evening from 5-6pm at Massasoit Community College, a community partner. These classes are attended by 10-30 people each week and are extremely well received by the community.
- Diabetes Day – A Health expo offered at no cost to the community with many components including:
 - Free Screenings (Vascular, Glucose, Cholesterol, A1C, Blood Pressure, Dental Screenings)
 - Healthy Cooking Demonstration
 - Exercise Demonstrations
 - Children’s Activities (obstacle course, craft area)
 - “Ask the Expert” stations staffed by Signature Healthcare clinicians

More than 250 community members attended with more than 100 of those screened. If any of the screening values were considered high, education was provided and they were immediately linked up with a provider to assist them with their health. The Vascular screening results were given to the individual being screened and a copy of those results was also provided to their Primary Care Physician.

- Brockton Knocks Down Diabetes – A community-wide initiative aimed at providing education and awareness around Diabetes. Signature Healthcare is a partner by providing clinicians where needed, assisting with coordination and staffing for various events and offering health education classes throughout the initiative.
- In FY 15, Signature Healthcare began working with the local “Blessings in a Backpack” program after meeting with School committee members and staff of the Kennedy School. There are many students who are on the free and reduced breakfast and lunch program. Blessings ensures these same students have healthy food for the weekends. Signature Healthcare provided healthy meals for over 50 students at the Kennedy School. Each weekend these children are provided nutritious food to take home such as soups, fresh fruit and healthy grains.
- During FY 15, Signature Healthcare employees participated in more than twenty-five community events to promote education on the topic of Diabetes, Nutrition and Obesity.
- Kids Road Races - Signature Healthcare supports this local grassroots initiative that holds two 8 week sessions, one in the fall and one in the spring. Children come each week to run a 2 mile road race at DW Field Park. By Signature Healthcare providing funding, the program coordinator is able to keep the costs minimal for all participants. Additionally, Signature Healthcare provides education and healthy snacks at each race.

FY 16 Initiatives

- Wellness Wednesday – Free Zumba classes are offered each Wednesday evening from 5-6pm at Massasoit Community College, a wonderful community partner. These classes are attended by 10-30 people each week and are extremely well received by the community.
- Health & Wellness Expo (Previously known as Diabetes Day) – A Health expo offered at no cost to the community that has many components including:
 - Free Screenings (Vascular, Glucose, Cholesterol, A1C, Blood Pressure, Dental Screenings)
 - Healthy Cooking Demonstration
 - Exercise Demonstrations
 - Children’s Activities (obstacle course, craft area)
 - “Ask the Expert” stations staffed by Signature healthcare clinicians

More than 250 community members attended with more than 100 of those screened. If any screening values were considered high, education was provided and they were immediately linked up with a provider to assist them with their health. The Vascular Screening results were given to the individual being screened and a copy of those results were also sent to their Primary Care Physician

- Brockton Knocks Down Diabetes – A community-wide initiative aimed at providing education and awareness around Diabetes and pre-Diabetes. Signature Healthcare is a partner by providing clinicians where needed, assisting with coordination and staffing for various events and offering health education classes throughout the initiative.
- In FY 16, Signature Healthcare continued working with the local “Blessings in a Backpack” program after meeting with School committee members and staff of the Kennedy School. There are many students who are on the free and reduced breakfast and lunch program. Blessings ensures these same students have healthy food for the weekends. Signature Healthcare provided healthy meals for over 50 students at the Kennedy School. Each weekend these children are provided nutritious food to take home such as soups, fresh fruit and healthy grains.
- During FY 16, Signature Healthcare employees participated in more than twenty-five community events to promote education on the topic of Diabetes, Nutrition and Obesity.
- Kids Road Races - Signature Healthcare supports this local grassroots initiative that holds two 8 week sessions, one in the fall and one in the spring. Children come each week to run a 2 mile road race at DW Field Park. By Signature Healthcare providing funding, the program coordinator is able to keep the costs minimal for all participants. Additionally, Signature Healthcare provides education and healthy snacks at each race.
- In the summer of 2016, Signature Healthcare began working with the Summer Meals Program, specifically Hillside Village, a low income family housing residence in Brockton. The Summer Meals program provides lunches Monday through Friday at various locations throughout the city including low income housing facilities, parks and churches. In addition to the meals supplied, Signature Healthcare’s food services staff began holding workshops to educate the children on proper nutrition. The staff developed an engaging curriculum for the children where they learned things such as Proper Hydration and the Importance of Choosing Healthy Foods. This is now a yearlong initiative where our Nutrition staff visit the children monthly.

The following input was provided by the Massachusetts Department of Public Health:

Massachusetts Department of Public Health (MA DPH) is currently focusing on the following Social Determinants of Health:

- Housing
- Education
- Built Environment
- Social Environment
- Violence

MA DPH is focused on getting to the root cause of the problem. They are in the process of creating and rolling out a new Population Health Information tool which is a modern version of MassChip. This tool is aimed at assisting organizations such as Signature Healthcare as they work toward future Community Health Needs Assessments to identify the significant community needs.

MA DPH suggested we review their 2017 MA State Health Needs Assessment as it mentions areas of Signature Healthcare’s focus over the past few years including Diabetes and Substance Use Disorder. <https://www.mass.gov/service-details/2017-state-health-assessment>

Populations our Partner’s serve

The nature and extent of input provided by organizations representing the interests of the medically underserved, low-income and minority populations in the community that are served by Signature Healthcare are as follows:

- Bridgewater State University – Center for Urban Poverty provided Point in Time count information for the South Shore Network and 2014 Vulnerability Index. The homeless population surveyed includes families, young adults and veterans.
- *Community Connections of Brockton In Partnership with Stonehill College Center for Community Based Learning Community Organizing Class: Micro to Macro* Lee G. Farrow, Adjunct Professor with support from John Figueiredo & Sarah Gleason, Stonehill College students - Developed a conversation / survey instrument to conduct community “quality and knowledge” one-on-ones and neighborhood circle discussions / campaigns that informed, unpacked and discussed the strategic health priorities of the Community Health Assessment. Conversations were with members from a variety of income levels and cultures throughout the city.
- Stoughton Youth Commission – YRBS (Youth Risky Behavior Survey) information was shared to highlight the youth perspective on risky behaviors in a community we serve. This data showed information on alcohol consumption, tobacco use, physical activity and eating healthy fruits and vegetables.

Community written comments were not solicited for the 2013 CHNA report.

Signature Healthcare commits to following all IRS guidelines when conducting the 2019 Community Health Needs Assessment that will be completed by September 30, 2019.

Community Benefits Plan *Implementation Strategy* FY 2017



SIGNATURE HEALTHCARE

www.MySignatureCare.org

- The Attorney General’s Community Benefits Guidelines call upon hospitals to identify and respond to unmet community health needs. By formalizing their approach to community benefits planning and collaborating with community representatives they identify and create programs that address those needs, and issue annual reports on their efforts/findings.
- Efforts are expected to be measurable and fall within at least one of the statewide priorities:
 - Supporting health care reform
 - Chronic disease management in disadvantaged populations
 - Reducing health disparities
 - Promoting wellness of vulnerable populations

Oversight & Management

- Signature Healthcare’s governing body, the Board of Trustees, shall engage in the development, review and approval of:
 - CHNA (Community Health Needs Assessment) every three years
 - Implementation Strategy Annually
- Signature Healthcare shall solicit input from the Board of Trustees, Massachusetts Department of Public Health and other agencies with whom we collaborate.
- Signature Healthcare shall solicit written comments on the impact of actions taken pursuant to the prior CHNA and include the evaluation of that input in the development of the subsequent CHNA.

Community Health Needs Assessment

- The Community Health Needs Assessment utilized a four pronged approach to uncover the state of health in the City of Brockton and the surrounding towns:
 - Key informant interviews - with people who work within the CHNA 22 cities and towns - were conducted to determine the needs of the residents both inside and outside of the city. The types of key informants who participated in these discussions were police officers, educators, administrators and physicians.
 - Existing programs, strategies and services in the area were reviewed to uncover gaps;
 - Data was analyzed to determine how health outcomes in the City of Brockton and surrounding towns differ from each other and the State of Massachusetts overall;
 - Focus groups were conducted to examine perceptions regarding the priority areas and their impact in the service area. These focus groups were held at Massasoit Community College, Stonehill College and the South Shore Leadership Conference. There were 171 conversations that lasted about 20 minutes each and all perceptions of various health conditions were captured.
- A Community Health Needs Assessment (CHNA) is required to be conducted every three years thus, in December 2016, a new assessment was completed.
- Signature Healthcare’s assessment was compiled with assistance from various community partners that include representation of medically underserved, low-income and minority populations including:
 - Brockton Neighborhood Health Center

- Community Connections
- Stonehill College
- Greater Brockton Health Alliance
- Review of existing programs

Priority Health Concerns for 2017

- **Substance Abuse**

- Substance use is an ongoing issue in Brockton and all of its surrounding towns. Admission to a DPH funded treatment program is higher than the state average in several towns within our service area including Abington, Whitman, Weymouth, Brockton, Holbrook and Taunton.
- Looking at YRBS (Youth Risk Behavior Survey) data from Stoughton High School showed that 16.6% of the students had 5 or more drinks within a span of a few hours in the past 30 days. Avon High School's survey revealed that 7.5% of their students used non-prescription medications for something other than its intended purpose.

- **Nutrition, Fitness and Diabetes**

- 18.1% of First graders from the Whitman Hanson School District were considered overweight compared to the state average of 15.5%.
- Stoughton High School student body reported that 24.9% of the adolescents spend 5 or more hours in front of a screen per day.
- Only 6.1% of Stoughton High School students reported eating fruit 4 or more times per day. 31.1% of the students reported eating fruit 1-3 times during the past 7 days and 9.7% stated they did not eat any fruit.
- According to the South Shore Health Compass, Brockton, West Bridgewater, Randolph, East Bridgewater and Avon have higher rates of diabetes than the state average.

Interventions

- **Wellness Programs**

- In response to a variety of findings in the past few CHNA's that highlighted the lack of physical activity for adults and children, Signature Healthcare implemented a free Zumba program. This program has been in place since 2011. The classes are held at Massasoit Community College and attract 20-30 attendees each week. These classes, offered in a safe environment, provide community members with an opportunity to begin their fitness journey. In 2016, Yoga was added to our offerings to the community. Signature aims to continue offering both Zumba and Yoga yearly.



- **Blessings in a Backpack**

- To address the need for enhanced nutritional services, Signature Healthcare will continue to work with “Blessings in a Backpack”; a program that supports children who are on the free and reduced breakfast and lunch program. Signature will provide the 50 children, identified from the Kennedy School, nutritious food to take home for the weekend.



- **Brockton Knocks Down Diabetes**

- Signature Healthcare will continue to be part of the larger community wide “Brockton Knocks Down Diabetes” (BKDD) initiative and will kick it off with a Health & Wellness Expo. Signature

- Will provide clinicians when needed
- Assist with coordination and staffing for various events
- Offer healthcare education classes throughout the initiative
- Work with various community partners including:
 - Brockton VNA
 - Old Colony YMCA
 - American Diabetes Association
 - Harbor One

- **Health & Wellness Expo**

- Signature Healthcare’s annual FREE Health & Wellness Expo will be offered in June and will include:

- Screenings
- Education
- Healthy Cooking Demonstrations
- Kids’ Activities
- Walk with the Doc
- Fitness Demonstrations
- Ask the Clinician stations



- **Kids Road Races**

- Signature Healthcare will, in an effort to address the community’s nutrition and fitness needs, continue to support “Kids Road Races,” a grassroots program led by a community resident for more than 30 years
- Signature Healthcare will provide funding for the insurance coverage for the event and healthy food options at the end of each race.



- **Substance Abuse & Opioid Crisis Management Programs**

- Signature Healthcare Emergency Department Physicians will continue to work with local police and fire departments – providing training and medical guidance.
- Staff will continue to be part of the Brockton Mayor’s Opioid Coalition, Independence Academy and the Plymouth County’s Substance Abuse Coalition.
- Within the Signature Healthcare Emergency Department, overdose patients will receive nasal narcan, a list of detox facilities and counseling. The Emergency Department physicians are also limiting the number of narcotics prescribed to patients. They will not fill lost prescriptions and they are advancing use of the State’s “Prescription Monitoring Program”.
- Signature Healthcare Pediatrics offices will provide education to parents and children over age 11. Materials are provided by the Brockton Area Opioid Abuse Prevention Collaborative to assist in educating children at a younger age.
- Power to the Parent’s Hidden in Plain Sight room provides parents with clues from a teen’s bedroom to help them determine whether their child might be experimenting with or using drugs or alcohol. This presentation will be brought into Signature Healthcare to provide education to our employees and the community.