West Suburban
Community Health Network Area
(CHNA 18)

Serving the towns of Brookline, Dedham, Dover, Needham, Newton, Waltham, Wellesley, Weston, Westwood

Community Health Assessment
Phase 1

"The community drives
the change.
That's where it all starts"

CHNA Community Member

Acknowledgements

This assessment could not have been completed without the participation of over 100 community residents, providers and town employees, whose intimate knowledge of and commitment to community health is reflected in the document that follows. We gratefully thank them for their time, and their thoughtful responses.

CHNA 18 also acknowledges the enormous contribution of the Needs Assessment Subcommittee (NAS) members, who provided their time and effort to produce this document, and will continue to offer their expertise for Phase II of the Needs Assessment Project.

Members include:

Janice Berns-Resident, Needham Health Department, CHNA Treasurer

Emily Carroll-Needham Health Department

Bruce Cohen-Resident, Massachusetts Department of Public Health, CHNA 18 Co-Chair

Bryan Eustis- Needham Health Department

Judy Fallows-Healthy Waltham and CHNA 18 Co-Chair

Lloyd Gellineau-Resident, Brookline Health Department, CHNA 18 Steering Committee member

Kim Hinden-Beth-Israel Deaconess Hospital Needham

Sheila O'Connell-St. Elizabeth's Medical Center

Joanne Patterson-REACH Beyond Domestic Violence

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Beth Rogan- Resident, Freedman Center at the Massachusetts School of Professional Psychology and CHNA 18 Steering Committee member

Laura Streichert-Resident, International Society for Disease Surveillance

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Staff: Emily Bhargava, Elana Brochin, Adam Chu, Marsha Lazar, Andrew Petrone, Elizabeth Theriault, Jhana Wallace

Finally, we thank the CHNA 18 Steering Committee, whose leadership will ensure that the data presented will guide the CHNA in its future programmatic and funding initiatives.

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CHAPTER 1: EXECUTIVE SUMMARY

What is a CHNA, and who is CHNA 18?

The Massachusetts Department of Public Health (MDPH), in collaboration with health service providers, coalition members, and interested citizens, has designated 27 areas for community health planning. It is the Department's intention to foster in each of these areas the development of Community Health Networks – consortia of health care providers, human service agencies, schools, churches, youth, parents, elders, advocacy groups, and individual consumers -- to address the health needs of the community. The Community Health Network Areas (CHNAs) mobilize around key health issues impacting the community, promote prevention efforts, enhance access to care, provide opportunities for more collaboration among agencies, and create a client-centered, outcome-oriented health service delivery system. The geographic definitions that placed communities into CHNAs were established by MDPH in 1992 and loosely based on comprehensive health planning sub-areas developed in the 1970's.

The West Suburban Community Health Network Area (CHNA) 18 is a regional coalition of public, non-profit, and private organizations working together to build healthier communities. With a focus on developing collaborations among community groups and across communities, CHNA 18 serves as a resource for local agencies and organizations to gather information, share ideas, and network on a regular basis. CHNA 18 also offers grant opportunities and educational and training events for public health professionals. Member communities include Brookline, Dedham, Dover, Needham, Newton, Waltham, Wellesley, Weston and Westwood.

The Needs Assessment

In early 2011, the CHNA embarked on a community health assessment in order to understand community needs, identify vulnerable populations and determine gaps in service. This information will be used to focus CHNA efforts and resources, while maximizing impact on improving community health. In addition, this information will be useful to agencies and organizations for program planning, evaluation and grant writing. A data-gathering process was designed to help the CHNA better understand the health needs of the nine cities and towns in the CHNA 18 region. Additional partners in this effort included local hospitals responding to the Massachusetts Attorney General's requirements for an assessment of the health of their communities.

Good health is a result of more than genes, lifestyle choices, and access to quality, affordable health care. For this report, therefore, health is defined broadly to include the many "social determinants" of health –that is, how the social and physical environment enhance or impede community health.

A Needs Assessment Subcommittee (NAS) of CHNA members and representatives of the Steering Committee was convened to guide the assessment process, which included both qualitative (key informant interviews) and quantitative data collection. This group met regularly throughout the process, and was invaluable in brokering connections with stakeholders in each town.

This report summarizes the information collected to date, and completes Phase 1 of the CHNA's needs assessment process. It offers the CHNA and its member communities a snapshot of the health of their citizens, which can be used for local and regional planning, to support grant proposals, and to begin

community-wide discussions of critical issues. Results of the needs assessment will provide clear and transparent justification for the action plan that will guide the CHNA's activities for the next three to five years. Phase 2 may include additional data collection and/or more detailed analyses of data collected in Phase 1.

Key findings:

Socio-demographic profile of CHNA 18:

- CHNA 18 has a larger proportion of White and Asian residents, and a lower proportion of Black and Hispanic residents than Massachusetts as a whole.
- CHNA 18 has fewer residents living in poverty than does Massachusetts as a whole.
- As compared with Massachusetts, CHNA 18 is home to more elderly residents and fewer youth.

Major Health Findings:

- CHNA 18 residents fare better than Massachusetts residents overall on most health indicators.
- There is variation among cities and towns within CHNA 18 on many health indicators.
- Sources of concern were centered on: Mental health issues, transportation barriers, alcohol and substance abuse among youth, and financial security of CHNA 18 residents.

Hospital findings:

- CHNA 18 residents value collaboration with local hospitals, but overall, are not very aware of hospital services.
- CHNA 18 residents make use of many hospitals, with Beth Israel Deaconess, Beth Israel Deaconess- Needham, Brigham and Women's, St. Elizabeth's Medical Center, and Newton Wellesley Hospital serving many residents.

The process of implementing this community health assessment has mobilized CHNA 18 participants in a significant way. By engaging local stakeholders in the data-gathering process, producing a product useful to both the CHNA and individual communities, and providing information that is meaningful and useful, the Needs Assessment has energized current CHNA members and engaged new interest in regional public health planning.

The results of the assessment, and especially the identification of key health issues, provide guidelines for future CHNA 18 member and community activities, which might include:

- Encouraging cooperation among and between health and human service providers,
- Engaging in efforts to improve communication about/coordination of services,
- Exploring inter-town or regional responses to community health needs, e.g. hiring of community/regional social workers,
- Focusing effort on CHNA 18's aging population and their caregivers, especially regarding falls prevention,

- Advocating for improved transportation options,
- Implementing efforts to build social connections between people in our communities,
- Encouraging education around mental health/mental illness, including resources for treatment, and
- Encouraging education for more effective parenting.

West Suburban Community Health Network Area (CHNA) 18

CHNA 18 Steering Committee

Bruce Cohen, Co-Chair, Massachusetts Department of Public Health

Judy Fallows, Co-Chair, Healthy Waltham

Janice Berns, Treasurer, Needham Health Department

Roseane Cardoso, Women, Infants and Children (WIC)

Lloyd Gellineau, Brookline Health Department

Cheryl Lefman, Wellesley Health Department

Beth Rogan, Freedman Center at the Massachusetts School of Professional Psychology

Venice Sahely, Resident

Gail Sommer, Newton Community Service Center

Laura Van Zandt, REACH Beyond Domestic Violence

Teresa Wood Kett, Newton Health and Human Services Department

Ex-Officio Members: Jhana Wallace, Coordinator; Regional Center for Healthy Communities Representative

www.chna18.org

CHAPTER 2: METHODOLOGY

A Needs Assessment subcommittee (NAS) was identified from among the CHNA 18 membership and local community members to design and guide the assessment process. This group also included members from the CHNA 18 steering committee and staff from the Regional Center for Healthy Communities (RCHC). In addition, a consultant was hired to manage the qualitative data gathering, and interns with the Massachusetts Department of Public Health (MDPH) and the RCHC added support to the collection and analysis of both the quantitative and qualitative data. This group met regularly throughout the process, and was invaluable in making connections with stakeholders in each town as well as crafting this final report.

The key informant interview process

Through a series of structured meetings and outreach to selected stakeholders, the NAS defined three broad areas upon which to focus the qualitative data-gathering: ***mental health***, ***access to health care***, and ***the impact on health of the built and social environment***.

With these priorities in mind, a 15-question survey was designed to gather input from identified informants from the 9-town CHNA region. Questions focused on what respondents considered to be the most pressing health issues in their town, what strategies were currently in place or they would like to see to address those issues, and how local hospitals were perceived as partners in health improvement efforts. The survey was piloted and modified for length and wording. A goal was set of 10 interviews per town, with a maximum of 100 interviews for the entire CHNA.

A "town lead" was identified for each municipality, with the responsibility of identifying potential interviewers and respondents, and coordinating the local information-gathering process. This helped share the labor (each interviewer committed to doing two interviews, with the consultant and an intern sharing the rest) and capitalized on long-existing relationships in the community. In several towns it put additional pressures on already short-staffed local public health departments and therefore in several instances the intern served as the town lead.

A one-hour training in the basics of qualitative interviewing was developed and offered to the 16 volunteer interviewers identified. The training stressed the need for uniformity in the way questions were asked, and emphasized the need for confidentiality in order to maximize the interviewees' frankness.

Interviewees were selected because of their involvement in one of the three health issues defined and/or their knowledge of and involvement in local health promotion activities. Attention was paid to ensuring representatives from multiple sectors, including business, non-profit and faith-based organizations.

Ninety-six interviews were conducted over a three-month period, divided between telephone and face-to-face meetings. Most communities completed the 10 interviews suggested. The completed interviews ranged from four to twenty-two per town. Several communities have plans to continue the interview process in order to get a deeper understanding of local community health needs.

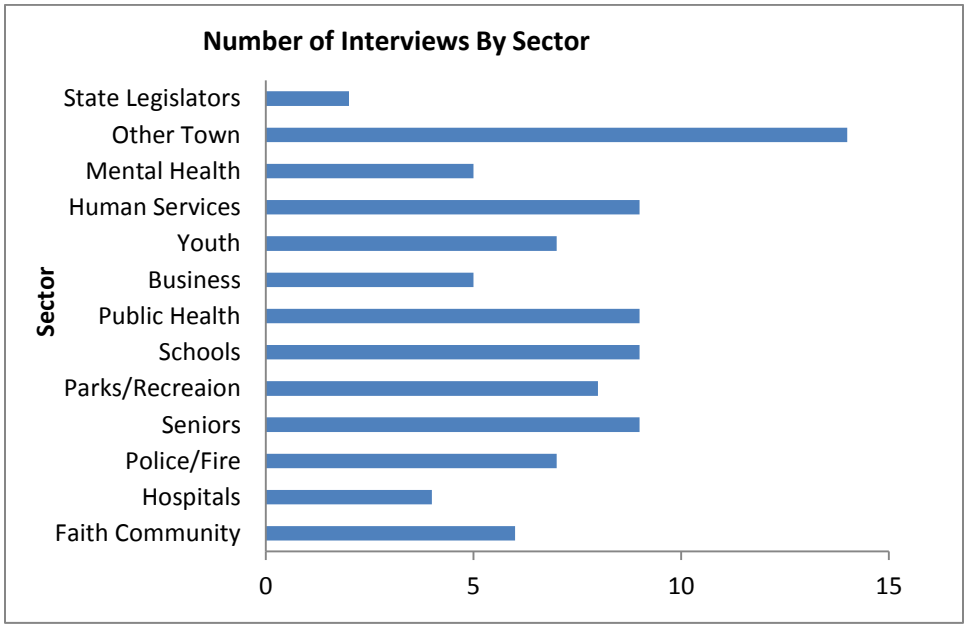
After completing each interview, interviewers filled out an interview form. The interview form was located online as a Google document and could be completed by interviewers online and uploaded easily for analysis. The NAS was concerned about ensuring confidentiality, so only two staff had access to the Google document containing the completed interviews. The interviews were entered into a database using a coding system that was developed by the interviewers and updated as interviewing progressed.

Interviews were conducted and coded over a three-month period (August-October, 2011) and included community members from a range of sectors with an interest in public/community health, including:

- Business leaders
- Faith community representatives
- Hospital employees
- Human Service professionals
- Mental health professionals
- Municipal employees, including town managers and planning department staff
- Parks/recreation workers
- Police and firefighters
- Public health professionals
- School employees
- Seniors and providers of senior services
- State representatives
- Youth providers

The breakdown of interviewees by role in their communities is illustrated in Figure 1 below.

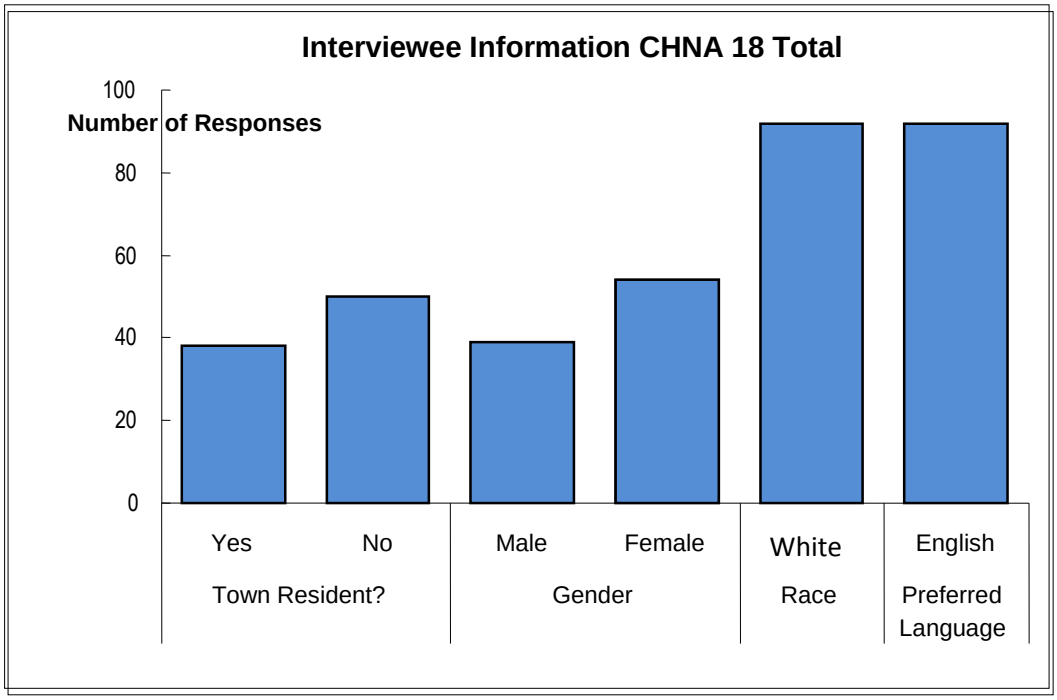
Figure 1



Of those interviewed, about 45% lived in the towns they serve and 55% lived elsewhere, but were included because they served town residents in their professional capacity and had extensive knowledge of and commitment to community health issues. About 62% were female and 38% male, probably reflective of the over-representation of women in the human service field.

100% identified as White, with English noted as their primary language. This is largely reflective of the composition of the community health workforce, which would ideally be more representative of the populations served. It also addresses the need for more outreach to minority providers in Phase 2 of this project. See Figure 2 for detailed demographic information about interviewees.

Figure 2



The quantitative data collection process

Health status indicators, risk factors and disease data for the entire CHNA and each community in the CHNA have been generated from existing databases and analyses. These comprise phase 1 of the quantitative data collection for this needs assessment. A primary source of these data is Massachusetts Community Health Information Profile (MassCHIP). This is an online, interactive, health indicator data system with information from over thirty databases from the Massachusetts Department of Public Health, other state agencies, and the US Census. Other databases and custom analyses were used for phase 1. Data sets used include: Registry of Vital Records and Statistics (RVRS) data; population data; census data; employment data; hospital and emergency department utilization

data; health risk behavior and self-reported health status information from the Behavioral Risk Factor Surveillance Survey (BRFSS) and Youth Behavioral Risk Survey (YRBS); Physician Board of Registration data; and environmental data. The YRBS data are gathered from individual community surveys, and caution should be used in making comparisons among towns because of differences in the survey contents and methods.

Data related to the way the social and built environment influences health were located primarily through the Community, Luxury, and Residential (CLR) search which draws upon census data to report on characteristics of specific cities and towns for real estate purposes.

There were two goals of this quantitative analysis: first, to generate information on the three priority topics generated by the CHNA: mental health, access to care, and the social and built environment; and second, to identify other areas of health behaviors, risk factors, and disease patterns that might be important. In order to make the information as useful as possible, data were generated not only at the CHNA level, but, where possible, for each community within the CHNA. To provide context, comparisons are made between statewide rates and national standards, such as U.S. rates and Healthy People 2020 goals.

CHAPTER 3: WHO LIVES IN CHNA 18? DEMOGRAPHICS

GENERAL DEMOGRAPHICS: CHNA 18 comprises a diverse set of communities, with differences in socio-economic status, race, and population density. Median income in 2000 ranged from $54,010 (Waltham) to $153, 918 (Weston). See Table 1 for detailed demographic information.

Table 1: Demographic Indicators

	Population (2005)	Median Income (2000)	% Below Poverty Line (2000)	% of Children Getting Free or Reduced Price Lunch (2010-11)	Population per Square Mile (2011)
Brookline	56,422	$66,711	9.3%	12.2%	8,308
Dedham	23,681	$61,699	4.6%	23.2%	2,376
Dover	5,634	$141,818	3.0%	3.1%	373
Needham	28,445	$88,079	2.5%	5.4%	2,303
Newton	83,346	$86,052	4.3%	10.7%	4,687
Waltham	59,564	$54,010	7.0%	34.3%	4,772
Wellesley	26,975	$113,686	3.8%	4.0%	2,693
Weston	11,591	$153,918	2.9%	3.4%	702
Westwood	13,902	$87,394	2.5%	4.4%	1,306
CHNA 18	309,560		4.5%		2,783
Massachusetts	6,436,940		9.3%	34.2%	839

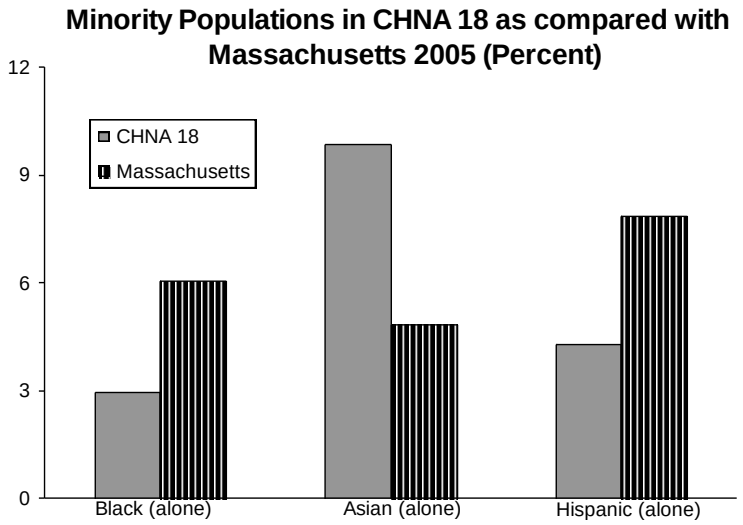
Sources: Census Data from MassCHIP, Department of Education, Boston Globe Population Report.

RACE: The percentage of CHNA 18 residents identifying as White was just slightly higher than Massachusetts as a whole. However, that percentage ranges from about 75% (Waltham) to almost 95% in Westwood. See Table 2 and Figure 3 for detailed information about the racial break-down of CHNA 1.

Table 2: Race (2005) Source: Census Data from MassCHIP

	% White	% Black	% Asian	% Hispanic
Brookline	73.0%	4.2%	17.9%	4.8%
Dedham	92.1%	2.1%	2.6%	3.1%
Dover	92.9%	0.5%	5.0%	1.5%
Needham	92.4%	1.0%	5.0%	1.6%
Newton	84.2%	2.4%	10.4%	2.9%
Waltham	74.6%	5.2%	9.6%	9.5%
Wellesley	86.6%	2.4%	7.9%	3.0%
Weston	87.1%	1.4%	9.2%	2.2%
Westwood	94.5%	0.7%	3.5%	1.2%
CHNA 18	82.8%	3.0%	9.9%	4.3%
Massachusetts	81.0%	6.0%	4.9%	7.9%

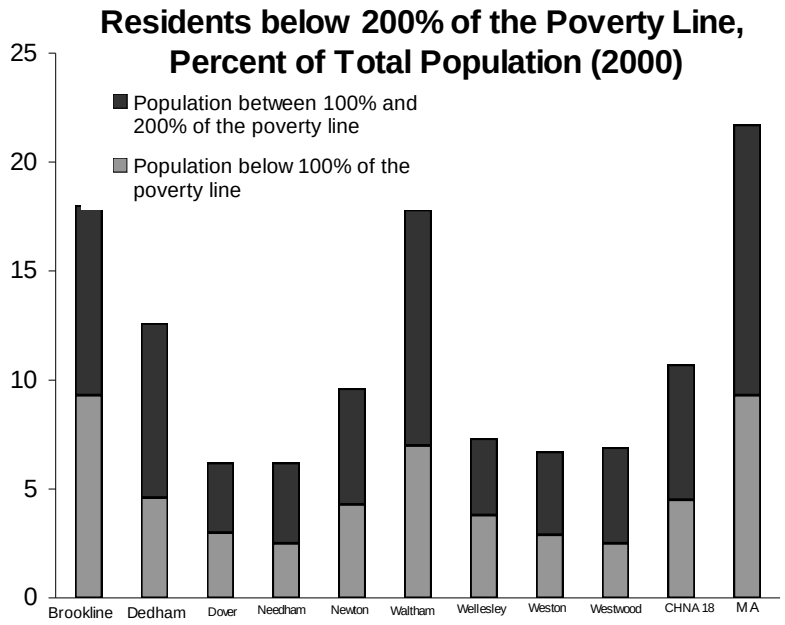
Figure 3



Source: Census Data from MassCHIP

POVERTY: Figure 4 illustrates the extent of poverty in the various cities and towns within the CHNA.

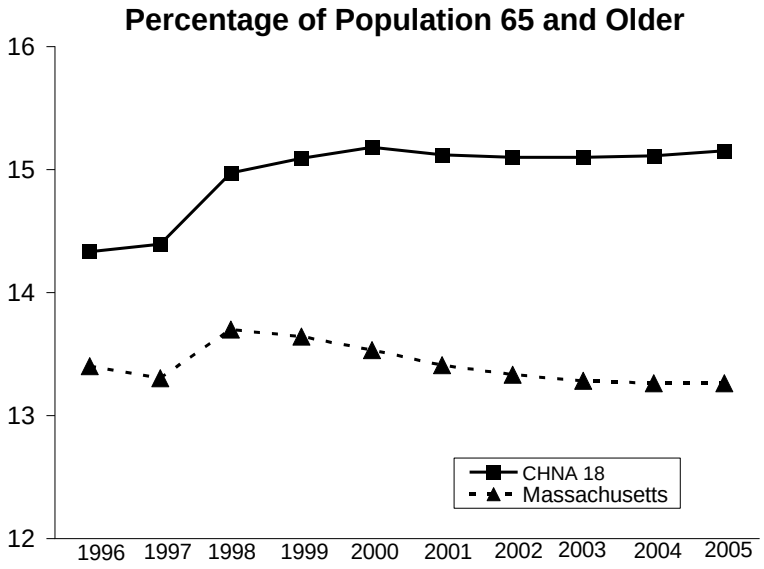
Figure 4



Year: 2000. Source: Census data from MassCHIP

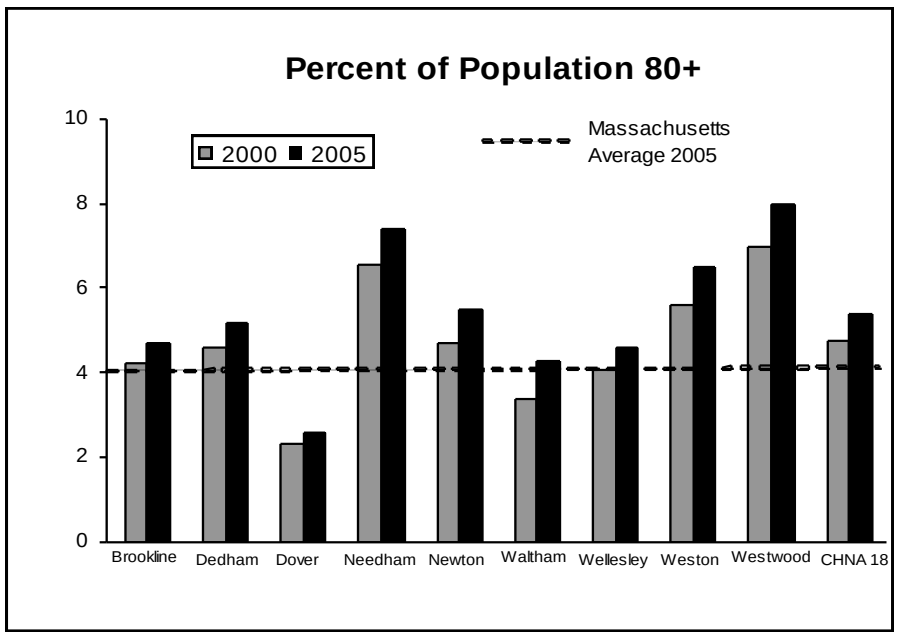
AGE: CHNA 18 has a larger population of residents over 65 than does Massachusetts as a whole (Figure 5). In particular, the population of the 'oldest old', that is, persons age 80 and above is growing- between 2000 and 2005 the proportion of residents older than 80 has grown in each community within CHNA 18 (Figure 6). Table 3 contains more detailed information on the age of CHNA 18 residents.

Figure 5



Source: Census Data from MassCHIP

Figure 6



Source: Census data from MassCHIP

Table 3: Age (2005)

	% 19 and below	% 65 and Above
Brookline	18.7	12.3
Dedham	23.8	16.5
Dover	32.0	10.9
Needham	27.7	17.9
Newton	24.9	15.2
Waltham	20.6	13.1
Wellesley	30.2	13.6
Weston	29.3	16.6
Westwood	28.3	19.3
CHNA 18	24.0	16.7
Massachusetts	25.5	13.3

Source: Census Data from MassCHIP

EDUCATION: Of those CHNA 18 towns that report education levels, all have a higher percentage of residents who graduated college than Massachusetts as a whole. However, there is considerable variance within CHNA 18, ranging from 42% in Waltham to almost 80% in Dover.

Table 4: Education (2010)

	Less than high school	Graduated high school, did not graduate college	Graduated college
Dover	0.8%	19.9%	79.3%
Newton	4.0%	25.4%	70.7%
Waltham	11.2%	46.9%	41.9%
Weston	2.9%	20.0%	77.1%
Westwood	3.8%	35.6%	60.7%
MA	12.0%	52.2%	35.8%
US	15.4%	57.3%	27.4%

Source: Census from CLR Database
Year: 2010

CHAPTER 4: WHAT ARE THE KEY HEALTH ISSUES OUR COMMUNITIES IDENTIFIED?

KEY HEALTH ISSUE: MENTAL HEALTH

"Everything is on the exterior wonderful. But if you look closely……. there are issues with drug abuse, depression, and suicide. Everyone is so separated because of large yards, open spaces – it really seems like an ideal community feeling, but that only allows people the ability to hide those mental health problems" – youth provider

"There's a huge loss in confidence among parents in asserting themselves to raise kids. It doesn't mean they don't care." "There needs to be more focus on what parenting is and helping parents learn…..what to say, how to act, etc." – mental health provider

"It's schedule frenzy for families--from grade school to high school. It starts earlier and earlier. It affects parents….they are harried and stressed" – minister

"Substance abuse is part of the culture; it is OK to do it at all levels" – police community service officer

"We have many seniors with dementia…that are still at home. People who are not 100 % but still driving and living alone" – local public health staff

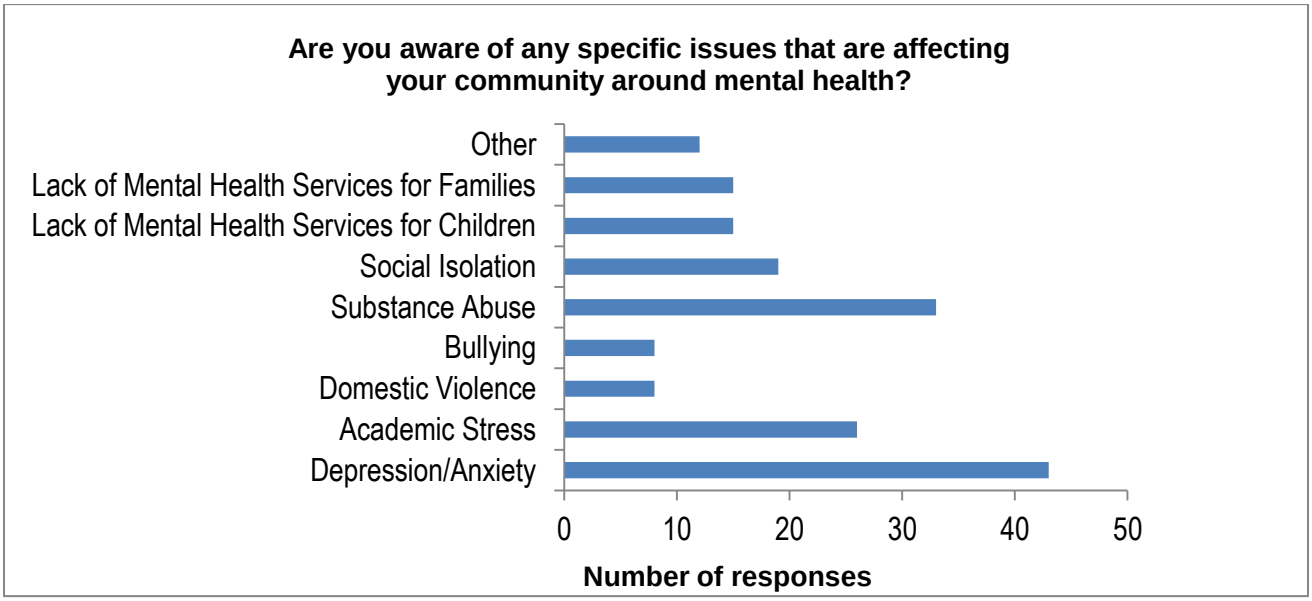
Mental health emerged as a key issue in our key informant interviews. Within the category of mental health several themes emerged leading to the division of this section into the following subsections:

1) *General* mental health concerns
2) *Youth* mental health concerns
3) *Adult* mental health concerns
4) *Substance abuse* concerns
5) *Financial strain* concerns as it relates to mental health

MENTAL HEALTH CONCERNS: GENERAL

The number of non-mental health providers (e.g. police, recreation providers) who identified mental health difficulties in their client population as preventing them from being able to make use of their programs and resources was notable. Mental health concerns for both youth and adults were expressed. The main sources of mental health difficulties were seen as 1) depression/anxiety, 2) substance abuse and 3) academic pressure. The stressors most identified by interviewees as causing their depression and/or anxiety were financial difficulty caused by the recession and subsequent job loss. Figure 7 illustrates the range of mental health issues and the frequency with which mental health issues were mentioned in the interviews.

Figure 7



MENTAL HEALTH CONCERNS: YOUTH

Academic stress, in particular, was seen as detrimental to the mental health of youth, with interviewees perceiving both parents and schools as setting unrealistic and stress-inducing standards of achievement. One respondent described, "there is a constant, accelerating high-level of expectation for performance." This, combined with an increasing load of extra-curricular activities, was seen by many of those interviewed as resulting in anxiety, panic attacks, and even suicide.

Related to this concern, many noted an increasing reluctance or inability of parents to articulate realistic expectations, provide loving discipline, and serve as role models for appropriate behavior. One respondent reported an increasing "lack of confidence" in parents, and many interviewees commented on too little oversight of children and an inability to set and enforce rules.

Suicidal thoughts and suicide attempts among high school students are lower in Brookline, Needham, Newton and Weston, while the percentage of Waltham high school students seriously considering suicide is particularly high (14%) and warrants further investigation (See Table 5).

Table 5: Percent of High-School Students who Seriously Considered Suicide or Attempted Suicide in the Last Year

	Massachusetts (2009)	Brookline (2011)	Needham (2010)	Newton (2010)	Waltham (2010)	Weston (2008)
Seriously Considered Attempting Suicide	14%	3%	10%	7%	14%	10%
Attempted Suicide	7%	1%	2%	2%	15%	3%

Source: YRBS

Overall, the age-adjusted suicide rate was significantly lower in CHNA 18 as compared with the state in the 1999-2001 time period, but was not significantly different in the 2006-2008 time period (data not shown in report).

Access to a trusted adult can make a difference in risk-behavior among youth. According to the Brookline 2005 YRBS Report, "Students who had a parent or other adult to talk with outside of school were much less likely to binge drink, use marijuana, or smoke cigarettes than those who reported not talking with an adult outside of school or within school." This association points to the importance of encouraging relationships between high school students and trusted adults.

Despite the importance of relationships with trusted adults, a relatively low percentage of high school students in Brookline, Newton, Needham, and Weston had an adult with whom they could talk outside of school when compared with students in Massachusetts as a whole. Similarly, while 71% of Massachusetts high-school students reported having a teacher or adult to consult with about problems *in* school in 2009, a smaller percentage of high school students in Brookline, Newton, Weston, and Needham reported having such a relationship with an adult in school (See Table 6 for details).

Table 6: High-School students who had an Adult to Consult with About Problems

	Massachusetts (2009)	Brookline (2011)	Needham (2005)*	Newton (2010)	Waltham (2010)*	Weston (2008)
In School	71%	61%	61%	57%	NA	57%
Outside of School	92%	85%	88%	82%	NA	83%

*Question not reported in most recent YRBS
Source: YRBS

Sleep deprivation was described as a wide-ranging problem for youth, resulting from over-full schedules and unrealistic academic, social and extra-curricular expectations. This is also reflected in data on Massachusetts' adult population (elaborated upon in the next section).

Safety at school: While **4%** of all high school students in Massachusetts reported not going to school because they felt unsafe in the last month in 2009, the percentage was 3% among students in both Needham and Newton, 6% among students in Waltham, 1% among students in Weston, and 4% among Brookline high school students in 2011. (See Table 7).

Table 7: High-School students who did not go to school because they felt unsafe in the last month

Massachusetts (2009)	Brookline (2011)	Needham* (2005)	Newton (2010)	Waltham (2010)	Weston (2008)
4%	4%	3%	3%	6%	1%

*Item not reported in most recent YRBS
Source: YRBS

Substance Use: See "Substance Abuse Concerns" below for information specific to youth.

MENTAL HEALTH CONCERNS: ADULTS

Close to five percent of adults in CHNA 18 report experiencing more than 15 days of poor mental health in a month. This can be compared to close to nine percent of adults in Massachusetts. Table 8 describes the variation in answers to this survey question among individual cities and towns in the CHNA.

Table 8: Percentage Adults Reporting >15 days Poor Mental Health in Last Month (2007-2010)

Region	Percentage
Brookline	4.3
Dedham	6.5
Dover	
Needham	4.5
Newton	3.9
Waltham	5.8
Wellesley	4.3
Weston	
Westwood	6.0
CHNA 18	4.7
Massachusetts	8.9

Source: Special analyses, Health Survey Program, MDPH

Access to mental health treatment was identified as a challenge, including the difficulty finding a psychiatrist to prescribe and oversee medications, lack of transportation to appointments, and insurance barriers including high co-payments, small provider panels and long wait lists.

Adding to this, many identified continuing stigma around mental illness and reluctance to identify these issues and ask for help. A general lack of understanding about mental health, mental illness and the range of treatment options were also noted, offering opportunities for the CHNA to provide education around these critical areas.

Also related to concerns about mental health, more Massachusetts residents overall and CHNA 18 residents in particular report having greater than 15 days of poor sleep in the last month in 2007-2009 as compared with 1999-2001 (See Table 9).

Table 9: Percentage Adults Reporting >15 days Poor Sleep in the Last Month

Region	CHNA 18		Massachusetts	
Time Period	1999-2001	2007-2009	1999-2001	2007-2009
Percentage	21.6	23.5	24.1	27.7

Source: BRFSS from MassCHIP

In addition to anxiety and depression caused by social stress or financial difficulties, mental health difficulties for seniors and their caregivers were also identified by multiple respondents. Caregiver stress was also noted as a significant contributor to mental health issues, especially in the "sandwich generation" that is still working while caring for both children and parents.

In general, a picture emerges of an over-extended resident population, struggling to maintain an unrealistic standard of living and achievement, with inadequate knowledge of mental health resources and limited access to behavioral health providers.

MENTAL HEALTH CONCERNS: SUBSTANCE ABUSE

Regarding substance abuse, a community-wide "culture of substance abuse" was noted by some, with both parents and high school students using alcohol regularly in social situations. A lack of commonly-held norms countering underage drinking was also seen as contributing to substance abuse among teenagers, with easy access to both alcohol and prescription drugs identified by multiple interviewees. While substance abuse was identified as a problem within the CHNA, it can be noted that alcohol and substance abuse related hospitalizations, opioid-related injuries, and admissions to substance abuse programs were lower in most cities and towns within the CHNA as compared with Massachusetts as a whole (See Tables 10, 11, and 12).

Table 10: Alcohol/Substance Abuse Related Hospitalizations 2005-2009 (Based on Age-Adjusted Rate)

Above MA Average	Below MA Average	Not Significantly Different from MA Average
Dedham	Brookline Dover Needham Newton Wellesley Weston	Waltham Westwood

Source: Hospitalization data from MassCHIP

Table 11: Hospitalizations for Opioid-Related Injuries 2005-2008 (Based on Age-Adjusted Rate)

Above MA Average	Below MA Average	Not Significantly Different from MA Average
	Brookline Dover Needham Newton Waltham Wellesley Weston Westwood	Dedham

Source: Hospitalization Data from MassCHIP

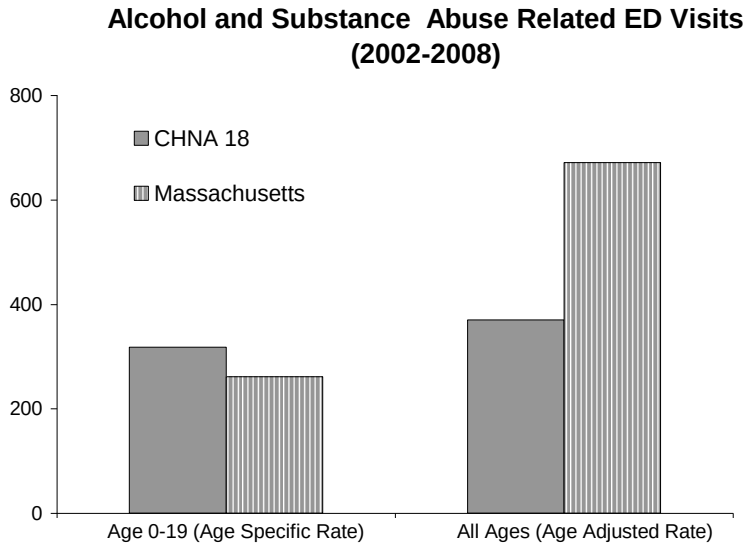
Table 12: Admissions to State-funded Substance Abuse Programs 2010

Above MA Average	Below MA Average	Not Significantly Different from MA Average
	Brookline Dover Needham Newton Waltham Wellesley Weston Westwood	Dedham

Source: Bureau of Substance Abuse Services data from MassCHIP

In addition to the data above that describes alcohol and substance abuse in the general population, the following data describe the ways in which alcohol and substance use specifically affects youth in CHNA 18. Figure 8 shows that there was a significantly higher rate of emergency department visits related to alcohol and substance abuse for CHNA residents ages 0-19 when compared with the rate for Massachusetts youth overall. The opposite is true when looking at emergency department (ED) visits related to alcohol and substance abuse for residents of all ages, where the rate of ED visits for CHNA 18 residents is significantly lower than that of the state. The data for residents of all ages show that the high rate of ED visits is unique to the youth population. *The comparison of ED visits for youth indicates that emergencies related to alcohol and substance abuse among youth in CHNA 18 is comparatively high and should be further investigated and addressed.*

Figure 8



Source: Emergency room data from MassCHIP

Table 13 expands upon Figure 8 by detailing how the individual cities and towns within CHNA 18 compare with the state for ED visits related to alcohol and substance abuse for those 19 and under and for all ages.

Table 13: ED visits related to alcohol and substance abuse

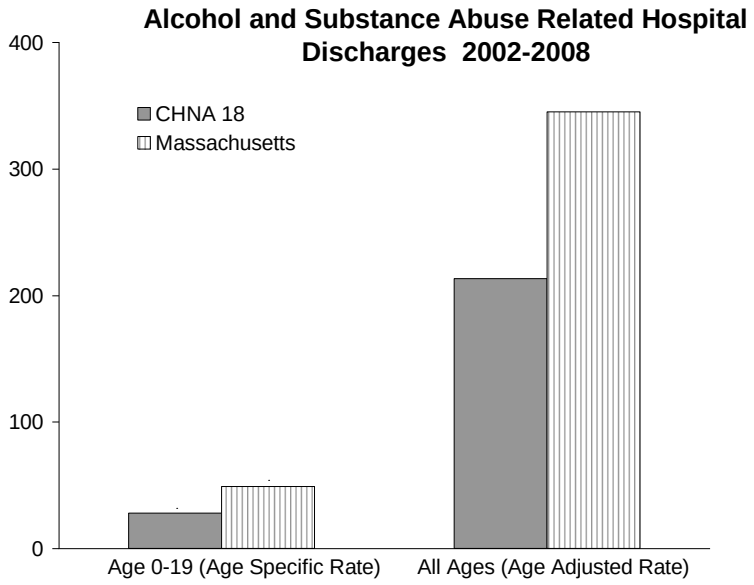
	19 and Under	All Ages
Brookline	Above	Below
Dedham	Same	Below
Dover	Below	Below
Needham	Below	Below
Newton	Above	Below
Waltham	Above	Same
Wellesley	Above	Below
Weston	Same	Below
Westwood	Same	Below

Source: Emergency room data from MassCHIP

Table 13 indicates that the high number of emergency department visits related to alcohol and substance abuse in CHNA 18 are most pronounced in Brookline, Newton, Waltham, and Wellesley. When further investigating this data, it would be useful to focus on these towns.

Figure 8 illustrates the difference between CHNA 18 and the state in ED visits related to alcohol and substance abuse and can be contrasted with Figure 9 that compares the CHNA and the state in terms of hospital discharges. Figure 9 shows that Massachusetts as compared with CHNA 18 has a higher rate of hospital discharges both for youth (ages 19 and under) as well as for all ages. The contrast between these two graphs raise an interesting question: Why are there comparatively more hospital ED visits related to alcohol and substance abuse among youth yet relatively low rates of hospital discharges for this type of abuse? Further research should focus on this question in order to address drug and substance abuse among youth in CHNA 18 communities.

Figure 9



Source: Hospital discharge data from MassCHIP

Tables 14 and 15 elaborate upon the data presented above and describe behavior of high school students in relation to alcohol and drugs. According to Table 14, youth within cities and towns in the CHNA for which data was available are less likely to have drank alcohol in their lifetime, drank alcohol in the past 30 days, engaged in binge-drinking in the past 30 days (with the exception of Waltham), or have ridden in a car with someone who had been drinking in the past 30 days than youth in Massachusetts.

Table 15 shows that high school students in CHNA 18 are also less likely to have used marijuana or someone else's prescription drug in order to get high than their Massachusetts' counterparts (with the exception of Waltham). These data further raises the question as to why our CHNA has a higher rate of emergency room visits related to drug and alcohol abuse among youth than does Massachusetts in spite of the YRBS data that indicates relatively low rates of drug alcohol use among youth.

Table 14: YRBS Data Related to Alcohol

	Brookline (2011)	Newton (2010-2011)	Needham (2010)	Waltham (2010)	Weston (2008)	MA (2009)
High Schoolers Who drank Alcohol in life-time	61%	50%	56%	69%	59%	71%
High Schoolers Who Consumed Alcohol in the Past 30 days	36%	31%	36%	45%	42%	44%
High Schoolers Who report engaging in binge drinking in the past 30 days	17%	23%	28%	27%	25%	
High Schoolers who rode in a car with someone who drank in the past 30 days	8%	8%	18%	25%	19%	27%
High Schoolers who drove after drinking in the past 30 days			12%	7%	9%	

Source: YRBS

Table 15: YRBS Data Related to Drugs

	Brookline (2011)	Newton (2010)	Needham (2010)	Waltham (2010)	Weston (2008)	Massachusetts (2009)
High School students who used marijuana in the past 30 days	26%	19%	23%	28%	23%	27%
Used Someone else's prescription to get high*	6%	2%	7%	18%	<1%	18%

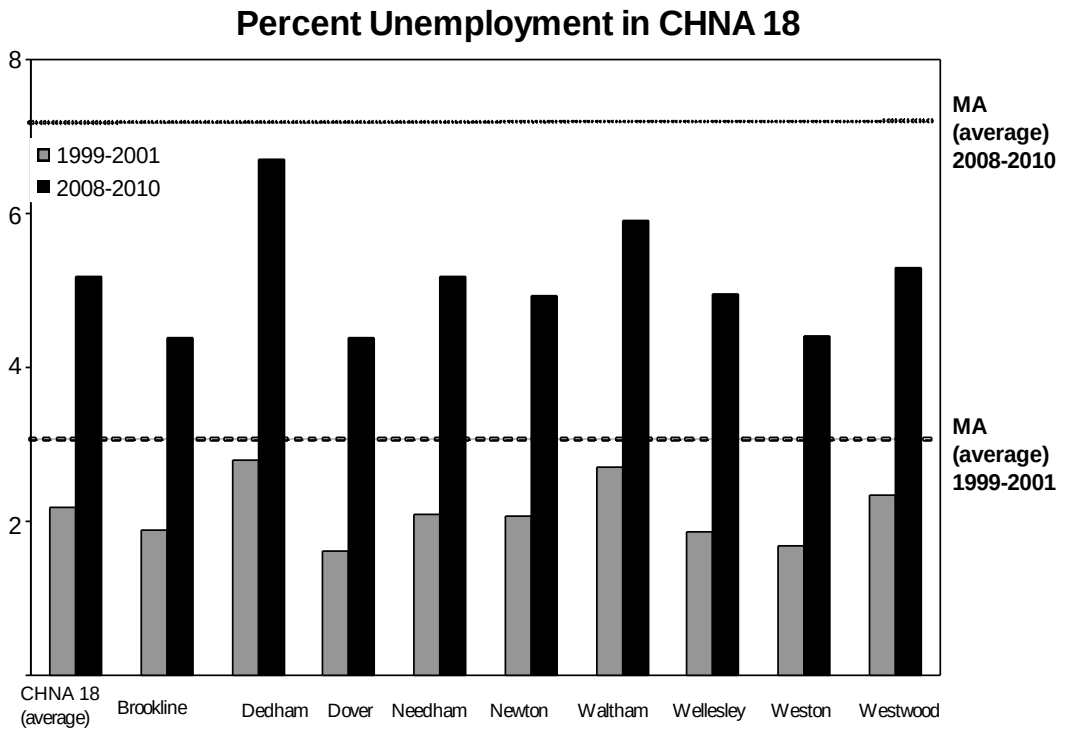
* Question asked in Brookline was specific to painkillers and didn't indicate in whose name the prescription was. Needham asks a more general question about misuse of prescription drugs

Source: YRBS

MENTAL HEALTH CONCERNS: FINANCIAL STRAIN

Financial strain, and especially job loss, was the other major contributor to mental health difficulties. While CHNA 18 overall has lower unemployment levels than Massachusetts as a whole, the CHNA's unemployment level more than doubled between 2002 and 2010 (See Figure 10). Most respondents identified difficulties in keeping up mortgage/rent payments, inability to pay school and extra-curricular activity fees and the inability to keep up with previous standards of living as causing enormous stress and anxiety for many residents. Some mentioned children not knowing or understanding that parents had lost jobs, and the anxiety and shame many parents feel at not being able to provide their previous standard of living.

Figure 10



Source: Division of Unemployment Assistance from MassCHIP

Financial Insecurity – Selected quotes from qualitative interviews

(Note that financial insecurity is adding stress to individuals and families, as well as to the community institutions that serve them)

"Lots of people who live in nice houses are just making ends meet" – Council on Aging staff

"Maintaining the level of town services for residents in a tough economy is impossible. We are very tight, no extra funds and we are constantly cutting budgets" – school committee member

"Real estate values dropping… It's a big issue for seniors staying in the own homes with the high taxes" – local police officer

"There's pressure on school system with growing enrollment, more diversity and budget cuts" – community foundation staff

"Not many affordable food options. The bulk and grocery stores tend to be expensive. The elderly are especially affected…" – senior center staff

"More demand for services and fewer resources to assist others have led to worker stress…. community stress. Family members who care for relatives are feeling stress as those whom they care for become increasingly disabled, while their resources to manage their care declines" – community social worker

The Bottom Line

CHNA communities are struggling to meet the mental health needs of their residents. Challenges include identifying those with mental health difficulties, finding and paying for treatment, combating stigma and encouraging preventive behaviors that support mental wellness.

Strategies to be considered by the CHNA overall and/or individual communities or organizations might include:

- **Expand mental health information and referral services; Provide education around mental health/mental illness, including resources for treatment.**
- **Explore inter-town or regional responses to community mental health needs, e.g. hiring of community/regional social workers.**
- **Provide opportunities for sharing experiences and collaborating between neighboring communities re: mental health programming.**
- **Implement efforts to build social connections between people**
- **Investigate the high rate of ED visits related to substance use among youth and prioritize programs focused on preventing substance abuse emergencies**
- **Provide education and a social marketing campaign for more effective parenting.**

KEY HEALTH ISSUE: TRANSPORTATION

Transportation was cited as a substantial community health need. Two separate issues emerged: 1) lack of transportation options, especially for youth and seniors; and 2) traffic and safety issues.

Table 16 describes how the majority of CHNA residents, like their US and Massachusetts counterparts, travel primarily by car, truck, or van. The norm of traveling via private vehicle makes transportation increasingly challenging for those who don't have access to such vehicles. Specifically, many respondents spoke to the difficulty older people have in shopping, getting to medical appointments and social opportunities, some citing this as the primary barrier to accessing health care and to being able to stay in their homes as they age. This is seen as especially difficult in the wealthier communities, where many elderly people find themselves "house rich, but cash poor"and have difficulty managing the costs of a car. Although many towns support transportation options for seniors (The Ride, etc.), these are seen as inadequate. Several respondents also cited the lack of public transportation as a barrier to youth, limiting their access to healthy social and physical activities.

At the same time, traffic and safety was cited by many interviewees as impacting poorly on community health, especially for those towns on well-traveled arteries like Route 9 and Route 1. Congestion has been created by the increasing number of cars on the road (there are more vehicles per households in CHNA 18 than in the state overall), contributing towards longer commute times and more time spent in a car rather than walking or biking. Fewer people walk to school or work, despite the many walking trails identified across the region.

Table 16: Transportation to Work*

Mode of Transportation	Dover	Newton	Waltham	Weston	Westwood	MA	USA
Car, Truck, or Van	80.8%	73.7%	80.6%	77.3%	82.0%	81.9%	87.3%
Public Transportation	7.0%	12.1%	8.3%	4.7%	9.6%	8.7%	4.4%
Other Transportation	2.0%	6.0%	8.0%	5.0%	2.2%	5.4%	4.0%
Work at Home	10.3%	8.2%	3.2%	13.0%	6.2%	4.0%	4.2%

*Data for Brookline, Dedham, Needham, and Wellesley were unavailable.
Source: CLR Database
Year: 2010

The Bottom Line

Transportation access is a substantial barrier to the health of CHNA 18 residents, especially youth and seniors. Limited transportation options inhibit access to health and wellness activities for seniors and contribute to increased isolation. The over-reliance on automobiles contributes to traffic congestion and may impact obesity rates.

Strategies for the CHNA or individual communities or organizations to consider include:

- **Partner with local civic and governmental organizations to advocate for improved transportation options.**
- **Support the development of local Transportation Advisory Committees.**
- **Support efforts to encourage parents and students to walk, bike and/or use public transit to get to school.**
- **Support the expansion of senior transportation options, especially for health and wellness/socialization activities.**

KEY HEALTH ISSUE: ACCESS TO HEALTH CARE

Both our quantitative and qualitative data reveal that access to healthcare is less of a concern in CHNA 18 than in the rest of the state (Figure 11). As compared with Massachusetts residents, larger percentages of CHNA 18 respondents report having a personal healthcare provider, having health insurance, not experiencing cost as a barrier to medical treatment and are equal to the state in having had a check-up within the past year (See Table 19). In addition, the percentage of pregnant women receiving adequate prenatal care in CHNA 18 (83.7%) has exceeded the national average and Massachusetts average (Figure 12). Figure 13 describes the percent of pregnant women receiving adequate prenatal care according to individual cities and towns within the CHNA. Table 17 compares the cities and towns to Massachusetts as a whole. The percentage of women over 40 receiving mammograms (Figure 14) and residents over 65 receiving flu shots in CHNA 18 was also greater than the state as a whole (Figure 15).

That said, several barriers to care were identified by survey respondents, including:

- Lack of transportation to care
- Lack of knowledge about what services are available
- Legal/financial barriers, including insurance, language and immigration status

Access to Care: Selected quotes from qualitative interviews

"Finding a primary care physician can be difficult….Physician practices have changed over the years. They have moved away, or closed, concierge medicine has grown, and they are not accepting new patients." – senior center staff

"….psychiatric care access is an issue no matter what type of insurance coverage people have, this is a barrier at all age levels….It's especially hard to find psychiatrists who take Medicaid" – human services provider

"….Access to health care for the elderly…it's not financial or health insurance…it's <u>getting</u> to medical appointments" – COA Director

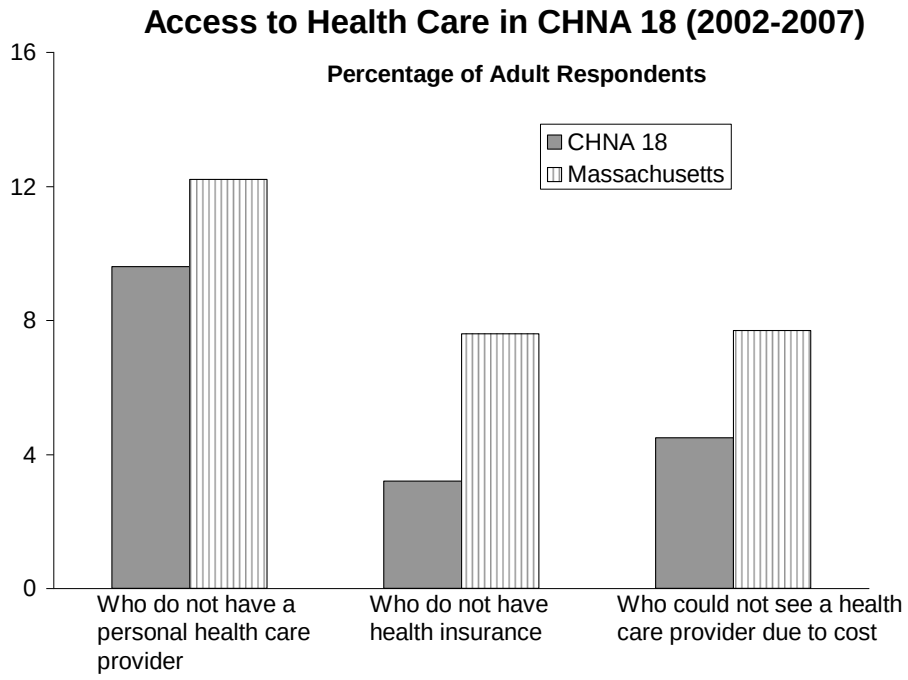
"Businesses find that the costs associated with paying health insurance for their employees continue to increase, an expense they find more difficult to fund." – chamber of commerce staff

"Those who are employed as well as those who are self-employed are paying exorbitant rates to sustain their health care coverage" –municipal selectman

"For documented and undocumented individuals who can't get MassHealth, the Safety Net is only for emergencies…so there are many people without primary health care." – human service staff

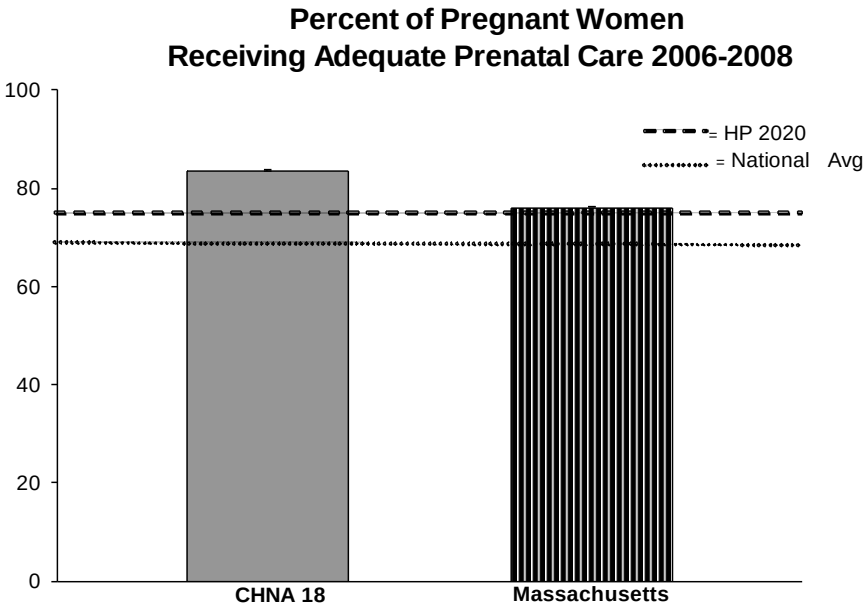
"I think seniors in the community are the ones that struggle financially to maintain proper healthcare…it's difficult for seniors to access health care if they don't drive, or have a family member to support them. Would like to see more use of roving nurse practitioners to local neighborhoods" – senior center staff

Figure 11



Source: BRFSS from MassCHIP

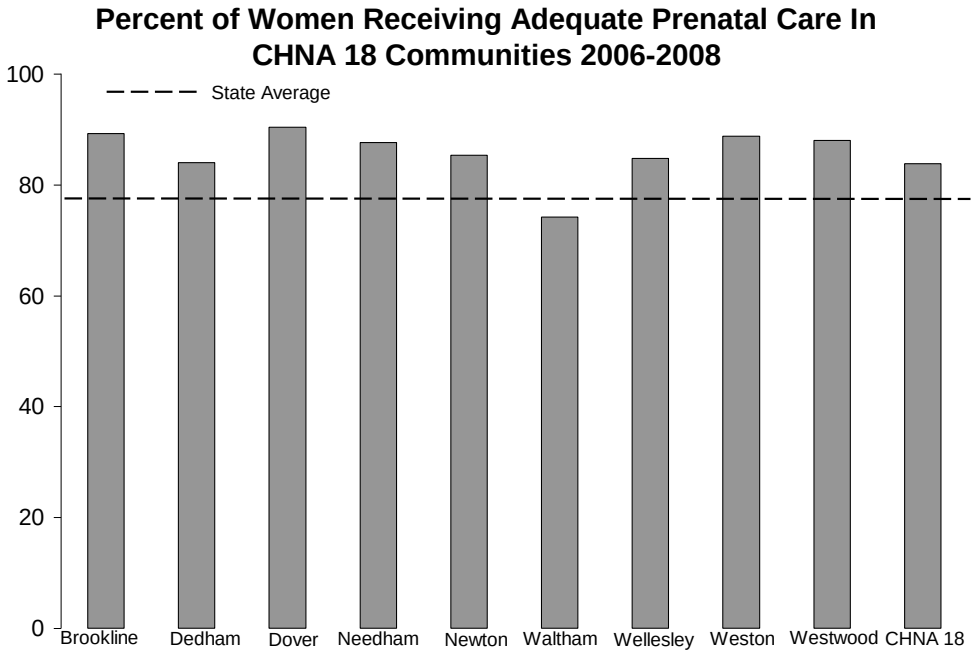
Figure 12



*Adequate Prenatal Care is a quantitative measurement that assesses the timing of initiation and number of visits for prenatal care. It does not measure the quality of this care. The Kessner Index of PNC Adequacy was used to calculate the statistics presented in this report.

Source: Registry of Vital Records and Statistics (RVRS) from MassCHIP

Figure 13



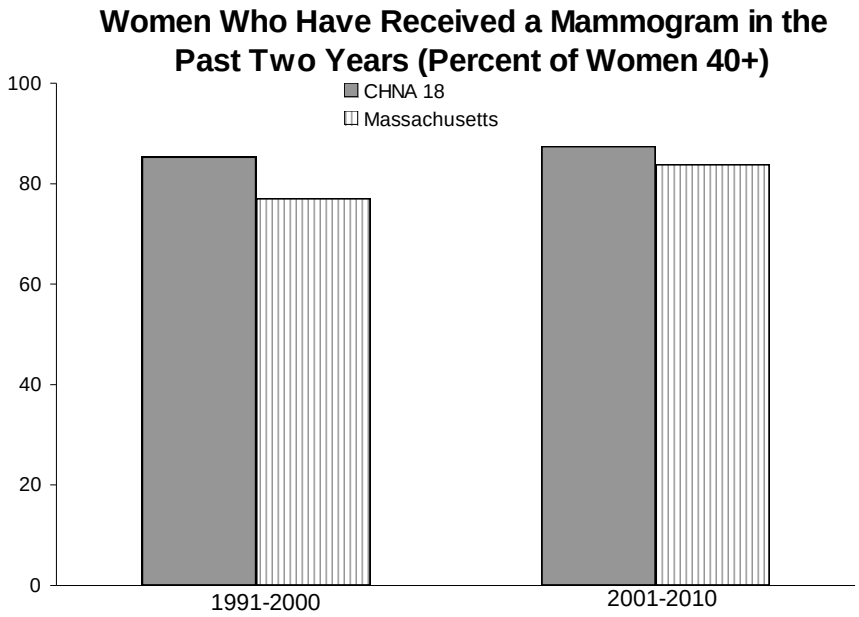
Source: Registry of Vital Records and Statistics (RVRS), birth data from MassCHIP

Table 17: Prenatal Care in CHNA 18 Communities as compared with Massachusetts (2006-2008)

Worse Than MA Average	Better Than MA Average	Not Significantly Different From Massachusetts Average
Waltham	Brookline* Dedham Dover* Needham* Newton Wellesley Weston* Westwood*	

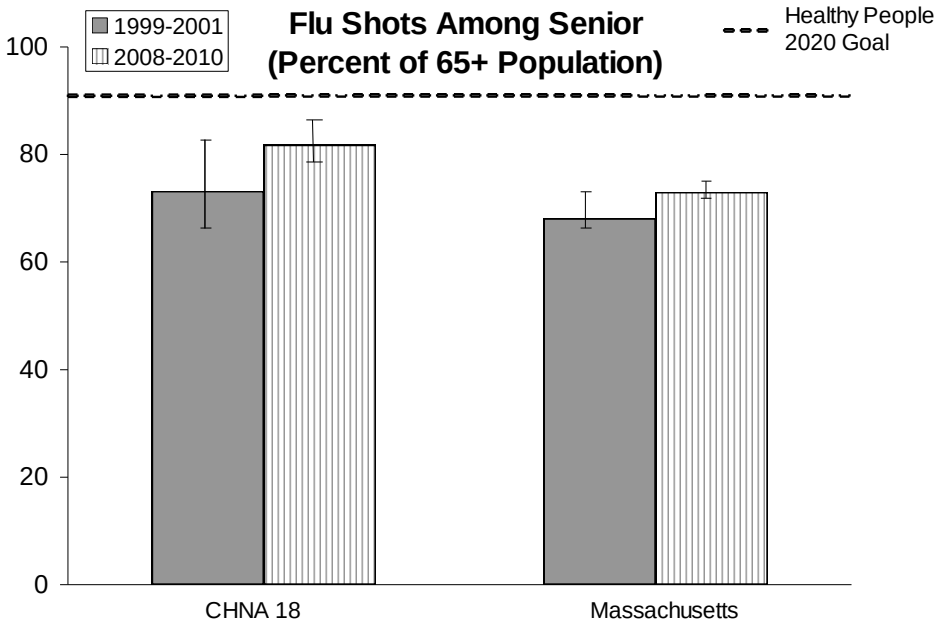
* In addition to being above Massachusetts average, the percentage of pregnant women receiving adequate prenatal care in these communities was also above CHNA average.
Source: Registry of Vital Records and Statistics (RVRS), birth data from MassCHIP

Figure 14



Source: BRFSS data from MassCHIP

Figure 15



Source: BRFSS from MassCHIP

Table 18: Percentage of Adults who have had a check-up in the last year

Region	CHNA 18		Massachusetts	
Time Period	1997-2000	2007-2010	1997-2000	2007-2010
Percentage	78.1	79.3	78.2	77.5

Source: BRFSS from MassCHIP

The Bottom Line

Improving access to care for CHNA residents is largely a matter of state and national policy, and beyond the scope of the CHNA. However, the following strategies might be considered by cities/towns or the CHNA as a whole:

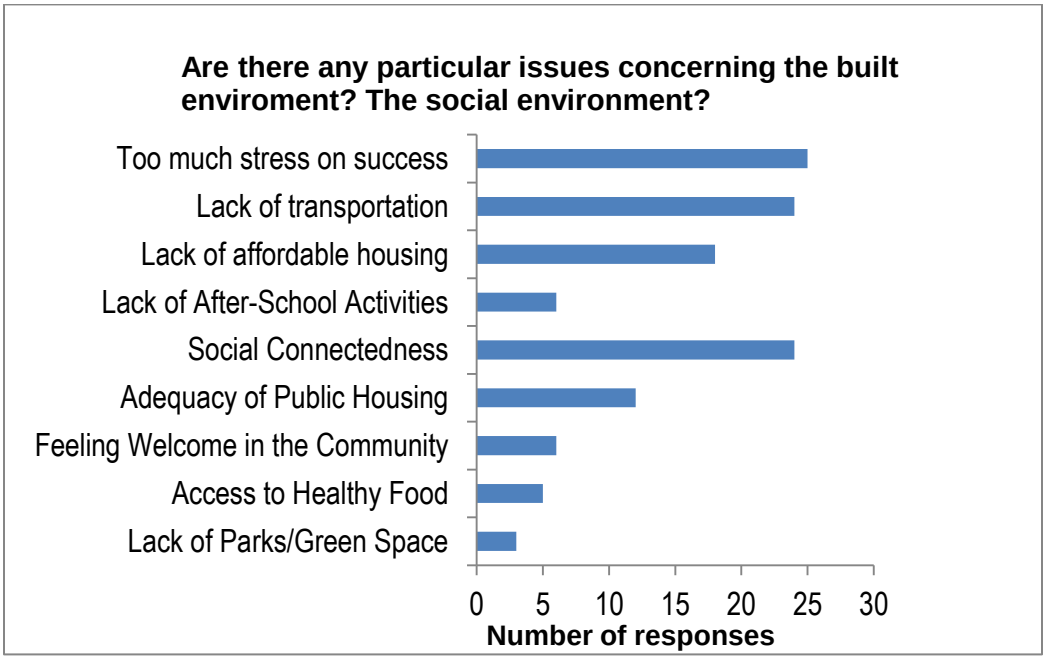
- **Support the expansion of senior transportation options, especially for health/ wellness services**
- **Publicize and coordinate health care information and referral activities**
- **Create a regional care coordinator for health and mental health services**
- **Support the expansion of medical interpreter services, especially for Haitian/Creole and Asian language-speaking patients**

KEY HEALTH ISSUE: THE BUILT AND SOCIAL ENVIRONMENT

Asked "what prevents your community from being a place where the basic emotional, physical, and spiritual needs of everyone in the community are met?" most frequently cited were:

- Too much stress on success
- Lack of transportation (detailed in previous section)
- Lack of a sense of connectedness
- Lack of affordable housing

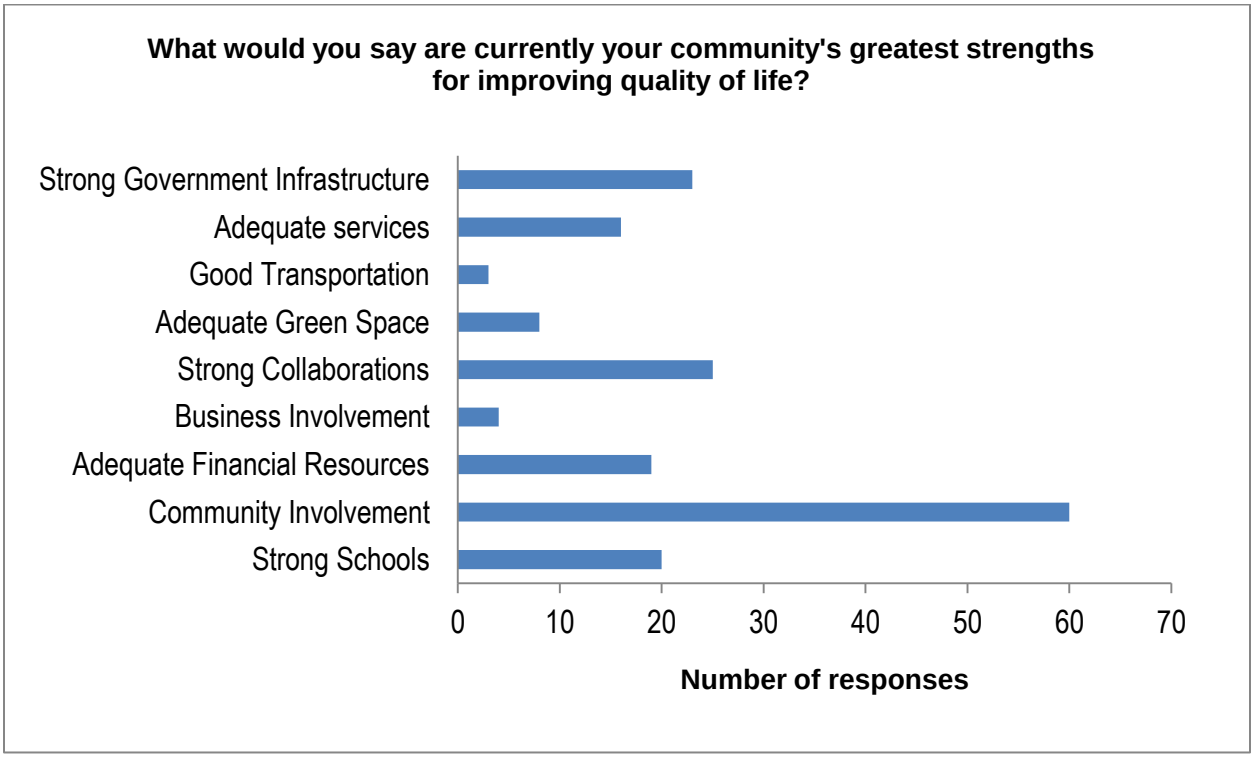
Figure 16



In contrast, when asked "what are your community's greatest strengths for improving quality of life?" people identified: (See Figure 17 for detailed answers to this question).

- Community involvement, which was cited twice as often as any other indicator. This included a spirit of volunteerism, residents who "enjoy being engaged in a meaningful way", lots of "brain power," "people willing to make things happen."
- Strong government infrastructure, including many respondents who cited a strong local health department as playing a significant role in the health of their community.
- Strong collaborations – "many community organizations working together to make things better" and significant regional or inter-town cooperation.
- Additional strengths cited include adequate green space, a "resilient" population and a large percentage of seniors who have time to contribute to town activities.

Figure 17



Quality of Life

The sentiments expressed in questions about the social and built environment can be further understood in the context of a quality of life index that has been calculated by the CLR, using variables including: crime, amusement, culture, education, medical, religion, restaurants, weather, earthquake, and mortality. The index sets a national average quality of life index of 100. Based on this index, Massachusetts residents report a slightly lower quality of life than do US residents overall. Within CHNA 18, Waltham and Weston residents report a higher quality of life, while Dover and Westwood residents report a lower quality than do Massachusetts and US residents (Table 19).

Table 19: Quality of Life Index

	Brookline	Dedham	Dover	Needham	Newton	Waltham	Weston	Westwood	MA	US
Quality of Life Index	N/A	N/A	78	N/A	N/A	123	114	87	95	100

Source: CLR Database
Year: 2010

Air Quality

Air quality data are only available by county and therefore the CHNA 18 air quality report is confined to data from Norfolk and Middlesex counties, the two counties in which CHNA 18 cities and towns are

located. Neither Norfolk nor Middlesex counties experienced any days of unhealthy or very unhealthy air quality in 2010 (Norfolk County data were taken in 2005 and Middlesex county was taken in 2007). Table 20 shows the number of "unhealthy" and "very unhealthy" days in each county from 2000 through 2010.

Table 20: Air Quality

	Norfolk		Middlesex		Massachusetts Total	
	Number of Unhealthy Days	Number of Very Unhealthy Days	Number of Unhealthy Days	Number of Very Unhealthy Days	Number of Unhealthy Days	Number of Very Unhealthy Days
2001	0	0	5	0	30	5
2002	7	2	5	0	46	8
2003	1	0	0	0	9	1
2004	1	0	0	0	3	0
2005	0	0	0	0	10	0
2006	0	0	0	0	12	1
2007	0	0	0	0	9	0
2008	0	0	0	0	5	0
2009	0	0	0	0	0	0
2010	0	0	0	0	1	0

Source: Environmental Protection Agency

The Bottom Line

The built and social environment critically impact the health of a community. CHNA 18 interviewees especially noted a spirit of volunteerism and strong government infrastructure as positive contributors to the health of their citizens. Strategies that might be considered to further improve the built and social environment include:

- **Encouraging efforts to mobilize and support volunteers**
- **Supporting efforts that foster connectedness between residents**
- **Strengthening local public health infrastructure and/or educating the public about how local public health impacts their lives**

CHAPTER 5: ADDITIONAL COMMUNITY HEALTH INDICATORS

GENERAL HEALTH STATUS

The general health status in the CHNA 18 communities can be described by the Standardized Mortality Ratio (SMR). THE SMR is the ratio of the number of events observed in a population to the number that would be expected if the population had the same age-specific rates as the standard population, multiplied by 100. A standardized ratio of more than 100 indicates that a community's mortality rate is higher than expected compared to the statewide average. A standardized ratio of less than 100 indicates a less than expected number of deaths compared to the statewide average.

Table 21 below shows that most towns in CHNA 18 experienced a lower rate of death than did Massachusetts as a whole, whereas Dedham and Westwood were similar to the MA rate.

Table 21: Standardized Mortality Ratio 2006-2008

Better Than MA Rate	Worse Than MA Rate	Not Significantly Different From MA Rate
Brookline Dover Needham Newton Waltham Wellesley Weston		Dedham Westwood

Source: RVRS, death data from MassCHIP

CHRONIC DISEASE AND CHRONIC DISEASE RISK FACTORS

Cancer Deaths

The standardized mortality ratio (SMR) for death from cancer in CHNA 18 is significantly better than the SMR for the state between 1999 and 2008. Within cities and towns in CHNA 18, the SMR is consistently better than or comparable with the SMR for the state indicating that there are no large variations between the SMRs in the individual cities and towns within the CHNA.
Source: RVRS from MassCHIP

Breast Cancer Deaths

The SMR for Breast Cancer among females has not significantly changed between 1999 and 2008. Further, there is no significant difference between any city or town within the CHNA and the CHNA as a whole or the state as a whole.

Prostate Cancer Deaths

Prostate Cancer deaths were significantly lower in CHNA 18 as compared with the state in 1999-2008. Due to the small numbers, no differences between individual cities and towns and the state were

deemed significant with the exception of Weston, which had a significantly lower rate of deaths from prostate cancer than did the state as a whole (data not included in report).

Hypertension

Estimates indicate that most cities and towns within CHNA 18 have significantly lower rates of adults reporting having ever had hypertension than Massachusetts as a whole. Variation within the CHNA is described in Table 22.

Table 22: Estimated Percent of Adults who ever had Hypertension

Better than MA Average	Worse Than MA Average	Not Significantly Different From MA Average
Brookline Dover Needham Newton Waltham Wellesley Weston		Dedham Westwood

Source: Unpublished Data from Massachusetts Department of Public Health

Diabetes

Estimates indicate that most cities and towns within CHNA 18 have significantly lower rates of adults reporting having ever had diabetes than Massachusetts as a whole with the exception of Dedham. Variation within the CHNA is described in Table 23.

Table 23: Estimated Percent of Adults who ever had Diabetes

Better Than MA Average	Worse Than MA Average	Not Significantly Different from MA Average
Brookline Dover Needham Newton Waltham Wellesley Weston Westwood	Dedham	

Source: Unpublished Data from Massachusetts Department of Public Health

Smoking

Estimates indicate that most cities and towns within CHNA 18 have significantly lower rates of adults reporting being smokers Massachusetts as a whole. Variation within the CHNA is described in Table 24.

Table 24: Estimated Smoking among Adults in CHNA 18

Better Than MA Average	Worse Than MA Average	Not Significantly Different From MA Average
Brookline Dover Needham Newton Wellesley Weston Westwood		Dedham Waltham

Source: Unpublished Data from Massachusetts Department of Public Health

Adult Obesity

Estimates indicate that most cities and towns within CHNA 18 have significantly lower rates of adult obesity than does Massachusetts as a whole. Variation within the CHNA is described in Table 25.

Table 25: Estimated Obesity Among Adults in CHNA 18

Better Than MA Average	Worse Than MA Average	Not Significantly Different from MA Average
Brookline Dover Needham Newton Waltham Wellesley Weston Westwood		Dedham

Source: Unpublished Data from Massachusetts Department of Public Health

Exercise and Nutrition

Estimates indicate that most cities and towns within CHNA 18 have significantly lower rates of adults who report getting no exercise than does Massachusetts as a whole. Variation within the CHNA is described in Table 26.

Table 26: Estimated Adults Getting No Exercise in CHNA 18

Better Than MA Average	Worse Than MA Average	Not Significantly Different from MA Average
Brookline		Dedham

Dover Needham Newton Wellesley Weston Westwood		Waltham

Source: Unpublished Data from Massachusetts Department of Public Health

Estimates indicate that most cities and towns within CHNA 18 have significantly lower rates of adults reporting that they don't eat at least 5 fruits and vegetables a day. Variation within the CHNA is described in Table 27.

Table 27: Estimated Adults Eating 5 Fruits and Vegetables a Day

Better Than MA Average	Worse Than MA Average	Not Significantly Different From MA Average
Brookline Dover Needham Newton Wellesley Weston Westwood		Dedham Waltham

Source: Unpublished Data from Massachusetts Department of Public Health

Food Security

There are a total of ten food pantries and two soup kitchens located in CHNA 18. There is at least one food pantry located in each CHNA 18 city or town, with the exceptions of Dover and Weston. Waltham houses the only two soup kitchens (as indicated through the Greater Boston Food Bank's food recipients) as well as three of the ten food pantries in CHNA 18.

INFECTIOUS DISEASE

HIV/AIDS Prevalence

Table 28 describes the variation that exists between cities and town in the CHNA by showing which cities and towns have prevalence significantly above or below the CHNA average.

Table 28: HIV/AIDS prevalence in cities and towns in CHNA 18 compared with CHNA average.

Higher Than CHNA average	Lower Than CHNA average	Not Significantly Different From CHNA	Not Enough Data to Draw Conclusion as Relates to CHNA
Brookline** Waltham**	Needham Wellesley Westwood	Dedham Newton	Dover Weston

** While higher than CHNA average, the prevalence in Brookline and Waltham is still lower than that of the state.

Source: HIV/AIDS program
Year: 2009

YOUTH

Pediatric Asthma

A CHNA average was not available for this indicator; however data from individual cities and towns within the CHNA indicate that the majority of CHNA 18's cities and towns had a lower percentage of students with asthma than the state as a whole.
Table 29 compares individual cities and towns to the state average:

Table 29: Students in Grades K-8 with Asthma

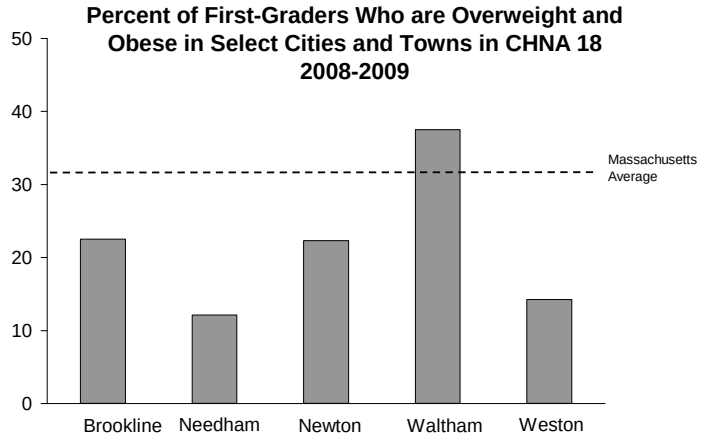
Higher than state average	Lower than state average	Not Significantly Different From State Average
Dedham	Dover Newton Waltham Weston Westwood	Brookline Needham Wellesley

*CHNA data does not include Brookline in this statistic as custom report did not allow addition of Brookline in this instance.
Source: Essential School Health Services, MDPH

Youth Overweight and Obesity

While there was variation in the percentage of first graders in this town who were considered overweight and obese, all cities and towns, with the exception of Waltham, had a lower percentage of overweight and obese first graders than did Massachusetts as a whole (See Figure 18).

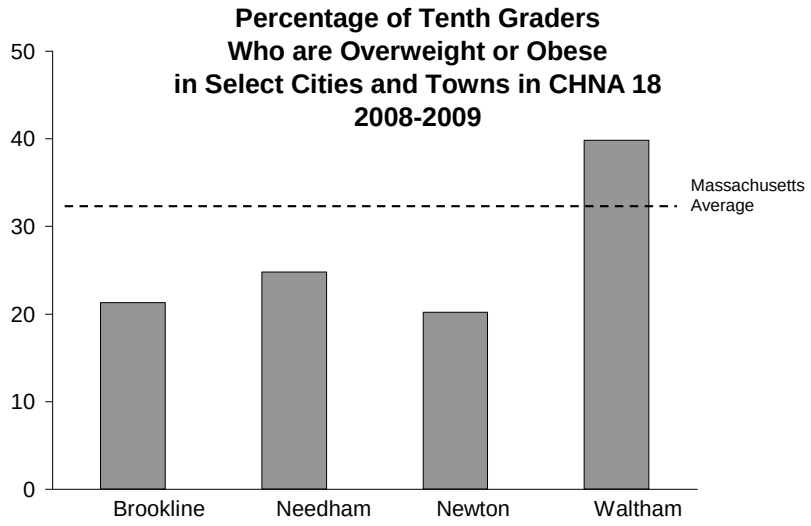
Figure 18



Source: "Status of Childhood Overweight in Massachusetts in 2009," Massachusetts Department of Public Health Report. The data available for tenth graders in CHNA 18 are similar to that available for first graders, with the absence of data for Weston which is unavailable for tenth graders (See Figure 19).
Year: 2008-2009

The patterns evident among first graders are echoed in the data for tenth graders, with Brookline, Newton, and Wellesley showing lower rates of overweight and obesity and Waltham showing higher rates as compared with the state.

Figure 19



Error! No bookmark name given. Source: "Status of Childhood Overweight in Massachusetts in 2009" MDPH Report.

Child Abuse

In 2009 there were fewer substantiated cases of child abuse after an investigation in CHNA 18 as compared with Massachusetts. Specifically, Wellesley, Newton, and Dedham had lower rates of substantiated cases as compared with the state. Waltham and Needham were not significantly different and Brookline, Dover, Weston, and Westwood did not have enough information to compare with the state.

INJURIES

Motor Vehicle Emergency Department (ED) Visits

The rate of motor-vehicle related ED visits is lower in CHNA 18 as compared with Massachusetts as a whole. Table 30 describes the large variation that exists between cities and towns within the CHNA.

Table 30: Motor Vehicle Related ED Visits

Better Than CHNA Average	Worse Than CHNA Average	Rate Comparable With CHNA Average
Brookline Needham Newton Wellesley Weston	Dedham Waltham Westwood	Dover

Source: Emergency Department Data from MassCHIP
Year: 2006-2008

PERINATAL

Teen Birth Rate

The Teen Birth Rate (Births per 1000 teenagers aged 15-19) in 2005-2009 was lower in CHNA 18 as compared with the state. Each city and town within the CHNA had a lower Teen Birth Rate than that of the state. In spite of this consistent trend, there was variation between cities and towns in the CHNA, with Dedham and Waltham experiencing higher teen birth rates than other cities and towns within the CHNA.

Low Birth Weight

The Low Birth Weight Rate (less than 5.5 lbs at birth) in CHNA 18 is significantly lower than Massachusetts Average. Variation between cities and towns within the CHNA are described in Table 31.

Table 31: Low Birth Weight Rate in CHNA 18 2005-2009

Better Than MA Average	Above Massachusetts Average	Not Significantly Different from MA Average
Brookline Dedham Needham* Westwood		Dover Newton Waltham Wellesley Weston

* In addition to being significantly below the Massachusetts average, the rate of low birth weight in Needham is significantly below the CHNA average.

Data Source: RVRS, birth data from MassCHIP

Multiple Births

The multiple birth rate for CHNA 18 is significantly higher than that of the state. Variation in multiple birthrates in cities and towns within the CHNA is described in Table 32.

Table 32: Multiple Birthrate in CHNA 18 in 2000-2009

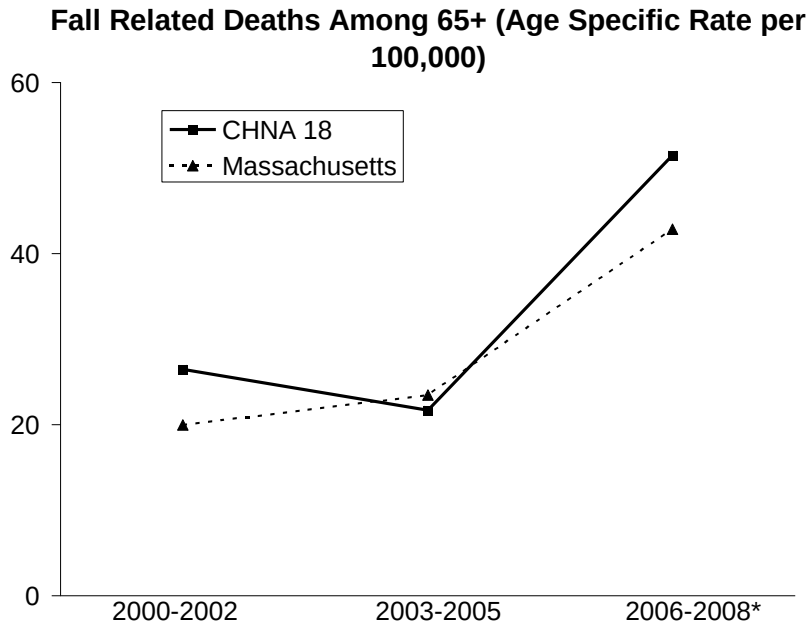
Below Massachusetts Average	Above Massachusetts Average	Not Significantly Different From Massachusetts Average
	Brookline Dedham Dover* Newton Wellesley* Weston* Westwood	Needham Waltham

*In addition to being significantly above the Massachusetts average, the rate of multiple births in Dover, Wellesley, and Weston is significantly above the CHNA average.
Data Source: RVRS, birth data from MassCHIP

Seniors

The rate of fall-related deaths among those older than 65 has risen in Massachusetts as a whole, and in CHNA 18 in particular, in the 2006-2008 time period as compared with the 2003-2005 time period. In addition to paralleling the rise in Massachusetts, the rate in CHNA 18 in 2006-2008 is higher than that of the state (Figure 20 below).

Figure 20



Source: RVRS, death data from MassCHIP

CHAPTER 6: COMMUNITY INITIATIVES AND STRATEGIES

Many respondents report that their towns have developed new programs (60%) or new partnerships (30%) to address identified community needs. Of note is that few new programs are planned for the future, indicating the increasing lack of resources available to address town priorities (See Figure 21). Many interviewees spoke of reduced support for their programs, increased competition for limited grant dollars, and lay-offs of staff. Some organizations are increasing the use of volunteers to supplement paid staff.

Almost all respondents spoke to the need for more programs and resources to address the specific community health needs they identify for their city or town. Figure 22 details additional strategies that organizations would like to see used in addressing identified challenges. Themes that emerged in this part of the interview included:

- The critical need for better cooperation among and between providers,
- Improving communication about and coordination of services, including addressing HIPPA constraints and hiring community/regional social workers,
- Exploring inter-town or regional responses to community health needs,
- Improving transportation options,
- Raising the threshold for entitlement services to allow more citizens access,
- Implementing efforts to build community social connections,
- Education around mental health/mental illness, including resources for treatment,
- Education for more effective parenting, and
- Investing in prevention.

Figure 21

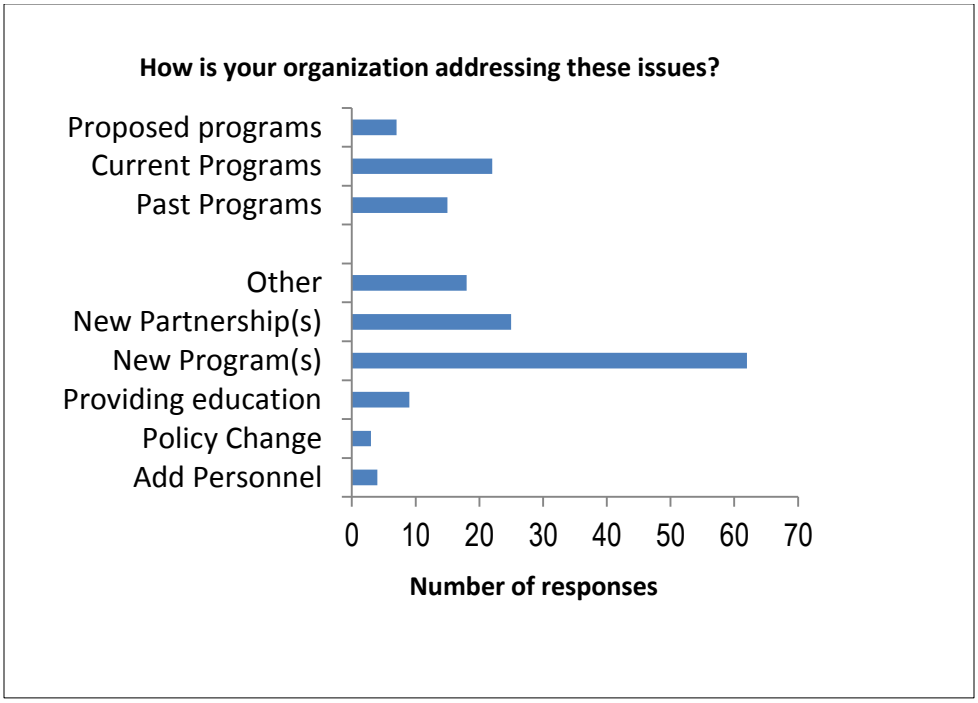
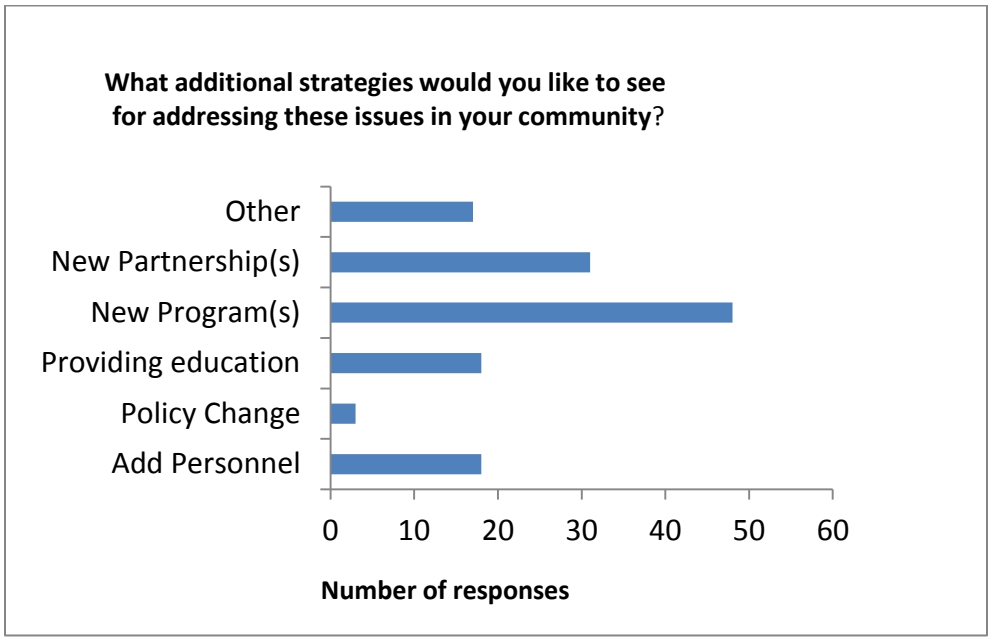


Figure 22


What additional strategies would you like to see for addressing these issues in your community?
Other
New Partnership(s)
New Program(s)
Providing education
Policy Change
Add Personnel
0
10
20
30
40
50
60
Number of responses

CHAPTER 7: ARE OUR HOSPITALS MEETING OUR COMMUNITY NEEDS?

Hospital Discharge Data

Of the hospitals located within CHNA 18, patients of five facilities are made up of many CHNA 18 residents. These hospitals include: Brigham and Women's, Newton-Wellesley, Beth-Israel Deaconess Needham, St. Elizabeth's Medical Center, and Mount Auburn.

BID-Needham has the largest percentage of patients from CHNA 18 with almost three quarters of patients coming from this region. Specifically, 46.1% of all patients reside in Needham and 11.8% of patients reside in Dedham (data not shown in report).

Table 33 breaks down hospital discharge data by city and town within the CHNA. For example, 35.4% of Brookline residents who were hospitalized in 2009 used Beth Israel Deaconess while 28.6% of Brookline residents who were hospitalized used Brigham and Women's Hospital.

Table 33: Hospital discharge data by city/town

	Brookline	Dedham	Dover	Needham
Beth Israel Deaconess (BID)	35.4	12.1	10.3	18.1
BID- Needham	N/A*	7.7	6.0	30.3
Brigham and Women's	28.6	15.6	15.8	10.5
Norwood Hospital	N/A	17.3	5.5	N/A
St. Elizabeth's Medical Center	6.6	N/A	N/A	N/A
Children's	4.1	N/A	6.3	N/A
Faulkner	N/A	13.3	4.0	N/A
Lahey Clinic	N/A	N/A	N/A	N/A
Massachusetts General Hospital	6.9	4.0	15.0	4.0
Metrowest Medical Center	N/A	N/A	7.0	N/A
Mt. Auburn	N/A	N/A	N/A	N/A
New England Baptist	N/A	N/A	4.8	N/A
Newton-Wellesley	4.1	9.7	14.0	20.9
Other	14.3	20.3	11.3	16.2

	Newton	Waltham	Wellesley	Weston	Westwood
BID	13.4	6.3	8.1	9.3	8.8
BID- Needham	N/A	N/A	N/A	N/A	9.2
Brigham and Women's	14.2	6	13.1	10.7	12.5
Norwood Hospital	N/A	N/A	N/A	N/A	28.3
St. Elizabeth's Medical Center	8.7	11.5	N/A	4.6	N/A
Lahey Clinic	N/A	4.7	N/A	4.2	N/A
Children's	N/A	N/A	N/A	N/A	N/A
Faulkner	N/A	N/A	N/A	N/A	7.8
Massachusetts General Hospital	9.8	6.5	12.6	14.4	7.0
Metrowest Medical Center	N/A	N/A	4.5	N/A	N/A
Mt. Auburn	N/A	15.3	N/A	N/A	N/A
New England Baptist	N/A	N/A	N/A	N/A	N/A
Newton-Wellesley	36.5	37.3	41.5	39.5	10.4
Other	17.6	12.4	20.2	17.3	16.0

Source: Census from MassCHIP

*Any value under 4.0% is indicated by N/A and included in "Other."

Attitudes about hospitals

Hospitals are considered important partners in improving the health of communities. When asked which hospital interviewees considered most connected to their community, four were identified: Newton-Wellesley Hospital, Beth Israel/Beth Israel Deaconess, Mount Auburn Hospital and C Norwood Hospital. In addition, an examination of hospital discharge data indicates that many CHNA 18 residents use Brigham and Women's Hospital.

While interviewees had high expectations of hospital participation in community health activities, many were uncertain as to whether their hospital was addressing unmet community needs.

Asked whether hospitals are good partners with other community organizations in addressing community health needs, Mount Auburn and Norwood Hospital have slightly more positive responses while Newton Wellesley and Beth Israel have slightly more uncertain or negative responses. While the small numbers of responses for each hospital make comparisons difficult, hospitals may find the information gathered useful for designing program, marketing and outreach activities. Figure 23 describes interviewees' responses when asked about which hospitals they felt were most connected to their community.

Figure 23

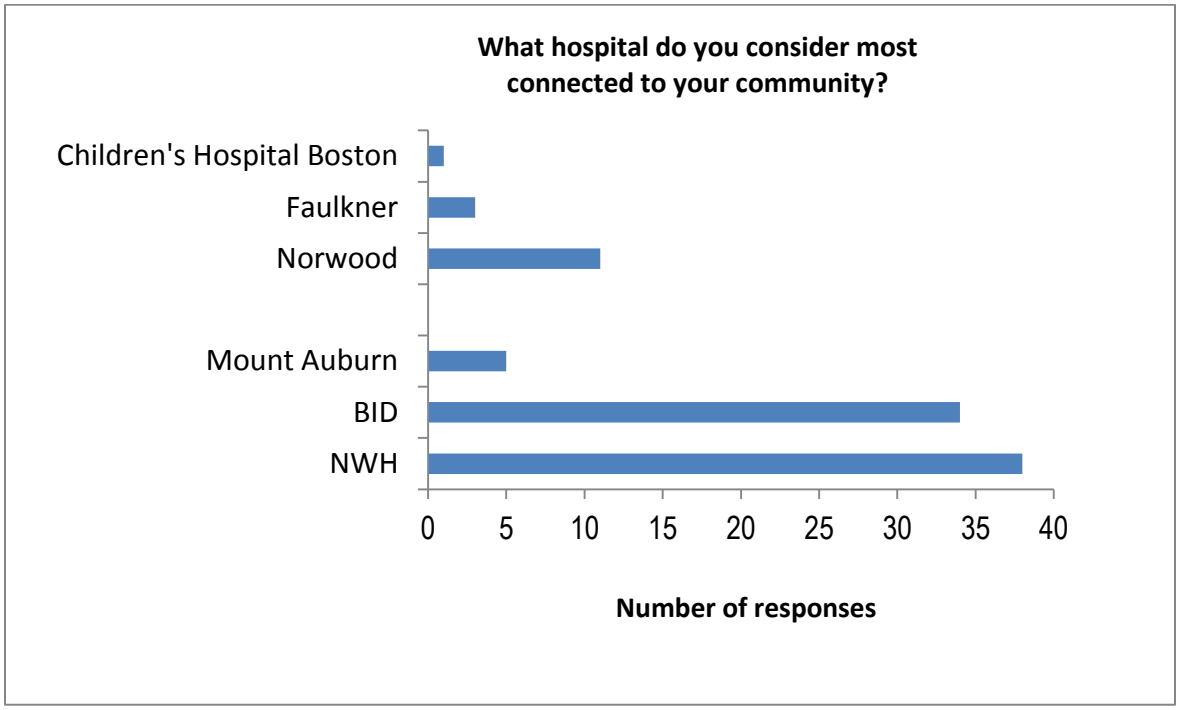


Figure 24

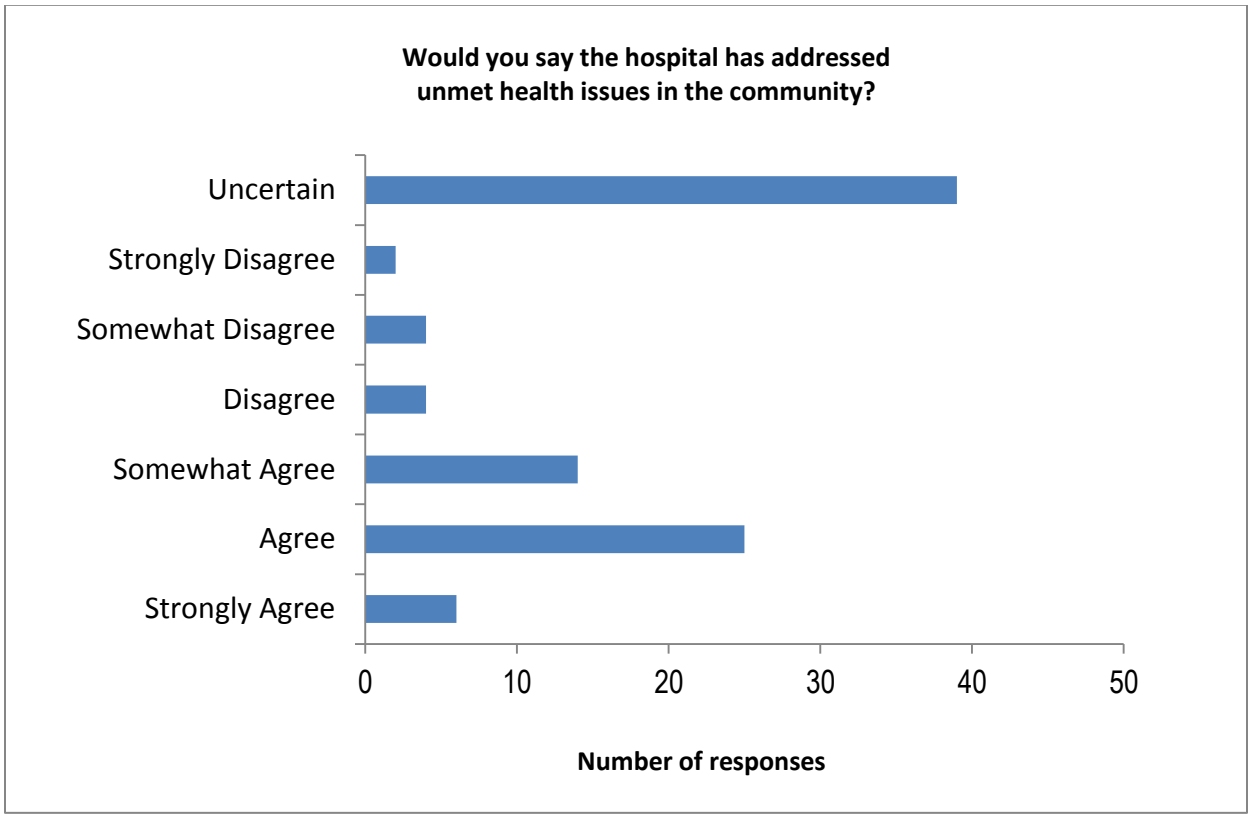
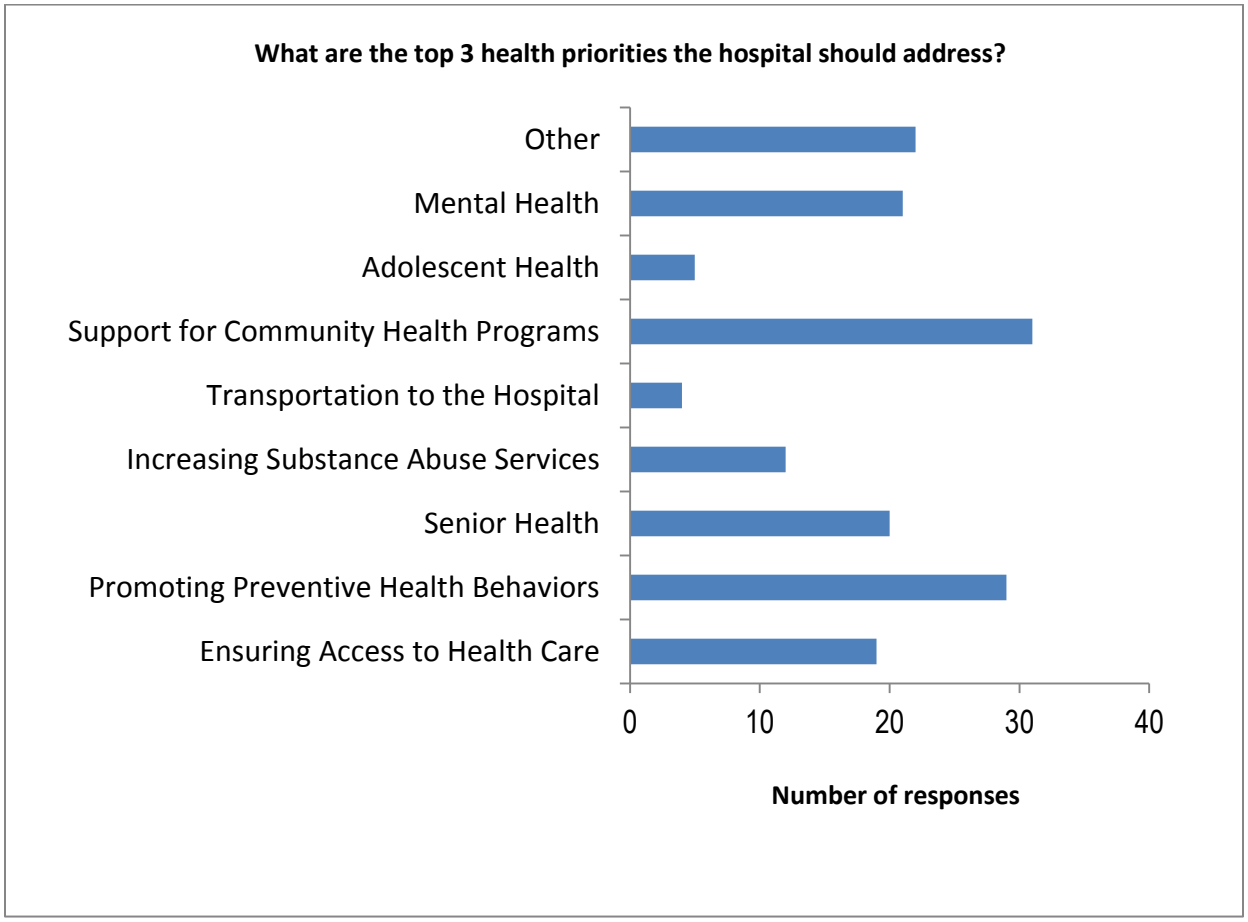


Figure 25


What are the top 3 health priorities the hospital should address?
Other
Mental Health
Adolescent Health
Support for Community Health Programs
Transportation to the Hospital
Increasing Substance Abuse Services
Senior Health
Promoting Preventive Health Behaviors
Ensuring Access to Health Care
0
10
20
30
40
Number of responses

CHAPTER 8: WHERE DO WE GO FROM HERE?

This report reflects information collected as part of Phase 1 of the Community Health Needs Assessment. Phase 1 focused on identifying major health priorities through the gathering of quantitative and qualitative data (Phase 2, described below, includes a more comprehensive approach to utilizing the report results). While this report provides a good deal of information about the health status of CHNA 18 cities and towns, the primary goal of the assessment has been to provide the CHNA 18 community with information that is both interesting *and* useful. Ideally, the results will extend well beyond the pages of this written report, and lead to conversations and action around the issues of ***mental health, access to health care, and the built and social environment*.** Additionally, this document is intended to be used as a starting point for collaboration and innovation in public health within, among, and beyond the nine communities of CHNA 18.

The three priority health areas of ***mental health*, *access to health care***, and the ***built and social environment*** arose from a months-long series of community discussions and surveys. These priority health areas encompass issues people face every day in their personal and professional lives, like whether a parent can navigate the maze of mental health services available, if a neighbor can get the medical care she needs or whether a client has a safe place to call home. It is the goal of this report to expand upon these issues, and provide support and context for program planning, grant writing, and other activities as needed.

It is important to note that the information gathered for this report is merely a snapshot in time of the health of these communities. Priority health areas and related health indicators were selected based on extensive information gathering and prior research, but these alone do not define the health of people living and working in these communities. There is much more data available that describes the health status of CHNA 18 communities and much of this can be found on the CHNA 18 website, where an online resource for more data has been established.

How can this report be used?

Community Members: During the data gathering process, CHNA members were asked to share what they hoped to gain from the needs assessment results and how the results could best be used. The vast majority expressed the need to have data (both CHNA–wide and town specific) that can be used to seek funding, to demonstrate need and to better understand the populations they serve. This report was created with that perspective as a guiding factor, and ideally the information can be used in many ways.

Many communities may choose to use this report to begin a dialogue. Since the data presented is intended to make an impact at the local level, an important question to ask upon review of the data would be what services are already in place or what else could be done to address the areas of concern. Additionally, the results in this report can be shared with community leaders, informing them about major health issues in their areas and empowering them to make changes. Community health, as a whole, is best addressed by engaging and involving as many members of a community as possible. The CHNA encourages the sharing of this information with community partners, local media, schools, regional hospitals, colleagues, neighbors, and family. Post this report on websites, share it with others via social media, and use it to write grants for additional funding.

CHNA 18: A major impetus for embarking on the needs assessment process was to help the CHNA identify how best to allocate resources, particularly any funds that may become available. The CHNA intends to develop a 3-5-year action plan based on the results, which will include funding allocation, professional development and educational programming, and member support. Any grant funding released to the community will be based on the results of the needs assessment, and will likely be related to addressing the priority health issues identified.

Community members AND CHNA 18: The report supports several strategies both CHNA 18 and community members might utilize based on the results. These might include:

- Connecting providers who are working on the same issue. For example, qualitative interviews revealed many organizations are working to prevent domestic violence and provide support for those who have experienced domestic violence. Often these groups are working independently when collaboration would promote better access to services.
- Engaging in efforts to improve communication about/coordination of services among NGOs, local government and community residents.
- Exploring inter-town or regional responses to community health needs, e.g. hiring of community/regional social workers.
- Focusing efforts on CHNA 18's aging population and their caregivers, especially regarding falls prevention.
- Advocating for improved transportation options.
- Implementing efforts to build social connections within communities.
- Providing education around mental health/mental illness, including resources for treatment.
- Providing education for more effective parenting.
- Use the town specific data sheets developed for each of the nine cities and towns in CHNA 18. (available for printing at www.chna18.org). These 1-page handouts were designed to provide a quick overview of the major health issues in each community. They are meant to be easily copied and shared with others.

Phase 2-What's Next?

CHNA 18 intends to expand this report by embarking on a second phase that will likely include additional data gathering. During the interview process, it became clear that members saw a need for data that have never been collected, or data that was collected was only statewide and largely irrelevant at the local level in specific populations. Phase 2 will focus on accessing data that was not readily available during Phase 1 and will review existing resources available to address priorities that emerge.

Also, as part of Phase 2, the CHNA plans to review the report with local boards of health, health departments and community organizations to share the results of the assessment, bring stakeholders together to discuss the implications of the data, and to solicit feedback on the report itself. Questions to be asked might include: Does the data confirm existing impressions? Is more detailed information needed? Community residents who are involved in these discussions will benefit from a more in-depth analysis of existing data. In addition, they will be part of identifying specific information that their NGO

or community needs and will have access to a more thorough assessment of available resources to help them target services

While the CHNA believes it was important to have a completed assessment ready for Spring 2012, the Community Health Needs Assessment is meant to be updated and changed as new information becomes available. Phase 2 is an opportunity for the CHNA to solicit more feedback from community members on the timeliness, relevance, and usefulness of the report's content, and to make changes as necessary.

Potential Phase 2 Activities might include:

- Conduct more key informant interviews from broader community perspectives,
- Complete community surveys through the internet and local newspapers for more resident input,
- Hold focus groups for target subgroups such as youth, elderly, or more isolated groups,
- Find more community data sources such as public safety and health department program information,
- Review, compile and analyze YRBS and other youth focused data,
- Perform more in-depth analyses of data identified in phase 1,
- Find more existing secondary data sources,
- Evaluate community resources,
- Work with full CHNA and individual communities to develop action plans, and
- Create ongoing repositories for data and community health indicators that can be used and updated at community level.

CHAPTER 9: ADDITIONAL RESOURCES

In addition to the data presented in the report, the following table describes data publicly available that is relevant to the report's domains.

Additional data can be found at www.chna18.org. On the website, the data from this report as well as many other relevant data are listed.

Table A1: Additional Data Available

	Individual City and Town	CHNA	State	US	Healthy People 2020 Goal
Demographic Data					
Births	All	Yes	Yes	Yes	No
Deaths	All	Yes	Yes	Yes	No
Life Expectancy at Birth	No	No	Yes	Yes	No
Health Risk and Disease Outcomes					
Maternal and Child Health					
Women with Pre-pregnancy BMI that is overweight	None	No	Yes	Yes	No
Infant Mortality	All	Yes	Yes	Yes	Yes
Pre-term births	All	Yes	Yes	Yes	Yes
Cesarean Delivery	All	Yes	Yes	Yes	Yes
Breastfeeding	All	Yes	Yes	Yes	Yes
WIC Participants	All	Yes	Yes	Yes	No
Injuries/Violence					
Weapons Injuries	None	Yes	Yes	Yes	Yes
Self-inflicted Injuries	Some	Yes	Yes	Yes	No
Injury-related deaths	All	Yes	Yes	Yes	Yes
Fall-related deaths	All	Yes	Yes	Yes	Yes
Sexual Violence	None	Yes	Yes	Yes	Yes
Youth that had sexual contact against will	No	No	Yes	Yes	No
High schoolers who attempted suicide	Some	No	Yes	Yes	Yes
Elevated blood lead level cases	Some	Yes	Yes	Yes	Yes
Violent Deaths					
Firearm Deaths	Some	Yes	Yes	Yes	Yes
Homicides	All	Yes	Yes	Yes	Yes
Motor Vehicle Related Deaths	Some	Yes	Yes	Yes	Yes

	Individual City and Town	CHNA	State	US	Healthy People 2020 Goal
Disease-Related Deaths					
Asthma Deaths	Some	Yes	Yes	Yes	Yes
Hospitalizations/ER Visits					
Diabetes Hospitalizations	All	Yes	Yes	Yes	No
Obesity Hospitalizations	All	Yes	Yes	Yes	No
ER pediatric Asthma Hospitalizations	All	Yes	Yes	Yes	Yes
Traumatic Brain Injury Hospitalizations	All	Yes	Yes	Yes	Yes
Overweight and Obesity					
Overweight/Obese high school students	Some	Yes	Yes	Yes	Yes
Overweight/Obese children in grades 1, 4, 7, and 10	Some	Yes	Yes	Yes	Yes
Disease Risk					
Adults with high cholesterol	None	Yes	Yes	Yes	Yes
Screenings					
Colorectal Cancer Screenings	None	Yes	Yes	Yes	Yes
Adults who have had blood pressure checked	None	Yes	Yes	Yes	Yes
Disease Incidence/Prevalence					
Children with Asthma	All	Yes	Yes	Yes	Yes
Mental Health					
General					
Number of psychiatrists	All	Yes	Yes	Yes	No
Adults					
Adults who felt tense >15 days in the past month	No	No	Yes	Yes	Yes
Had >15 days of high energy in the past month	No	No	Yes	Yes	Yes
Had >15 days of pain in the last month	No	No	Yes	Yes	No

	Individual City and Town	CHNA	State	US	Healthy People 2020 Goal
Had >15 days sad, blue, or depressed in the last month	No	Yes	Yes	Yes	No
Youth					
Youth who were bullied at school	Some	No	Yes	Yes	Yes
High-Schoolers who felt so sad or hopeless that they stopped some activities in the last year.					
Access to Healthcare					
Medicaid Recipients (65+, disabled, family, total)	All	Yes	Yes	Yes	No
Early Intervention Participants	Some	Yes	Yes	Yes	Yes
Infants Diagnosed with hearing loss (Total and those that received services)	No	No	Yes	Yes	Yes
Child Care Slots	All	Yes	Yes	Yes	No
Healthy Social and Built Environment					
Protected Open Space	All	Yes	Yes	Yes	No
Form of Government	All	Yes	Yes	Yes	No
Registered Voters	All	Yes	Yes	Yes	No
Number of Crimes	All	Yes	Yes	Yes	Yes
Number of jobs	All	Yes	Yes	Yes	No
Public School Enrollment	All	Yes	Yes	Yes	No
MCAS	All	Yes	Yes	No	No

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