MEDFORD SURGERY CENTER, LLC
DON APPLICATION # 18060613-AS
ATTACHMENTS

APPLICATION FOR DETERMINATION OF NEED FOR AMBULATORY SURGERY SERVICES

JUNE 11, 2018

BY

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700 CONGRESS STREET, SUITE 204
QUINCY, MA 02169

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2. Project Description

Medford Surgery Center, LLC ("Applicant") located at 700 Congress Street, Suite 204, Quincy, Massachusetts 02169 submits this request for a Notice of Determination of Need ("DoN") for the construction of a freestanding ambulatory surgery center ("ASC") to be located on the grounds of the MelroseWakefield Healthcare Corp.'s ("MelroseWakefield Healthcare") Lawrence Memorial Hospital campus at 170 Governors Avenue, Medford, MA 02155 ("Proposed Project"). The Applicant is a newly formed joint venture founded for the purposes of establishing the ASC. Its members are Shields ASC, LLC ("Shields ASC"), MelroseWakefield Healthcare, formerly Hallmark Health and Tufts Medical Center Physician Organization ("TMCPO").

Through the Proposed Project, the Applicant will construct an ASC with three (3) outpatient operating rooms and two (2) procedure rooms on the Lawrence Memorial Hospital campus. In turn, once the ASC opens, Lawrence Memorial Hospital, which currently operates 11 operating and procedure rooms, will surrender the right to operate three (3) operating rooms and three (3) procedure rooms. Lawrence Memorial Hospital also will temporarily suspend use of the remaining 5 operating and procedure rooms while the hospital plans for their potential future use. The proposed ASC will specialize in providing outpatient surgical services, including orthopedic surgery; ear, nose and throat ("ENT") surgery; endoscopy; and plastic surgery to a designated panel of patients. The establishment of the ASC will allow the Applicant to offer value-based care through the provision of high quality, low-cost surgical services to patients in Medford, Massachusetts and the surrounding communities.

Statewide population statistics, as well as service area projections for the Proposed Project show substantial growth in the 0-18 age cohort and the 65+ age cohort. Consequently, the Proposed Project will satisfy existing and future needs of the Applicant's patient panel by ensuring timely access to ENT surgeries as well as increased access to high quality, community-based endoscopy, orthopedic and plastic surgical services for all adult patients, especially patients within the 65+ age cohort. By providing high quality services in the community, the Applicant will provide residents with a cost-effective alternative to receiving these services through a hospital-based outpatient department and/or traveling to Boston for necessary procedures.

Patients will benefit from the Proposed Project in multiple ways. First, the new ASC will be designed to utilize industry-defined best practices for quality, efficiency and effectiveness. High quality care will be achieved through the provision of a smaller scope of procedures in comparison to a hospital, leading clinical staff to become highly proficient in providing the noted surgical services and procedures. Second, the Applicant will implement appropriate process improvement initiatives by reviewing quality of care outcomes, identifying best practices and implementing necessary process changes to ensure high quality services. Third, the Applicant also will transform the care experience for patients ensuring higher levels of patient satisfaction through the implementation of online pre-registration tools and a cost transparency application. Fourth, the Applicant will improve quality of life for patients by providing access to state-of-the-art technology in a new facility designed with the patient experience in mind. The Applicant selected the location of the Proposed Project based on accessibility and convenience for patients in the noted service area. Situated in close proximity to major thoroughfares, the site for the Proposed Project will offer ample parking and other amenities, improving patient experience. Accordingly, these initiatives will provide patients with the highest quality outcomes and satisfaction levels.

Finally, the Proposed Project will meaningfully contribute to Massachusetts' goals for cost containment by providing high quality surgical services for clinically appropriate patients in a more cost-effective setting. With the emergence of ASCs as a high-quality care option, health care expenditures for elective and same day surgical procedures will decrease, reducing overall provider costs, and directly impacting total medical expenses ("TME"). Consequently, the Proposed Project will compete on the basis of TME and provider costs.

Factor 1: Applicant Patient Panel Need, Public Health Values and Operational Objectives

F1.a.i **Patient Panel:**
Describe your existing Patient Panel, including incidence or prevalence of disease or behavioral risk factors, acuity mix, noted health disparities, geographic breakdown expressed in zip codes or other appropriate measure, demographics including age, gender and sexual identity, race, ethnicity, socioeconomic status and other priority populations relevant to the Applicant's existing patient panel and payer mix.

The Applicant is a newly formed joint venture between Shields ASC, LLC ("Shields ASC"); MelroseWakefield Healthcare, formerly Hallmark Health; and TMCPO. Shields ASC is affiliated with Shields Health Care Group, a provider with more than thirty (30) years of experience in providing high quality, high value outpatient healthcare services, with a focus on advanced diagnostic imaging. MelroseWakefield Healthcare is a fully integrated health care system that includes a licensed hospital with two (2) campuses, including Melrose-Wakefield Hospital and Lawrence Memorial Hospital of Medford, as well as a number of satellite locations in its surrounding communities north of Boston. MelroseWakefield Healthcare is a founder member of Wellforce Care Plan, which is an Accountable Care Organization. Wellforce is a comprehensive health system with four community hospital campuses, an academic medical center, a children's hospital, and nearly 3,000 physicians. Wellforce was established in 2014 by Tufts Medical Center, Circle Health (which includes Lowell General Hospital), New England Quality Care Alliance ("NEQCA"), a large physician group, and the Lowell General Physician Hospital Organization. MelroseWakefield Healthcare joined Wellforce in 2017, adding Melrose-Wakefield Hospital, Lawrence Memorial Hospital, and the Hallmark Physician Hospital Organization to the system. TMCPO is Tufts Medical Center's academic physician organization. Both TMCPO and the Hallmark Health Physician Organization are a part of NEQCA.

The ASC also will be affiliated with Wellforce. The affiliated physician members can practice at Wellforce's various hospitals, improving patient access to specialists. Wellforce joins its providers together in a model that brings high quality care to its patients and achieves synergies as well as economies of scale to provide care more efficiently and cost effectively.

The joint venture was formed to establish an ambulatory surgery center ("ASC") that will serve the communities around Medford, Massachusetts. As the Applicant is a newly formed joint venture and does not have its own patient panel, the Applicant relies on patient panel data from its joint venture partners to determine the need for the Proposed Project. In addition to historical volume from the joint venture partners, the Applicant relies upon demographic and service line specific demand projections obtained from the Advisory Board Company ("Advisory Board), which further validates the need for ambulatory surgical services in the Applicant's Primary Service Area ("PSA").

A. Historical Patient Panel Information

MelroseWakefield Healthcare Patient Panel

MelroseWakefield Healthcare is comprised of a community hospital with two campuses: The Melrose-Wakefield Hospital campus in Melrose and the Lawrence Memorial Hospital of Medford, along with multiple satellite locations in its primary service area. In addition, MelroseWakefield Healthcare has a physician organization and visiting nurse association ("VNA") that provides both home health and hospice services. The proposed ASC will be sited on the Lawrence Memorial Hospital campus in Medford. Approximately 84% of the proposed ASC's patient panel will be comprised of MelroseWakefield Healthcare's patients. Accordingly, the Applicant provides data with respect to the broader MelroseWakefield Healthcare patient panel for its most recent three fiscals years ("FY").

For the purposes of review, MelroseWakefield Healthcare examined unique patients, unique visits, and unique cases. Unique patients are the number of individual patients who obtained care while unique visits are the number of individual visits for each patient. In contrast, unique cases are the billed encounters; a patient may have multiple individual visits that are billed as one case. In FY2015, MelroseWakefield Healthcare saw 444,552 unique cases, 502,961 unique visits, and 121,933 unique patients; in FY2016, 448,447 unique cases, 510,516 unique visits, and 121,348 unique patients; and in FY2017, 429,703 unique cases, 484,307 unique visits, and 119,761 unique patients. The following narrative will present information based on unique visit, unique case, or unique patient data. Unique case, patient, and visit volume demonstrates that MelroseWakefield's patient panel is subject to annual fluctuations but maintains stability overall. Furthermore, MelroseWakefield Healthcare's historical patient panel demonstrates ongoing, consistent demand for services when age cohorts are considered.

From FY2015-2017, MelroseWakefield Healthcare tracked age by unique visits. 37% of MelroseWakefield Healthcare's unique visits were in the 65+ age cohort[1]. This remained stable all three years, demonstrating strong utilization amongst the older patient population. The 0-17 age cohort was the smallest, accounting for approximately 3% of all visits from FY2015-2017.[2] Of note, from FY2015-2017, 60% of MelroseWakefield Healthcare's patient panel was in the 18-64 age cohort.[3] Consequently, it is anticipated that a large shift of patients from the 18-64 age cohort to the 65+ age cohort will occur in the coming years.

With regard to gender, MelroseWakefield Healthcare tracked FY2015-FY2017 by unique patients. In FY2015, 50,581 unique patients or 41% were male while 71,355 unique patients or 59% were female. In FY2016, 50,353 unique patients or 41% were male while 70,996 unique patients or 59% were female. In FY2017, 49,345 unique patients or 41% were male while 70,422 unique patients or 59% were female.

MelroseWakefield Healthcare's patient panel is comprised of a mix of races, which is reported by unique cases. MelroseWakefield Healthcare tracks self-reported patient race data in the following categories: American Indian or Alaska Native; Asian; Black or African American; Hispanic or Latino; Native Hawaiian or Other Pacific Islander; White or Caucasian; and Other. Racial data for FY2017 provides the following results: 357,424 cases identified as White or Caucasian; 16,322 cases identified as Black or African American; 18,057 cases identified as Asian; 11,896 cases identified as Hispanic or Latino; 194 cases identified as American Indian or

[1] There were 186,306 visits age 65+ in FY 2015, 189,677 visits age 65+ in FY 2016, and 181,372 visits age 65+ in FY 2017.
[2] There were 17,281 visits ages 0-17 in FY 2015, 17,020 visits in FY 2016, and 15,699 visits in FY 2017.
[3] There were 299,371 visits in this cohort in FY 2015, 303,819 visits in FY 2016, and 287,236 visits in FY 2017.

Alaska Native; 35 cases were classified as Native Hawaiian or Other Pacific Islander; 4,479 cases identified as other; 18,214 cases were categorized as unknown; and 82 cases declined to self-report. In FY2016, 379,680 cases identified as White or Caucasian; 17,155 cases were identified as Black or African American; 18,320 cases were identified as Asian; 12,593 cases identified as Hispanic or Latino; 127 cases were identified as American Indian or Alaska Native; 18 cases were classified as Native Hawaiian or Other Pacific Islander; 4,153 cases identified as other; 16,341 cases were categorized as unknown; and 60 cases declined to self-report. In FY2015, 378,557 cases identified as White or Caucasian; 16,119 cases were identified as Black or African American; 16,692 cases were identified as Asian; 11,312 cases identified as Hispanic or Latino; 180 cases were identified as American Indian or Alaska Native; 16 cases were classified as Native Hawaiian or Other Pacific Islander; 6,677 cases identified as other; 14,975 cases were categorized as unknown; and 24 cases declined to self-report. Racial composition for the MelroseWakefield Healthcare patient panel may be underreported based on the number of cases self-reported as other or unknown.

MelroseWakefield Healthcare provides care to residents north of Boston. During the years FY2015-FY2017, the top ten cities and towns served by MelroseWakefield Healthcare were: Malden; Medford; Melrose; Wakefield; Saugus; Revere; Everett; Stoneham; Reading; and Somerville. Over 70% of MelroseWakefield Healthcare's cases are from these patients who reside in these cities and towns. The following chart provides a further breakdown of these numbers and demonstrates the percentage of patients from each of the top ten cities and towns in MelroseWakefield Healthcare's service area. The remaining patients in the panel are either from other cities and towns in Massachusetts or are part of the 2% of patients who do not reside in Massachusetts.

	FY 2015	FY 2016	FY 2017
Medford	68,180 (15%)	67,478 (15%)	62,634 (15%)
Malden	58,814 (13%)	58,217 (13%)	54,381 (13%)
Melrose	45,337 (10%)	45,080 (10%)	42,420 (10%)
Wakefield	35,864 (8%)	36,304 (8%)	34,607 (8%)
Saugus	34,085 (7%)	34,516 (7%)	32,370 (7%)
Revere	20,912 (5%)	20,202 (5%)	19,062 (4%)
Everett	20,653 (5%)	20,624 (5%)	18,883 (4%)
Stoneham	19,954 (5%)	20,247 (5%)	18,935 (4%)
Reading	12,884 (3%)	13,644 (3%)	13,532 (3%)
Somerville	11,731 (2%)	11,962 (2%)	11,547 (2%)

MelroseWakefield Healthcare's patient panel reflects a broad payer mix. Approximately 50% of the patient panel is insured by third party commercial carriers, while 42% of the patient panel is insured through government programs, such as MassHealth or Medicare. The remaining 6% of MelroseWakefield Healthcare's patient panel qualifies for free care, self-pay, or have some other form of insurance. The payer mix has remained fairly constant over the past three fiscal years, with only slight annual variations. Appendix A.2. provides this demographic profile for the Applicant in table form.

To determine historical need for the Project within the MelroseWakefield Healthcare service area, the Applicant reviewed historical use rates for the surgeries to be offered at the ASC. This

evaluation was intended as a guide to determine baseline volume. MelroseWakefield Healthcare historically has provided the types of surgical services that will be provided at the proposed ASC. This includes orthopedics, ENT surgery, endoscopy, and plastic surgery. Across these four specialties, MelroseWakefield Healthcare has experienced ongoing growth From FY2015-FY2017, total unique visits and total unique patients undergoing procedures within these specialties grew by 6.8% and 5.4%. The following chart provides historical volume data for the period FY2015-FY2017.

	FY 2015		FY 2016		FY 2017	
	Unique Visits	Unique Patients	Unique Visits	Unique Patients	Unique Visits	Unique Patients
Orthopedics	1,209	1,133	1,196	1,126	1,103	1,054
ENT	246	238	222	212	210	201
Endoscopy	7,115	6,610	7,680	7,063	7,882	7,259
Plastics	201	179	191	163	170	142
TOTAL	8,771	8,029	9,289	8,358	9,365	8,462

Demand for these services is expected to continue into the future due to the various factors influencing demand for services, such as age and increasing co-morbidities for patients in the 18-64 and 65+ age cohorts. In particular, endoscopy has experienced a significant increase in volume. From FY2015-FY2017, unique patients undergoing endoscopy procedures has increased by 9.8%. While historical volumes have demonstrated declines for orthopedics, ENT, and plastics, a portion of this loss can be attributed to physician attrition over the FY2015-FY2017 time period at MelroseWakefield Healthcare. However, through the affiliation with the Wellforce ACO, it is expected that providers may now begin to offer surgical services at additional locations. This added availability of physicians through the ACO affiliation is expected to reverse historical decline trends and account for overall increases in volume in the future. Moreover, demand for all of the services to be provided in the proposed ASC is expected to continue into the future due to the various factors influencing demand for services, such as age and increasing co-morbidities for patients in the 18-64 and 65+ age cohorts.

Wellforce ACO Patient Panel Specific to Medford ASC Service Area

In addition to MelroseWakefield Healthcare, the Applicant projects that volume for the proposed ASC will originate from the Wellforce Care Plan's patient panel that resides in the ASC's primary service area. Wellforce Care Plan ("Wellforce ACO") is an Accountable Care Organization ("ACO"). The Plan is comprised of the Wellforce ACO and Fallon Health. The Wellforce ACO is a group of hospitals and providers who have agreed to work closely together to provide care for MassHealth and risk-based patients. The Wellforce ACO is comprised of doctors and other health care providers from, or affiliated with several hospitals, including Melrose-Wakefield Hospital, Lawrence Memorial Hospital, and Tufts Medical Center.

Information is available for those Wellforce ACO patients who participate in its MassHealth ACO, Medicare Shared Savings Program, or are covered by risked-based commercial contracts. The Applicant reviewed the number of Wellforce ACO members who reside in the cities and towns of the proposed PSA and who do not have a MelrsoeWakefield Healthcare Primary Care Physician based on available data. The Applicant excluded patients with a MelroseWakefield Healthcare Primary Care Physician so as not to double count volume from the relevant historical MelroseWakefiled Healthcare surgery and procedure volume. In 2016 and 2017, the Wellforce ACO had the following members in the projected PSA: 4,366 MassHealth

ACO members;[4] 2,100 Medicare Shared Savings Program ACO members; and 27,618 commercial members.

Information also is available on the languages spoken by Wellforce ACO patient panel members, which include Chinese (167), Spanish (148), Haitian/Creole (40), Hindi (42), Arabic (37), and Vietnamese (111), among others. While this data does not indicate racial background, language spoken indicates panels members' ethnic identity. The languages spoken demonstrate that members of this subset of the Applicant's proposed patient panel are diverse.

B. Proposed Patient Panel and ASC Volume Projections

Advisory Board Projected Patient Panel

The Applicant utilized the Advisory Board data, as well as historical volume data from its joint venture partners to develop a primary service area ("PSA") for the ASC. The cities and towns that will comprise the ASC's PSA are: Malden; Medford; Melrose; Saugus; Wakefield; Stoneham; Revere; Everett; Winchester; Woburn; Wilmington; Reading; North Reading; Somerville; Arlington; Winthrop; Chelsea; Lynn; Lynnfield; and Peabody. The PSA has a total population of 738,961 as of 2016, which is expected to increase by 5% to 775,602 by 2021. The population originating within the ASC's PSA patient panel developed from the Advisory Board projections can be further broken down by certain demographic information. There was a total of 360,600 males within the PSA in 2016, growing by 5% to 379,294 in 2021. For females, there are a total of 378,362 in 2016, increasing 5% to 396,304 by 2021.

As previously discussed, the Applicant is a newly formed joint venture and as such has not previously operated an ASC in the proposed PSA. Consequently, there is no historical patient panel volume available relative to the ASC specifically. However, the Applicant utilized data obtained from the Advisory Board in conjunction with the Joint Venture partners' relevant patient panel data for the purposes of extrapolating volume projections. The Advisory Board is a best practices firm that uses a combination of research, technology, and consulting to improve the performance of health care organizations. Population health data obtained from the Advisory Board, including population/demographic projections, health conditions, and service line specific needs have allowed the Applicant to model projected volume for the proposed ASC.

Based on available data from the Advisory Board in conjunction with the Joint Ventures partners' relevant patient panel data, the Applicant determined that there are 120,590 potential patients who may need one of the noted surgical procedures within the ASC's proposed PSA.

	2016	2021	% Change
Endoscopy	51,629	62,681	21%
Orthopedic Surgery	36,477	45,804	26%
ENT Surgery	24,928	29,507	18%
Plastic Surgery	7,556	9,802	30%
Total Volume	**120,590**	**147,793**	**23%**

[4] This data is for 2017 only.

Assuming 15% of those potential patients fall within the managed population, the approximate relevant patient panel size is 18,096.

ASC Volume Projections

The Applicant aggregated ASC eligible historical volume from its joint venture partners and overlaid demographic projections and population health data from the Advisory Board to develop a conservative projected volume for the proposed ASC. The consolidation of this data allowed the Applicant to determine the future need within the proposed ASC's PSA for specialty surgical services. Using this data, the Applicant modeled volume projections for the ASC based on service line.[5] In total, the proposed ASC is will potentially service at least 20% of the ASC eligible patient panel within the PSA in Year 1 and up to 40% by Year 4, based on the Advisory Board data and associated projections.

	Year 1	Year 2	Year 3	Year 4
Endoscopy	2,523	3,784	4,541	4,995
Orthopedic Surgery	977	1,466	1,759	1,935
ENT Surgery	581	872	1,046	1,150
Plastic surgery	99	149	179	197

To determine the number of operating rooms and procedure rooms required to serve the projected volume, the Applicant established average surgical case and endoscopy procedure times for the proposed ASC. The times include surgical case or procedure time and room turnover time. Orthopedic surgeries are expected to have a total time of 85 minutes, including 65 minutes of surgery and a 20-minute operating room turnover. ENT cases will have a total of 75 minutes, inclusive of 55 minutes of surgical time and 20 minutes of operating room turnover. Endoscopy procedures will total 40 minutes, comprised of 30 minutes for the procedure and 10 minutes for procedure room turnover. Finally, plastic surgeries will require 140 minutes, including 120 surgical minutes and 20 minutes of operating room turnover time. Based on these numbers and ramp up in the availability of 3 operating rooms and 2 procedures rooms in the new ASC, the Applicant anticipates the ASC will perform 4 cases per day per operating room in Year 1, increasing to 5 cases per day per operating room by Year 4; in addition, 6 procedures per day per procedure room will be performed in Year 1, 7 procedures per day per procedure room in Year 2, 9 procedures per day per procedure room in Year 3, and 10 procedures per day per procedure room in Year 4.

F1.a.ii **Need by Patient Panel:**

Provide supporting data to demonstrate the need for the Proposed Project. Such data should demonstrate the disease burden, behavioral risk factors, acuity mix, health disparities, or other objective Patient Panel measures as noted in your response to Question F1.a.i that demonstrates the need that the Proposed Project is attempting to address. If an inequity or disparity is not identified as relating to the Proposed Project, provide information justifying the need. In your description of Need, consider the principles underlying Public Health Value (see instructions) and ensure that Need is addressed in that context as well.

[5] The Advisory Board data identified the drivers of this growth as population change, demographic shift, and disease prevalence.

In considering the Proposed Project, Wellforce, MelroseWakefield Healthcare and TMCPO, determined that their respective patient panels in the PSA would benefit from access to an ASC that provides the proposed specialized services. This determination was made based on an evaluation of patient panel composition and historical and projected demand, as well as available resources within the Wellforce system to provide such care in the most efficient and cost-effective setting.

A. Applicant's Proposed Establishment of a Five Room ASC

MelroseWakefield Healthcare's Lawrence Memorial Hospital campus currently has a satellite emergency department, inpatient psychiatry services, imaging services, and primary care. It is currently licensed to operate eleven (11) operating and procedure rooms. The existing operating rooms at Lawrence Memorial Hospital are at the end of their useful life and require significant renovation to meet current standards of care. However, MelroseWakefield Healthcare determined that renovation of the existing operating rooms is not a cost-effective approach to meeting the needs of its patients and that continuing to provide low acuity surgery in a hospital setting is costlier to patients and insurers. Consequently, the Applicant is proposing to establish a five (5) room freestanding ASC that will be located on the grounds of MelroseWakefield Healthcare's Lawrence Memorial Campus located at 170 Governors Avenue in Medford. The Applicant is partnering with Shields ASC and TMCPO to establish the ASC that will serve the noted PSA and be a resource to the Wellforce ACO in meeting the needs of the patient panel that originates in this area. The proposed ASC will contain three (3) outpatient operating rooms and two (2) procedure rooms. In turn, Lawrence Memorial Hospital, which currently operates eleven (11) operating and procedure rooms, will surrender the right to operate three (3) operating rooms and three (3) procedure rooms once the ASC is operational. Lawrence Memorial Hospital also will temporarily suspend use of the remaining five (5) operating and procedure rooms while the hospital plans for their potential future use. The ASC will specialize in providing outpatient surgical services, including orthopedics, ENT, endoscopy, and plastic surgery. The establishment of the ASC will allow the Applicant to offer low acuity surgical services to patients in a cost-effective manner.

B. Need for the Proposed Surgical Services

Through the establishment of the ASC, the Applicant will increase access to community-based surgical services to serve a patient panel that encompasses patients from the MelroseWakefield Healthcare, TMCPO through the Wellforce ACO, along with other patients in the service area seeking cost-effective surgical services. The ASC will serve all ages. With respect to ENT services, pediatric patients will have access to an ASC that offers common procedures performed in this age group. In addition, as the population continues to age, older adults will require greater access to the types of lower acuity procedures that the ASC will offer.

Need for Pediatric Surgical Services

The overall trends for the pediatric population[6] indicate that volume will experience a slight decrease but remain steady over time. The University of Massachusetts' Donahue Institute

[6] For purposes of this discussion, the pediatric population is defined as ages 0-19, consistent with the U.S. Census Bureau 2010 Census Summary File 1 found on page 14 of UNIVERSITY OF MASSACHUSETTS DONAHUE INSTITUTE, LONG-TERM POPULATION PROJECTIONS FOR MASSACHUSETTS REGIONS AND MUNICIPALITIES 11 (Mar. 2015), *available at* http://pep.donahue-institute.org/downloads/2015/new/UMDI_LongTermPopulationProjectionsReport_2015%2004%20_29.pdf.

("UMDI") projects population distribution by age group for the 2010-2035 period and confirms this trend.[7] The pediatric population cohort will decrease by 14% from 2010 to 2035. The decrease occurs gradually, with an initial decrease of 7% between 2010 and 2015, followed by smaller decreases over subsequent years.[8] The pediatric population accounts for 24.8% of the Massachusetts population in 2010 and decreases to 21.4% of the overall population by 2035. [9]

In contrast to the general trend toward a decreasing patient population, the Applicant's proposed service area will experience growth within the pediatric patient cohort. The Applicant reviewed UMDI pediatric population projections specific to the cities and towns in the proposed ASC's PSA. Contrary to the statewide findings, the pediatric population in the ASC's service area is projected to increase by 2035.[10] Over the time period 2010 to 2035, the pediatric population will increase 10.8% in the cities and towns in the ASC's PSA.[11] The pediatric population cohort will grow from 173,693 individuals in 2010 to 192,425 by 2035.[12] This trend is noteworthy given the statewide projections for a decrease in this population.[13] The growth in this population cohort will result in increased demand particularly for ENT procedures.

Need for Surgical Services in the 65+ Age Cohort

There currently is an ongoing trend in Massachusetts toward an aging population, particularly among those ages 65+. Findings from UMDI demonstrate that the Massachusetts state population is expected to increase 11.8% from 2010 to 2035.[14] Further review of UMDI's projections show a dramatic population increase in the 65+ cohort.[15] In 2020, the 65+ cohort accounts for 13.8% of the total Massachusetts population; however, by 2035, the 65+ cohort will account for 23% of the Massachusetts population.[16] The 65+ cohort will almost double over the 2010-2035 time period, while every other age cohort will experience a decrease over the same time period.[17] Moreover, no other age cohort will experience the same dramatic increase in growth as the 65+ cohort.[18]

The Applicant evaluated the UMDI population projections for those cities and towns that will account for the ASC's projected PSA. The increase in the 65+ population cohort occurring

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[7] UNIVERSITY OF MASSACHUSETTS DONAHUE INSTITUTE, LONG-TERM POPULATION PROJECTIONS FOR MASSACHUSETTS REGIONS AND MUNICIPALITIES 11 (Mar. 2015), *available at* http://pep.donahue-institute.org/downloads/2015/new/UMDI_LongTermPopulationProjectionsReport_2015%2004%20_29.pdf.

[8] *Id.*

[9] *Id.*

[10] *Massachusetts Population Projections – EXCEL Age/Sex Details*, UNIVERSITY OF MASSACHUSETTS DONAHUE INSTITUTE (2015), http://pep.donahue-institute.org/downloads/2015/Age_Sex_Details_UMDI_V2015.xls. This data has been extracted for the cities and towns located in the ASC's projected service area.

[11] *Id.*

[12] *Id.*

[13] UNIVERSITY OF MASSACHUSETTS DONAHUE INSTITUTE, LONG-TERM POPULATION PROJECTIONS FOR MASSACHUSETTS REGIONS AND MUNICIPALITIES 11 *supra* note 7.

[14] *Id.* The Massachusetts Secretary of the Commonwealth contracted with the University of Massachusetts Donahue Institute to produce population projections by age and sex for all 351 municipalities.

[15] *Id.* at 14. The report uses the cohorts as defined by the U.S. Census Bureau 2010 Census Summary, which are 0-19, 20-39, 40-64, and 65+. Figure 2.5 in the report demonstrates that where the 65+ cohort increases from 2015 to 2035, all other cohorts are predicted to decrease.

[16] *Id.*

[17] *Id.*

[18] *Id.*

statewide also will be reflected in the PSA.[19] From 2010 to 2035, there will be a 76.5% increase in the 65+ cohort in these communities, reflecting an increase of almost double the 65+ population.[20] Increases in demand for outpatient surgeries, including those provided in an ASC setting, will accompany the projected growth in the 65+ patient population as the number of procedures that can be effectively performed in the ASC setting continues to grow.

There is an ongoing increase in geriatric surgery that is related to improved life expectancy rates and the need to treat comorbidities.[21] Geriatric surgery will continue to increase as further medical advancements are made and more is known about managing health conditions that may impact surgical recovery in this patient cohort.[22] The 65+ age cohort has experienced the greatest increase in number of surgical procedures since 1990, which is a higher rate of growth than any other age cohort.[23] It is expected that at least half of all individuals in the 65+ cohort will require surgery, with geriatric surgery comprising as high as 53% of all surgical procedures based on estimates.[24] With the projected growth anticipated to occur in Massachusetts' 65+ cohort, the Applicant will experience an increased need for resources to accommodate growing surgical demand in the 65+ population.

A 2017 report from National Health Statistics, *Ambulatory Surgery Data From Hospitals and Ambulatory Surgery Centers: 2010* found that in 2010, 48.3 million surgical and nonsurgical procedures were performed during 28.6 million ambulatory surgery visits to hospitals and ASCs combined.[25] About 19% of procedures were performed on those aged 65–74, while about 14% were performed on those aged 75 and over. The most frequently performed procedures included endoscopy of large intestine (4.0 million), endoscopy of small intestine (2.2 million). Specifically, under operations on the digestive system, the report found that endoscopy of large intestine—which included colonoscopies—was performed 4.0 million times, and endoscopy of small intestine was performed 2.2 million times. Endoscopic polypectomy of large intestine was performed an estimated 1.1 million times. Accordingly, the demand for endoscopy services is growing, especially for the 65+ age cohort. The Proposed Project seeks to meet this demand for the growing now of seniors in the Commonwealth.

Moreover, one of the most common chronic conditions many individuals in the 65+ age cohort face is osteoarthritis.[26] Osteoarthritis is caused by inflammation in aging joints, injury and obesity.[27] Eventually, this condition will cause cartilage tissue to deteriorate, causing pain, swelling or deformity.[28] Osteoarthritis leads to pain in the hips, knees, shoulders or spine that can be so severe it interrupts daily life activities. Consequently, it is estimated that by the year 2030, almost 3.4 million people will undergo knee replacement surgery, and around half a

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[19] *Massachusetts Population Projections – EXCEL Age/Sex Details supra* note 10. This data has been extracted for the cities and towns located in the ASC's projected service area.
[20] *Id.*
[21] Relin Yang et al., *Unique Aspects of the Elderly Surgical Population: An Anesthesiologist's Perspective*, 2 GERIATRIC ORTHOPAEDIC SURGERY & REHABILITATION 56 (2011), available at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3597305/.
[22] *Id.*
[23] Judith S. L. Partridge et al., *Frailty in the older surgical patient: a review*, 41 AGE AND AGEING 142 (2012), *available at* https://academic.oup.com/ageing/article/41/2/142/47699.
[24] Relin, *supra* note 21.
[25] https://www.cdc.gov/nchs/data/nhsr/nhsr102.pdf
[26] http://www.ascseniorcare.com/common-orthopedic-surgeries-seniors/
[27] *Id.*
[28] *Id.*

million people will obtain hip replacements.[29] With a large segment of both the United States and Massachusetts populations reaching 65+, the demand for orthopedic surgeries is increasing. The Proposed Project will meet the demand for additional outpatient orthopedic procedures.

Furthermore, this is a large increase in the number of 65+ individuals seeking plastic surgery in an effort to remain "visible."[30] New data from the American Society for Aesthetic Plastic Surgery ("ASAPS") provide that many modern cosmetic surgical procedures are on the rise, and that surgical procedures account for 77% of all business for surveyed physicians.[31]According to the ASAPS, the number of people 65 and older getting facelifts and cosmetic eyelid surgeries has more than doubled over the last two decades, with much of that increase occurring over the last five years.[32] In 2015 39,772 eyelid surgeries and 37,632 facelifts were performed on people 65 and older. Although there is no age breakdown within the category, surveyed doctors reports that most of their older patients are between 65 and 75, and around three quarters are new to plastic surgery. Accordingly, the establishment of the ASC will allow the Applicant to improve access to outpatient surgical services in a community-based setting for the 65+ age cohort.

C. Migration of Lower Acuity Surgical Services to Outpatient Setting

The continuously evolving medical landscape has resulted in a shift in the provision of outpatient surgical procedures from hospitals to the ASC setting. Lower acuity procedures can be effectively provided in an ASC setting, without requiring a patient to obtain care in a hospital outpatient department.[33] This is due, in part, because ASCs focus on a subset of medical specialties and surgical procedures, including minimally and non-invasive surgeries, for improved provision of care.[34] By performing a limited set of procedures, ASC personnel are able to gain high proficiency and efficiency performing those procedures. This achieves clinical and operational efficiencies not attainable in a hospital setting as hospital-based operating rooms must be able to accommodate a wide range of medically complex procedures in the event of an emergency[35].

Clinical outcomes in the ASC setting are comparable to that of hospital outpatient surgery departments, with the provision of surgery in ASCs associated with decreased mortality, morbidity, and hospital admission rates.[36] Patients in ASCs experience shorter surgery and recovery times overall.[37] There are no disruptions to the surgical schedule in an ASC on

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[29] *Id.*
[30] https://www.surgery.org/media/news-releases/the-american-society-for-aesthetic-plastic-surgery-reports-that-modern-cosmetic-procedures-are-on-the-rise
[31] *Id.*
[32] *Id.*
[33] Dennis C. Crawford et al., *Clinical and Cost Implications of Inpatient Versus Outpatient Orthopedic Surgeries: A Systematic Review of the Published Literature*, 7 ORTHOPEDIC REVIEW 116 (2015), *available at* https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4703913/pdf/or-2015-4-6177.pdf
[34] POSITION STATEMENT: AMBULATORY SURGICAL CENTERS (Am. Ass'n of Orthopaedic Surgeons 2010), *available at* https://www.aaos.org/uploadedFiles/1161%20Ambulatory%20Surgical%20Centers.pdf.
[35] Elizabeth L. Munnich & Stephen T. Parente, *Procedures Take Less Time At Ambulatory Surgery Centers, Keeping Costs Down And Ability To Meet Demand Up*, 33 HEALTH AFFAIRS 764 (2014), *available at* https://www.healthaffairs.org/doi/pdf/10.1377/hlthaff.2013.1281.
[36] David Cook et al., *From 'Solution Shop' Model to 'Focused Factor' In Hospital Surgery: Increasing Care Value and Predictability*, 33 HEALTH AFFAIRS 746 (2014), *available at* https://www.healthaffairs.org/doi/pdf/10.1377/hlthaff.2013.1266
[37] Margaret J. Hall et al., *Ambulatory Surgery Data From Hospitals and Ambulatory Surgery Centers: United States, 2010*, 102 NAT'L HEALTH STATISTICS REPORTS 1 (2017), *available at* https://www.cdc.gov/nchs/data/nhsr/nhsr102.pdf

account of acute inpatient or emergent patient needs.[38] As a result, patients do not experience delays that otherwise are prone to occur in a hospital outpatient department. This contributes to greater convenience for patients and their families when electing a setting for surgical procedures and drives overall demand for the provision of services in the outpatient ASC setting.

The establishment of the Applicant's ASC will result in migration of less medically complex patients in need of lower acuity orthopedic, ENT, endoscopy, or plastic surgery to a community-based ASC. The Applicant determined that sufficient need for ASC services exists among its patient panel based on the number of surgical cases that could be migrated to the ASC setting. Patients will experience reduced wait times in the ASC, with care available closer to their homes and communities. An additional benefit of the ASC will be the elimination of the overnight stay, which may further drive volume to the Applicant's ASC versus a hospital surgical department. The opening of the ASC will allow the Applicant to shift those low acuity surgical procedures that would otherwise go through a hospital outpatient surgical department to a more cost and operationally efficient outpatient setting that benefits patients.

D. Patient Choice

The emergence of ASCs as an alternative setting for lower acuity surgical procedures provides patients with alternatives not previously available for obtaining such surgeries. Hospitals are no longer the only available location at which to have certain surgical procedures. Patients now are informed of the benefits of having a lower acuity surgery performed in an ASC. ASCs have demonstrated clinical outcomes that are as good as hospitals.[39] Patients benefit from the lack of interruptions in scheduling as well as the reduced surgical and recovery times, allowing the patient to return home faster than for the same procedure performed in a hospital.[40] The presence of the ASC within a patient's community improves access with regard to outpatient surgeries and offers a practicable alternative to a hospital outpatient surgery department.

The ASC setting further provides patients with options related to costs associated with a surgical procedure. Due to the elimination of an overnight stay and other hospital overhead costs, a surgery performed at an ASC will cost less than in a hospital.[41] For this reason, ASCs are able to compete with hospitals on the basis of cost for outpatient procedures. Patients may opt to obtain surgery at an ASC due to the lower cost. Particularly for those patients who bear a higher amount of medical costs individually, an ASC offers a lower cost alternative with clinical outcomes that are as a good as a hospital and services provided by the same physician who

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[38] POSITION STATEMENT: AMBULATORY SURGICAL CENTERS (Am. Ass'n of Orthopaedic Surgeons 2010), *available at* https://www.aaos.org/uploadedFiles/1161%20Ambulatory%20Surgical%20Centers.pdf. *See also* Munnich, *supra* note 35.

[39] Cook, *supra* note 36.

[40] Hall, *supra* note 37. *See also* Cook, *supra* note 36. The provision of a surgical procedure in an ASC eliminates an overnight stay. Depending on scheduling, a patient undergoing what would be an outpatient surgery may require hospital admission for routine recovery. An ASC by its nature is not equipped for an overnight patient stay. As a result, a patient obtaining surgery at an ASC will be discharged the same day as the surgery and will not be admitted to the hospital for recovery in the event of schedule overruns.

[41] Louis Levitt. *The Benefits of Outpatient Surgical Centers*. The Centers for Advanced Orthopedics. June 2017; available at https://www.cfaortho.com/media/news/2017/06/the-benefits-of-outpatient-surgical-centers. The costs of a procedure performed in an ASC have been found to be approximately 40% to 60% less than in a hospital. *See also* POSITION STATEMENT: AMBULATORY SURGICAL CENTERS, *supra* note 34, which indicates that ASC procedures are 84% of the cost of a hospital for the same procedure.

would perform the surgery in the hospital setting.

The availability of an ASC also can diminish patient wait times for surgeries. Members of the proposed ASC patient panel currently experience a wait time of 1-2 weeks for hand surgery, 3-4 weeks for other outpatient orthopedic procedures, and 4+ weeks for ENT procedures. Due to the lack of disruptions, ASCs are able to adhere more uniformly to a surgical schedule, which ultimately can allow more surgeries to be scheduled in a day. This will result in overall reductions in patient wait times for surgeries at hospitals.

As access to healthcare shifts, patients are seeking out services that are more convenient and are offered at lower costs than in a hospital. All patients in need of low acuity surgical procedures can benefit from obtaining such care at a community-based provider. With shorter surgery and recovery times, ASCs allow patients to be discharged home faster than in a hospital. The pediatric and 65+ populations cohorts would also benefit from having procedures performed in a streamlined outpatient setting rather than at a hospital, where the activity associated with a surgical department may be overwhelming. Frequently, these patients find it difficult to navigate the complex infrastructure of a hospital, finding ASC experiences less complicated and easier to access (given online registration systems, availability of cost transparency tools and accessible staff). Patients also may select a surgical setting that is lower cost than a traditional hospital surgical service, allowing patients to experience an overall cost savings when undergoing surgery. The availability of ASCs offers patient selection with regard to care, allowing patients more autonomy in decision-making as it effects health.

F1.a.iii **Competition:**

Provide evidence that the Proposed Project will compete on the basis of price, total medical expenses, provider costs, and other recognized measures of health care spending. When responding to this question, please consider Factor 4, Financial Feasibility and Reasonableness of Costs.

The Applicant's expansion of surgical services will not have an adverse effect on competition in the Massachusetts healthcare market based on price, total medical expenses ("TME"), provider costs or other recognized measures of health care spending. Rather, the Proposed Project seeks to offer high quality surgical care through a lower cost alternative to outpatient surgery performed in a hospital outpatient department ("HOPD"). Annually, ASCs perform more than seven million procedures for Medicare beneficiaries needing same-day surgical, diagnostic and preventive procedures. By specializing in specific procedures, ASCs are able to maximize efficiency and quality outcomes for patients.

Typically, ASCs have two goals. The first goal is to ensure that patients have the best surgical experience possible, including high quality outcomes. The second goal is to provide cost-effective care that leads to savings by government and third-party payers, as well as patients. On average, the Medicare program and its beneficiaries share in more than $2.6 billion in savings each year when surgery is provided in an ASC. ASC reimbursement rates are 48% of the amount paid to HOPDs.[42] Studies provide that if half of the eligible surgical procedures were shifted from HOPDs to ASCs, Medicare would save an additional $2.5 billion annually; an additional study estimates the savings to commercial payors to be as high as $55 billion

[42] 2018 HOPD Medicare Fee Schedule.

annually.[43] Similarly, Medicaid and other insurers benefit from lower prices for services performed in the ASC setting.[44] Patients also typically pay less coinsurance for procedures performed in the ASC than for comparable procedures in the hospital setting.[45]

With the emergence of ASCs as a high-quality care option, health care expenditures for elective and same day surgical procedures will decrease, reducing overall provider costs, and directly impacting TME. Consequently, the Proposed Project will compete on the basis of TME and provider costs. With a shift in surgical volume moving from hospitals to the Applicant, this savings is estimated to be substantial.

F1.b.i **Public Health Value /Evidence-Based:**
Provide information on the evidence-base for the Proposed Project. That is, how does the Proposed Project address the Need that Applicant has identified.

A. ASC Clinical and Operational Efficiencies

ASCs offer greater clinical and operational efficiencies over traditional hospital outpatient surgery departments as the focus of an ASC is on performing a narrow subset of medical specialties and surgical procedures in a limited number of medical specialties.[46] ASCs are designed to provide care for specific categories of lower-acuity surgical cases and for patients who have less risk for any complications following surgery.[47] In the case of the Applicant, the proposed ASC will be limited to offering orthopedic, endoscopy, ENT, and plastic surgery procedures. A majority of surgical procedures offered in ASCs are for the digestive system and musculoskeletal system, both of which the Applicant will offer.[48] The types of surgical procedures that may be performed in an ASC continues to increase over time, with estimates indicating approximately one third of outpatient surgeries now are performed in ASCs.[49] The migration of surgeries to the ASC setting is associated with demonstrated clinical and operational advantages.

ASCs achieve efficiencies from the ability to tailor services to a smaller offering of low acuity surgical procedures. Hospital operating rooms, including those dedicated to outpatient surgery, must be designed with enough space to handle a wide range of procedures in multiple clinical specialties.[50] Hospital-based operating rooms must be flexible enough to handle the range in services provided, with equipment to handle anything from a routine elective procedure to an emergency room patient in need of immediate surgery. In contrast, ASCs are designed to accommodate and limited to specific surgical specialties, with the operating rooms appropriately sized to meet such needs.[51] ASC operating rooms are equipped specifically for the types of

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[43] *Id. See also* Commercial Insurance Cost Savings in Ambulatory Surgery Centers, *available at* https://www.ascassociation.org/HigherLogic/System/DownloadDocumentFile.ashx?DocumentFileKey=829b1dd6-0b5d-9686-e57c-3e2ed4ab42ca&forceDialog=0.
[44] *Id.*
[45] *Id.*
[46] POSITION STATEMENT: AMBULATORY SURGICAL CENTERS, *supra* note 34.
[47] Crawford et al., *supra* note 33.
[48] Hall et al., *supra* note 40.
[49] Munnich, *supra* note 35. The Medicare ASC fee payment schedule covers approximately 3,600 outpatient surgical procedures. This has grown over time, driving higher volumes in ASCs. Estimates indicate that outpatient surgeries performed in ASCs have increase from 4% of all outpatient surgeries in 1891 to 38% in 2005. See also POSITION STATEMENT: AMBULATORY SURGICAL CENTERS, *supra* note 34.
[50] Munnich, *supra* note 35.
[51] *Id.*

procedures to be performed, with operating rooms frequently being used for the same type of surgery on a continuous basis each day.[52]

Hospital-based operating rooms also must be equipped to accommodate emergency or complex cases.[53] Hospital operating rooms schedules are subject to disruption when an operating room is needed for an emergency room or emergent inpatient surgery, leading to delays in all subsequent surgeries scheduled for the day.[54] ASCs only accommodate routine, scheduled procedures and are not hampered by the schedule disruptions associated with a hospital surgical department.[55] Furthermore, ASC operating rooms are equipped for providing the same types of surgical procedures and cases daily.[56] Patients and staff benefit from the operational efficiencies of ASCs, with procedures performed in ASCs taking 31.8 fewer minutes on average when compared to procedures performed in a hospital.[57] Patients experience improved procedure scheduling and shorter wait times when an outpatient surgery is performed in an ASC.[58] Recovery times for procedures performed in the ASC are typically shorter, which is also attributable to the evolution of medical devices and pharmaceuticals administered in connection with surgery.[59] Patients spend almost a quarter less time in an ASC versus in a hospital outpatient surgical department for the same procedure.[60]

ASCs also provide a lower cost alternative to hospital outpatient surgery departments. On average, ASCs are approximately 48% less expensive than a hospital.[61] In one instance, a comparison of hospital outpatient department and ASC costs resulted in the finding that procedures performed in an ASC are 84% of the cost of the same procedure performed in the hospital outpatient department.[62] Some of the savings is the result of not requiring the same overhead as a hospital surgical service, such as fewer nursing, staffing, laboratory, medication, and imaging costs.[63] Variation associated with the need for a hospital to be able to adapt to provide care within different specialties and for varying case complexities increases overall costs for hospital outpatient surgical departments.[64] Additional ASC savings are derived from the elimination of an overnight patient stay.[65] Overall, the ASC setting is associated with efficiencies that also reduce costs.

B. Provision of High Quality Surgical Services

Patients who undergo surgery in the ASC setting experience a number of benefits associated with high quality surgical services. Rates of revisit to the hospital one week post-surgery are

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[52] Levitt, *supra* note 41.
[53] Munnich, *supra* note 35.
[54] *Id.*
[55] POSITION STATEMENT: AMBULATORY SURGICAL CENTERS, *supra* note 34.
[56] Munnich, *supra* note 35.
[57] *Id. See also* Hall, et al, *supra* note 40. A patient undergoing ambulatory surgery at a hospital spends, on average, 63 minutes in the operating room, 37 minutes in surgery, and 89 minutes in postoperative care; in contrast, a patient undergoing an ambulatory procedure in an ASC spends an average of 50 minutes in the operating room, 29 minutes in surgery, and 51 minutes in postoperative care.
[58] POSITION STATEMENT: AMBULATORY SURGICAL CENTERS, *supra* note 34.
[59] Levitt, *supra* note 41. *See also Outpatient Surgeries Show Dramatic Increase*, 10 Health Capital Topics 1 (2010), *available at* https://www.healthcapital.com/hcc/newsletter/05_10/Outpatient.pdf
[60] Levitt, *supra* note 41. *See also* Munnich, *supra* note 35.
[61] 2018 HOPD Medicare Fee Schedule.
[62] POSITION STATEMENT: AMBULATORY SURGICAL CENTERS, *supra* note 34.
[63] Crawford, et al., *supra* note 33. *See also* Cook et al., *supra* note 36.
[64] Cook et al., *supra* note 36.
[65] *Id.*

lower for ASC patients.[66] Infection rates for procedures performed in ASCs are half that for the same procedures performed in the hospital setting.[67] Patients experience improved pain levels and less nausea when receiving surgery in an ASC.[68] There also are better thirty day outcomes, including reductions in pneumonia, renal failure, and sepsis as well as no demonstrated increase in morbidity, mortality, or readmission.[69] In fact, major morbidity and mortality following ASC procedures are extremely rare.[70] These are all factors associated with high quality surgical service delivery.

C. Individualized Patient Care

With the increasing availability of ASCs, patients have greater options to choose from when selecting an appropriate setting for outpatient surgical services. Growth in minimally invasive or non-invasive procedures has led to an increase in the ability to perform surgery on an outpatient basis.[71] These surgeries are considered lower acuity and have less complexities than other types of procedures, such as fewer surgical cuts or incisions and decreased blood loss.[72] Anesthesia needs for these low acuity procedures can be met in an ASC due to ongoing developments in the delivery of anesthetics.[73] As more low acuity surgeries are performed in the outpatient setting, patients are able to select outpatient centers that will meet their individual needs.

D. The Role of an ASC in an Integrated Care Delivery System

ACOs were created as a means to improve health care delivery while also achieving savings in the provision of care.[74] Another one of the triple aims of ACOs is to achieve population health; that is, addressing factors such as social determinants of health to effect an overall increase in the health of a population.[75] This shifts the focus to a community model that requires collaboration among the members of the ACO to achieve the ACO's population health goals.[76] Better access to care can achieve this outcome, meaning that the presence of an ASC in a community can improve access to outpatient surgical care. Furthermore, coordinated care among members of the ACO is necessary in order to meet the health care delivery, savings, and population health goals of an ACO.[77] ASCs play a beneficial role in ACOs as they offer a lower cost alternative setting for hospital surgical departments for the provision of outpatient

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[66] Levitt, *supra* note 41.
[67] *Id.*
[68] Crawford, et al., *supra* note 33.
[69] Cook, et al.,*supra* note 36.
[70] Crawford, et al., *supra* note 33. This is likely due to the selection of healthier, less medically complex patients to receive care in an ASC.
[71] *Outpatient Surgeries Show Dramatic Increase*, 10 HEALTH CAPITAL TOPICS 1 (2010), *available at* https://www.healthcapital.com/hcc/newsletter/05_10/Outpatient.pdf
[72] *Id.*
[73] *Id.*
[74] Department of Healthcare Policy and Research, Virginia Commonwealth University School of Medicine. *Policy Brief: Accountable Care Organizations,* January 2015, *available at https://hbp.vcu.edu/media/hbp/policybriefs/pdfs/VCU_DHPR_ACO_Finalweb.pdf*
[75] Karen Hacker and Deborah Klein Walker. *Achieving Population Health in Accountable Care Organizations.* Am J Public Health. 2013 July; 103(7): 1163–1167.
[76] *Id.*
[77] Department of Healthcare Policy and Research, Virginia Commonwealth University School of Medicine, *supra* note 74.

surgery.[78] The physicians who practice at an ASC are part of the ACO, allowing for coordination of care between the ASC and the physicians to eliminate fragmentation of care.

ASCs play an important role as part of a robust and diverse care delivery system. ASCs can accommodate certain low acuity surgical procedures that otherwise must be performed in a hospital outpatient surgery department. The presence of an ASC results in a decrease in the number of outpatient procedure performed at a hospital.[79] Lower acuity procedures can be handled more effectively in the ASC setting instead of in a hospital surgical department, allowing hospitals to better focus resources on treating more acutely ill patients. This allows migration of low acuity procedures out of the hospital into a more appropriate setting, freeing resources in order for hospitals to continue to accommodate medically complex or emergency patients.

The Applicant's ASC will contribute to the overall functions of the Wellforce ACO as it achieves the goals of cost containment, improving population health, and improving care delivery. The ASC will provide an alternative setting for ACO members in need of low acuity outpatient orthopedic, ENT, endoscopy, and plastic surgeries. The migration of these procedures to the ASC will have associated cost savings and improved clinical outcomes through operational efficiencies that result from the ASC's focus on a limited number of surgical procedures. In this way, the ASC will complement the care provided at Wellforce's tertiary and community hospitals.

F.1.b.ii **Public Health Value /Outcome-Oriented:**
Describe the impact of the Proposed Project and how the Applicant will assess such impact. Provide projections demonstrating how the Proposed Project will improve health outcomes, quality of life, or health equity. Only measures that can be tracked and reported over time should be utilized.

A. Improving Health Outcomes and Quality of Life

The Applicant anticipates that the Proposed Project will provide the Applicant's patients with improved health outcomes and improved quality of life through additional access to high quality surgical services by expanding capacity in the community setting. As more fully discussed in Factor F.1.b.i., shifting patients to an ambulatory setting allows for high-quality, lower-cost care closer to home. The Proposed Project will offer greater throughput pre- and post-surgery, ensuring an expedited, patient-centered experience for patients.

The Proposed Project is designed to utilize industry-defined best practices for quality, efficiency and effectiveness. High quality care is achieved in the following ways: 1) By placing a focus on specific specialties and their associated surgeries (orthopedic, ENT, endoscopy and plastic surgery), physicians are able to provide efficient, expert care to patients; 2) Maximizing process improvement initiatives – given that the Proposed Project will focus on specific specialties and associated surgeries, clinical staff will develop and implement a robust program for reviewing quality of care outcomes, identifying best practices and implementing performance improvement initiatives; and 3) Transforming the care experience for patients – in the ASC setting, clinical and administrative staff have the ability to narrow their focus to the noted specialties, which allows these staff to more effectively control scheduling, thereby eliminating

[78] *ACA will bring more patients to ASCs— but will profits follow?* OR Manager, Vol. 30 No. 2, February 2014, *available at* https://www.ormanager.com/wp-content/uploads/2014/02/ORM_0214_p.29_ASC_Health_Reform.pdf
[79] John Bian & Michael A. Morrisey, *Free-Standing Ambulatory Surgery Centers and Hospital Surgery Volume*, 44 INQUIRY 200 (2007), *available at* http://journals.sagepub.com/doi/pdf/10.5034/inquiryjrnl_44.2.200.

delays, backlogs and rescheduled procedures. Consequently, ASCs have less unpredictability than a HOPD in regard to scheduling. Together these care components will transform the care process for patients, providing improved quality of life and leading to higher quality outcomes.

The Applicant also will implement amenities that assist in creating a higher level of patient satisfaction. These tools include an online pre-registration system that will allow patients to register from the comfort of their homes, rather than waiting prolonged periods of time in a clinical setting. This technology platform is available in over 70 languages to ensure all patients within the community have access to pre-registration capabilities. The Applicant also will implement price transparency tools, allowing patients to estimate prices for their procedures, as well as online payment portals, offering greater communication between administrative staff and patients. These tools provide transparent, expedited administrative processes for patients unlike more complicated HOPDs.

Furthermore, the Applicant selected the location of the Proposed Project based on accessibility and convenience to patients from the noted PSA. Situated in close proximity to major thoroughfares, the site for the Proposed Project will offer ample parking improving patient experience. Accordingly, these combined care tools will ultimately lead to improved patient experience and higher quality process and clinical outcomes.

B. Assessing the Impact of the Proposed Project

To assess the impact of the proposed Project, the Applicant developed the following quality metrics and reporting schematic, as well as metric projections for quality indicators that will measure patient satisfaction and quality of care. The measures are discussed below:

1. **Patient Satisfaction:** Patients that are satisfied with their care are more likely to seek additional treatment when needed. The Applicant will review patient satisfaction levels with the ASC's surgical services.

   Measure: The Outpatient & Ambulatory Surgery Community Assessment of Healthcare Providers and Systems (OAS-CAHPS) survey will be provided to all eligible patients. The OAS-CAHPS survey focuses on six (6) key areas: 1) before a patient's procedure; 2) about the ASC facility and staff; 3) communications about the patient's surgical procedure; 4) patient recovery; 5) overall experience; and 6) patient demographic information.

   Projections: As the ASC is not yet operational, the Applicant established a benchmark of 85.8% for the "Overall Rating of Care", which is the top decile for reporting providers.

   Monitoring: Any category receiving a less than "Good" or satisfactory rating will be evaluated, and policy changes instituted as appropriate. Reviewed quarterly by clinical staff.

2. **Clinical Quality – Surgical Site Infection Rates:** This measure evaluates the number of patients with surgical site infections and aims to reduce or eliminate such occurrences.

   Measure: The number of patients with surgical site infections.

Projections: The ASC plans to meet or exceed the national benchmark of 0.10% surgical site infection rates, ultimately reaching a target of 0%.

Monitoring: Reviewed quarterly by clinical staff.

3. **Clinical Quality – Pre-Operative Time Out:** This measure ensures pre-operative compliance with practices aimed at ensuring high quality outcomes among members of the care team and promoting communication.

   Measure: The procedure team conducts a pre-operative time out.

   Projections: A pre-operative time-out will be completed 100% of the time on all surgical cases in the ASC.

   Monitoring: Reviewed quarterly by clinical staff.

F1.b.iii **Public Health Value /Health Equity-Focused:**

For Proposed Projects addressing health inequities identified within the Applicant's description of the Proposed Project's need-base, please justify how the Proposed Project will reduce the health inequity, including the operational components (e.g. culturally competent staffing). For Proposed Projects not specifically addressing a health disparity or inequity, please provide information about specific actions the Applicant is and will take to ensure equal access to the health benefits created by the Proposed Project and how these actions will promote health equity.

To ensure health equity to all populations, including those deemed underserved, the Proposed Project will not affect accessibility of the Applicant's services for poor, medically indigent, and/or Medicaid eligible individuals. The Applicant will not discriminate based on ability to pay or payer source following implementation of the Proposed Project. As further detailed throughout this narrative, the proposed Project will increase access to high quality surgical services for all patients by offering a low-cost alternative in the community setting.

The diversity of the Applicant's current and projected patient panel necessitates implementation of culturally appropriate support services to ensure improved patient experience and higher quality outcomes. Accordingly, the Applicant is developing a robust translation services program. The Applicant will offer multiple tools to address language barriers, including Language Line and InDemand interpreting to provide multiple options for translation services.

Language Line provides quality phone and video interpretation services from highly trained professional linguists in more than 240 languages 24 hours a day, 7 days a week, facilitating more than 35 million interactions a year. InDemand offers leading-edge medical interpreting solutions, such as video interpretations, allowing clinicians to provide their limited English proficient, Deaf and hard of hearing patients with access to the highest quality healthcare. Together, these solutions will eliminate language barriers for patients and ensure culturally appropriate care.

Furthermore, as previously discussed, the Applicant will offer price transparency tools to ensure that all patients have access to current pricing information. By providing this information,

patients may determine if specific procedures are affordable. The Applicant also will provide financial counselors for assistance in understanding insurance benefits.

F1.b.iv Provide additional information to demonstrate that the Proposed Project will result in improved health outcomes and quality of life of the Applicant's existing Patient Panel, while providing reasonable assurances of health equity.

The Proposed Project will allow for the expansion of lower-cost surgical services in the community setting. This alternative point of access, which boasts similar quality outcomes as outpatient hospital surgical services, is in a more convenient setting reducing travel time for patients and offering more convenient parking options. The Applicant also plans to implement numerous amenities, including patient access tools, such as pre-registration functionality and a cost transparency application, to improve patient experience and ensure high rates of patient satisfaction.

F1.c Provide evidence that the Proposed Project will operate efficiently and effectively by furthering and improving continuity and coordination of care for the Applicant's Patient Panel, including, how the Proposed Project will create or ensure appropriate linkages to patients' primary care services.

Through the Proposed Project, the Applicant will combine physician engagement with a strong technology infrastructure to ensure continuity of care, improved health outcomes and care efficiencies. The technology infrastructure for the Proposed Project encompasses streamlined patient access tools that offer pre-registration functionality. These tools interface with an electronic medical record ("EMR") system to amalgamate necessary patient health information, such as medical history, allergies and medications that is reviewed by surgeons and anesthesiologists. EMR functionality also allows surgeons to share operative notes and post-operative discharge instructions with primary care physicians ("PCPs"), so both physicians may track a patient's progress post-discharge. The EMR also tracks a patient's pre-operative medications to ensure appropriate dosing, as well as necessary post-operative prescriptions.

While a strong technology foundation is the first step in providing coordinated care, the Applicant's administrative leaders will carry out other processes to ensure continuity of care, including engaging surgeons in developing policies and procedures that assist in increasing communication with PCPs. For example, in the event that a patient is unable to have surgery because they have failed to follow instructions by the surgeon, communication between the surgeon and PCP may address the issue, so the patient is aware of appropriate preparation for surgery. Developing strategies for timely communication amongst providers ensures higher quality outcomes for patients, especially those with co-morbidities that struggle with psycho-social support needs.

Furthermore, in an effort to improve care efficiencies and coordination, upon discharge a nurse manager will provide appropriate discharge instructions for all patients. For ACO patients, an ACO care manager will follow-up with the patient to determine if he/she has any needs post-discharge. For non-ACO patients that have an identified social determinant of health need, these patients will be referred to the Director of Community Services at MelroseWakefield Healthcare for assistance in obtaining necessary linkages to support services. Accordingly, these efforts will ensure patients have efficient and coordinated care.

F1.e.i **Process for Determining Need/Evidence of Community Engagement:**
For assistance in responding to this portion of the Application, Applicant is encouraged to review *Community Engagement Standards for Community Health Planning Guideline.* With respect to the existing Patient Panel, please describe the process through which Applicant determined the need for the Proposed Project.

The Applicant's joint venture partners identified the need to establish an appropriate, community-based setting where patients can obtain low-acuity outpatient surgical services. It was determined that the establishment of a freestanding ASC would improve access to outpatient orthopedic, ENT, endoscopy, and plastic surgery services. MelroseWakefield Healthcare's historical utilization data for these services demonstrates strong, ongoing demand. The Applicant engaged the community in order to more fully involve patients and families regarding the proposed ASC.

The ASC project was presented at the MelroseWakefield Healthcare's Patient Family Advisory Committee ("PFAC") on February 27, 2018. The PFAC is comprised of both members from MelroseWakefield Healthcare as well as community members. As approximately 89% of the proposed ASC volume will originate from MelroseWakefield Healthcare, it was decided that the PFAC would best represent patients from the ASC's proposed service area. The presentation sought to inform community members about the ongoing global shift from inpatient to outpatient procedures as part of the evolving health care delivery landscape. Information was presented on the advances in medical technology that have improved outpatient surgery and recovery, making an ASC more cost efficient and convenient for patients.

The PFAC presentation offered members an overview of the proposed ASC project. Details included the plans for a one-story, 17,500 SF project to be located on the grounds of Lawrence Memorial Hospital that includes both operating rooms and procedure rooms. It was explained that the ASC will be built to the specific needs of advanced technology and resources, resulting in a state-of-the-art surgical facility. The presentation also discussed how the ASC setting is a lower cost care center than a hospital outpatient surgery department, which reduces costs for patients. The PFAC members also were informed about the nature of the ASC as a collaboration among the joint venture partners to strengthen care within the community to meet needs.

The PFAC members had positive input regarding the proposed ASC. Overall, the establishment of the freestanding ASC was received as a positive addition to the City of Medford, which is where the ASC will be located. Members who have family utilizing other ASCs spoke about positive experiences with the ASC setting. The PFAC discussed both education/information sessions and employment opportunities for the community, further demonstrating engagement with the proposed project.

Additionally, the joint venture partners sought to engage local resident and resident groups through a community forum. This meeting was held on April 30, 2018 at Lawrence Memorial Hospital's School of Nursing Building with nine community members attending. At this forum leaders from the joint venture partners presented an overview of the Proposed Project and the benefits of an ASC. Community members asked questions regarding the potential for increased traffic and crime, with the Applicant's leaders providing responses. Through these efforts, the Applicant engaged patients, families and community members in thoughtful discussions regarding the expansion of local surgical services.

F1.e.ii **Please provide evidence of sound Community Engagement and consultation throughout the development of the Proposed Project. A successful Applicant will, at a minimum, describe the process whereby the "Public Health Value" of the Proposed Project was considered, and will describe the Community Engagement process as it occurred and is occurring currently in, at least, the following contexts: Identification of Patient Panel Need; Design/selection of DoN Project in response to "Patient Panel" need; and Linking the Proposed Project to "Public Health Value".**

To ensure sound community engagement throughout the development of the Proposed Project, the Applicant's joint venture partners took the following actions:

- Presentation to MelroseWakefield Healthcare's PFAC on February 27, 2018; and
- Community Forum for all community members on April 30, 2018.

For detailed information on these activities, see Appendix A.3.

For transparency and to educate the community regarding the public health value of the proposed Project, the Applicant's joint venture partners developed a presentation to provide at the aforementioned community forum. This presentation documents the components of the proposed Project, an overview of ASCs, and benefits of the Proposed Project on the patient panel (see Appendix A.3.).

Factor 2: Health Priorities

Addresses the impact of the Proposed Project on health more broadly (that is, beyond the Patient Panel) requiring that the Applicant demonstrate that the Proposed Project will meaningfully contribute to the Commonwealth's goals for cost containment, improved public health outcomes, and delivery system transformation.

F2.a. **<u>Cost Containment:</u>**
Using objective data, please describe, for each new or expanded service, how the Proposed Project will meaningfully contribute to the Commonwealth's goals for cost containment.

The goals for cost containment in Massachusetts center around providing low-cost care alternatives without sacrificing high quality. The Massachusetts Health Policy Commission (HPC), an independent state agency charged with monitoring health care spending growth in Massachusetts and providing data-driven policy recommendations regarding health care delivery and payment system reform set the following goal for cost containment: *better health and better care – at a lower cost – across the Commonwealth.* Consequently, the proposed Project meets this goal by providing qualifying lower-acuity patients with high quality surgical services in a cost-effective setting. As previously discussed, ASC reimbursement rates are 48% of the amount paid to HOPDs.[80] Studies provide that if half of the eligible surgical procedures were shifted from HOPDs to ASCs, Medicare would save an additional $2.5 billion annually.[81] Similarly, Medicaid, other insurers and patients benefit from lower prices for services performed in the ASC setting given lower levels of reimbursement and less coinsurance payments.[82]

[80] 2018 HOPD Medicare Fee Schedule.
[81] *Id.*
[82] *Id.*

Patients receiving surgical services through the proposed ASC also will have access to experienced, expert surgeons and clinical staff. This expertise leads to care and cost efficiencies, leading to overall reduced provider price, costs and TME. Accordingly, the proposed Project will lower price and in turn costs for the noted surgical services, leading to overall reduced TME and total healthcare expenditures.

F2.b. **Public Health Outcomes:**
Describe, as relevant, for each new or expanded service, how the Proposed Project will improve public health outcomes.

Providing access to expedited, expert surgical care in the community setting will improve public health outcomes and patient experience. First, clinical staff, including surgeons providing surgical services in ASCs focus on specific specialty surgeries annually. Consequently, studies have shown that this narrow focus leads to greater expertise among clinical staff and creates care efficiencies that lead to improvement in process and clinical outcomes, as well as patient experience. Second, patient experience will be improved through convenient access to the facility, ample parking, expedited scheduling of procedures and patient-centered technology, such as pre-registration system and cost transparency tools. When patients receive timely care, in the appropriate setting and achieve cost savings both the healthcare market and patients benefit.

F2.c. **Delivery System Transformation:**
Because the integration of social services and community-based expertise is central to goal of delivery system transformation, discuss how the needs of their patient panel have been assessed and linkages to social services organizations have been created and how the social determinants of health have been incorporated into care planning.

Through the Proposed Project, patients will be provided with linkages to the social determinants of health. As further discussed in Section F.1.c., patients will be provided with access to care management services in two ways. First, prior to discharge, Wellforce ACO patients will meet with a case manager that will screen patients for social determinant of health needs. If after screening a patient needs additional services, the individual will be linked to a Wellforce ACO care manager, who will help the individual access local resources. If an ASC patient is a not a Wellforce ACO patient, a case manager will meet with the patient prior to discharge and discuss whether the patient has any identified social determinant of health needs. If the patient has any needs, these individuals will be referred to the Director of Community Services for MelroseWakefield Healthcare for additional linkages to care and follow-up. Accordingly, these efforts will ensure patients are linked with appropriate community resources to address social determinant of health needs.

Factor 5: Relative Merit

F5.a.i **Describe the process of analysis and the conclusion that the Proposed Project, on balance, is superior to alternative and substitute methods for meeting the existing Patient Panel needs as those have been identified by the Applicant pursuant to 105 CMR 100.210(A)(1). When conducting this evaluation and articulating the relative merit determination, Applicant shall take into account, at a minimum, the quality, efficiency, and capital and operating costs of the Proposed Project relative to potential alternatives or**

substitutes, including alternative evidence-based strategies and public health interventions.

Proposal: To construct a freestanding ASC with three (3) operating rooms and two (2) procedure rooms on the campus of Lawrence Memorial Hospital.

Quality: Surgical services and related care provided in an ASC have demonstrated high quality, with clinical outcomes that are equal to or better than hospital outpatient surgical departments for the same procedures.

Efficiency: The specialization of services offered at the ASC will allow the Applicant to achieve clinical and operational efficiencies. Lower acuity cases can be shifted from hospital outpatient surgical departments to the ASC, which will achieve cost savings. Clinical efficiencies will be achieved through the use of highly trained staff and the ability to maintain a more uniform schedule, allowing for high quality patient outcomes.

Capital Expense: Establishment of the ASC will result in a one-time capital expense to construct an energy efficient ASC building.

Operating Costs: The operating expenses anticipated for Year 1, the first full year of operation of the ASC, are expected to be $5,294,141.

List alternative options for the Proposed Project:

Option 1

Alternative Proposal: Do not establish an ASC and continue serving patients through the existing operating rooms at Melrose-Wakefield Hospital, Lawrence Memorial Hospital, and Tufts Medical Center.

Alternative Quality: This alternative is not sufficient to meet the combined patient panel's need for outpatient surgical services. It also does not address the needs to replace operating rooms and upgrade equipment in order to remain operational, thereby negatively impacting quality outcomes.

Alternative Efficiency: Not establishing an ASC will result in continued clinical and operational inefficiencies due to the limitation in providing on-time surgical services in a hospital setting.

Alternative Capital Expenses: Capital expenses initially would not change under this alternative, but would increase at a later time in order to renovate the existing operating rooms at Lawrence Memorial Hospital.

Alternative Operating Costs: Taking no action to establish an ASC and continuing to offer low acuity surgical procedures in the hospital outpatient department, ultimately would result in increased operating costs. Both Melrose-Wakefield Hospital and Tufts Medical Center could shift volume to Lawrence Memorial Hospital's existing operating rooms, but significant investment is needed in order to renovate the facilities. Lawrence Memorial Hospital's operating rooms are over forty (40) years old and are hampered by inefficient patient flow, lack of adequate central sterile processing, and lack of waiting areas.

Option 2

Alternative Proposal: Renovate the existing operating rooms at Lawrence Memorial Hospital.

Alternative Quality: This alternative is not feasible as many of the factors contributing to negative patient satisfaction scores, such as cost of care due to higher HOPD rates, and patient flow, would not be resolved through the renovation of the existing operating rooms at Lawrence Memorial Hospital. Additionally, renovating the existing operating rooms at Lawrence Memorial Hospital would disrupt other clinical programs that are in close proximity to this space, such as the Urgent Care, Emergency Department, etc.

Alternative Efficiency: The renovation of the existing operating rooms at Lawrence Memorial Hospital would be inefficient as patient flow would continue to be hampered as the operating rooms are located in the basement, a far distance from the registration desk and not on the same level as the parking area.

Alternative Capital Expenses: Renovations to the existing Lawrence Memorial Hospital operating rooms would cost at least $16,600,000. This expense does not fully address all issues impacting the operations of these operating rooms, such as the distance of the operating rooms from the main entrance and patient flow. Additional expenses are anticipated to support the needs of a hospital outpatient surgery department.

Alternative Operating Costs: This alternative will lead to higher operating costs as hospital-based operating rooms have higher administrative costs than ASCs.

Attachment/Exhibit

2

MelroseWakefield Healthcare - Patient Panel Data

1. MelroseWakefield Healthcare Panel Volume

	Unique Visits	Unique Cases*	Unique Patients (Medical Record #)
FY 15	502,961	444,552	121,933
FY 16	510,516	448,447	121,348
FY 17	484,307	426,703	119,761
FY 15-17 Total	**1,497,784**	**1,319,702**	**363,042**

*Cases are billed encounters. Some re-occurring visits are rolled into 1 case (encounter) on a monthly basis

2. Geographic Breakdown

	List of MA Zip Codes	List of Other (Outside of MA) Zip Codes for Patients Seeking Services in MA	Unknown / Invalid
FY 15	See Separate Tab	See Separate Tab	See Separate Tab
FY 16	See Separate Tab	See Separate Tab	See Separate Tab
FY 17	See Separate Tab	See Separate Tab	See Separate Tab
FY 15-17 Total			

3. Age at Visit (Encounter Level)

	Cases			
	0-17 years old	18-64 years old	65+ years old	Total
FY 15	16,795	272,693	155,064	444,552
FY 16	16,574	275,437	156,436	448,447
FY 17	15,354	262,044	149,305	426,703
FY 15-17 Total	**48,723**	**810,174**	**460,805**	**1,319,702**

	Unique Patients (Medical Record #)			
	0-17 years old	18-64 years old	65+ years old	Total
	11,259	82,495	29,054	121,933
	11,234	82,232	29,106	121,348
	10,281	81,481	29,233	119,761

	Visits			
	0-17 years old	18-64 years old	65+ years old	Total
	17,281	299,371	186,309	502,961
	17,020	303,819	189,677	510,516
	15,699	287,236	181,372	484,307
	50,000	**890,426**	**557,358**	**1,497,784**

4. Gender (Patient Level)

	Cases			
	Female	Male	Unknown	Total Cases
FY 15	287,541	157,003	8	444,552
FY 16	290,442	158,002	3	448,447
FY 17	276,637	150,065	1	426,703
FY 15-17 Total	**854,620**	**465,070**	**12**	**1,319,702**

	Unique Patients (Medical Record #)			
	Female	Male	Unknown	Total
	71,355	50,581	6	121,933
	70,996	50,353	3	121,348
	70,422	49,345	1	119,761

5. Race (Patient Level)

	Cases									
	American Indian or Alaska Native	Asian	Black or African American	Hispanic or Latino	Native Hawaiian or Other Pacific Islander	White or Caucasian	Other	Unavailable	Declined	Total
FY 15	180	16,692	16,119	11,312	16	378,557	6,677	14,975	24	444,552
FY 16	127	18,320	17,155	12,593	18	379,680	4,153	16,341	60	448,447
FY 17	194	18,057	16,322	11,896	35	357,424	4,479	18,214	82	426,703
FY 15-17 Total	**501**	**53,069**	**49,596**	**35,801**	**69**	**1,115,661**	**15,309**	**49,530**	**166**	**1,319,702**

	Unique Patients (Medical Record #)									
	American Indian or Alaska Native	Asian	Black or African American	Hispanic or Latino	Native Hawaiian or Other Pacific Islander	White or Caucasian	Other	Unavailable	Declined	Total
	53	5,319	5,278	3,432	9	98,459	2,512	7,730	18	121,933
	47	5,741	5,402	3,678	7	97,759	1,800	7,418	30	121,348
	67	5,941	5,326	3,661	9	94,722	2,009	8,310	47	119,761

6. MelroseWakefield Healthcare- Patients that have Received Orthopedic, ENT, Endoscopy or Plastic Surgery services for the past 36-month period and Project Volume

Historical Data

Orthopedic	Unique Visits	Unique Cases*	Unique Patients
FY 15	1,209	1,209	1,133
FY 16	1,196	1,196	1,126
FY 17	1,103	1,103	1,054
FY 15-17 Total	**3,508**	**3,508**	

ENT	Unique Visits	Unique Cases*	Unique Patients
FY 15	246	246	238
FY 16	222	222	212
FY 17	210	210	201
FY 15-17 Total	**678**	**678**	

Endoscopy	Unique Visits	Unique Cases*	Unique Patients
FY 15	7,115	7,115	6,610
FY 16	7,680	7,678	7,053
FY 17	7,882	7,882	7,259
FY 15-17 Total	**22,677**	**22,675**	

Plastic Surgery	Unique Visits	Unique Cases*	Unique Patients
FY 15	201	201	179
FY 16	191	191	163
FY 17	170	170	142
FY 15-17 Total	**562**	**562**	

7. Most Prevelant Conditions/Diseases associated with Orthopedic, ENT, Endoscopy and Plastic Surgeries that will be performed at the ASC

Orthopedic

FY 15	354 - Carpal tunnel syndrome	836 - Tear of medial cartilage or meniscus of knee current	840.4 - Rotator cuff (capsule) sprain	717.2 - Derangement of posterior horn of medial meniscus	727.03 - Trigger finger (acquired)	836.1 - Tear of lateral cartilage or meniscus of knee current
FY 16	G56.01 - Carpal tunnel syndrome right upper limb	S83.242A - Other tear of medial meniscus current injury left knee initial encounter	S83.241A - Other tear of medial meniscus current injury right knee initial encounter	G56.02 - Carpal tunnel syndrome left upper limb	M75.101 - Unspecified rotator cuff tear or rupture of right shoulder not specified as traumatic	M75.102 - Unspecified rotator cuff tear or rupture of left shoulder not specified as traumatic

MelroseWakefield Healthcare - Patient Panel Data

FY 17	G56.01 - Carpal tunnel syndrome right upper limb	S83.241A - Other tear of medial meniscus current injury right knee initial encounter	S83.242A - Other tear of medial meniscus current injury left knee initial encounter	G56.02 - Carpal tunnel syndrome left upper limb	M75.101 - Unspecified rotator cuff tear or rupture of right shoulder not specified as traumatic	M75.102 - Unspecified rotator cuff tear or rupture of left shoulder not specified as traumatic
FY 15-17 Total	**G56.01 - Carpal tunnel syndrome right upper limb**	**S83.241A - Other tear of medial meniscus current injury right knee initial encounter**	**S83.242A - Other tear of medial meniscus current injury left knee initial encounter**	**G56.02 - Carpal tunnel syndrome left upper limb**	**M75.101 - Unspecified rotator cuff tear or rupture of right shoulder not specified as traumatic**	**M75.102 - Unspecified rotator cuff tear or rupture of left shoulder not specified as traumatic**

ENT

FY 15	470 - Deviated nasal septum	474 - Chronic tonsillitis	802 - Closed fracture of nasal bones	478.19 - Other disease of nasal cavity and sinuses	784.2 - Swelling mass or lump in head and neck	478.5 - Other diseases of vocal cords
FY 16	J34.2 - Deviated nasal septum	R22.1 - Localized swelling mass and lump neck	J34.89 - Other specified disorders of nose and nasal sinuses	H66.93 - Otitis media unspecified bilateral	S02.2XXA - Fracture of nasal bones initial encounter for closed fracture	J32.9 - Chronic sinusitis unspecified
FY 17	J34.2 - Deviated nasal septum	H66.93 - Otitis media unspecified bilateral	C73 - Malignant neoplasm of thyroid gland	J35.01 - Chronic tonsillitis	L72.0 - Epidermal cyst	Q89.2 - Congenital malformations of other endocrine glands
FY 15-17 Total	**J34.2 - Deviated nasal septum**	**H66.93 - Otitis media unspecified bilateral**	**C73 - Malignant neoplasm of thyroid gland**	**J34.89 - Other specified disorders of nose and nasal sinuses**	**R22.1 - Localized swelling mass and lump neck**	**J35.01 - Chronic tonsillitis**

Endoscopy

FY 15	V76.51 - Special screening for malignant neoplasms of colon	211.3 - Benign neoplasm of colon	535.1 - Atrophic gastritis without mention of hemorrhage	V67.09 - Follow-up examination following other surgery	280.9 - Iron deficiency anemia unspecified	569.3 - Hemorrhage of rectum and anus
FY 16	Z12.11 - Encounter for screening for malignant neoplasm of colon	K29.50 - Unspecified chronic gastritis without bleeding	K21.0 - Gastro-esophageal reflux disease with esophagitis	K62.5 - Hemorrhage of anus and rectum	D50.9 - Iron deficiency anemia unspecified	K92.1 - Melena
FY 17	Z12.11 - Encounter for screening for malignant neoplasm of colon	K29.50 - Unspecified chronic gastritis without bleeding	K21.0 - Gastro-esophageal reflux disease with esophagitis	K57.30 - Diverticulosis of large intestine without perforation or abscess without bleeding	D50.9 - Iron deficiency anemia unspecified	K22.2 - Esophageal obstruction
FY 15-17 Total	**Z12.11 - Encounter for screening for malignant neoplasm of colon**	**V76.51 - Special screening for malignant neoplasms of colon**	**K29.50 - Unspecified chronic gastritis without bleeding**	**K21.0 - Gastro-esophageal reflux disease with esophagitis**	**D50.9 - Iron deficiency anemia unspecified**	**K57.30 - Diverticulosis of large intestine without perforation or abscess without bleeding**

Plastic Surgery

FY 15	611.1 - Hypertrophy of breast	354 - Carpal tunnel syndrome	173.31 - Basal cell carcinoma of skin of other and unspecified parts of face	611.82 - Hypoplasia of breast	612 - Deformity of reconstructed breast	701.8 - Other specified hypertrophic and atrophic conditions of skin
FY 16	Z41.1 - Encounter for cosmetic surgery	N62 - Hypertrophy of breast	N65.0 - Deformity of reconstructed breast	C44.311 - Basal cell carcinoma of skin of nose	C44.319 - Basal cell carcinoma of skin of other parts of face	E65 - Localized adiposity
FY 17	N62 - Hypertrophy of breast	Z41.1 - Encounter for cosmetic surgery	C44.311 - Basal cell carcinoma of skin of nose	N65.0 - Deformity of reconstructed breast	N64.82 - Hypoplasia of breast	L72.0 - Epidermal cyst
FY 15-17 Total	**Z41.1 - Encounter for cosmetic surgery**	**N62 - Hypertrophy of breast**	**611.1 - Hypertrophy of breast**	**C44.311 - Basal cell carcinoma of skin of nose**	**N65.0 - Deformity of reconstructed breast**	**354 - Carpal tunnel syndrome**

2015

Payer Type	Total Patients	Percentage of Patients
	See Separate Tab	
	See Separate Tab	
	See Separate Tab	
Total		

2016

Payer Type	Total Patients	Percentage of Patients
	See Separate Tab	
	See Separate Tab	
	See Separate Tab	
Total		

2017

Payer Type	Total Patients	Percentage of Patients
	See Separate Tab	
	See Separate Tab	
	See Separate Tab	
Total		

MelroseWakefield Healthcare

Payer Type
FY15 - FY17
Patient Type - All

	FY2015		FY2016		FY2017	
Insurance Plan Code	**Cases**	**Payer**	**Cases**	**Payer**	**Cases**	**Payer**
BC-HMO	34,307	7.72%	32,329	7.21%	29,434	6.90%
BC-IND	1,119	0.25%	1,281	0.29%	1,479	0.35%
BC-PPO	46,193	10.39%	49,214	10.97%	48,357	11.33%
CIGNA	8,976	2.02%	9,179	2.05%	9,358	2.19%
COMMERCIAL	7,418	1.67%	7,900	1.76%	8,446	1.98%
FREE CARE	2,106	0.47%	2,310	0.52%	1,089	0.26%
GOVT	1,248	0.28%	1,322	0.29%	1,233	0.29%
HARVARD	33,614	7.56%	32,989	7.36%	30,870	7.23%
HHA	4,451	1.00%	4,823	1.08%	4,498	1.05%
INDUSTRIAL	2,537	0.57%	2,329	0.52%	2,244	0.53%
MANAGED CARE PLANS	13,401	3.01%	13,134	2.93%	11,424	2.68%
MBHP	44	0.01%	124	0.03%	105	0.02%
MEDICAID	20,218	4.55%	16,931	3.78%	15,033	3.52%
MEDICAID - MC	27,919	6.28%	32,402	7.23%	33,767	7.91%
MEDICARE	125,205	28.16%	125,736	28.04%	117,823	27.61%
MEDICARE - MC	8,732	1.96%	9,186	2.05%	11,275	2.64%
NHP	9,198	2.07%	12,299	2.74%	11,155	2.61%
NON MBHP MH	2,771	0.62%	2,482	0.55%	2,177	0.51%
OTHER	2,069	0.47%	2,112	0.47%	2,267	0.53%
PSYCH MCP (not MBHP)	1,217	0.27%	988	0.22%	947	0.22%
SECURE HORIZONS	23,641	5.32%	23,823	5.31%	23,091	5.41%
SELF PAY	24,412	5.49%	21,903	4.88%	20,732	4.86%
TUFTS	28,795	6.48%	27,610	6.16%	25,378	5.95%
UNITED	6,957	1.56%	6,902	1.54%	7,329	1.72%
US HEALTH	7,870	1.77%	7,271	1.62%	7,087	1.66%
[Blank]	134	0.03%	1,868	0.42%	105	0.02%
Grand Total	**444,552**	**100.00%**	**448,447**	**100.00%**	**426,703**	**100.00%**

MelroseWakefield Healthcare

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
MA	01001	Agawam			4
	01002	Amherst	8	8	10
	01003	Amherst			1
	01004	Amherst			1
	01005	Barre	1	1	3
	01010	Brimfield	2	5	
	01013	Chicopee	1	1	4
	01020	Chicopee		13	5
	01027	Easthampton	1	8	4
	01028	East Longmeadow	8	1	7
	01030	Feeding Hills	6	5	
	01033	Granby	1		
	01035	Hadley	2		1
	01036	Hampden	1	3	5
	01040	Holyoke	3	5	8
	01041	Holyoke			1
	01050	Huntington	1		
	01054	Leverett			2
	01056	Ludlow		3	4
	01057	Monson		1	
	01060	Northampton		4	4
	01062	Florence	3	1	1
	01066	North Hatfield		4	8
	01068	Oakham	1		
	01069	Palmer	2		1
	01070	Plainfield	1		1
	01071	Russell		1	
	01073	Southampton	3		
	01074	South Barre	4	6	2
	01075	South Hadley	5	1	
	01077	Southwick	5	3	1
	01080	Three Rivers	1		
	01081	Wales	2	1	
	01082	Ware		1	2
	01083	Warren		1	
	01085	Westfield	3	1	4
	01086	Westfield		2	1
	01089	West Springfield		1	
	01092	West Warren		1	
	01095	Wilbraham		1	
	01098	Worthington	1		
	01101	Springfield	10		
	01102	Springfield		2	
	01103	Springfield			1
	01104	Springfield		1	2

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	01105	Springfield	2		
	01106	Longmeadow	8	10	3
	01107	Springfield	2		
	01108	Springfield	2	3	1
	01109	Springfield	1	2	14
	01118	Springfield	1	8	8
	01119	Springfield		2	
	01128	Springfield		1	1
	01201	Pittsfield	7	6	8
	01220	Adams	3	3	8
	01222	Ashley Falls		9	12
	01224	Berkshire	3		
	01225	Cheshire			1
	01226	Dalton	3	1	1
	01229	Glendale			1
	01230	Great Barrington		1	
	01236	Housatonic		4	
	01238	Lee			1
	01240	Lenox	2		3
	01243	Middlefield	3	13	3
	01244	Mill River	2	1	
	01245	Monterey		5	5
	01247	North Adams			17
	01252	North Egremont		14	2
	01254	Richmond	1	1	
	01255	Sandisfield	3	8	22
	01262	Stockbridge			2
	01267	Williamstown	4	3	2
	01301	Greenfield	3	1	
	01302	Greenfield			1
	01331	Athol	17	29	17
	01339	Charlemont		2	
	01341	Conway	3	2	1
	01346	Heath		1	1
	01351	Montague			1
	01354	Northfield	2	1	
	01355	New Salem	2	3	12
	01364	Orange	3		5
	01366	Petersham	1	4	7
	01368	Royalston	2	6	8
	01373	South Deerfield			1
	01376	Turners Falls	1	1	1
	01378	Warwick	1		
	01420	Fitchburg	51	60	109
	01430	Ashburnham	2	6	11
	01431	Ashby	7	10	1

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	01432	Ayer	47	25	55
	01436	Baldwinville	1	1	
	01440	Gardner	12	13	17
	01441	Gardner	8		
	01450	Groton	38	22	56
	01451	Harvard	12	26	11
	01452	Hubbardston	1	3	11
	01453	Leominster	83	60	87
	01460	Littleton	40	47	71
	01462	Lunenburg	32	32	46
	01463	Pepperell	49	58	45
	01464	Shirley	33	11	16
	01468	Templeton	3	7	6
	01469	Townsend	43	71	41
	01473	Westminster		2	18
	01474	West Townsend	2	4	
	01475	Winchendon	10	6	4
	01501	Auburn	24	15	5
	01503	Berlin	8	10	5
	01504	Blackstone	6	14	8
	01505	Boylston		3	
	01506	Brookfield	1		
	01507	Charlton	3	17	11
	01510	Clinton	41	25	27
	01515	East Brookfield	12	4	4
	01516	Douglas		6	2
	01519	Grafton	20	7	6
	01520	Holden	2	2	4
	01521	Holland	4	2	2
	01522	Jefferson	6		5
	01523	Lancaster	3	6	14
	01524	Leicester	4	6	4
	01527	Millbury	1	3	4
	01529	Millville		1	1
	01531	New Braintree	1		
	01532	Northborough	27	12	19
	01534	Northbridge	1	2	1
	01535	North Brookfield		2	1
	01536	North Grafton	1	2	
	01540	Oxford		3	5
	01541	Princeton		2	1
	01542	Rochdale		1	
	01543	Rutland		5	5
	01545	Shrewsbury	21	18	20
	01550	Southbridge	15	14	3
	01560	South Grafton	7	2	11

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	01561	South Lancaster		1	
	01562	Spencer	2		
	01564	Sterling	3	8	5
	01566	Sturbridge	7	4	
	01568	Upton	1	5	2
	01569	Uxbridge	5	2	2
	01570	Webster	6	10	19
	01571	Dudley			7
	01580	Westborough	19		
	01581	Westborough	7	39	30
	01583	West Boylston	3	2	2
	01585	West Brookfield	2	5	15
	01588	Whitinsville	25	25	27
	01590	Sutton	12	11	13
	01601	Worcester	91	4	5
	01602	Worcester	3	17	5
	01603	Worcester	4	26	9
	01604	Worcester	3	14	28
	01605	Worcester	8	29	31
	01606	Worcester		11	10
	01607	Worcester	1	4	2
	01608	Worcester	1	1	1
	01609	Worcester	4	4	5
	01610	Worcester	2	1	8
	01611	Cherry Valley	1	3	3
	01612	Paxton		1	
	01613	Worcester		1	
	01701	Framingham	117	70	97
	01702	Framingham	19	58	57
	01704	Framingham			1
	01718	Village Of Nagog Woods	1	3	5
	01719	Boxborough	13	23	47
	01720	Acton	91	88	110
	01721	Ashland	35	41	56
	01730	Bedford	261	308	269
	01731	Hanscom Afb	6	11	26
	01740	Bolton	23	41	15
	01741	Carlisle	51	42	51
	01742	Concord	109	117	109
	01746	Holliston	11	22	36
	01747	Hopedale	8	5	8
	01748	Hopkinton	60	35	27
	01749	Hudson	37	32	35
	01752	Marlborough	73	85	131
	01754	Maynard	52	35	35
	01756	Mendon	1	6	9

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	01757	Milford	30	29	44
	01760	Natick	74	82	67
	01770	Sherborn	3	1	
	01772	Southborough	16	10	13
	01773	Lincoln	22	38	22
	01775	Stow	16	21	25
	01776	Sudbury	49	60	63
	01778	Wayland	74	80	100
	01801	Woburn	8,296	8,592	8,160
	01803	Burlington	2,225	2,130	2,221
	01805	Burlington	1	9	9
	01806	Woburn	1	2	6
	01807	Woburn		5	3
	01810	Andover	1,740	1,923	1,846
	01812	Andover	1	2	
	01813	Woburn		3	5
	01815	Woburn		3	3
	01821	Billerica	2,858	2,998	2,806
	01822	Billerica	3	2	5
	01824	Chelmsford	372	347	400
	01826	Dracut	697	849	908
	01827	Dunstable	27	31	45
	01830	Haverhill	1,012	616	630
	01831	Haverhill	1	6	12
	01832	Haverhill	124	569	624
	01833	Georgetown	547	621	581
	01834	Groveland	290	275	288
	01835	Haverhill	240	459	516
	01840	Lawrence	529	40	31
	01841	Lawrence	51	273	280
	01842	Lawrence	8	7	14
	01843	Lawrence	88	374	323
	01844	Methuen	1,779	1,734	1,805
	01845	North Andover	1,931	1,716	1,873
	01850	Lowell	777	194	159
	01851	Lowell	30	185	191
	01852	Lowell	105	482	429
	01853	Lowell	4	9	1
	01854	Lowell	37	213	221
	01860	Merrimac	96	146	134
	01862	North Billerica	472	536	621
	01863	North Chelmsford	115	93	163
	01864	North Reading	6,656	6,745	6,663
	01865	Nutting Lake	26	49	38
	01866	Pinehurst	24	15	13
	01867	Reading	12,884	13,644	13,532

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	01876	Tewksbury	4,745	5,224	5,069
	01879	Tyngsboro	127	149	162
	01880	Wakefield	35,864	36,304	34,607
	01885	West Boxford	11	12	14
	01886	Westford	175	211	233
	01887	Wilmington	6,112	7,095	7,106
	01888	Woburn	17	48	54
	01889	North Reading	1	6	3
	01890	Winchester	2,986	3,196	3,051
	01899	Andover	1	4	
	01901	Lynn	5,753	357	256
	01902	Lynn	578	2,422	2,311
	01903	Lynn	1	16	23
	01904	Lynn	367	1,864	1,865
	01905	Lynn	646	2,980	2,929
	01906	Saugus	34,085	34,516	32,370
	01907	Swampscott	587	639	554
	01908	Nahant	332	248	324
	01910	Lynn		3	
	01913	Amesbury	336	361	312
	01915	Beverly	802	831	794
	01921	Boxford	513	429	507
	01922	Byfield	71	80	67
	01923	Danvers	2,004	2,144	1,933
	01929	Essex	30	35	56
	01930	Gloucester	411	350	369
	01931	Gloucester	1	11	8
	01936	Hamilton	19	4	5
	01937	Hathorne	2	8	
	01938	Ipswich	329	317	325
	01940	Lynnfield	5,541	5,445	5,324
	01944	Manchester	43	65	48
	01945	Marblehead	209	231	220
	01947	Salem		3	1
	01949	Middleton	1,190	1,313	1,303
	01950	Newburyport	241	236	240
	01951	Newbury	59	64	58
	01952	Salisbury	240	245	263
	01960	Peabody	7,461	7,586	7,485
	01961	Peabody	8	30	10
	01964	Peabody		7	2
	01965	Prides Crossing	33	9	13
	01966	Rockport	118	97	113
	01969	Rowley	371	351	323
	01970	Salem	1,334	1,408	1,457
	01971	Salem	5	11	1

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	01982	South Hamilton	77	83	121
	01983	Topsfield	431	404	433
	01984	Wenham	25	29	51
	01985	West Newbury	56	29	42
	02018	Accord			2
	02019	Bellingham	18	4	8
	02020	Brant Rock	2		
	02021	Canton	56	74	64
	02025	Cohasset	7	9	4
	02026	Dedham	55	53	38
	02030	Dover	1	2	3
	02031	East Mansfield			1
	02032	East Walpole	8	8	16
	02035	Foxboro	14	11	5
	02038	Franklin	39	49	13
	02043	Hingham	52	34	31
	02045	Hull	60	59	71
	02047	Humarock	29	16	14
	02048	Mansfield	17	23	34
	02050	Marshfield	72	40	22
	02052	Medfield	21	24	31
	02053	Medway	12	9	12
	02054	Millis	11	9	16
	02056	Norfolk	6	14	14
	02061	Norwell	15	14	10
	02062	Norwood	73	73	66
	02066	Scituate	52	38	39
	02067	Sharon	19	18	21
	02071	South Walpole	1		
	02072	Stoughton	39	45	43
	02081	Walpole	34	30	32
	02090	Westwood	29	23	46
	02093	Wrentham	16	5	9
	02101	Boston	4	10	10
	02104	Boston		3	2
	02105	Boston		1	
	02106	Boston			1
	02107	Boston		2	
	02108	Boston	1,915	110	89
	02109	Boston	20	109	115
	02110	Boston	17	48	48
	02111	Boston	16	52	69
	02112	Boston	5	4	6
	02113	Boston	20	128	160
	02114	Boston	17	61	62
	02115	Boston	29	127	134

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	02116	Boston	27	136	128
	02117	Boston	2	9	11
	02118	Boston	69	184	196
	02119	Boston	110	173	146
	02120	Boston	8	63	82
	02121	Boston	377	85	91
	02122	Boston	41	72	93
	02123	Boston	1		3
	02124	Boston	40	194	157
	02125	Boston	38	148	159
	02126	Mattapan	65	84	88
	02127	Boston	66	293	386
	02128	Boston	549	2,749	2,498
	02129	Charlestown	869	893	795
	02130	Jamaica Plain	110	125	198
	02131	Roslindale	115	121	125
	02132	West Roxbury	70	93	110
	02133	Boston			1
	02134	Allston	85	117	112
	02135	Brighton	211	244	272
	02136	Hyde Park	108	106	81
	02137	Readville	2		1
	02138	Cambridge	1,395	319	386
	02139	Cambridge	98	436	462
	02140	Cambridge	130	697	697
	02141	Cambridge	60	319	316
	02142	Cambridge	10	59	67
	02143	Somerville	9,926	2,869	2,652
	02144	Somerville	764	3,747	3,797
	02145	Somerville	1,041	5,346	5,098
	02146	Brookline	1	4	11
	02147	Brookline Village	1		3
	02148	Malden	58,814	58,217	54,381
	02149	Everett	20,653	20,624	18,883
	02150	Chelsea	3,810	3,861	3,332
	02151	Revere	20,912	20,202	19,062
	02152	Winthrop	10,000	9,142	8,729
	02153	Medford	53,753	78	45
	02154	Waltham		20	18
	02155	Medford	14,333	67,356	62,538
	02156	West Medford	94	44	51
	02158	Newton		3	3
	02159	Newton			1
	02160	Newton	1	3	7
	02163	Boston	5	46	6
	02165	Newton	2	3	2

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	02166	Auburndale		1	
	02167	Chestnut Hill			1
	02168	Waban		1	
	02169	Quincy	505	333	341
	02170	Quincy	18	72	83
	02171	Quincy	34	103	91
	02172	Watertown		4	6
	02173	Lexington	7	22	16
	02174	Arlington	5	73	12
	02175	Arlington Heights		2	3
	02176	Melrose	45,337	45,080	42,420
	02178	Belmont	1	8	16
	02180	Stoneham	19,954	20,247	18,935
	02181	Wellesley		4	3
	02184	Braintree	142	132	141
	02186	Milton	39	50	72
	02188	Weymouth	74	53	36
	02189	Weymouth	18	40	40
	02190	Weymouth	34	40	25
	02191	Weymouth	13	14	23
	02193	Weston		1	
	02194	Needham		4	
	02196	Boston		1	
	02199	Boston		1	3
	02201	Boston	1	1	
	02205	Boston	4	18	29
	02209	Boston			2
	02210	Boston	7	23	26
	02211	Boston	2		
	02215	Boston	5	16	49
	02216	Boston		1	
	02228	East Boston	1,518	4	
	02238	Cambridge	2	1	1
	02254	Waltham		2	
	02269	Quincy	1	5	3
	02298	Boston	7	10	6
	02301	Brockton	158	101	78
	02302	Brockton	17	36	48
	02303	Brockton		3	4
	02322	Avon	18	4	9
	02324	Bridgewater	31	34	57
	02327	Bryantville		1	1
	02330	Carver	48	37	22
	02331	Duxbury	15	1	
	02332	Duxbury	11	8	31
	02333	East Bridgewater	16	5	13

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	02334	Easton	5	1	
	02338	Halifax	5	7	8
	02339	Hanover	9	6	13
	02341	Hanson	11	11	12
	02343	Holbrook	33	32	37
	02344	Middleboro	14	1	3
	02345	Manomet	3	2	1
	02346	Middleboro	1	8	10
	02347	Lakeville	11	13	20
	02351	Abington	36	35	30
	02356	North Easton	3	16	15
	02359	Pembroke	9	11	20
	02360	Plymouth	106	111	115
	02364	Kingston	9	10	5
	02367	Plympton	4	3	2
	02368	Randolph	106	167	130
	02370	Rockland	38	69	37
	02375	South Easton	5	7	5
	02379	West Bridgewater	20	16	9
	02382	Whitman	12	13	18
	02420	Lexington	533	344	348
	02421	Lexington	65	291	329
	02445	Brookline	99	52	65
	02446	Brookline	21	97	106
	02447	Brookline Village	1	14	
	02451	Waltham	461	204	180
	02452	Waltham	28	181	112
	02453	Waltham	59	213	192
	02454	Waltham	6	17	18
	02455	North Waltham		1	5
	02457	Babson Park			4
	02458	Newton	186	131	75
	02459	Newton Center	4	33	29
	02460	Newtonville	10	18	22
	02461	Newton Highlands	4	20	23
	02462	Newton Lower Falls	6	5	10
	02464	Newton Upper Falls	2	3	7
	02465	West Newton	25	33	54
	02466	Auburndale	8	17	18
	02467	Chestnut Hill	13	20	40
	02468	Waban	7	10	12
	02471	Watertown	195	15	15
	02472	Watertown	70	269	298
	02474	Arlington	2,932	2,233	2,084
	02475	Arlington Heights		2	2
	02476	Arlington	97	753	747

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	02477	Watertown		1	
	02478	Belmont	305	385	447
	02481	Wellesley Hills	4	28	35
	02482	Wellesley	35	28	13
	02492	Needham	34	31	38
	02493	Weston	25	20	21
	02494	Needham	8	11	29
	02499	Brockton		1	
	02532	Buzzards Bay	5	8	5
	02534	Cataumet	2		
	02535	Chilmark		1	
	02536	East Falmouth	26	32	30
	02537	East Sandwich	3		2
	02538	East Wareham	10	12	19
	02539	Edgartown	4	4	5
	02540	Falmouth	32	13	9
	02541	Falmouth		2	2
	02543	Woods Hole		2	
	02552	Menemsha		6	
	02554	Nantucket	2	2	1
	02556	North Falmouth	6	8	4
	02557	Oak Bluffs	2		
	02558	Onset	5	5	9
	02559	Pocasset	2	2	1
	02561	Sagamore			2
	02562	Sagamore Beach	3	6	3
	02563	Sandwich	15	10	21
	02568	Vineyard Haven	2	3	2
	02571	Wareham	12	14	27
	02574	West Falmouth	1		1
	02575	West Tisbury			1
	02576	West Wareham		8	3
	02601	Hyannis	15	16	9
	02630	Barnstable		2	
	02631	Brewster	28	13	11
	02632	Centerville	12	5	9
	02633	Chatham	6		1
	02635	Cotuit	6	3	1
	02637	Cummaquid			1
	02638	Dennis	10	10	5
	02639	Dennis Port	7	7	9
	02641	East Dennis	2	3	
	02643	East Orleans	2		
	02644	Forestdale	1		
	02645	Harwich	38	26	41
	02646	Harwich Port		6	3

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	02647	Hyannis Port	1		1
	02648	Marstons Mills	2	5	4
	02649	Mashpee	27	28	27
	02651	North Eastham	1	7	2
	02652	North Truro	1	3	
	02653	Orleans	1	3	5
	02655	Osterville	7	6	3
	02657	Provincetown	5	6	3
	02659	South Chatham	1		1
	02660	South Dennis	6	7	7
	02664	South Yarmouth	13	47	32
	02667	Wellfleet		3	
	02668	West Barnstable	1	4	4
	02670	West Dennis	5	2	4
	02671	West Harwich	2	1	1
	02672	West Hyannisport	1	6	2
	02673	West Yarmouth	11	14	16
	02675	Yarmouth Port	6	8	9
	02702	Assonet		4	1
	02703	Attleboro	45	71	42
	02713	Cuttyhunk			1
	02714	Dartmouth	1	1	
	02715	Dighton	1		1
	02717	East Freetown	14	2	1
	02718	East Taunton	2	3	9
	02719	Fairhaven	14	12	7
	02720	Fall River	23	23	29
	02721	Fall River		7	6
	02722	Fall River	1		
	02723	Fall River	1		4
	02724	Fall River	4	13	7
	02725	Somerset	1		1
	02726	Somerset			2
	02738	Marion	1	3	3
	02739	Mattapoisett	6		6
	02740	New Bedford	28	13	14
	02741	New Bedford	1		
	02743	Acushnet	2	2	2
	02744	New Bedford	1	4	11
	02745	New Bedford		4	3
	02746	New Bedford	1	3	7
	02747	North Dartmouth	11	4	16
	02748	South Dartmouth	1	1	3
	02760	North Attleboro	14	13	26
	02762	Plainville	3	9	3
	02763	Attleboro Falls	1	4	3

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	02764	North Dighton	1		2
	02766	Norton	3	18	17
	02767	Raynham	16	12	11
	02769	Rehoboth	5	8	3
	02770	Rochester	6	10	9
	02771	Seekonk	11	4	8
	02779	Berkley	1	3	3
	02780	Taunton	31	27	30
	02783	Taunton		1	
	02790	Westport	2	4	4
	05501	Andover	2	6	
MA Total			436,594	439,765	417,900
Out of State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	09006	Apo	2		
	09102	Apo		5	6
	09140	Apo			3
	09608	Fpo			1
	09858	Apo	1		
	99501	Anchorage	6		
	99502	Anchorage	1		
	99613	King Salmon	1		
	99686	Valdez		1	
	99901	Ketchikan		1	
	35244	Birmingham	1		2
	35749	Harvest		1	
	36108	Montgomery		3	1
	36532	Fairhope			1
	36533	Fairhope		2	
	36607	Mobile			2
	36732	Demopolis	1		
	36830	Auburn	2		
	36867	Phenix City		1	3
	71902	Hot Springs National Park	1		
	72201	Little Rock	1		
	72701	Fayetteville	3		
	72751	Pea Ridge		1	4
	85001	Phoenix	5		
	85003	Phoenix		2	
	85021	Phoenix			1
	85087	New River	1		
	85201	Mesa	3		
	85205	Mesa			2
	85213	Mesa		2	
	85233	Gilbert	1		
	85234	Gilbert		1	1
	85250	Scottsdale	1		

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	85251	Scottsdale	2		
	85254	Scottsdale		1	2
	85257	Scottsdale		1	
	85258	Scottsdale		1	1
	85259	Scottsdale			1
	85281	Tempe	2		
	85286	Chandler		1	
	85301	Glendale	1		
	85308	Glendale			1
	85323	Avondale	1		
	85326	Buckeye		1	
	85338	Goodyear		1	
	85351	Sun City	1		
	85365	Yuma			1
	85373	Sun City			3
	85374	Surprise		1	
	85375	Sun City West	1		
	85383	Peoria			2
	85635	Sierra Vista		1	
	85701	Tucson	1		
	85706	Tucson			1
	85713	Tucson		1	
	85742	Tucson	1		
	86004	Flagstaff	1		3
	86429	Bullhead City	5		
	86442	Bullhead City		2	2
	90001	Los Angeles	7	3	
	90004	Los Angeles			1
	90021	Los Angeles			2
	90028	Los Angeles		1	3
	90029	Los Angeles		1	
	90036	Los Angeles	1	1	
	90041	Los Angeles			1
	90045	Los Angeles		1	
	90049	Los Angeles		2	
	90068	Los Angeles		1	1
	90069	West Hollywood		1	
	90210	Beverly Hills		2	
	90212	Beverly Hills	1	1	
	90241	Downey		1	
	90254	Hermosa Beach	2		
	90265	Malibu		1	3
	90266	Manhattan Beach	2		1
	90272	Pacific Palisades		3	1
	90274	Palos Verdes Peninsula			1
	90275	Rancho Palos Verdes	1		1

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	90277	Redondo Beach			1
	90291	Venice	2	1	4
	90292	Marina Del Rey			2
	90301	Inglewood			1
	90402	Santa Monica	1	1	
	90403	Santa Monica		1	
	90404	Santa Monica			1
	90405	Santa Monica			4
	90623	La Palma		1	
	90631	La Habra	2		
	90711	Lakewood	1		
	90715	Lakewood			1
	90740	Seal Beach	1		
	90801	Long Beach	6		
	90802	Long Beach			2
	90803	Long Beach	4		
	90807	Long Beach		1	
	91001	Altadena		1	1
	91007	Arcadia		1	
	91011	La Canada Flintridge		1	1
	91030	South Pasadena	4	1	
	91101	Pasadena	1		4
	91104	Pasadena		3	
	91106	Pasadena			1
	91202	Glendale		1	
	91214	La Crescenta	1		
	91301	Agoura Hills	4	1	3
	91302	Calabasas	2		
	91307	West Hills		1	
	91311	Chatsworth		1	
	91316	Encino			3
	91320	Newbury Park	1		
	91342	Sylmar	2		
	91344	Granada Hills			3
	91351	Canyon Country	1		1
	91352	Sun Valley		1	
	91364	Woodland Hills	3		
	91377	Oak Park	1		
	91381	Stevenson Ranch		1	
	91390	Santa Clarita			1
	91401	Van Nuys	1		
	91406	Van Nuys		1	
	91501	Burbank	2		
	91504	Burbank		2	
	91601	North Hollywood	1	2	
	91602	North Hollywood			2

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	91604	Studio City	3	1	1
	91607	Valley Village			2
	91711	Claremont			1
	91739	Rancho Cucamonga		1	2
	91745	Hacienda Heights		2	
	91747	La Puente			1
	91766	Pomona		1	
	91773	San Dimas	2	1	
	91911	Chula Vista			1
	91941	La Mesa		1	
	92008	Carlsbad	1		
	92014	Del Mar			1
	92021	El Cajon			1
	92027	Escondido			1
	92029	Escondido	1		
	92037	La Jolla			1
	92049	Oceanside	1		
	92064	Poway		1	
	92065	Ramona		1	
	92069	San Marcos			1
	92078	San Marcos			1
	92081	Vista	1		
	92082	Valley Center			1
	92101	San Diego	1		
	92103	San Diego			2
	92104	San Diego			1
	92108	San Diego		2	2
	92126	San Diego	2		
	92127	San Diego			1
	92128	San Diego		1	
	92130	San Diego	1	2	1
	92131	San Diego			3
	92143	San Ysidro	2		
	92173	San Ysidro			3
	92270	Rancho Mirage			5
	92310	Fort Irwin		1	
	92311	Barstow	2	2	1
	92315	Big Bear Lake			5
	92543	Hemet	1		
	92557	Moreno Valley			1
	92562	Murrieta		2	
	92602	Irvine	3		
	92620	Irvine		1	
	92630	Lake Forest		2	
	92648	Huntington Beach			1
	92656	Aliso Viejo	7	11	17

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	92658	Newport Beach	1		
	92679	Trabuco Canyon		1	1
	92694	Ladera Ranch			1
	92782	Tustin		1	
	92831	Fullerton			1
	92840	Garden Grove	1		
	92841	Garden Grove	1		
	93012	Camarillo			2
	93063	Simi Valley			1
	93065	Simi Valley		1	2
	93101	Santa Barbara	3	1	
	93110	Santa Barbara		1	
	93111	Santa Barbara	1		
	93442	Morro Bay	2		
	93534	Lancaster	1		
	93650	Fresno	1		
	93656	Riverdale			1
	93901	Salinas	1		1
	93940	Monterey	1	1	
	93955	Seaside			1
	94010	Burlingame		1	1
	94022	Los Altos	1	5	1
	94025	Menlo Park	1	1	1
	94027	Atherton	1		
	94028	Portola Valley		1	2
	94030	Millbrae			4
	94040	Mountain View		1	1
	94041	Mountain View			2
	94043	Mountain View			1
	94061	Redwood City		1	
	94070	San Carlos	5		
	94101	San Francisco	2		
	94107	San Francisco			1
	94109	San Francisco		2	
	94112	San Francisco			2
	94114	San Francisco		1	1
	94117	San Francisco			1
	94118	San Francisco			1
	94122	San Francisco	1		
	94123	San Francisco		1	2
	94131	San Francisco		1	1
	94301	Palo Alto	1	1	
	94303	Palo Alto		2	1
	94305	Stanford	1		
	94306	Palo Alto	1	3	
	94401	San Mateo	1		

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	94402	San Mateo			1
	94404	San Mateo		1	7
	94506	Danville	1		
	94509	Antioch			1
	94513	Brentwood			1
	94523	Pleasant Hill	3		
	94526	Danville		1	
	94531	Antioch		1	
	94533	Fairfield			1
	94539	Fremont		1	
	94544	Hayward		2	
	94549	Lafayette	1		
	94552	Castro Valley			2
	94553	Martinez			1
	94556	Moraga	1	1	1
	94560	Newark			3
	94563	Orinda		1	
	94565	Pittsburg		1	
	94566	Pleasanton			1
	94579	San Leandro	1		
	94580	San Lorenzo			1
	94597	Walnut Creek	1		
	94601	Oakland	2	1	
	94612	Oakland		2	
	94618	Oakland	2	2	1
	94703	Berkeley		4	
	94709	Berkeley			1
	94804	Richmond			1
	94901	San Rafael			4
	94904	Greenbrae			1
	94939	Larkspur	1		
	94941	Mill Valley	6	3	3
	94947	Novato		1	
	94949	Novato			1
	94960	San Anselmo		1	
	95014	Cupertino		1	2
	95030	Los Gatos	1	1	1
	95032	Los Gatos			1
	95036	Milpitas		1	
	95050	Santa Clara	1	1	
	95051	Santa Clara		1	2
	95060	Santa Cruz			1
	95062	Santa Cruz	2		
	95101	San Jose	2		
	95125	San Jose			2
	95130	San Jose			2

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	95131	San Jose		1	
	95134	San Jose		3	
	95201	Stockton	1		
	95351	Modesto			1
	95401	Santa Rosa	1		
	95403	Santa Rosa	1	1	
	95501	Eureka	2		
	95519	Mckinleyville	1		
	95616	Davis	1		
	95620	Dixon			1
	95621	Citrus Heights			1
	95626	Elverta		1	
	95667	Placerville		1	
	95835	Sacramento		1	
	95926	Chico	2		1
	96001	Redding		1	
	96160	Truckee			2
	96161	Truckee			1
	80010	Aurora	1		
	80017	Aurora	3		
	80020	Broomfield	1		
	80026	Lafayette	1		
	80027	Louisville	1		
	80110	Englewood	1		
	80111	Englewood			1
	80113	Englewood			1
	80120	Littleton	1		
	80134	Parker			1
	80201	Denver	1		
	80207	Denver			1
	80218	Denver	1		
	80220	Denver	2	1	
	80246	Denver	1		
	80301	Boulder	2		
	80302	Boulder			1
	80303	Boulder	1	1	
	80304	Boulder		1	
	80401	Golden	3		
	80403	Golden	1		
	80465	Morrison		1	
	80901	Colorado Springs	2		
	80905	Colorado Springs		1	
	80906	Colorado Springs			2
	80909	Colorado Springs		1	
	80911	Colorado Springs	1		
	80916	Colorado Springs			1

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	80920	Colorado Springs			2
	81147	Pagosa Springs	1		
	81611	Aspen			1
	81615	Snowmass Village	1		
	06001	Avon	2	3	
	06002	Bloomfield	2	1	
	06010	Bristol		1	
	06019	Canton			2
	06026	East Granby		1	
	06029	Ellington			1
	06030	Farmington	3		
	06032	Farmington		1	3
	06033	Glastonbury	1	2	4
	06035	Granby	2		
	06037	Kensington	1	2	
	06040	Manchester			2
	06042	Manchester	1		1
	06053	New Britain	1	2	6
	06057	New Hartford			1
	06062	Plainville		1	
	06066	Vernon Rockville	1	9	
	06067	Rocky Hill			1
	06070	Simsbury	2	2	1
	06071	Somers			1
	06074	South Windsor			5
	06076	Stafford Springs		2	
	06078	Suffield			1
	06082	Enfield	1	5	3
	06084	Tolland	3	1	1
	06095	Windsor		1	
	06098	Winsted	1		
	06101	Hartford	4		
	06105	Hartford		1	1
	06106	Hartford		1	1
	06107	W Hartford	3	2	2
	06109	Wethersfield		1	1
	06110	W Hartford		1	
	06117	W Hartford		1	
	06118	East Hartford	1	2	1
	06141	Hartford		1	
	06230	Abington	1		
	06234	Brooklyn			1
	06241	Dayville	2		1
	06248	Hebron		1	2
	06249	Lebanon	1		
	06259	Pomfret Center			1

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	06262	Quinebaug	1		
	06278	Ashford		1	
	06281	Woodstock			7
	06320	New London	2	1	
	06330	Baltic	1		
	06331	Canterbury			1
	06335	Gales Ferry			1
	06339	Ledyard			5
	06355	Mystic		1	
	06357	Niantic			4
	06359	North Stonington		1	
	06360	Norwich	3		2
	06371	Old Lyme		1	
	06375	Quaker Hill	1	1	
	06377	Sterling	2	1	
	06378	Stonington	2	1	1
	06382	Uncasville		1	
	06385	Waterford	5	2	4
	06387	Wauregan	1		
	06401	Ansonia		2	
	06410	Cheshire	1		3
	06412	Chester	1	1	
	06413	Clinton			2
	06415	Colchester	1		1
	06416	Cromwell		1	
	06417	Deep River	1		
	06419	Killingworth		1	2
	06424	East Hampton	1	9	
	06437	Guilford	2	1	
	06450	Meriden			1
	06457	Middletown			1
	06460	Milford			2
	06468	Monroe	1	1	1
	06470	Newtown	4	2	2
	06473	North Haven		1	3
	06475	Old Saybrook			1
	06477	Orange	1		
	06479	Plantsville			1
	06480	Portland			1
	06482	Sandy Hook			1
	06484	Shelton	3		
	06488	Southbury		5	1
	06489	Southington		7	5
	06492	Wallingford	2		
	06497	Stratford	1		
	06501	New Haven	1		

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	06512	East Haven	1		
	06514	Hamden		1	4
	06518	Hamden		1	
	06525	Woodbridge	2		1
	06601	Bridgeport	1		
	06604	Bridgeport		1	
	06606	Bridgeport			1
	06610	Bridgeport			2
	06611	Trumbull	1	1	1
	06612	Easton	9	2	1
	06614	Stratford	1		
	06704	Waterbury			1
	06705	Waterbury	1		
	06712	Prospect	1		
	06762	Middlebury			1
	06763	Morris	5	2	
	06770	Naugatuck		1	
	06776	New Milford	1	1	4
	06778	Northfield	1		
	06784	Sherman			1
	06787	Thomaston		2	
	06790	Torrington	4	1	
	06798	Woodbury	3		
	06801	Bethel	2	1	
	06804	Brookfield	1	1	
	06807	Cos Cob			1
	06811	Danbury		1	
	06820	Darien		1	3
	06824	Fairfield	4		
	06825	Fairfield	1	5	14
	06830	Greenwich	2		
	06831	Greenwich			1
	06840	New Canaan	2		2
	06850	Norwalk	1		
	06854	Norwalk	3	1	2
	06870	Old Greenwich	1		1
	06877	Ridgefield	1	2	1
	06878	Riverside		7	
	06880	Westport	5		2
	06883	Weston		2	3
	06896	Redding	3		1
	06897	Wilton		1	2
	06902	Stamford		2	1
	06903	Stamford			1
	06907	Stamford			1
	20001	Washington	4	2	2

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	20002	Washington		1	2
	20007	Washington		1	
	20008	Washington			1
	20009	Washington			3
	20010	Washington			1
	20015	Washington			1
	20016	Washington	1	2	3
	20020	Washington			2
	20024	Washington			1
	19702	Newark	1		
	19707	Hockessin		1	
	19711	Newark			1
	19801	Wilmington	3		
	19802	Wilmington		1	
	19803	Wilmington			1
	19809	Wilmington		1	
	19901	Dover			1
	19958	Lewes	1		
	19966	Millsboro	1		
	32003	Orange Park			1
	32004	Ponte Vedra Beach	1		
	32025	Lake City		2	
	32034	Fernandina Beach			1
	32050	Middleburg	2		
	32068	Middleburg	1		
	32080	Saint Augustine	3		1
	32114	Daytona Beach	1		
	32118	Daytona Beach	4		
	32119	Daytona Beach		1	
	32124	Daytona Beach		1	
	32127	Daytona Beach	1	4	
	32128	Daytona Beach	1		2
	32129	Port Orange			1
	32135	Palm Coast	1		
	32136	Flagler Beach	1		
	32137	Palm Coast		2	8
	32159	Lady Lake	1	1	2
	32162	Lady Lake	16	10	7
	32163	The Villages		3	1
	32164	Palm Coast	2	1	
	32168	New Smyrna Beach	1	2	
	32169	New Smyrna Beach			1
	32173	Ormond Beach		1	
	32174	Ormond Beach			3
	32210	Jacksonville		1	
	32246	Jacksonville		1	

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	32250	Jacksonville Beach	1		1
	32259	Jacksonville	1		
	32404	Panama City			1
	32504	Pensacola		6	
	32536	Crestview			2
	32547	Fort Walton Beach		1	
	32563	Harold			1
	32569	Mary Esther		1	
	32712	Apopka		1	1
	32725	Deltona	1	3	
	32726	Eustis	1	1	1
	32728	Deltona	1	1	
	32736	Eustis			1
	32738	Deltona			1
	32757	Mount Dora		1	
	32762	Oviedo	1		
	32765	Oviedo		1	
	32776	Sorrento	1		
	32792	Winter Park	2		
	32801	Orlando	8		
	32809	Orlando		1	
	32810	Orlando			1
	32812	Orlando		2	
	32832	Orlando		1	
	32837	Orlando		1	1
	32839	Orlando		2	
	32901	Melbourne	2	2	1
	32903	Indialantic		2	
	32904	Melbourne		1	
	32905	Palm Bay	2		
	32907	Palm Bay	1	1	2
	32926	Cocoa	2		
	32927	Cocoa		1	
	32931	Cocoa Beach	1	1	
	32934	Melbourne		3	1
	32937	Satellite Beach		4	
	32940	Melbourne		2	
	32952	Merritt Island	4		
	32960	Vero Beach	7	1	1
	32963	Vero Beach		4	2
	32966	Vero Beach	1		1
	32976	Sebastian		1	
	33004	Dania	11	6	9
	33008	Hallandale	3		
	33009	Hallandale	1		1
	33012	Hialeah			1

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	33018	Hialeah	1	1	
	33019	Hollywood	1		
	33020	Hollywood		1	2
	33023	Hollywood		1	1
	33024	Hollywood			3
	33025	Hollywood		1	1
	33028	Hollywood	1		
	33029	Hollywood		1	1
	33040	Key West	3		1
	33042	Sugarloaf Shores	1	1	
	33050	Marathon			1
	33051	Key Colony Beach			1
	33060	Pompano Beach	5	4	7
	33062	Pompano Beach		3	5
	33063	Pompano Beach	1	3	4
	33064	Pompano Beach	1		
	33065	Pompano Beach		2	2
	33068	Pompano Beach		2	
	33069	Pompano Beach		1	
	33075	Pompano Beach	2		
	33101	Miami	4		
	33109	Miami Beach	1		
	33114	Miami	1	1	
	33125	Miami		1	
	33127	Miami			8
	33129	Miami	1		
	33131	Miami		4	
	33135	Miami		1	
	33139	Miami Beach	1		4
	33142	Miami			1
	33143	Miami		1	1
	33154	Miami			3
	33156	Miami		3	
	33157	Miami	2	5	1
	33160	North Miami Beach		1	1
	33166	Miami		1	
	33168	Miami			4
	33169	Miami			2
	33173	Miami	1		
	33174	Miami			1
	33176	Miami		1	
	33178	Miami			6
	33181	Miami			1
	33183	Miami		1	
	33301	Fort Lauderdale	4	1	
	33304	Fort Lauderdale		4	2

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	33308	Fort Lauderdale	1		7
	33309	Fort Lauderdale	13	3	1
	33316	Fort Lauderdale		1	4
	33319	Fort Lauderdale			1
	33321	Fort Lauderdale		2	3
	33323	Fort Lauderdale			1
	33326	Weston		1	
	33328	Fort Lauderdale		4	
	33334	Fort Lauderdale		2	1
	33401	West Palm Beach	6	1	1
	33407	West Palm Beach	1	2	1
	33408	North Palm Beach			3
	33410	West Palm Beach			2
	33411	West Palm Beach	6	6	7
	33413	West Palm Beach			1
	33414	West Palm Beach	1	1	
	33418	West Palm Beach	1	1	3
	33422	West Palm Beach		2	
	33424	Boynton Beach	13		
	33426	Boynton Beach	3	1	
	33427	Boca Raton	7		
	33433	Boca Raton		1	1
	33434	Boca Raton	2	1	
	33435	Boynton Beach		4	3
	33436	Boynton Beach		4	3
	33441	Deerfield Beach	1	2	1
	33442	Deerfield Beach	1	1	
	33444	Delray Beach	9	2	
	33445	Delray Beach		1	
	33446	Delray Beach	1		3
	33449	Lake Worth		1	
	33458	Jupiter	4	2	
	33460	Lake Worth		1	1
	33462	Lake Worth			4
	33467	Lake Worth		1	
	33469	Jupiter		3	6
	33470	Loxahatchee		1	
	33472	Boynton Beach	1	2	1
	33480	Palm Beach			2
	33483	Delray Beach		1	2
	33484	Delray Beach		2	
	33486	Boca Raton		3	1
	33487	Boca Raton	1	6	
	33496	Boca Raton		1	1
	33498	Boca Raton	1		2
	33510	Brandon	2	1	

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	33513	Bushnell			4
	33543	Zephyrhills	1		
	33548	Lutz	5		
	33569	Riverview			2
	33572	Apollo Beach	2		
	33576	San Antonio	1	3	1
	33585	Sumterville		2	
	33601	Tampa	1		
	33607	Tampa		1	
	33615	Tampa			1
	33647	Tampa		2	
	33701	Saint Petersburg	2		
	33702	Saint Petersburg	1	1	
	33703	Saint Petersburg	3	1	
	33706	Saint Petersburg		5	7
	33710	Saint Petersburg			2
	33715	Saint Petersburg	1		
	33755	Clearwater	2		1
	33758	Clearwater	1		
	33761	Clearwater		1	
	33763	Clearwater	1		2
	33770	Largo	3		
	33772	Seminole		1	
	33777	Seminole	1		
	33778	Largo	3	2	
	33779	Largo			1
	33780	Pinellas Park	2		
	33781	Pinellas Park		1	
	33782	Pinellas Park		2	
	33801	Lakeland	1		
	33810	Lakeland			2
	33844	Haines City	1		1
	33856	Nalcrest		1	
	33872	Sebring	1		
	33880	Winter Haven		1	
	33897	Davenport			2
	33900	Fort Myers	12		
	33901	Fort Myers			1
	33903	North Fort Myers	6	2	
	33904	Cape Coral	2		
	33908	Fort Myers	1	9	5
	33909	Cape Coral		1	1
	33912	Fort Myers			1
	33913	Fort Myers	2	5	6
	33917	North Fort Myers		2	2
	33919	Fort Myers	2	4	2

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	33928	Estero		1	4
	33931	Fort Myers Beach	1	1	3
	33936	Lehigh Acres	2	3	1
	33948	Port Charlotte	3	1	
	33950	Punta Gorda	2	10	10
	33966	Fort Myers	3	1	2
	33976	Lehigh Acres	1		
	33980	Port Charlotte		1	1
	34101	Naples	24		1
	34102	Naples			6
	34103	Naples		2	
	34104	Naples		7	6
	34105	Naples			1
	34108	Naples		1	1
	34109	Naples			1
	34110	Naples		1	7
	34112	Naples		8	10
	34113	Naples		6	3
	34114	Naples		1	
	34116	Naples	1	1	2
	34119	Naples		3	4
	34133	Bonita Springs	3		
	34134	Bonita Springs			2
	34135	Bonita Springs		7	7
	34145	Marco Island	1		2
	34201	Bradenton	10		
	34202	Bradenton	5	2	3
	34203	Bradenton	1	3	2
	34207	Bradenton			2
	34209	Bradenton	3	6	5
	34222	Ellenton		2	
	34224	Englewood		4	
	34229	Osprey		2	
	34230	Sarasota	1		
	34233	Sarasota		1	1
	34234	Sarasota	1	1	5
	34235	Sarasota			1
	34238	Sarasota	1		
	34243	Sarasota	1	7	
	34265	Arcadia	3		
	34269	Arcadia	1	6	6
	34274	Nokomis	3		
	34275	Nokomis		1	
	34284	Venice	4		
	34285	Venice	2	3	
	34286	North Port	2		

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	34287	North Port		1	1
	34292	Venice		5	4
	34293	Venice		1	2
	34432	Dunnellon		1	
	34433	Dunnellon			2
	34434	Dunnellon			6
	34450	Inverness		1	
	34464	Beverly Hills	2		
	34465	Beverly Hills	1	5	
	34472	Ocala			1
	34473	Ocala		1	
	34475	Ocala		1	
	34491	Summerfield			4
	34604	Brooksville		1	1
	34652	New Port Richey	1		
	34667	Hudson		2	
	34668	Port Richey		1	
	34682	Palm Harbor	3		
	34684	Palm Harbor		2	2
	34685	Palm Harbor		1	1
	34689	Tarpon Springs			1
	34690	Holiday		5	6
	34691	Holiday		2	
	34695	Safety Harbor	1	1	
	34711	Clermont	1	2	
	34736	Groveland		1	
	34741	Kissimmee	2		
	34744	Kissimmee	1	1	
	34746	Kissimmee	2	3	
	34747	Kissimmee	1	3	
	34748	Leesburg	3	3	2
	34759	Kissimmee	3	4	
	34761	Ocoee	1	1	2
	34771	Saint Cloud		1	
	34786	Windermere	1		
	34787	Winter Garden			1
	34788	Leesburg	1		
	34953	Port Saint Lucie	1		2
	34957	Jensen Beach		1	
	34979	Fort Pierce		1	1
	34982	Fort Pierce			4
	34990	Palm City			1
	34994	Stuart	2		
	34997	Stuart	1	16	11
	30003	Norcross	1		
	30004	Alpharetta	3		

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	30009	Alpharetta			3
	30019	Dacula	1		
	30024	Suwanee		1	1
	30025	Social Circle		1	
	30039	Snellville			1
	30045	Lawrenceville		1	
	30047	Lilburn			1
	30052	Loganville	1		
	30067	Marietta			1
	30075	Roswell	1		
	30080	Smyrna	1		
	30083	Stone Mountain	1		
	30087	Stone Mountain	1	1	
	30092	Norcross		1	1
	30097	Duluth	2	2	
	30114	Canton		1	
	30115	Canton		1	
	30120	Cartersville			1
	30127	Powder Springs	1		
	30132	Dallas	1		
	30157	Dallas		1	
	30168	Austell	1		
	30188	Woodstock	1		
	30215	Fayetteville	2		
	30236	Jonesboro			2
	30253	Mcdonough	1		7
	30265	Newnan			1
	30269	Peachtree City	1		1
	30277	Sharpsburg			1
	30294	Ellenwood		6	
	30296	Riverdale		1	
	30301	Atlanta	3		
	30305	Atlanta			1
	30307	Atlanta	1		
	30309	Atlanta		2	
	30327	Atlanta	2	1	1
	30328	Atlanta		2	1
	30331	Atlanta			1
	30333	Atlanta	1		
	30338	Atlanta		2	
	30342	Atlanta		1	
	30363	Atlanta			1
	30374	Atlanta	1		
	30379	Atlanta	1		
	30506	Gainesville			1
	30606	Athens	1		1

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	30642	Greensboro	2		
	30650	Madison			1
	30662	Royston		1	
	31313	Hinesville		1	
	31320	Midway			2
	31401	Savannah	3	1	
	31405	Savannah	1		
	31513	Baxley			1
	31905	Fort Benning	1		
	31909	Columbus			1
	96707	Kapolei		1	
	96720	Hilo		1	
	96743	Kamuela		1	
	96744	Kaneohe		1	
	96753	Kihei			2
	96755	Kapaau	1		
	96786	Wahiawa	1		
	96801	Honolulu	1		
	96813	Honolulu			1
	96817	Honolulu		6	
	96821	Honolulu		1	1
	96822	Honolulu			1
	50428	Clear Lake		1	
	52142	Fayette			1
	52240	Iowa City	2		
	52245	Iowa City			1
	52402	Cedar Rapids			2
	52722	Bettendorf		4	
	83404	Idaho Falls	1		1
	83713	Boise		4	
	83814	Coeur D Alene		2	
	60004	Arlington Heights		2	
	60022	Glencoe		1	1
	60026	Glenview Nas	1	1	3
	60031	Gurnee			2
	60043	Kenilworth		1	
	60068	Park Ridge		1	
	60079	Waukegan	1		
	60089	Buffalo Grove		1	
	60093	Winnetka		2	2
	60098	Woodstock			1
	60101	Addison		1	
	60154	Westchester		2	
	60174	Saint Charles	1		
	60189	Wheaton		2	
	60201	Evanston	9	3	

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	60290	Chicago	4		
	60305	River Forest	2		2
	60468	Peotone		2	
	60501	Summit Argo			1
	60505	Aurora	1		
	60510	Batavia	5		
	60540	Naperville	1		1
	60565	Naperville		1	
	60585	Plainfield			1
	60607	Chicago			1
	60608	Chicago	1		
	60610	Chicago			1
	60611	Chicago		1	1
	60612	Chicago			1
	60615	Chicago		1	
	60619	Chicago		2	
	60640	Chicago			1
	60641	Chicago			4
	60643	Chicago			2
	60647	Chicago		3	
	60657	Chicago	1	2	
	60660	Chicago		1	1
	61001	Apple River			1
	61063	Pecatonica			2
	61107	Rockford	1		
	61356	Princeton		1	
	61701	Bloomington	1		
	61820	Champaign		2	
	61822	Champaign		2	
	62220	Belleville	1		
	62269	O Fallon	1		
	62901	Carbondale	6	1	1
	46011	Anderson	2		
	46033	Carmel		1	
	46037	Fishers			1
	46201	Indianapolis	1		
	46226	Indianapolis			1
	46259	Indianapolis			1
	46268	Indianapolis		1	
	46615	South Bend	1		
	46706	Auburn	1		
	46767	Ligonier		1	
	46936	Greentown	1		
	47119	Floyds Knobs		1	
	47201	Columbus			1
	47374	Richmond	1		

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	47401	Bloomington	1		
	47801	Terre Haute	1		
	47834	Brazil	1		3
	47901	Lafayette	1		
	47906	West Lafayette			1
	66043	Lansing			1
	66044	Lawrence	1		
	66048	Leavenworth	2		
	66049	Lawrence		1	
	66085	Stilwell	2		1
	66204	Shawnee Mission	1		
	66205	Shawnee Mission		1	
	66207	Shawnee Mission		1	
	66208	Shawnee Mission	2	1	
	66209	Shawnee Mission			1
	66211	Shawnee Mission	1		
	66221	Shawnee Mission			1
	66442	Fort Riley	1		
	66601	Topeka	2		
	66866	Peabody			1
	67207	Wichita		1	
	67220	Wichita		2	
	67601	Hays			1
	40004	Bardstown	1		
	40048	Nazareth	1	1	
	40067	Simpsonville			1
	40165	Shepherdsville			1
	40241	Louisville			1
	40383	Versailles	1		
	40502	Lexington	2		
	40510	Lexington	1		3
	40729	East Bernstadt	1		
	41102	Ashland		1	2
	41311	Beattyville	1		
	42003	Paducah			1
	42078	Salem		1	
	42103	Bowling Green		4	2
	42223	Fort Campbell	1		
	42642	Russell Springs		7	1
	70001	Metairie	1		
	70002	Metairie	1	2	
	70003	Metairie			3
	70065	Kenner		1	
	70118	New Orleans	1	2	
	70123	New Orleans			1
	70360	Houma	3		

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	70394	Raceland			2
	70435	Covington			1
	70455	Robert		2	
	70506	Lafayette			2
	70734	Geismar	1		
	71272	Ruston	1		
	71291	West Monroe	3		
	71459	Leesville			1
	20602	Waldorf			1
	20619	California		2	2
	20623	Cheltenham		1	
	20640	Indian Head			1
	20646	La Plata	1		
	20712	Mount Rainier		1	
	20715	Bowie	1		
	20716	Bowie		1	
	20735	Clinton	1		
	20747	District Heights		1	
	20748	Temple Hills	1		
	20759	Fulton	1		
	20764	Shady Side	1		
	20772	Upper Marlboro		1	
	20781	Hyattsville		1	
	20782	Hyattsville	1		
	20810	Bethesda	3		
	20814	Bethesda		5	1
	20815	Chevy Chase	2	4	2
	20817	Bethesda	1	3	4
	20847	Rockville	1		
	20850	Rockville	1		
	20854	Potomac			3
	20871	Clarksburg	1		
	20877	Gaithersburg	5	1	
	20878	Gaithersburg	1	3	1
	20882	Gaithersburg			3
	20895	Kensington		1	
	20901	Silver Spring	2		
	20902	Silver Spring			1
	20910	Silver Spring		1	1
	20912	Takoma Park	1		
	21014	Bel Air	1	1	1
	21015	Bel Air	1		
	21029	Clarksville	1		
	21030	Cockeysville		1	1
	21031	Hunt Valley	1	1	
	21037	Edgewater			1

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	21040	Edgewood		3	7
	21041	Ellicott City	1		
	21042	Ellicott City			1
	21050	Forest Hill			2
	21093	Lutherville Timonium	1		3
	21113	Odenton			2
	21122	Pasadena			6
	21131	Phoenix			3
	21136	Reisterstown	1		
	21146	Severna Park	1		
	21201	Baltimore	4		
	21204	Towson			1
	21206	Baltimore			1
	21208	Pikesville			1
	21209	Baltimore			1
	21210	Baltimore		1	
	21211	Baltimore			1
	21217	Baltimore		1	
	21222	Dundalk		1	
	21234	Parkville			1
	21236	Nottingham		1	
	21401	Annapolis			1
	21403	Annapolis		1	
	21601	Easton	2	1	
	21613	Cambridge		1	
	21701	Frederick	6		1
	21702	Frederick	1	1	1
	21703	Frederick		1	
	21769	Middletown			1
	03901	Berwick	5		7
	03902	Cape Neddick	1	3	2
	03903	Eliot	5	8	3
	03904	Kittery	2	7	11
	03905	Kittery Point		1	1
	03906	North Berwick	8	2	1
	03907	Ogunquit	3	2	3
	03908	South Berwick	7	10	4
	03909	York	15	20	16
	03910	York Beach	2	2	2
	03911	York Harbor	5	7	7
	04001	Acton	2	1	
	04002	Alfred		3	
	04005	Biddeford	3	11	5
	04009	Bridgton	2	7	2
	04010	Brownfield		1	4
	04011	Brunswick	2	2	1

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	04015	Casco			1
	04020	Cornish			3
	04021	Cumberland Center	2	1	
	04027	Lebanon	9	10	7
	04029	Sebago	5	6	11
	04030	East Waterboro	4	8	6
	04032	Freeport			3
	04037	Fryeburg			2
	04038	Gorham		1	3
	04040	Harrison	2	2	2
	04042	Hollis Center	2		
	04043	Kennebunk	17	17	7
	04046	Kennebunkport			2
	04047	Parsonsfield	2	3	5
	04048	Limerick	1	2	
	04050	Long Island	1		2
	04054	Moody	1	1	1
	04055	Naples	4	9	8
	04056	Newfield	6		
	04061	North Waterboro			2
	04062	Windham		1	
	04063	Ocean Park	1	1	
	04064	Old Orchard Beach	14	15	1
	04068	Porter	1		
	04070	Scarborough	1		
	04071	Raymond	1		
	04072	Saco	16	3	3
	04073	Sanford	9	11	2
	04074	Scarborough		7	3
	04076	Shapleigh	13	13	11
	04083	Springvale			1
	04084	Standish		1	3
	04087	Waterboro	10	16	11
	04090	Wells	14	28	45
	04092	Westbrook	1	1	1
	04096	Yarmouth	2	5	
	04101	Portland	6		3
	04102	Portland	1	1	
	04103	Portland	1	1	3
	04104	Portland		3	
	04105	Falmouth	3		
	04106	South Portland	3	3	1
	04107	Cape Elizabeth	3	1	2
	04210	Auburn	1		1
	04219	Bryant Pond			1
	04220	Buckfield		1	

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	04222	Durham		1	
	04240	Lewiston	7	18	5
	04241	Lewiston			1
	04243	Lewiston			1
	04252	Lisbon Falls		2	1
	04254	Livermore Falls		3	
	04255	Locke Mills	1	3	
	04257	Mexico	1		1
	04261	Newry		4	
	04263	Leeds			1
	04268	Norway	2		
	04270	Oxford	2	1	1
	04274	Poland	1		
	04276	Rumford	2		
	04281	South Paris		1	2
	04330	Augusta	1	1	1
	04332	Augusta	1		
	04345	Gardiner		1	
	04348	Jefferson	2	1	4
	04354	Palermo			7
	04357	Richmond			2
	04358	South China	1		
	04364	Winthrop			1
	04401	Bangor			1
	04410	Bradford	1		
	04416	Bucksport	1		
	04426	Dover Foxcroft	1		
	04444	Hampden		1	
	04455	Lee	1		
	04457	Lincoln	1		
	04460	Medway	1		
	04462	Millinocket	1		
	04468	Old Town	2		
	04476	Penobscot	1	1	
	04530	Bath			1
	04553	Newcastle			1
	04554	New Harbor	1	1	
	04555	Nobleboro			2
	04558	Pemaquid	6		
	04562	Phippsburg		2	3
	04572	Waldoboro	3		
	04573	Walpole	1		
	04576	Southport	1		
	04578	Wiscasset	2	3	
	04609	Bar Harbor	1	3	1
	04627	Deer Isle			1

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	04640	Hancock	1	1	
	04649	Jonesport	1		
	04655	Machiasport	1		
	04666	Pembroke	1		
	04667	Perry	2		
	04672	Salsbury Cove			3
	04679	Southwest Harbor		1	
	04736	Caribou	1		
	04769	Presque Isle		2	
	04785	Van Buren	1		
	04841	Rockland			1
	04843	Camden	2	3	3
	04861	Thomaston	1		
	04863	Vinalhaven	2		
	04901	Waterville	1		12
	04915	Belfast			2
	04917	Belgrade	1		
	04921	Brooks		1	1
	04924	Canaan	3		4
	04928	Corinna		2	
	04947	Kingfield			1
	04963	Oakland	2	1	1
	04976	Skowhegan			2
	04982	Stratton	1		
	48009	Birmingham		1	
	48035	Clinton Township	1		
	48092	Warren			1
	48095	Washington		1	
	48098	Troy		2	1
	48101	Allen Park	1		
	48104	Ann Arbor		9	1
	48141	Inkster	1		
	48154	Livonia		1	
	48165	New Hudson	1		
	48197	Ypsilanti		1	
	48230	Grosse Pointe			1
	48302	Bloomfield Hills	1		
	48322	West Bloomfield			2
	48340	Pontiac			1
	48433	Flushing	1		
	48473	Swartz Creek	1		
	48813	Charlotte			1
	48917	Lansing			1
	49058	Hastings			3
	49068	Marshall	1		
	49088	Scotts			3

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	49090	South Haven	1		1
	49097	Vicksburg		1	1
	49315	Byron Center		4	2
	49504	Grand Rapids			1
	49506	Grand Rapids	1		
	49525	Grand Rapids		1	
	49546	Grand Rapids			1
	49653	Lake Leelanau			2
	49721	Cheboygan			1
	49738	Grayling			1
	49768	Paradise		6	2
	55021	Faribault	2		
	55101	Saint Paul	2		
	55112	Saint Paul	1		
	55118	Saint Paul	1		
	55305	Hopkins	1		
	55306	Burnsville			1
	55311	Osseo			1
	55331	Excelsior	4	2	
	55345	Minnetonka	2		
	55347	Eden Prairie		2	
	55358	Maple Lake	1		
	55378	Savage			2
	55391	Wayzata		1	
	55401	Minneapolis	2		
	56082	Saint Peter		1	1
	56097	Wells	2		
	56301	Saint Cloud	1		
	56310	Avon	1		
	56401	Brainerd			1
	63031	Florissant	1		
	63119	Saint Louis			1
	63122	Saint Louis	1		
	63303	Saint Charles			1
	63376	Saint Peters		1	
	64468	Maryville			1
	65020	Camdenton		1	
	65201	Columbia	1		
	65571	Summersville		1	
	65584	Saint Robert			1
	39056	Clinton			1
	39202	Jackson			1
	39480	Soso	2		
	59019	Columbus	1		
	59330	Glendive			1
	59624	Helena		1	

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	59718	Bozeman	2	3	
	59901	Kalispell			1
	27023	Lewisville	1	1	
	27103	Winston Salem			1
	27104	Winston Salem		1	
	27106	Winston Salem			1
	27265	High Point		2	1
	27332	Sanford			1
	27377	Whitsett		1	
	27403	Greensboro		1	2
	27406	Greensboro	1		
	27407	Greensboro	2	1	
	27502	Apex			2
	27510	Carrboro		1	
	27513	Cary			1
	27516	Chapel Hill			1
	27517	Chapel Hill			2
	27519	Cary	3		
	27560	Morrisville		1	
	27583	Timberlake	1		
	27601	Raleigh	2		1
	27603	Raleigh		2	
	27613	Raleigh	2		
	27616	Raleigh		2	
	27705	Durham	1		
	27713	Durham			1
	27816	Castalia	1		
	27834	Greenville			1
	27896	Wilson			1
	28016	Bessemer City			2
	28034	Dallas	1		
	28037	Denver	1	1	
	28173	Waxhaw	1		1
	28207	Charlotte		1	
	28208	Charlotte		1	
	28210	Charlotte		2	1
	28215	Charlotte			2
	28262	Charlotte		3	
	28269	Charlotte	1		
	28270	Charlotte	1		
	28273	Charlotte		1	2
	28277	Charlotte			3
	28337	Elizabethtown		1	
	28338	Ellerbe	1		
	28340	Fairmont		1	
	28356	Linden		1	

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	28369	Orrum		2	
	28370	Pinehurst	1		
	28376	Raeford		2	
	28390	Spring Lake		1	
	28401	Wilmington	1		
	28411	Wilmington		1	
	28451	Leland	1		
	28467	Calabash	1		
	28540	Jacksonville			1
	28544	Midway Park		1	
	28557	Morehead City			3
	28560	New Bern	1		
	28570	Newport		1	
	28681	Taylorsville	1		
	28730	Fairview			1
	28739	Hendersonville			1
	28756	Mill Spring		1	
	28757	Montreat	1		
	28787	Weaverville		1	
	28792	Hendersonville		1	
	68005	Bellevue		1	
	68101	Omaha	1		
	68108	Omaha			2
	68114	Omaha		1	1
	68116	Omaha			1
	68123	Bellevue			1
	68164	Omaha		1	
	68776	South Sioux City		3	
	03031	Amherst	11	4	5
	03032	Auburn	14	7	10
	03033	Brookline	4		5
	03034	Candia	7	1	3
	03036	Chester	22	21	15
	03037	Deerfield	1	6	6
	03038	Derry	389	418	510
	03041	East Derry		4	4
	03042	Epping	93	78	56
	03044	Fremont	29	26	46
	03045	Goffstown	9	22	6
	03048	Greenville	6	5	2
	03049	Hollis	3	6	16
	03051	Hudson	87	123	120
	03052	Litchfield	51	36	30
	03053	Londonderry	220	259	226
	03054	Merrimack	58	99	46
	03055	Milford	8	46	37

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	03057	Mont Vernon	1	2	1
	03060	Nashua	210	84	108
	03061	Nashua	2		7
	03062	Nashua	21	75	126
	03063	Nashua	20	81	50
	03064	Nashua	22	40	21
	03070	New Boston	3	6	9
	03071	New Ipswich	1	4	8
	03073	North Salem	18	13	14
	03076	Pelham	216	256	259
	03077	Raymond	43	44	55
	03079	Salem	665	650	810
	03084	Temple	2	4	3
	03086	Wilton	5	3	3
	03087	Windham	238	302	246
	03101	Manchester	83	5	10
	03102	Manchester	11	29	52
	03103	Manchester	12	39	76
	03104	Manchester	6	42	22
	03105	Manchester		1	
	03106	Hooksett	10	16	1
	03109	Manchester	3	22	23
	03110	Bedford	39	39	20
	03215	Waterville Valley	3	3	1
	03218	Barnstead		3	
	03220	Belmont	3	12	1
	03221	Bradford	6	7	4
	03222	Bristol	23	12	11
	03223	Campton	7	8	6
	03224	Canterbury			1
	03225	Center Barnstead	1	2	3
	03226	Center Harbor	2	1	1
	03227	Center Sandwich	2	1	1
	03229	Contoocook		2	17
	03231	East Andover			1
	03234	Epsom	5	10	16
	03235	Franklin	8	7	2
	03237	Gilmanton	15	7	3
	03241	Hebron	14	16	7
	03242	Henniker	9	9	6
	03243	Hill	3	4	2
	03244	Hillsboro	9	14	10
	03245	Holderness	1	2	2
	03246	Laconia	10	15	18
	03247	Laconia	1	4	8
	03249	Gilford	9	23	16

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	03251	Lincoln	3	1	5
	03252	Lochmere	1		
	03253	Meredith	18	10	12
	03254	Moultonborough	19	8	12
	03256	New Hampton	4		6
	03257	New London			2
	03258	Chichester	1	3	6
	03259	North Sandwich		8	6
	03261	Northwood	2	13	10
	03263	Pittsfield	1	2	1
	03264	Plymouth		4	2
	03266	Rumney		1	
	03268	Salisbury		1	
	03269	Sanbornton	7	8	7
	03275	Suncook	8	4	5
	03276	Tilton	20	8	24
	03278	Warner		1	
	03279	Warren	5		
	03281	Weare		4	
	03285	Thornton	1	1	2
	03287	Wilmot	1		2
	03289	Winnisquam	15	13	15
	03290	Nottingham	16	15	19
	03293	Woodstock	1		
	03301	Concord	18	24	33
	03302	Concord	1		
	03303	Concord	2	2	1
	03304	Bow	8	3	6
	03307	Loudon			1
	03431	Keene	3	8	1
	03440	Antrim	1	5	3
	03446	Swanzey		1	2
	03447	Fitzwilliam	1	1	
	03448	Gilsum	1		
	03450	Harrisville			1
	03452	Jaffrey	1		
	03455	Marlborough		1	4
	03457	Munsonville			1
	03458	Peterborough	3	8	
	03461	Rindge	3		
	03464	Stoddard			1
	03470	Winchester		1	3
	03570	Berlin		2	1
	03574	Bethlehem			1
	03580	Franconia	1		
	03581	Gorham			1

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	03585	Lisbon	1	1	1
	03586	Sugar Hill	1	1	
	03598	Whitefield	19	10	2
	03602	Alstead		1	5
	03741	Canaan			3
	03743	Claremont		1	
	03753	Grantham	6	1	
	03755	Hanover	1	1	4
	03756	Lebanon	1		
	03766	Lebanon		6	17
	03773	Newport		1	
	03782	Sunapee	3		
	03785	Woodsville		2	
	03801	Portsmouth	40	27	25
	03805	Rollinsford	1		
	03809	Alton	7	8	11
	03810	Alton Bay	3		2
	03811	Atkinson	115	143	126
	03813	Center Conway	2		2
	03814	Center Ossipee	22	48	35
	03816	Center Tuftonboro	3	2	4
	03817	Chocorua	10	11	5
	03818	Conway	1	2	
	03819	Danville	33	55	39
	03820	Dover	43	36	26
	03823	Madbury	1		2
	03824	Durham	2	5	6
	03825	Barrington	20	21	10
	03826	East Hampstead	66	63	44
	03827	East Kingston	25	27	18
	03830	East Wakefield	13	7	4
	03833	Exeter	28	32	55
	03835	Farmington	14	21	11
	03836	Freedom	11	16	21
	03837	Gilmanton Iron Works		1	
	03838	Glen	1	2	2
	03839	Rochester	6		
	03840	Greenland	5		3
	03841	Hampstead	61	61	68
	03842	Hampton	123	94	76
	03843	Hampton		3	7
	03844	Hampton Falls	11	7	9
	03845	Intervale			2
	03848	Kingston	50	69	75
	03850	Melvin Village		1	
	03851	Milton	13	9	5

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	03852	Milton Mills		1	
	03853	Mirror Lake	5	2	1
	03855	New Durham	4		
	03857	Newmarket	19	13	27
	03858	Newton	77	92	130
	03859	Newton Junction		3	4
	03860	North Conway	3	5	4
	03861	Lee	8	3	
	03862	North Hampton	7	15	8
	03864	Ossipee	10	2	
	03865	Plaistow	60	84	112
	03867	Rochester	2	18	24
	03868	Rochester		1	1
	03869	Rollinsford	5	1	7
	03870	Rye	8	7	41
	03872	Sanbornville	16	12	21
	03873	Sandown	99	60	68
	03874	Seabrook	117	109	151
	03875	Silver Lake	2	8	7
	03878	Somersworth	2	6	15
	03882	South Effingham	4	1	
	03883	South Tamworth		6	
	03884	Strafford	1	1	2
	03885	Stratham	13	15	12
	03886	Tamworth	2		
	03887	Union	1	6	3
	03890	West Ossipee	4	8	13
	03894	Wolfeboro	3	2	1
	07002	Bayonne		6	2
	07011	Clifton	1		
	07016	Cranford			1
	07029	Harrison			3
	07030	Hoboken		2	
	07036	Linden		1	
	07039	Livingston	1		2
	07040	Maplewood	2		
	07041	Millburn		2	
	07042	Montclair			1
	07043	Montclair		1	
	07044	Verona			1
	07046	Mountain Lakes	1		1
	07047	North Bergen	1	1	1
	07050	Orange	1		
	07052	West Orange	1	1	4
	07055	Passaic	6	3	
	07059	Warren			2

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	07068	Roseland			1
	07069	Watchung		1	
	07070	Rutherford	1	1	
	07072	Carlstadt	1		
	07075	Wood Ridge			1
	07076	Scotch Plains	1	1	6
	07078	Short Hills	2		
	07088	Vauxhall		1	
	07090	Westfield	2	2	1
	07092	Mountainside		1	
	07093	West New York			1
	07105	Newark			1
	07106	Newark			4
	07107	Newark			1
	07109	Belleville		1	
	07111	Irvington			3
	07302	Jersey City			1
	07305	Jersey City	1	6	2
	07307	Jersey City			2
	07310	Jersey City			1
	07401	Allendale		1	1
	07417	Franklin Lakes	2		
	07421	Hewitt			2
	07424	Little Falls	2	1	
	07430	Mahwah	1		
	07432	Midland Park		1	
	07435	Newfoundland		1	1
	07450	Ridgewood	2	2	1
	07458	Saddle River	1	1	
	07480	West Milford	1		
	07481	Wyckoff	1		
	07501	Paterson	1		
	07601	Hackensack		1	1
	07603	Bogota	1		
	07605	Leonia			2
	07606	South Hackensack			1
	07624	Closter	1	1	
	07642	Hillsdale			1
	07644	Lodi		1	
	07645	Montvale	1		
	07647	Northvale			3
	07650	Palisades Park	1		
	07652	Paramus			2
	07661	River Edge	1		
	07666	Teaneck	1	1	
	07670	Tenafly		2	2

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	07676	Township Of Washington			1
	07677	Woodcliff Lake		1	
	07701	Red Bank			2
	07704	Fair Haven		1	
	07711	Allenhurst		1	2
	07712	Asbury Park	1		
	07722	Colts Neck	1		
	07728	Freehold	1	1	2
	07731	Howell		1	
	07733	Holmdel		3	
	07739	Little Silver			1
	07747	Matawan		1	
	07751	Morganville	1		
	07760	Rumson	1		1
	07762	Spring Lake		1	1
	07821	Andover			1
	07834	Denville	2		
	07843	Hopatcong		1	
	07860	Newton		4	
	07866	Rockaway			1
	07876	Succasunna		2	
	07901	Summit		1	
	07920	Basking Ridge		1	3
	07922	Berkeley Heights			2
	07924	Bernardsville			1
	07928	Chatham		4	1
	07933	Gillette			1
	07945	Mendham	2		
	07950	Morris Plains		2	1
	07960	Morristown		1	1
	07977	Peapack			1
	07980	Stirling		1	
	07981	Whippany			1
	08002	Cherry Hill	1		
	08003	Cherry Hill			1
	08010	Beverly		1	
	08021	Clementon		3	3
	08030	Gloucester City			1
	08033	Haddonfield			1
	08043	Voorhees		1	
	08054	Mount Laurel	3		
	08055	Medford	1		
	08057	Moorestown	1		
	08071	Pitman	1		
	08080	Sewell		1	
	08081	Sicklerville	4	2	

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	08087	Tuckerton			3
	08098	Woodstown			1
	08101	Camden			1
	08102	Camden	1		
	08103	Camden		1	4
	08210	Cape May Court House	1		
	08215	Egg Harbor City			1
	08226	Ocean City			1
	08260	Wildwood		1	
	08404	Atlantic City	2		
	08502	Belle Mead			2
	08510	Clarksburg	1		
	08512	Cranbury	2		
	08527	Jackson		1	
	08530	Lambertville		3	
	08536	Plainsboro	4		
	08540	Princeton	7	3	3
	08550	Princeton Junction	1	1	3
	08551	Ringoes		1	
	08558	Skillman		2	
	08601	Trenton	1		
	08628	Trenton		1	
	08648	Trenton	2	1	
	08721	Bayville			2
	08724	Brick			1
	08733	Lakehurst	1		
	08750	Sea Girt			3
	08753	Toms River	1		1
	08803	Baptistown		2	
	08807	Bridgewater		1	2
	08812	Dunellen		2	
	08816	East Brunswick	2		
	08831	Jamesburg			2
	08833	Lebanon	3		
	08836	Martinsville			2
	08837	Edison			2
	08873	Somerset		2	
	08876	Somerville	1		
	08889	Whitehouse Station	1	1	
	87101	Albuquerque	1		
	87116	Albuquerque		1	
	87124	Rio Rancho	1	1	
	87196	Albuquerque	3	1	3
	87505	Santa Fe		1	
	87574	Tesuque		2	
	88220	Carlsbad		2	

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	0	Not Specified	134	162	105
	89002	Henderson	1		
	89011	Henderson			2
	89030	North Las Vegas	1		
	89052	Henderson			1
	89101	Las Vegas	6		
	89109	Las Vegas		2	
	89111	Las Vegas		2	
	89117	Las Vegas			1
	89120	Las Vegas	1		
	89129	Las Vegas			1
	89130	Las Vegas	1		
	89135	Las Vegas		1	
	89138	Las Vegas		1	
	89141	Las Vegas		1	1
	89146	Las Vegas	1		
	89148	Las Vegas		2	2
	10001	New York City	21	2	2
	10003	New York City	1		4
	10004	New York City			1
	10009	New York City	1		1
	10010	New York City		2	
	10011	New York City	1		
	10013	New York City		1	
	10014	New York City		1	
	10018	New York City		3	
	10021	New York City		2	1
	10022	New York City		1	
	10023	New York City		1	3
	10024	New York City		5	
	10025	New York City	4	3	6
	10027	New York City	1	1	3
	10028	New York City		6	2
	10029	New York City	1	2	2
	10031	New York City		2	2
	10033	New York City			1
	10035	New York City	1		
	10036	New York City	1		
	10037	New York City		1	
	10075	New York City	2	3	
	10121	New York City		2	
	10128	New York City		5	4
	10301	Staten Island	2		
	10302	Staten Island			1
	10306	Staten Island	1	4	
	10309	Staten Island	1		

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	10312	Staten Island		1	
	10451	Bronx	3		
	10452	Bronx		1	
	10458	Bronx			1
	10459	Bronx		3	
	10460	Bronx		1	1
	10461	Bronx	1		
	10462	Bronx			1
	10463	Bronx			2
	10467	Bronx		3	
	10469	Bronx		1	1
	10471	Bronx		2	
	10504	Armonk		5	2
	10506	Bedford		1	2
	10507	Bedford Hills			1
	10510	Briarcliff Manor			2
	10514	Chappaqua			1
	10520	Croton On Hudson	1		
	10523	Elmsford			1
	10528	Harrison		1	
	10536	Katonah	1	1	1
	10538	Larchmont	2	2	1
	10540	Lincolndale	1		
	10543	Mamaroneck			1
	10547	Mohegan Lake		1	
	10549	Mount Kisco		1	1
	10552	Mount Vernon		1	
	10566	Peekskill		6	
	10567	Cortlandt Manor		1	
	10570	Pleasantville	2	1	
	10573	Port Chester		1	2
	10576	Pound Ridge			1
	10580	Rye	1	12	8
	10583	Scarsdale	2	4	1
	10590	South Salem			1
	10597	Waccabuc	1		
	10606	White Plains		1	1
	10701	Yonkers	3		1
	10706	Hastings On Hudson		1	1
	10708	Bronxville		1	
	10801	New Rochelle	3	1	
	10901	Suffern	1		
	10921	Florida		1	
	10940	Middletown			1
	10956	New City			1
	10960	Nyack		1	1

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	10962	Orangeburg		1	
	10970	Pomona		3	3
	10976	Sparkill	1		
	10977	Spring Valley	1		
	11021	Great Neck		1	
	11030	Manhasset		1	
	11050	Port Washington	2	2	3
	11101	Long Island City			4
	11103	Astoria	1		1
	11109	Long Island City		2	
	11201	Brooklyn	12		1
	11203	Brooklyn		1	1
	11205	Brooklyn	1		2
	11206	Brooklyn	1	3	
	11208	Brooklyn			1
	11209	Brooklyn			1
	11211	Brooklyn		1	1
	11214	Brooklyn		1	1
	11215	Brooklyn	1	1	3
	11216	Brooklyn		1	1
	11217	Brooklyn	1		3
	11218	Brooklyn		2	2
	11222	Brooklyn		1	
	11224	Brooklyn	1	1	
	11225	Brooklyn		1	
	11226	Brooklyn	1		
	11229	Brooklyn	1	1	
	11230	Brooklyn		1	
	11232	Brooklyn			1
	11233	Brooklyn			1
	11236	Brooklyn		1	2
	11237	Brooklyn			2
	11238	Brooklyn		1	
	11354	Flushing		1	1
	11355	Flushing		1	
	11356	College Point		1	
	11364	Oakland Gardens	1		
	11367	Flushing	2		
	11368	Corona			1
	11373	Elmhurst	1		
	11377	Woodside			2
	11385	Ridgewood			1
	11405	Jamaica	1		
	11420	South Ozone Park			2
	11428	Queens Village			1
	11432	Jamaica		2	

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	11434	Jamaica		1	2
	11510	Baldwin		1	3
	11514	Carle Place		1	5
	11520	Freeport			1
	11554	East Meadow	3	9	9
	11557	Hewlett		2	
	11559	Lawrence			1
	11560	Locust Valley			1
	11563	Lynbrook	1	1	
	11566	Merrick		1	1
	11570	Rockville Centre	1		
	11572	Oceanside	1		
	11576	Roslyn	1	1	
	11577	Roslyn Heights			1
	11579	Sea Cliff			1
	11590	Westbury		1	1
	11692	Arverne		1	
	11694	Rockaway Park			1
	11705	Bayport		1	
	11717	Brentwood	1		
	11720	Centereach	1		
	11721	Centerport			1
	11733	East Setauket			1
	11741	Holbrook		1	
	11742	Holtsville			1
	11743	Huntington		1	1
	11746	Huntington Station	2	2	
	11756	Levittown			1
	11757	Lindenhurst			2
	11758	Massapequa	3		
	11762	Massapequa Park		1	
	11764	Miller Place		3	2
	11765	Mill Neck	1		
	11773	Syosset	1		
	11777	Port Jefferson			1
	11780	Saint James			1
	11783	Seaford	2	3	1
	11786	Shoreham	1		
	11788	Hauppauge	1		1
	11790	Stony Brook		3	
	11791	Syosset			1
	11795	West Islip	1		
	11801	Hicksville			1
	11803	Plainview	1	3	
	11932	Bridgehampton			2
	11946	Hampton Bays		2	

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	11952	Mattituck	1		
	11968	Southampton	15	12	
	12009	Altamont		2	
	12015	Athens	1		
	12019	Ballston Lake	1	2	
	12054	Delmar	1	1	
	12057	Eagle Bridge	1		
	12061	East Greenbush		1	1
	12063	East Schodack			1
	12065	Clifton Park		2	
	12084	Guilderland	1		
	12095	Johnstown	3	3	1
	12106	Kinderhook	1		
	12118	Mechanicville	1	1	
	12125	New Lebanon			1
	12144	Rensselaer	1		
	12158	Selkirk			1
	12159	Slingerlands		1	
	12165	Spencertown	1	9	8
	12180	Troy	3		
	12184	Valatie	1	1	1
	12188	Waterford		2	
	12189	Watervliet	1	1	
	12193	Westerlo	1		
	12201	Albany	3		
	12203	Albany		1	1
	12204	Albany			1
	12301	Schenectady	2		
	12303	Schenectady		1	1
	12304	Schenectady			1
	12306	Schenectady			2
	12308	Schenectady	1		
	12401	Kingston	1		1
	12407	Ashland			1
	12414	Catskill			1
	12477	Saugerties			1
	12491	West Hurley		2	
	12525	Gardiner		5	
	12533	Hopewell Junction			1
	12534	Hudson		1	
	12550	Newburgh	1		4
	12571	Red Hook	4	7	2
	12580	Staatsburg		1	
	12581	Stanfordville			1
	12601	Poughkeepsie	2		
	12603	Poughkeepsie			2

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	12746	Huguenot		1	
	12803	South Glens Falls		1	
	12814	Bolton Landing	1	1	
	12817	Chestertown	1	1	
	12866	Saratoga Springs	1		2
	12871	Schuylerville	2		
	12887	Whitehall		1	
	12901	Plattsburgh			1
	12973	Piercefield		1	
	13027	Baldwinsville		1	
	13039	Cicero			1
	13041	Clay			1
	13045	Cortland		1	
	13090	Liverpool			12
	13104	Manlius	3	3	
	13126	Oswego	1	1	
	13142	Pulaski			1
	13152	Skaneateles			1
	13201	Syracuse	5		
	13203	Syracuse		1	
	13206	Syracuse			1
	13210	Syracuse		1	
	13219	Syracuse			1
	13224	Syracuse		2	
	13350	Herkimer		1	
	13403	Marcy		1	
	13460	Sherburne		1	1
	13488	Westford	1	1	
	13491	West Winfield			2
	13492	Whitesboro			1
	13501	Utica			1
	13637	Evans Mills		1	
	13662	Massena		1	
	13676	Potsdam		2	
	13850	Vestal	2	2	3
	14052	East Aurora	1		
	14057	Eden	1		
	14072	Grand Island	1		
	14086	Lancaster	1		
	14108	Newfane			1
	14120	North Tonawanda			1
	14150	Tonawanda	2		
	14201	Buffalo	1		
	14209	Buffalo	4		
	14218	Buffalo			1
	14221	Buffalo		1	2

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	14225	Buffalo			1
	14226	Buffalo			2
	14301	Niagara Falls	2		
	14424	Canandaigua		1	
	14450	Fairport	1	2	
	14454	Geneseo	1		
	14467	Henrietta	1		
	14513	Newark	2		
	14526	Penfield	4	1	
	14527	Penn Yan		1	
	14534	Pittsford			2
	14564	Victor	1		
	14568	Walworth			1
	14580	Webster	2		2
	14602	Rochester	4		
	14611	Rochester	1		
	14612	Rochester		1	
	14617	Rochester			1
	14618	Rochester			2
	14623	Rochester			1
	14850	Ithaca	11		1
	14869	Odessa	1		
	14870	Painted Post		1	
	14880	Scio			1
	14882	Lansing	1		
	14895	Wellsville			3
	43016	Dublin			4
	43023	Granville		1	
	43026	Hilliard		2	
	43028	Howard		1	
	43040	Marysville	1	1	
	43054	New Albany			1
	43062	Pataskala	1		
	43081	Westerville	2		
	43138	Logan	1	2	1
	43228	Columbus			1
	43229	Columbus		1	
	43235	Columbus			1
	43402	Bowling Green		1	
	43606	Toledo	1	1	
	43623	Toledo	1		
	43725	Cambridge	1		1
	43952	Steubenville		1	
	44022	Chagrin Falls	1	2	2
	44023	Chagrin Falls			1
	44060	Mentor			1

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	44070	North Olmsted		1	
	44095	Eastlake		1	4
	44101	Cleveland	2		
	44107	Lakewood		1	
	44122	Beachwood			1
	44124	Cleveland			1
	44137	Maple Heights	2	5	
	44141	Brecksville		1	
	44145	Westlake		1	
	44149	Strongsville			1
	44224	Stow		4	
	44236	Hudson		2	
	44240	Kent			1
	44256	Medina		1	
	44270	Rittman			1
	44333	Akron			1
	44657	Minerva			1
	44663	New Philadelphia			1
	44701	Canton	1		
	44706	Canton		1	
	44721	Canton		1	1
	44880	Sullivan	1		
	45014	Fairfield		1	
	45040	Mason	1		
	45174	Terrace Park			1
	45201	Cincinnati	1	2	
	45202	Cincinnati		1	
	45229	Cincinnati		1	
	45244	Cincinnati		1	2
	45342	Miamisburg			1
	45701	Athens		1	
	45839	Findlay	1		
	73064	Mustang		1	
	73101	Oklahoma City	1		
	73118	Oklahoma City		1	
	74820	Ada			1
	74851	Mcloud	2		
	74872	Stratford			1
	74884	Wewoka	1		
	97006	Beaverton			7
	97031	Hood River	1		1
	97034	Lake Oswego			1
	97132	Newberg			2
	97201	Portland	1		2
	97202	Portland		1	
	97206	Portland		1	

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	97220	Portland		1	
	97221	Portland			1
	97321	Albany			1
	97358	Lyons		1	1
	97520	Ashland			1
	97756	Redmond			1
	15108	Coraopolis			2
	15116	Glenshaw		1	
	15143	Sewickley	1		1
	15146	Monroeville			1
	15201	Pittsburgh	7		
	15203	Pittsburgh			1
	15205	Pittsburgh	1		
	15217	Pittsburgh	1		2
	15218	Pittsburgh			1
	15221	Pittsburgh	1		2
	15228	Pittsburgh			1
	15238	Pittsburgh		1	
	15332	Finleyville		1	
	15419	California			1
	15771	Rochester Mills			1
	16101	New Castle		1	
	16125	Greenville	1		
	16424	Linesville		2	
	16501	Erie	4		
	16505	Erie	1		
	16601	Altoona	1		
	16652	Huntingdon			1
	16801	State College		1	1
	16823	Bellefonte			1
	17022	Elizabethtown	1		
	17036	Hummelstown	1	1	
	17042	Lebanon			1
	17101	Harrisburg		3	
	17103	Harrisburg	1		
	17306	Bendersville		1	
	17362	Spring Grove	1		
	17552	Mount Joy			1
	17554	Mountville	5		
	17573	Ronks	1		
	17603	Lancaster		1	1
	17771	Trout Run		1	
	17815	Bloomsburg			1
	18010	Ackermanville			8
	18015	Bethlehem	1		
	18020	Bethlehem			2

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	18031	Breinigsville		2	
	18069	Orefield			1
	18080	Slatington			1
	18240	Nesquehoning			1
	18301	East Stroudsburg	2		
	18336	Matamoras			2
	18352	Reeders		1	
	18411	Clarks Summit	1	1	
	18431	Honesdale		1	1
	18472	Waymart		1	
	18847	Susquehanna	1		
	18848	Towanda			2
	18901	Doylestown			1
	18923	Fountainville			1
	18925	Furlong			2
	18938	New Hope	1		
	18940	Newtown		1	2
	18964	Souderton	2		
	18969	Telford	1		1
	18974	Warminster		2	
	19003	Ardmore	1		1
	19004	Bala Cynwyd			1
	19006	Huntingdon Valley		1	
	19008	Broomall		1	1
	19010	Bryn Mawr	1		1
	19018	Clifton Heights	2		1
	19019	Philadelphia	10		
	19025	Dresher	1		
	19038	Glenside	5	4	1
	19040	Hatboro		2	
	19041	Haverford		1	1
	19046	Jenkintown		1	1
	19050	Lansdowne			1
	19053	Feasterville Trevose			1
	19054	Levittown		1	
	19066	Merion Station			1
	19067	Morrisville	1	1	3
	19076	Prospect Park			4
	19081	Swarthmore			1
	19085	Villanova	1	1	4
	19087	Wayne		1	
	19096	Wynnewood	1	2	
	19104	Philadelphia		1	1
	19106	Philadelphia			1
	19118	Philadelphia	1	1	
	19128	Philadelphia			1

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	19136	Philadelphia		2	
	19153	Philadelphia			1
	19335	Downingtown			1
	19341	Exton		1	
	19355	Malvern	5	6	3
	19380	West Chester	1		
	19406	King Of Prussia	1	1	
	19426	Collegeville	1		
	19444	Lafayette Hill		5	5
	19446	Lansdale	1		1
	19454	North Wales			1
	19460	Phoenixville		1	
	19462	Plymouth Meeting	1		
	19540	Mohnton			4
	00603	Aguadilla			1
	00646	Dorado		1	
	00901	San Juan	1		
	00926	San Juan			1
	00966	Guaynabo			1
	02801	Adamsville	1		
	02806	Barrington	10	5	1
	02809	Bristol	5	1	
	02813	Charlestown	8	2	
	02816	Coventry	11	2	1
	02817	West Greenwich			4
	02818	East Greenwich	4	2	1
	02822	Exeter			2
	02828	Greenville			1
	02830	Harrisville			1
	02835	Jamestown		2	4
	02840	Newport	3	1	1
	02842	Middletown		1	
	02852	North Kingstown		1	2
	02859	Pascoag			1
	02860	Pawtucket	7	1	2
	02861	Pawtucket	1	9	12
	02863	Central Falls	1	1	1
	02864	Cumberland	3	6	8
	02865	Lincoln		2	
	02871	Portsmouth	3	4	1
	02872	Prudence Island		4	14
	02874	Saunderstown	3		
	02876	Slatersville	6	2	1
	02878	Tiverton	1	1	
	02879	Wakefield		1	2
	02880	Wakefield	1	4	1

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	02881	Kingston			3
	02882	Narragansett		1	
	02885	Warren	1		
	02886	Warwick	1	1	9
	02887	Warwick		1	
	02888	Warwick			2
	02889	Warwick	2	3	2
	02891	Westerly	3	4	3
	02892	West Kingston	2	1	1
	02893	West Warwick		1	1
	02895	Woonsocket	3	2	9
	02896	North Smithfield		2	
	02901	Providence	9	1	
	02903	Providence		1	
	02904	Providence		2	2
	02905	Providence		3	1
	02906	Providence		6	7
	02907	Providence			2
	02908	Providence	2	4	2
	02909	Providence	2	16	29
	02910	Cranston	4	2	2
	02911	North Providence	4		1
	02914	East Providence	2	2	10
	02915	Riverside	1	2	4
	02916	Rumford		1	3
	02917	Smithfield	7	7	10
	02919	Johnston	1	1	4
	02920	Cranston			3
	02921	Cranston		2	3
	02940	Providence		1	
	29072	Lexington			1
	29073	Lexington		1	
	29201	Columbia	2		
	29205	Columbia			1
	29206	Columbia			3
	29229	Columbia	1		
	29301	Spartanburg	1		
	29401	Charleston	3		
	29464	Mount Pleasant		1	
	29510	Andrews			3
	29526	Conway		1	2
	29527	Conway			1
	29566	Little River	13		
	29572	Myrtle Beach		1	
	29576	Murrells Inlet	4	5	4
	29580	Nesmith			1

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	29585	Pawleys Island			1
	29640	Easley	1		
	29650	Greer	2	1	
	29651	Greer		1	
	29681	Simpsonville	1		
	29687	Taylors	1		
	29707	Fort Mill		1	1
	29720	Lancaster			2
	29732	Rock Hill		2	1
	29829	Graniteville		3	
	29902	Beaufort		2	1
	29928	Hilton Head Island		1	2
	57719	Box Elder	1	2	
	37040	Clarksville			2
	37066	Gallatin			1
	37069	Franklin			1
	37076	Hermitage		1	
	37122	Mount Juliet		2	
	37129	Murfreesboro		1	1
	37204	Nashville	1		1
	37207	Nashville	1		
	37323	Cleveland			1
	37343	Hixson	1		
	37377	Signal Mountain	1		
	37379	Soddy Daisy	1		
	37422	Chattanooga	1		
	37664	Kingsport			1
	37724	Cumberland Gap	1		
	37934	Knoxville			1
	38018	Cordova	1		
	38138	Germantown		2	
	38343	Humboldt		1	
	38501	Cookeville			1
	38572	Crossville			1
	73301	Austin	1		
	75002	Allen		1	
	75006	Carrollton	1	1	
	75010	Carrollton		3	
	75013	Allen	1		
	75022	Flower Mound	3		
	75033	Frisco			6
	75038	Irving	1		
	75054	Grand Prairie			2
	75056	The Colony			1
	75062	Irving		1	
	75074	Plano			1

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	75202	Dallas		1	
	75204	Dallas	1		1
	75218	Dallas		1	
	75219	Dallas			1
	75230	Dallas		1	1
	75244	Dallas		4	
	75252	Dallas		1	1
	75601	Longview	2		
	75605	Longview	1		
	76010	Arlington			1
	76051	Grapevine	1		
	76085	Weatherford	3		
	76086	Weatherford	1		
	76107	Fort Worth		2	
	76119	Fort Worth			1
	76132	Fort Worth			1
	76308	Wichita Falls			1
	76522	Copperas Cove		1	
	76542	Killeen		2	
	77001	Houston	9		
	77005	Houston		5	2
	77006	Houston		1	
	77027	Houston		1	
	77038	Houston	1		
	77041	Houston			1
	77044	Houston			1
	77062	Houston			1
	77069	Houston		1	
	77070	Houston		1	
	77072	Houston		2	
	77077	Houston		1	
	77082	Houston		1	
	77085	Houston		2	
	77095	Houston			4
	77098	Houston			1
	77379	Spring		4	1
	77382	Spring			1
	77385	Conroe	2		
	77401	Bellaire		1	1
	77402	Bellaire		1	
	77406	Richmond			2
	77429	Cypress			3
	77450	Katy			1
	77478	Sugar Land	1		
	77479	Sugar Land	1		
	77489	Missouri City		1	

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	77494	Katy			1
	77563	Hitchcock			1
	77566	Lake Jackson	4		
	77803	Bryan			1
	77840	College Station	1		
	78003	Bandera		1	
	78006	Boerne	1		
	78045	Laredo		1	
	78133	Canyon Lake			2
	78203	San Antonio	1	1	
	78209	San Antonio	1		
	78260	San Antonio	1		
	78504	Mcallen		1	
	78613	Cedar Park		1	2
	78641	Leander	2		
	78645	Leander	1		
	78665	Sandy	1		1
	78681	Round Rock	1	1	
	78704	Austin			3
	78745	Austin	1		2
	78754	Austin			1
	78759	Austin		1	
	78789	Austin		2	
	84010	Bountiful	1		
	84017	Coalville			3
	84047	Midvale		1	
	84050	Morgan			1
	84070	Sandy	1		
	84081	West Jordan			1
	84084	West Jordan			2
	84087	Woods Cross			1
	84094	Sandy		1	
	84098	Park City			1
	84101	Salt Lake City	1		
	84117	Salt Lake City		1	
	84128	Salt Lake City			2
	84337	Tremonton	1		
	84401	Ogden	1		2
	20124	Clifton	2	2	
	20136	Bristow	2		
	20141	Round Hill	1		
	20148	Ashburn		2	1
	20155	Gainesville		3	6
	20163	Sterling	1		
	20169	Haymarket			1
	20189	Dulles		1	

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	20190	Reston	8		
	22003	Annandale	1		
	22015	Burke			1
	22030	Fairfax	1		1
	22031	Fairfax			1
	22032	Fairfax			1
	22033	Fairfax	1		
	22046	Falls Church		1	
	22060	Fort Belvoir	2		
	22066	Great Falls	1	2	
	22079	Lorton			1
	22101	Mc Lean	3		
	22102	Mc Lean		1	
	22124	Oakton	1	1	
	22150	Springfield	2		
	22180	Vienna	2		
	22182	Vienna			1
	22192	Woodbridge			1
	22201	Arlington	5	1	1
	22204	Arlington			1
	22205	Arlington		1	
	22206	Arlington		2	
	22207	Arlington		1	2
	22304	Alexandria		2	1
	22306	Alexandria		1	
	22314	Alexandria	1		3
	22406	Fredericksburg			1
	22408	Fredericksburg		1	
	22551	Spotsylvania		1	
	22556	Stafford			1
	22601	Winchester	1		
	22902	Charlottesville			1
	22923	Barboursville			2
	22932	Crozet		1	
	22968	Ruckersville		1	
	22980	Waynesboro	1		
	23059	Glen Allen			1
	23075	Highland Springs	1		
	23111	Mechanicsville			1
	23218	Richmond	1	1	
	23220	Richmond			1
	23226	Richmond			1
	23228	Richmond	1		1
	23233	Richmond		1	
	23237	Richmond		2	
	23314	Carrollton		1	1

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	23322	Chesapeake	1		
	23435	Suffolk		1	1
	23450	Virginia Beach	2		
	23452	Virginia Beach		1	
	23456	Virginia Beach		1	
	23462	Virginia Beach	1		
	23464	Virginia Beach			2
	23501	Norfolk	4		
	23502	Norfolk	1		
	23505	Norfolk		1	
	23608	Newport News			1
	23690	Yorktown	1		
	23692	Yorktown		3	
	23693	Yorktown	1		
	24015	Roanoke		1	1
	24501	Lynchburg	1		
	24502	Lynchburg		2	
	24651	Tazewell	4	5	6
	05001	White River Junction	2	4	1
	05032	Bethel		1	
	05052	North Hartland	1		
	05055	Norwich	3		
	05075	Thetford Center	2		
	05079	Vershire		1	
	05148	Londonderry		7	
	05154	Saxtons River		3	2
	05201	Bennington	2		
	05254	Manchester	2		
	05257	North Bennington			1
	05261	Pownal			1
	05262	Shaftsbury			1
	05301	Brattleboro		1	2
	05345	Newfane	3		1
	05346	Putney	2	2	1
	05363	Wilmington			1
	05401	Burlington	9	2	1
	05403	South Burlington	2	2	2
	05443	Bristol			1
	05446	Colchester		1	
	05452	Essex Junction	4	3	6
	05453	Essex Junction	2	2	4
	05456	Ferrisburg			3
	05461	Hinesburg	1		
	05465	Jericho	1		
	05471	Montgomery Center		1	
	05478	Saint Albans	1		1

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	05482	Shelburne	1	2	1
	05495	Williston	3	1	7
	05601	Montpelier	1		
	05641	Barre	7		
	05654	Graniteville	2		
	05663	Northfield		1	1
	05674	Warren			1
	05701	Rutland	1		
	05751	Killington	4		
	05759	North Clarendon			1
	05772	Stockbridge			1
	05819	Saint Johnsbury		10	1
	05841	Greensboro		1	
	05851	Lyndonville	1		
	05855	Newport	1		1
	05860	Orleans	1	5	9
	98008	Bellevue		2	
	98039	Medina			1
	98040	Mercer Island		2	2
	98052	Redmond	2	11	
	98055	Renton	1		
	98074	Sammamish			1
	98101	Seattle	5		
	98103	Seattle		1	
	98105	Seattle	1		
	98112	Seattle		1	1
	98115	Seattle	1	1	
	98116	Seattle		1	
	98119	Seattle		1	
	98121	Seattle		1	
	98195	Seattle			1
	98221	Anacortes		1	
	98250	Friday Harbor		1	1
	98258	Lake Stevens			1
	98335	Gig Harbor			1
	98368	Port Townsend			1
	98446	Tacoma			1
	98660	Vancouver	1		
	98844	Oroville		1	
	99201	Spokane			1
	99208	Spokane			1
	53012	Cedarburg		1	
	53022	Germantown	1		
	53092	Thiensville		1	
	53097	Mequon	1		
	53142	Kenosha			1

Zip Code - State	Zip Code	Zip Code - City	FY2015	FY2016	FY2017
	53228	Milwaukee		1	
	53562	Middleton			1
	53701	Madison	2		
	53703	Madison		1	
	53704	Madison		1	
	53783	Madison			1
	54208	Denmark		1	
	54423	Custer			1
	54601	La Crosse	1		
	25301	Charleston	6		
	25309	Charleston			1
	25314	Charleston		1	
	25919	Skelton	1		
	26003	Wheeling			1
	26041	Moundsville			1
	26187	Williamstown		1	
	26301	Clarksburg	6	2	
	82007	Cheyenne		1	
	83001	Jackson	1		
Out of State Total			**6,310**	**6,768**	**7,132**
Invalid Zips Total			**1,648**	**1,914**	**1,671**
Total all zips			**444,552**	**448,447**	**426,703**

Attachment/Exhibit

3

Attachment/Exhibit

A

Ambulatory Surgery Center Joint Venture: Community Feedback

April 30, 2018

Hallmark Health

Shields HEALTH CARE GROUP

Welcome & Setting the Agenda

- Share with you information about our plans to build a state-of-the-art ambulatory surgery center at the Lawrence Memorial Hospital campus and how this will bring care into our community

- Introduce you to the individuals involved in this project from Hallmark Health and our partner organization, Shields Health Care

- Provide the opportunity for you to provide feedback or submit questions about the project

Introductions

- Bobbi Carbone, MD, MBA, Interim President and CEO, Hallmark Health; Chief Integration Officer, Wellforce
- Ryan Fuller, Vice President, Strategy and Business Planning, Hallmark Health
- Steven Sbardella, MD, Executive Vice President and Chief Medical Officer, Hallmark Health
- Deb Cronin-Waelde, Executive Vice President and Chief Nursing Officer, Hallmark Health
- Sarah Modine, Vice President of Corporate Development, Ambulatory Surgery, Shields Health Care

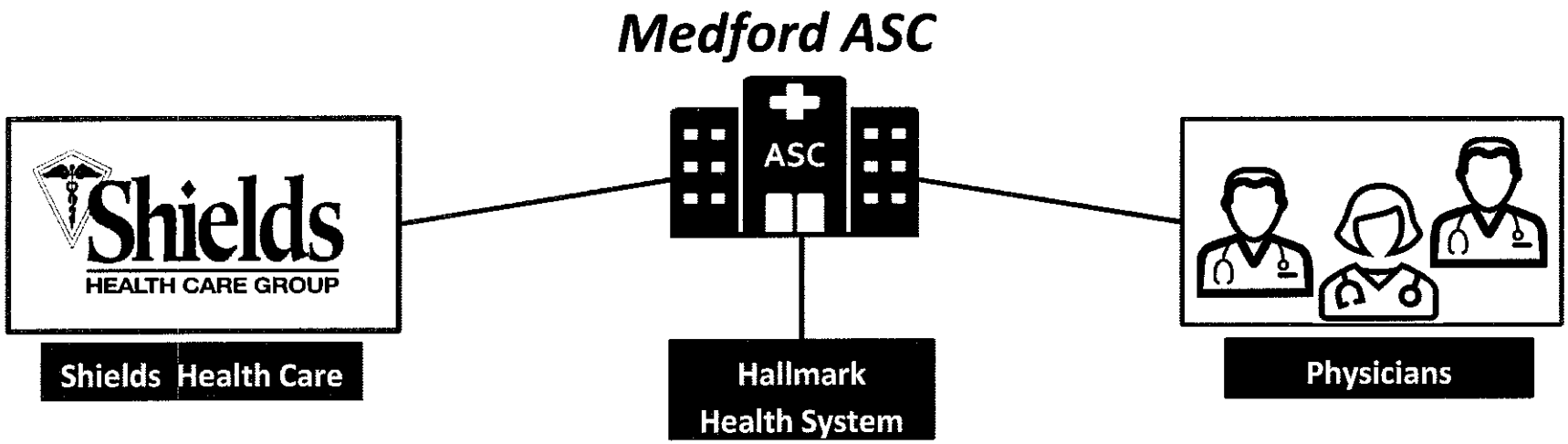
What is an ambulatory surgery center (ASC)?

- Medical facility that offer less-complex outpatient or "day-surgery" procedures
- Patients arrive, undergo surgery and depart, usually within a few hours
- Demonstrated an ability to improve customer service and quality while simultaneously reducing costs for procedures appropriate for this setting
- Designed for ease of access and a setting of comfort, safety and efficiency for the patient and family, without typical delays of a busy hospital setting

Benefits of an ASC

01	**Lowering costs**	• Procedures cost 25%-50% less in an ASC compared to an outpatient hospital procedure
02	**Providing more choices**	• High patient satisfaction • Safe and high quality service, ease of scheduling, greater personal attention and lower costs
03	**Bringing care to the community**	• Shifting care from inpatient to outpatient • Easy, convenient location • Multispecialty care for the family
04	**Increasing accessibility of care**	• Provides best access for patients and physicians in this region north of Boston • Specialization in outpatient surgeries allows for greater efficiencies

Summary: Medford ASC



Services	• 3-4 Operating Rooms, 2-3 Procedure Rooms • Orthopedics, Otolaryngology (ENT), GI/Endoscopy • Future considerations for total joint program & complementary specialties
Facility	• 17,500 square feet of newly developed space • Single story • 170 Governors Ave, Medford MA

Why partner with Shields Health Care?

- Shields Health Care is a reputable, local health care provider with a proven record of success
- A trusted health care partner for more than 30 years
- Similar successful projects with New England Baptist Hospital in Dedham and UMass Memorial Medical Center in Worcester

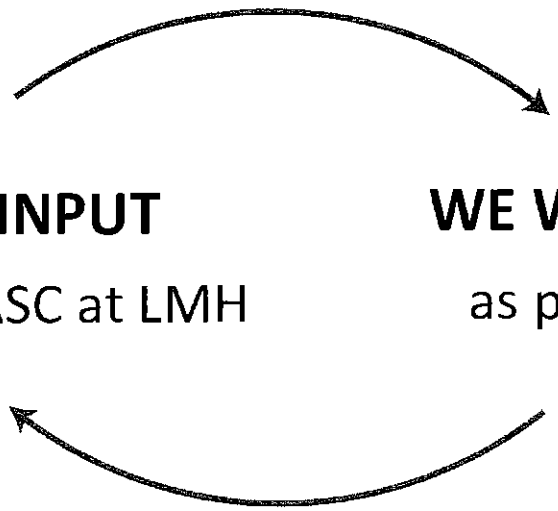
Why build new?

- Renovating existing Lawrence Memorial Hospital areas would cost the same as a new building
  - Procedure costs to patients (& insurance companies) would be higher because the procedures would still take place under a hospital license

- New construction offering state-of-the-art facilities and equipment

- Greater efficiency, optimized case load and productive team environment

Next Steps



WE WANT YOUR INPUT

on the concept of an ASC at LMH

WE WILL KEEP YOU INFORMED

as project progresses with DPH

Questions?

Attachment/Exhibit

B

Hallmark Health

Patient Family Advisory Committee Minutes

DATE:	February 27, 2018	**TIME:** 530pm	90min	**LOCATION:**	Melrose Wakefield Hospital – Boardroom
FACILITATOR:	Cheryl Warren				
Members:	Members Present: HHS Members: Sue Appleyard, Jillian Levine, Kelley McCue, Cheryl Warren Community Members: Virginia Caruso-Bove, Rick Catino, Robert Cecere, Karen McGarrahan, Judy Worthley Excused Members: Jonelle Eccleston, Diane Fuller, Kristen Plausky, Carolyn Resendes, Paula Weiner				
Recorder:	Karen Ferraina				

Discussion Leader	Time	Discussion Summary	Action Items
C. Warren	5	Welcome	• Welcome
C. Warren	5	November Meeting Minutes • Meeting minutes reviewed • Motion to accept by R. Catino, seconded by J. Levine.	• Minutes Accepted
T. Sievers	10	**Safety Counts Newsletter** • The Safety Counts! Newsletter - purpose is to highlight safety issues and efforts to improve patient and workforce safety - published 6 times a year (every other month) • The Committee recognized that the strategies to improve Hospital safety are aligned with the efforts and strategies underway to improve the patient experience and work environment	• PFAC reviewed January/February 2018 newsletter • Positive feedback from the group. One member asked if TMC or Circle Health have a similar newsletter, and asked if a Wellforce logo should be displayed on the newsletter. • Another feedback item included adding a "patient experience corner."
T. Sievers	15	**Accelerating Improvement in Patient Safety** Objectives include: • Establish a Culture of Safety • Coordinate Oversight of Patient Safety • Create a Common Set of Safety Metrics that Reflect Meaningful Outcomes • Address Safety Across the Entire Care Continuum	• Positive Feedback from the group

		• Support the Health Care Workforce • Partner with Patients and Families for the Safest Care • Ensure that Technology is Safe and Optimized to Improve Patient Safety	
W. Doherty	40	**Ambulatory Surgical Area** • Health care delivery is changing • Shift from inpatient to outpatient services • Advances in technology have made surgery and recovery easier and more convenient • Ambulatory surgery is more cost-efficient and convenient for patients • We can build to the specific needs of advanced technology and resources for a state-of-the-art facility more efficiently • The operating rooms at Lawrence Memorial Hospital currently do not allow for the same efficiencies • Free-standing ambulatory surgery centers can perform the same procedures at lower cost than those in a hospital setting – That is better for patients and for reducing health care costs • As a joint venture, it encourages collaboration among physicians throughout our communities. • A one-story, 17,500 square-foot building, exact location on the campus TBD • Will have operating rooms and procedure rooms • Joint venture with Shields Health Care, an industry leader in building successful partnerships for ambulatory surgery centers • The importance of the Lawrence Memorial Hospital campus improves access for patients and provides synergies for providers	• Positive Feedback from the group • Comments from the PFAC members - Wonderful - Positive morale for the City of Medford - Members have family utilizing New Hampshire Center – positive experience with Ambulatory Center - Discussed education/information sessions for the community - Employment opportunities for the community
S. Appleyard	5	**Flu Red Dot Stickers** • Explained the policy of having "red dot stickers" on ID badges to show employees/volunteers have received a vaccine	• Accepted
K. McCue	5	**Financial Assistance Policy** • Final Handout distributed • Explained the role of the 3 Financial Counselors	• Accepted

S. Appleyard	5	**PFAC 2018 Goals 2.3 & 3.1** • Reviewed and Finalized the following goals - #2 Quality - #3 Outreach/Recruitment	• S. Appleyard will follow up with B. Cecere and J. Levine re: outreach/recruitment programming. • S. Appleyard will email committee members with a list of standing Hospital committees that PFAC members are welcome to join.
		Meeting Wrap Up - Meeting ended 7pm	

Respectfully submitted, Karen Ferraina and Sue Appleyard
Distribution: PFAC committee members
These minutes were reviewed and approved by PFAC on 3.27.18

Attachment/Exhibit

4

Attachment/Exhibit

A

Hallmark Health System

COMMUNITY HEALTH NEEDS ASSESSMENT 2016

Prepared by the Institute for Community Health

INSTITUTE FOR COMMUNITY HEALTH

Building **sustainable community health,** together.

350 Main St, 4th Floor, Malden, MA 02148 P: 781.338.0300 F: 781.338.0340

Contents

Executive Summary

Hallmark Health System (HHS) undertook a **Community Health Needs Assessment (CHNA)** between March 2015 and August 2016. The CHNA was conducted using a mixed-methods approach in order to form a more robust understanding of the needs and patterns in the communities served. The methods used included: two **surveys** conducted with community and internal stakeholders; four **community forums** held with various sub-populations in the HHS communities; and the **collection and analysis of secondary quantitative data**. These findings were then used to **prioritize** the health concerns.

Hallmark Health encompasses Melrose-Wakefield Hospital in Melrose and Lawrence Memorial Hospital of Medford; Hallmark Health Medical Center in Reading; Hallmark Health Cancer Center, Center for Radiation Oncology, and Center for MRI, all in Stoneham; Hallmark Health VNA and Hospice; Hallmark Health Medical Associates; Lawrence Memorial/Regis College Nursing and Radiography programs; alliances for specialized services including wound care, sleep, and bariatric care; and more than 700 affiliated physicians north of Boston.

HHS has designated nine towns as their community benefits catchment or service area. The following six towns represent the core service area: **Malden, Medford, Melrose, Reading, Stoneham and Wakefield.** Three secondary communities are also included**: Everett, North Reading and Saugus.**

COMMUNITY DEMOGRAPHICS

The population of the HHS community benefits service area is approximately 302,800 people. Compared to Massachusetts as a whole, the area has a **smaller Hispanic population**; a **larger population of Asians**; a **larger foreign-born population**; and a population in which **fewer people speak English at home**.

In the HHS community benefits service area, the **household median income is higher** ($71,943) than in MA as a whole ($67,846). While **poverty rates for adults over age 65 are higher** in the service area (11 percent) than in MA (9 percent), they are **lower for children under age 18** (10 percent versus a MA rate of 15 percent).

HEALTH PRIORITIES

The following list of primary **health priorities** was generated through the 2016 CHNA process, based on a synthesis of the qualitative and quantitative data collected and analyzed.

- **Substance use disorder** emerged as a major concern among all stakeholders and across all types of data. The HHS Community Benefits (CB) service area had higher rates than the state of alcohol/substance use-related ED (emergency department) visits, and opioid-related ED visits, hospitalizations, and mortality. Stakeholders also identified substance use as their number one concern in the surveys and community forums.
- **Behavioral health** was the second most-frequently identified concern in the stakeholder surveys and forums. The HHS CB service area had a rate of mental disorder-related mortality higher than the state, and six of the nine communities had higher rates of

mental disorder related emergency department visits. This priority reflects both chronic and age-onset related concerns, and those that are both co-occurring and independent of substance use disorders.

- **Cancer** was identified as the third key concern by respondents to both stakeholder surveys. Across the catchment area, the incidence and mortality rate for colorectal cancer is higher than the state average. Lung cancer is also the third highest cause of death, comparable to the state, but an area of ongoing concern.
- **Cardiovascular disease** arose as a concern in the surveys and community forums in the context of lifestyle contributors such as unhealthy diets, lack of exercise, and obesity. Circulatory system diseases are the top cause of mortality, and the third most frequent reason for hospitalization.
- For the HHS community benefits service area as whole, **diabetes** is the highest cause of hospitalization, and individual populations, including people over age 65 and youth, also have higher rates of hospitalization than the state-wide rates.
- **Infectious diseases**, especially emerging diseases, such as Ebola and Zika, were concerning to survey participants. In multiple towns, there are higher rates of prevalence and incidence of HIV/AIDS, and incidence of Hepatitis C, Chlamydia, and TB.
- Overcoming **barriers to accessing healthcare** emerged as a common concern in the stakeholder surveys and forums. Some barriers commonly mentioned included language, transportation difficulties, economic insecurity/poverty, housing, and food insecurity. Securing and maintaining health care coverage, and assuring availability of a health care workforce providing care that reflects cultural, linguistic, sexual orientation and gender differences, also remain vital to ensuring full access.

An important priority for Hallmark Health System is reducing health disparities, and key to that is identifying **vulnerable populations** that are most at risk for experiencing those disparities. There was broad consensus that **older adults** are a vulnerable population. Also identified among many stakeholders were **immigrants**, especially those with limited English language skills, and **people living in poverty,** in particular those experiencing homelessness or housing insecurity. **Children and families** were also mentioned frequently, including challenges for young and/or single parents, changing family structures, and the high costs of quality childcare.

In addition, the following secondary priorities were identified: **preventable injuries and poisonings**; **respiratory disease**; **obesity**; **violence prevention**; and **disaster readiness and emergency preparation**.

EXISTING RESOURCES AND ASSETS

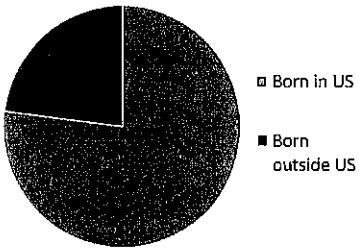
The nine towns that make up Hallmark Health System's Community Benefits service area are supported by a number of resources and assets. Stakeholders noted **beautiful lakes and parks, strong city government and school support** and the **many collaborations between different sectors** as some of the greatest strengths of the service area. Hallmark Health System participates in a variety of broad-based community coalitions and initiatives that work towards **addressing the specific and general health needs in the nine cities and towns.**

HALLMARK HEALTH

Community Health Needs Assessment

There are about **302,800** people living in the HHS community service area

23% were born outside the US



$112,419 is the highest town median income

The lowest town median income is **$51,056**

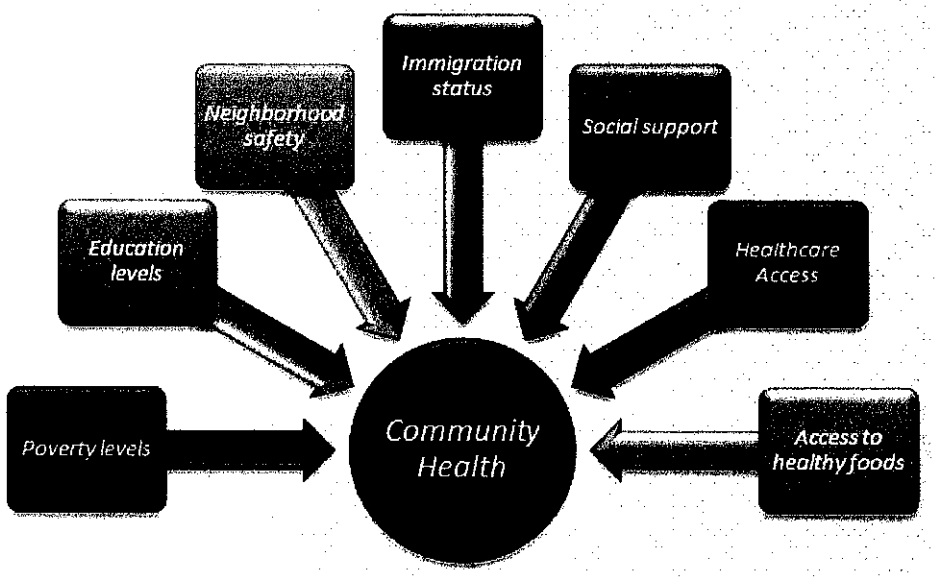
Groups vulnerable for poor health outcomes

Seniors

Immi-grants

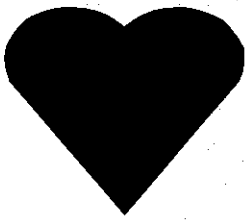
People living in Poverty

Many Factors Contribute to



COMMUNITY HEALTH

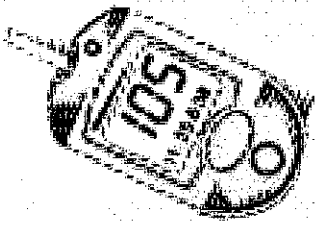
Circulatory System Disease



...is the top cause of death in the service area

Diabetes

...is the top cause of hospitalization in the service area



83% of stakeholders (20 out of 24) identified substance use disorder as a major health concern in the service area

Behavioral health care was the second most commonly-identified priority by stakeholders in the service area

PART 1: Background

Hallmark Health System (HHS) undertook a **Community Health Needs Assessment (CHNA)** between March 2015 and August 2016. HHS's goals for the CHNA included:

- Identifying major health concerns and vulnerable populations in the HHS service area
- Identifying unmet needs and gaps in service
- Gathering recommendations for programs and partnerships to address needs and gaps
- Defining priority focus areas for programming to improve population health
- Identifying opportunities to reduce health disparities

This report provides detailed insight into the health status of the nine communities in the HHS community benefits service area, the 2016 community health priorities, and opportunities for optimizing population health improvement. For the purposes of this CHNA, population health is defined as the health of HHS's patient panel as well as all others who live in the service area communities.

Hallmark Health System Community Benefits Service Area Towns

- Everett
- Malden
- Medford
- Melrose
- North Reading
- Reading
- Saugus
- Stoneham
- Wakefield

Hallmark Health System Overview

Hallmark Health System, Inc. was founded in 1997, when four community hospitals in Boston's northern suburbs joined together to form a local nonprofit health system—a coordinated approach to providing hospital, ambulatory and community-based services that were innovative, engaged and committed to improving the health of all who live and work in its service area.

Today, Hallmark Health encompasses **Melrose-Wakefield Hospital** in Melrose and **Lawrence Memorial Hospital** of Medford; **Hallmark Health Medical Center** in Reading; **Hallmark Health Cancer Center, Center for Radiation Oncology, and Center for MRI,** all in Stoneham; **Hallmark Health VNA and Hospice**; **Hallmark Health Medical Associates**; **Lawrence Memorial/Regis College Nursing and Radiography** programs; alliances for **specialized services** including wound care, sleep, and bariatric care; and **more than 700 affiliated physicians** north of Boston.

To bring the best specialty care to residents in the region, Hallmark Health is affiliated with:

- **Joslin Diabetes Center** for diabetes care, with clinical locations at both Melrose-Wakefield Hospital and Lawrence Memorial Hospital of Medford.
- **Massachusetts General Hospital** for cardiac care, including procedures performed at the Cardiac & Endovascular Center at Melrose-Wakefield Hospital.

- **UMass Memorial Medical Center** for ICU care, as one of only 10 Massachusetts hospitals to offer e-ICU services, at Melrose-Wakefield Hospital.
- **Tufts Medical Center** for neonatology, supporting the Maternal/Child Health program at Melrose-Wakefield Hospital, including the Special Care Nursery.

The Massachusetts Department of Public Health has designated Melrose-Wakefield Hospital and Lawrence Memorial Hospital as **Primary Stroke Service** hospitals, ready to provide emergency diagnostic and therapeutic services 24 hours a day, seven days a week, to acute stroke patients. Melrose-Wakefield Hospital is designated a **"Baby Friendly"** hospital, a program of the World Health Organization (WHO) and United Nations Children's Fund (UNICEF). Baby-Friendly birthing facilities create environments for parents and infants to get the best start in life from the very start, supporting breastfeeding and best practice infant care strategies.

In April 2014, Hallmark Health achieved **MAGNET® status**, a reflection of its nursing professionalism, teamwork and excellence in patient care. In 2016, the Vermont Oxford Network, a national nonprofit collaboration of health professionals working to change the landscape of neonatal care, named Melrose-Wakefield Hospital one of only 28 Centers of Excellence across the country in Education and Training for Substance-Exposed Infants.

Hallmark Health's inpatient and ambulatory clinical services reflect excellence in **five key service lines:**

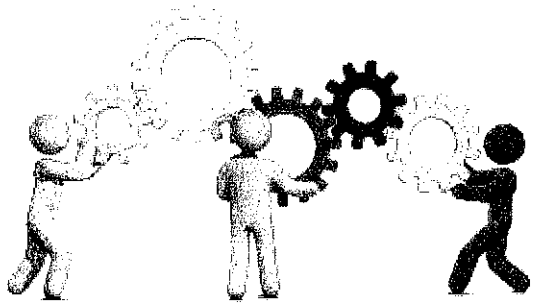
- Orthopedics and Sports Medicine
- Cardiology and Endovascular Medicine
- Gastrointestinal Medicine
- Maternal and Newborn Medicine
- Hematology and Oncology Services

Hallmark Health's **Community Services** division oversees programs that impact both medical and social determinants of health, supported by a mix of federal, state and private funding. These include:

- North Suburban Women, Infants, and Children (WIC) Nutrition Program
- Healthy Families Program and Massachusetts Home Visiting Initiative
- North Suburban Child and Family Resource Network
- Dutton Adult Day Health Center
- Aging in Balance Elder Outreach
- Community Health Education
- Lifeline Program

Contributors / Collaborating Organizations

To conduct this CHNA, **Hallmark Health System Community Benefits** staff primarily partnered with the **Institute for Community Health (ICH)**, a nationally recognized organization in Malden, Massachusetts focused on health status improvement through community-based participatory evaluation, assessment, research, strategic planning and training. ICH's role was to lead the needs assessment process, including collecting, analyzing and reporting on the data.



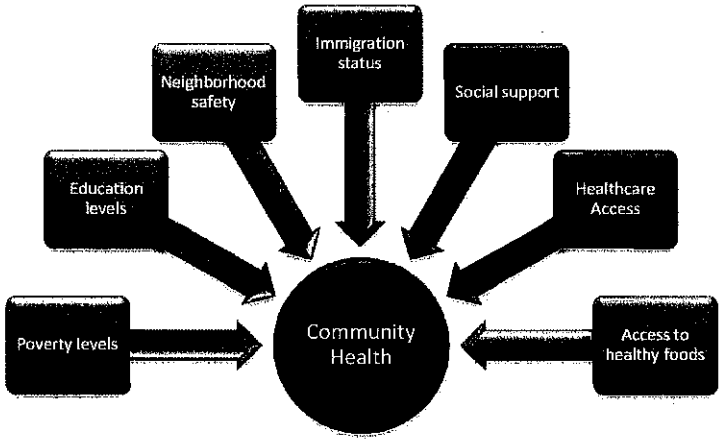
The **Hallmark Health System Community Benefits Advisory Council**, comprised of community representatives and community stakeholders as well as HHS leadership, also played a critical role in guiding the CHNA process, reviewing preliminary data, providing feedback, and participating in the prioritization process. ICH staff gave three presentations to the Advisory Council to garner and incorporate feedback as the CHNA process was in progress.

Various **consultants and advisors with public health expertise and local community knowledge** were brought in as needed throughout the CHNA process, and input was also incorporated from Hallmark Health System's Community Teams leadership, Hallmark Health Diversity Committee, Perinatal Advisory Council, and HHS department-level committees for OB/GYN, pediatrics, stroke, and behavioral health issues.

Broad representation of community interests was also achieved through the incorporation of community resident and community stakeholder input as key components of the assessment, through four community forums held in 2015 and 2016 and two stakeholder surveys conducted in late spring/early summer 2016. Two of the forums were conducted in the World Café style in order to make them accessible to people with diverse backgrounds, including different primary languages. Please see Appendix A for a complete list of collaborators.

PART 2: Methods

Community health is determined by a variety of factors, including conditions within our social and physical environment such as poverty, educational attainment, immigration status, social support, neighborhood safety, and access to healthy foods, spaces, and healthcare. Many of these factors affect our health risks, outcomes, and overall quality of life, and contribute to disparities across a multitude of health issues in our communities, ranging from cancer and cardiovascular health to substance abuse and mental health. As such, in assessing community health, it is important to examine not only traditional health indicators but also a variety of social factors that contribute to health disparities.



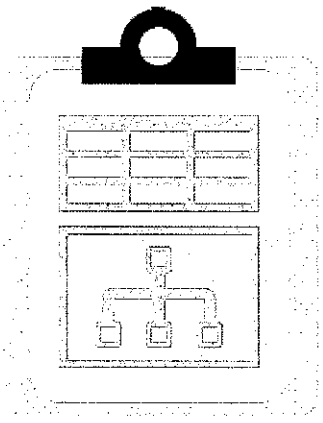
Mixed-Methods Approach

This assessment, conducted in 2016, involved a **mixed-methods approach** that included the examination of a variety of health topic areas and social factors across the HHS service area. The assessment was conducted utilizing a combination of **primary data collected from community stakeholders and community residents** through community forums and surveys, as well as **existing secondary data.** There were three main components, detailed below: 1) secondary data review; 2) four community forums held with residents and stakeholders from the service area; and 3) two surveys conducted with community and internal stakeholders. The data was then triangulated in order to form a more robust understanding of the needs and patterns in the communities. Finally, these findings were used in a process of **prioritization** of the health concerns, described more fully in section 5.

Secondary Data Review

Below is a brief overview of the methods used by the Institute for Community Health to conduct the **secondary/community data review** for this community needs assessment process. This review resulted in the creation of community data profiles for the service area as a whole and for each of the nine towns.

Indicators Reviewed



Data indicators reviewed for each community include **demographic and socioeconomic indicators** such as total population, gender, age, race/ethnicity, and country of origin, as well as educational attainment, income, poverty, unemployment and crime rates. **Public school enrollment and graduation rates** (including race/ethnicity and special populations) were examined by community and for the full HHS service area. **Youth risk behaviors** related to self-reported substance use, sexual activity, and mental health amongst public high school students were also examined using local Youth Risk Behavior Survey (YRBS) or Communities that Care Survey data for those communities that collected such data and made it available publicly. **Health outcomes** were examined for each community and for the HHS service area and in comparison to the state of Massachusetts. These included cancer incidence and mortality; emergency department (ED), hospitalizations and mortality for cardiovascular and diabetes; infectious disease prevalence and incidence, injury related hospitalizations, mental health related hospitalizations and mortality, mother and infant health indicators, premature mortality, respiratory health hospitalizations and ED visits, substance abuse related ED visits and mortality, top causes of death, and top causes of hospitalization.

Note that data for the HHS service area reflects data for the entire population of all nine towns, not just those individuals who receive care from Hallmark Health System. This includes residents of the nine towns that receive medical care from practitioners outside the catchment area (such as in Boston), as well as from other regional providers, including Lahey Health and Cambridge Health Alliance, free care programs such as The Sharewood Project, and physician practices and urgent care facilities operated locally by Caregroup, Children's Hospital Boston, and for profit entities.

Secondary Data Analysis

Data were examined by **comparing each community and the HHS service area as whole to the state of Massachusetts**. Percent differences were calculated for each indicator and those with a percent difference of +5% or more (e.g. 5% or higher mortality) were flagged for discussion. These comparisons to the state provide the community and stakeholders some perspective as to how the community is doing relative to the state (which is normally used as the standard for benchmarking).

Data were examined by comparing each community and the HHS service area as whole to the state of Massachusetts

Data were also **examined within each community and for the HHS service area.** The leading causes of death and hospitalizations were ranked. This review of counts and rates within the community and service area enable the community and stakeholders to understand the magnitude of a health condition at the community level, regardless of whether it differs from the state average or not.

Other Local Secondary Data

Other local secondary data included food insecurity data provided by the Greater Boston Food Bank and a review of 2010-15 opioid overdose related death certificate data from the Mystic Valley Public Health Coalition's MA Opioid Abuse Prevention Collaborative (MOAPC) grant.

For a complete list of indicators and data sources, please see Appendix B.

Primary Data Collection

Original data was collected for this assessment through community forums and community and internal stakeholder surveys.

Community Forums

Two **Community Conversation Events** were held in 2015. Participants were first shown a presentation about the HHS Community Benefits Department, and then participated in discussions in the World Café format. Both evening events took place at Lawrence Memorial Hospital of Medford.

The first event, held March 3, 2015, was hosted by the North Suburban Child and Family Resource Network (NSCFRN), a program of the Wakefield Public Schools and the Community Service Division of Hallmark Health. The 33 participants represented early childhood service providers, community-based organizations and parents. The purpose of the forum was two-fold: to conduct a participatory **assessment of both needs and health impacts on families and children birth to age 12**; and to inform the NSCFRN of **current program strengths, needs, and possibilities for future programming across an expanded service area**.

The second event, held August 19, 2015, recruited participants from the wider community, with an emphasis on reaching those served by HHS community benefits programs, including the Mobile Market, as well as by local community-based agencies. Recruitment targeted the nine towns in the community benefits catchment area. Each table discussed five questions addressing their **communities' health needs, existing health programs, the programs that they would like to see, what they would like HHS to know about their communities**, and whether

the event gave them a better understanding of HHS. Facilitators at each table led these discussions and interpreters translated questions and responses for the Haitian-speaking participants, as needed.

Additionally, two forums were held in May 2016 at Melrose-Wakefield Hospital with a total of 21 participants. At these events, participants reviewed the community data presented in this report and had the opportunity to vote on various questions related to **health concerns in their communities and their impressions of the services provided by HHS**. A conversation was facilitated afterwards on these same themes.

Community Stakeholder Survey: Number of respondents per community

Everett - 4
Malden - 4
Medford - 1
Melrose - 2
North Reading - 2
Reading - 4
Saugus - 1
Stoneham - 3
Wakefield - 3
Most familiar with the region as a whole - 4

For community forum reports, see Appendices C and D.

Community Stakeholder Survey

Community stakeholder surveys were sent by Hallmark Health System staff via Survey Monkey to 20 individuals selected by HHS as key stakeholders. (See full text of survey in Appendix E). Stakeholders each represented one or more of the communities in HHS's 9 town community benefits service area. A total of 13 stakeholders provided useable responses.

Respondents were instructed that they could pass the survey along to someone else in their agency if they did not think they were the best person to answer the questions. They were also instructed to be honest with their answers, and to skip questions that they were unable to answer. Respondents were told that the Institute for Community Health would be reviewing and analyzing their responses, and that no names or identifying information will be included in any reports.

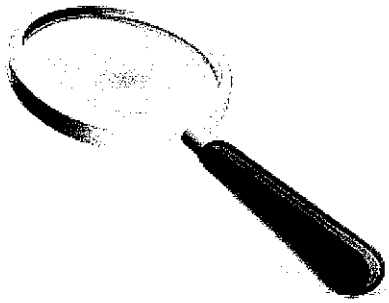
The respondents consisted of three people who reported their job titles as either CEO or Executive Director, seven people who are directors or managers, and three other public health workers. Respondents were asked to report which communities they were able to provide information about. Five respondents only chose one of the communities, four reported that they were most familiar with the service area as a whole, and five chose two or more communities. (The visual above shows the number of respondents who reported familiarity with each specific community or the entire region.)

The survey responses were then analyzed by ICH staff. Quantitative answers were tabulated and used for comparison. Qualitative answers were analyzed using content analysis techniques, and a report detailing the findings was submitted to HHS. See Appendix F for the full report.

HHS Internal Stakeholder Survey

An additional survey with primarily closed-ended questions was conducted to seek additional

input from **HHS employees** already engaged in community-based activities or diversity/inclusion efforts on behalf of the health system. Forty-four unique surveys were emailed to two distinct employee cohorts; thirteen total surveys were completed and returned. Eight participants reported being part of community teams, and five were members of the HHS diversity committee. Of the communities in the service area, most participants reported familiarity with the region as a whole (5), Melrose (4), and Wakefield (3). Two people each reported working with Stoneham and Reading/North Reading, one respondent was most focused on each of Medford and Everett/Malden, and no participant worked primarily in Saugus.



See Appendix G for the full text of the Internal Stakeholder survey and Appendix H for full survey results.

Limitations

This assessment purposefully incorporated a variety of different types of data sources to allow for triangulation between them, thereby enhancing the strength and quality of the findings; however it should be noted that **limitations** exist, and are inherent to any needs assessment process.

Secondary Data Review

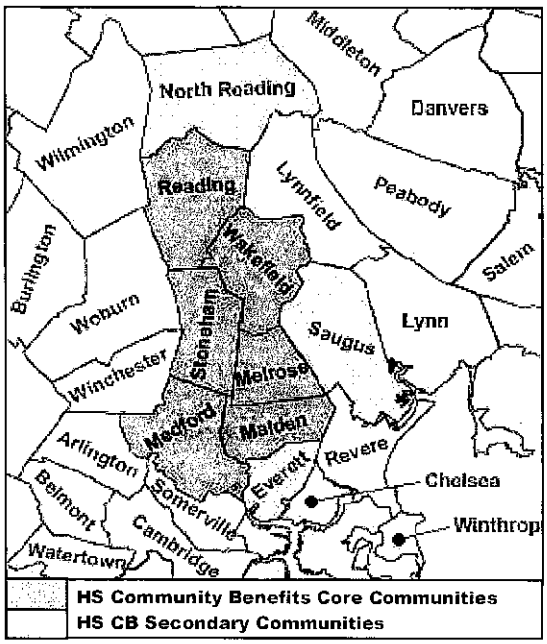
The Institute for Community Health strove to include all available data in the secondary data review process. Data may have been limited by the **unavailability of some important topic areas** related to health (e.g. violence) and data **may not be current** due to analysis and reporting lags at MA DPH (see Appendix B for most recent years available by indicator). Also, with respect to YRBS and Communities that Care data on youth risk behaviors, while information was publicly available for the majority of communities, not all towns participate in using this assessment tool.

Stakeholder Surveys and Community Forums

The survey and forum data described here **represent only the perspectives of the individuals and agencies who participated**, and do not necessarily represent or provide a complete picture of community needs, assets, or perspectives on HHS in each community. These **results therefore cannot necessarily be generalized to the HHS CB service area** as a whole, or to any particular towns within the service area.

PART 3: Description of Hallmark Health System Community Benefits Service Area

The HHS community benefits (CB) nine-community catchment or service area covers 71.7 square miles, with a **total population of 302,797**. Size and population density vary by community, with Malden and Medford having the largest populations at 60,309 and 56,981 respectively, and North Reading the smallest, at 15,249. Malden is the most densely populated community at 11,788 people per square mile, and North Reading the least densely populated at 1,103 people per square mile.



Definition of Communities Served & How They were Determined

The HHS community benefits service area consists of 6 core communities: **Malden, Medford, Melrose, Reading, Stoneham and Wakefield**. It also consists of 3 secondary communities: **Everett, North Reading, and Saugus**. The core communities are so designated because HHS has actual physical clinical facilities in those communities. Secondary communities are so called because HHS does not have a physical presence in these communities, but does actively collaborate with other organizations to provide services as well as work on coordinated responses regionally inclusive of these cities and towns.

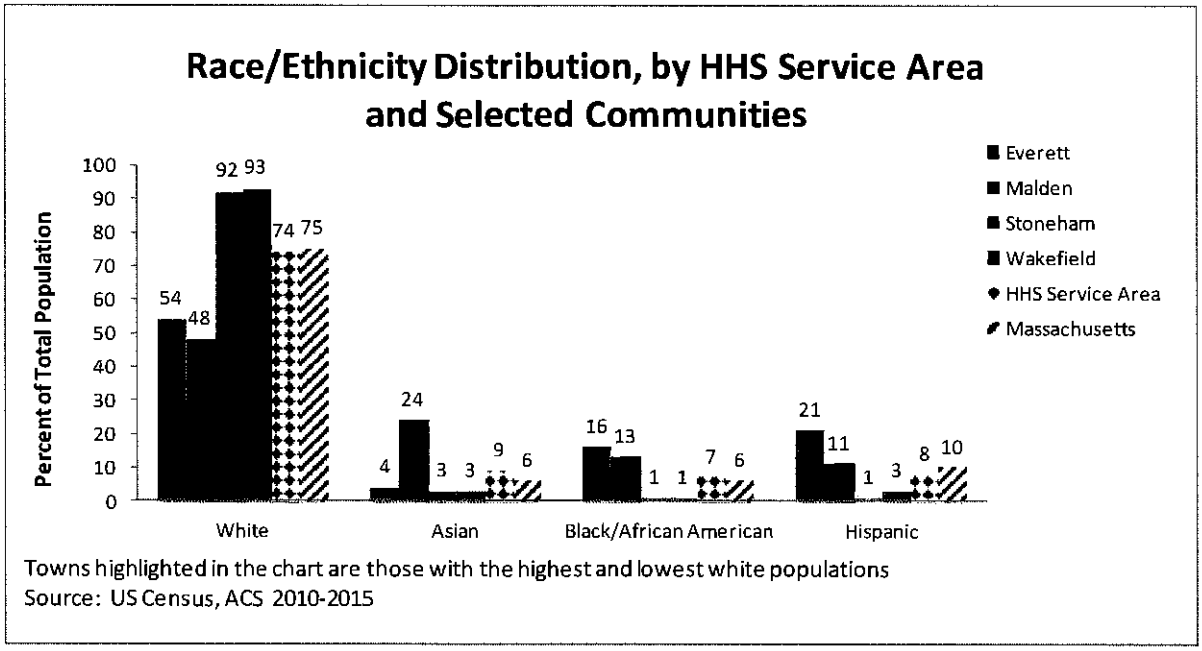
Demographics

The population of the CB service area is approximately 302,800 people. Compared to Massachusetts as a whole, the area has a **smaller Hispanic population** (8 percent, compared to 10 percent in MA); a **larger population of Asians** (9 percent vs. 6 percent) **and slightly larger of Blacks/African-Americans** (7 percent vs. 6 percent); a **larger foreign-born population** (23 percent compared to 15 percent); and a population in which **fewer people speak English at home** (71 percent compared to 78 percent).

In the HHS CB service area, the **household median income is higher** ($71,943) than in MA as a whole ($67,846). While **poverty rates for adults over age 65 are higher** in the service area (11 percent) than in MA (9 percent), they are **lower for children under age 18** (10 percent versus a MA rate of 15 percent).

Race/Ethnicity: The HHS CB service area has a **slightly higher proportion of the population identifying as Asian or Black/African-American and slightly lower identifying as Hispanic compared to Massachusetts** as a whole. However, breaking it down by community, more variation is observed. Wakefield and Stoneham both have very high proportions identifying as White (non-Hispanic): 93% and 92%, respectively, compared to a state wide rate of 75%. Malden has the highest rate of people describing themselves as Asian (24%, compared to a MA rate of 6%), and Everett has the highest rates of people identifying as Hispanic (21%, versus the MA rate of 10%) and Black/African-American (16%, versus a MA rate of 6%), see chart 1 below.

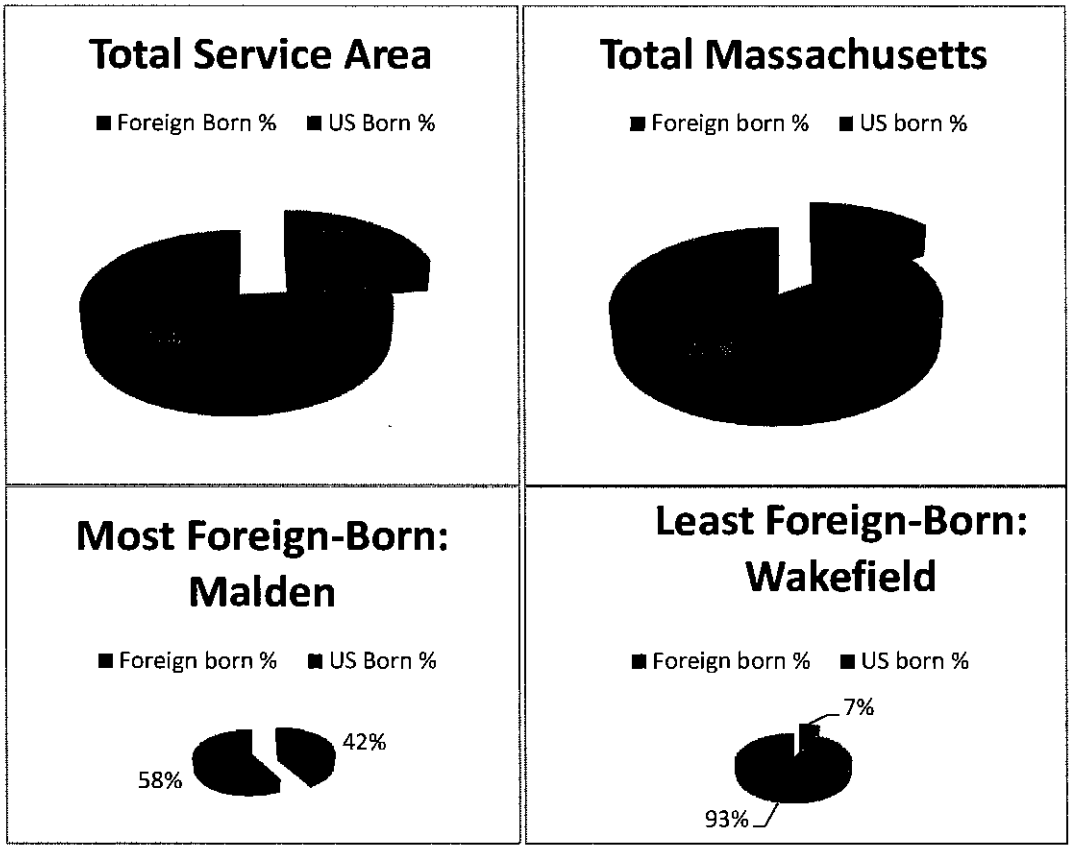
Chart 1: Race/Ethnicity Distribution



Towns highlighted in the chart are those with the highest and lowest white populations
Source: US Census, ACS 2010-2015

Foreign-born residents: The HHS CB service area also has a **higher population of foreign-born residents** compared to the state of Massachusetts as a whole: 23% compared to 15% statewide. Within the service area, the rates vary from a high of 42% in Malden to a low of 7% in Wakefield (see chart 2). Distributions for other towns are in each of the community profiles (see Appendix J).

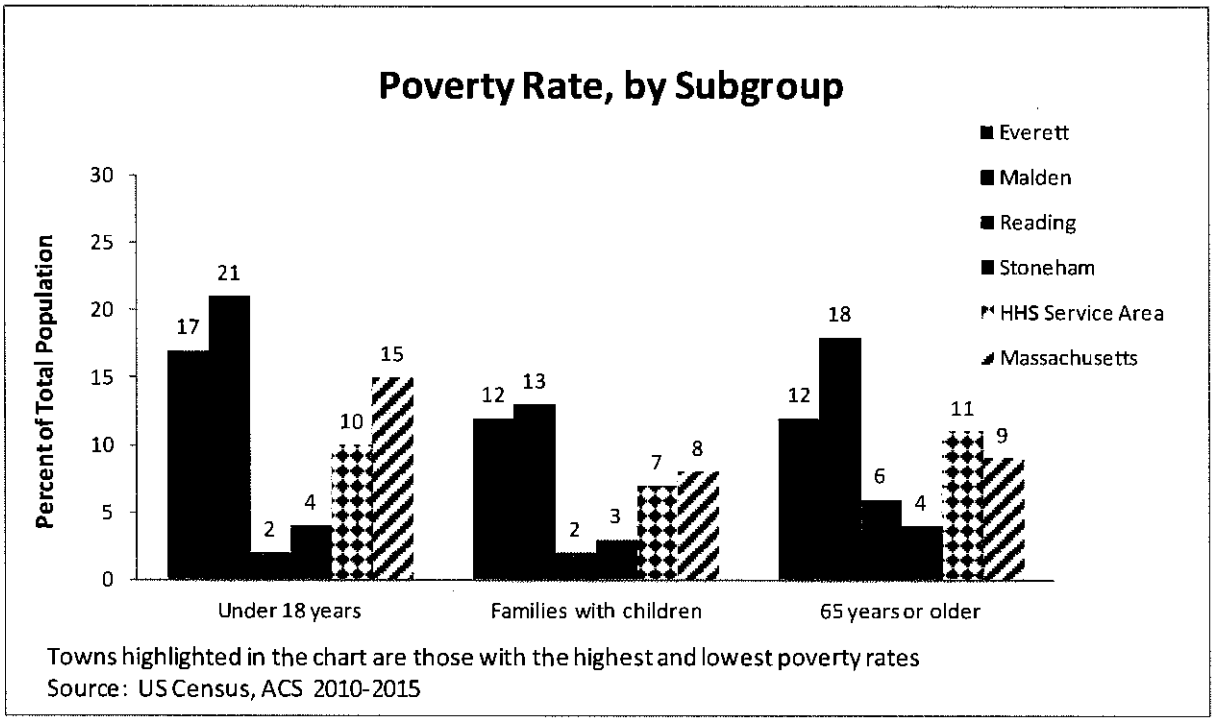
Chart 2: Nativity of Residents of HHS Service Area and MA



Source: US Census Bureau, ACS 2010-2015

Income and Poverty in Service Area: In the CB service area as a whole, **overall poverty rates are comparable to those of Massachusetts**. Rates of children under age 18 living in poverty are **lower than state-wide rates** (10% compared to 15% statewide). However, the rate of **older adults (over age 65) in poverty is higher** (11% compared to 9% statewide). Further, there is significant variation within the service area. Malden contains the highest rates of poverty, with 21% of children and 18% of older adults living in poverty. Reading and Stoneham contain the lowest rates: only 4% of Stoneham older adults live in poverty, and only 2% of Reading children live in poverty, see chart 3 below.

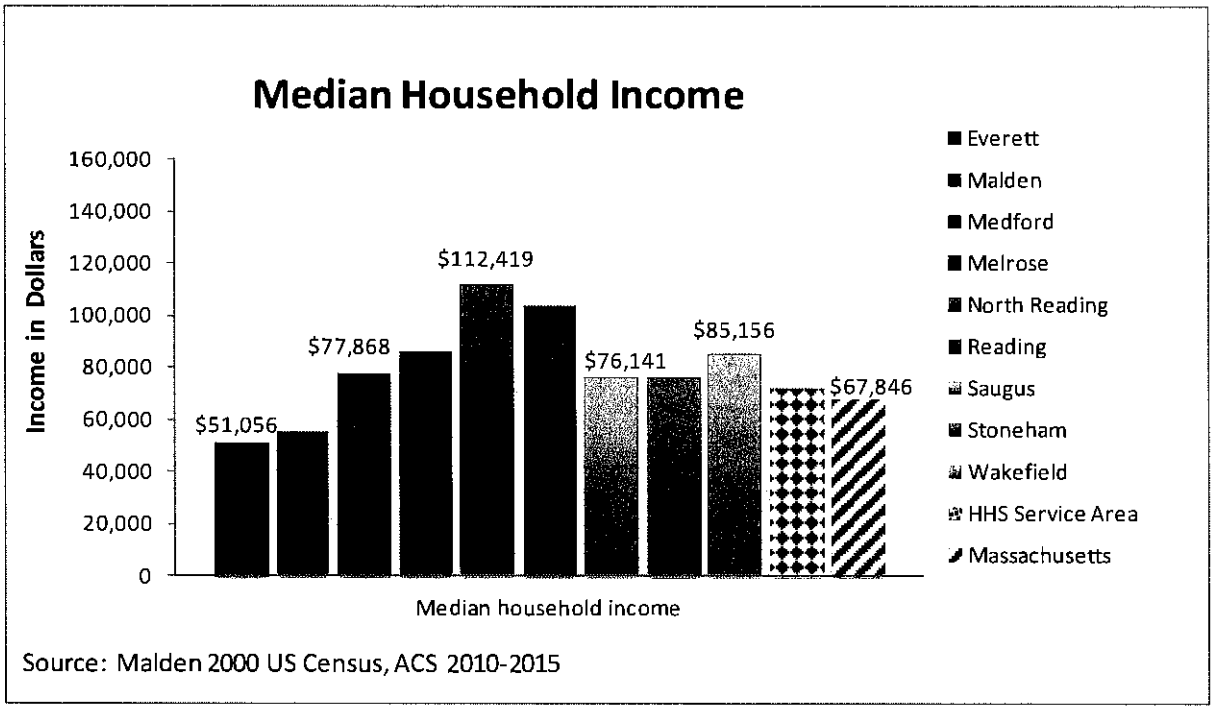
Chart 3: Poverty Rate by Subgroup



Towns highlighted in the chart are those with the highest and lowest poverty rates
Source: US Census, ACS 2010-2015

Income levels in the CB service area exhibit wide variation. Although the total service area has a higher median income than the state ($71,943 versus $67,846 statewide), this conceals variations between a high median income of $112,419 in North Reading and a low of $51,056 in Everett, see chart 4 below. It is also important to note that low poverty rates do not preclude poverty-related challenges among individuals or families living in more affluent communities. This has been noted qualitatively especially among vulnerable populations, including elder homeowners and single parent households.

Chart 4: Median Household Income for HHS Service Area and Communities



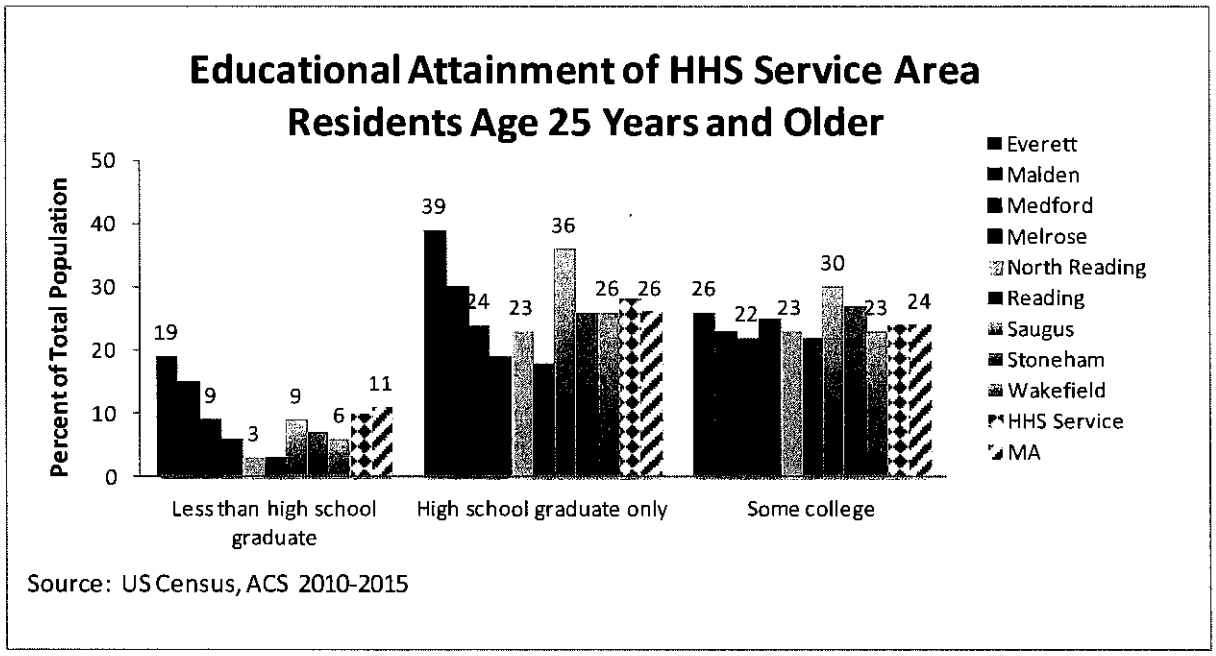
Source: Malden 2000 US Census, ACS 2010-2015

Crime: Crime is a concern in some parts of the CB service area, although in general, **most communities have significantly lower rates of both violent crime and property crime than the state** as a whole.[1] Malden was the only community with a violent crime rate higher than Massachusetts: it has a rate of 462.2 per 100,000, compared to the MA statewide rate of 405.5 per 100,000. The community with the lowest rate of violent crime was Reading, with a rate of just 39.6, followed by North Reading, with a rate of 98.8, both per 100,000 residents. Property crime followed a similar pattern. Everett was the only community with a rate higher than that of the state, with a rate of 2321.3 per 100,000 (compared to the statewide rate of 2153.0). The lowest rates of property crimes were again Reading and North Reading, with rates of 749.3 and 974.8 per 100,000 residents, respectively.

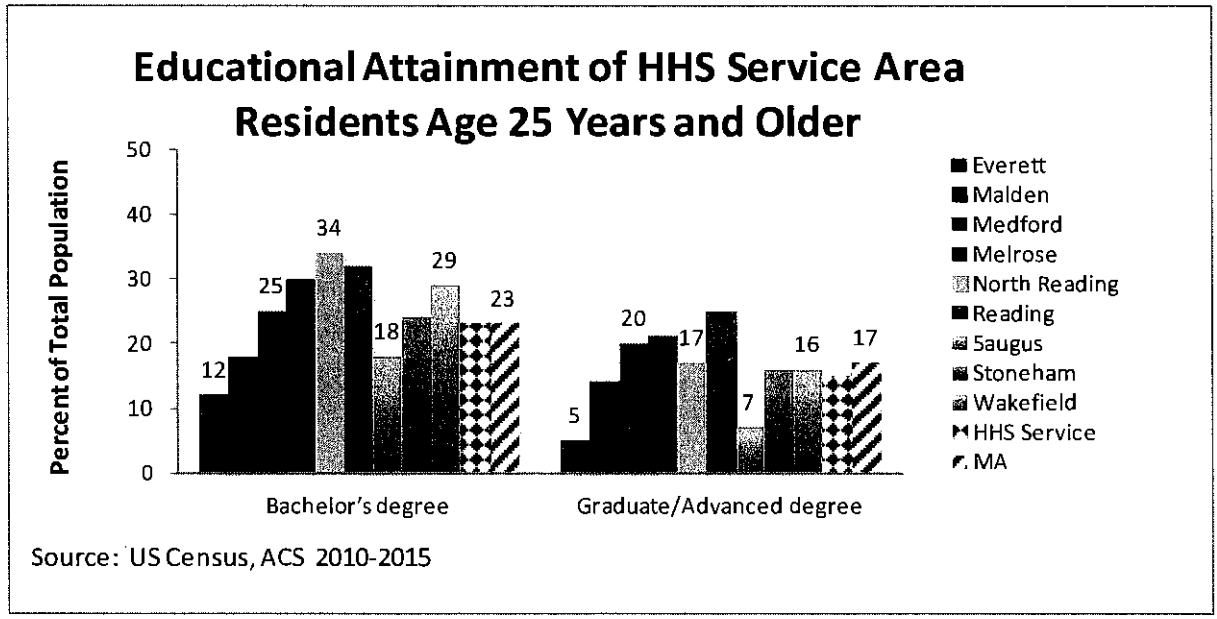
Educational attainment: The HHS CB service area as a whole has **educational attainment rates that are quite close to Massachusetts** as a whole. However, the individual communities present more variation (see charts 5 and 6). Everett and Malden have higher rates of people with less than a high school degree. These two communities plus Saugus and Stoneham also have higher rates of people with just a high school diploma. On the other end of the scale, Medford, Melrose, North Reading, and Wakefield have high rates of people with a bachelor's degree, and Medford, Melrose and Reading have high rates of people with a graduate or advanced degree.

[1] Data on crime rates was not available for Medford, nor for the service area as a whole.

Charts 5 and 6: Educational Attainment of HHS Service Area Residents



Source: US Census, ACS 2010-2015



Source: US Census, ACS 2010-2015

Unemployment: In the HHS service area, **unemployment is consistent with the Massachusetts rate.** Although the overall HHS service area rate of unemployment is unavailable, the highest rate, in Everett, matches the overall Massachusetts rate (5.7%), while the lowest rate, in Reading, is 4.2% (see table 1, below). Data for the other towns are included in each community profile (see Appendix J).

Table 1: Unemployment Rates for selected HHS Communities

HHS Community	Percent (%)
Everett	5.7
Malden	5.3
Reading	4.2
Saugus	5.3
Stoneham	5
MA overall	**5.7**

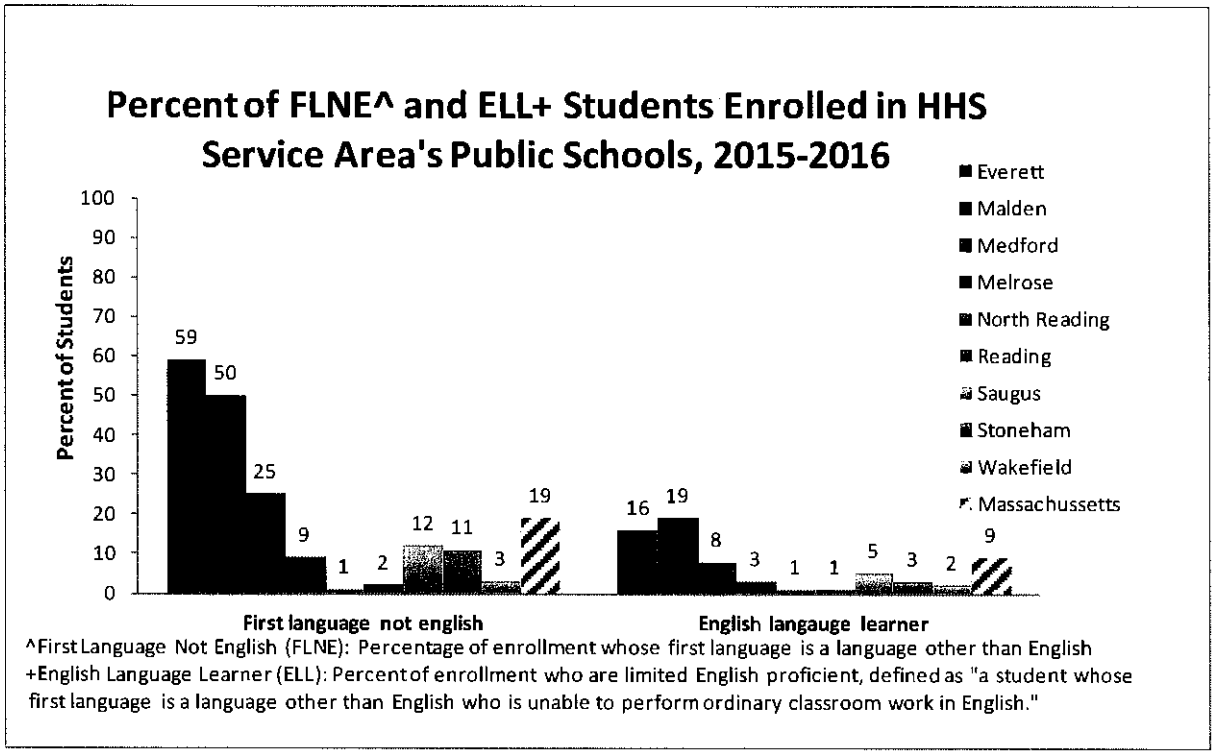
Source: US Dept. of Labor Bureau of Labor and Statistics, Local Unemployment Statistics, 2014

Public School and Youth Indicators: Compared with the state of Massachusetts, the public schools in the overall CB service area have a **slightly lower proportion of Hispanic students enrolled** (16% versus 19% statewide), a **slightly higher proportion of Black/African American students** (10% versus 9%), and a **slightly higher proportion of Asian students** (8% versus 7%).

Certain special populations pose educational challenges to schools: in the HHS CB service area, three communities (Everett, 59%; Malden, 50%; Medford, 25%) have higher rates of students whose first language is not English. Only Malden and Everett have higher rates than Massachusetts of students with limited English proficiency or English Language Learners (19% and 16%, respectively) (see chart 7 below).

The rate of students with disabilities is fairly consistent across the service area: the community with the highest rate is Stoneham, with 19%, and the lowest rates are in Everett, Melrose, and Saugus, all with 15% (compared to Massachusetts rate of 17%). The percentage of students from low income families varies from a high rate in Everett of 42% to a low in North Reading and Reading of 7%. Distributions for other towns are in each of the community profiles (see Appendix J).

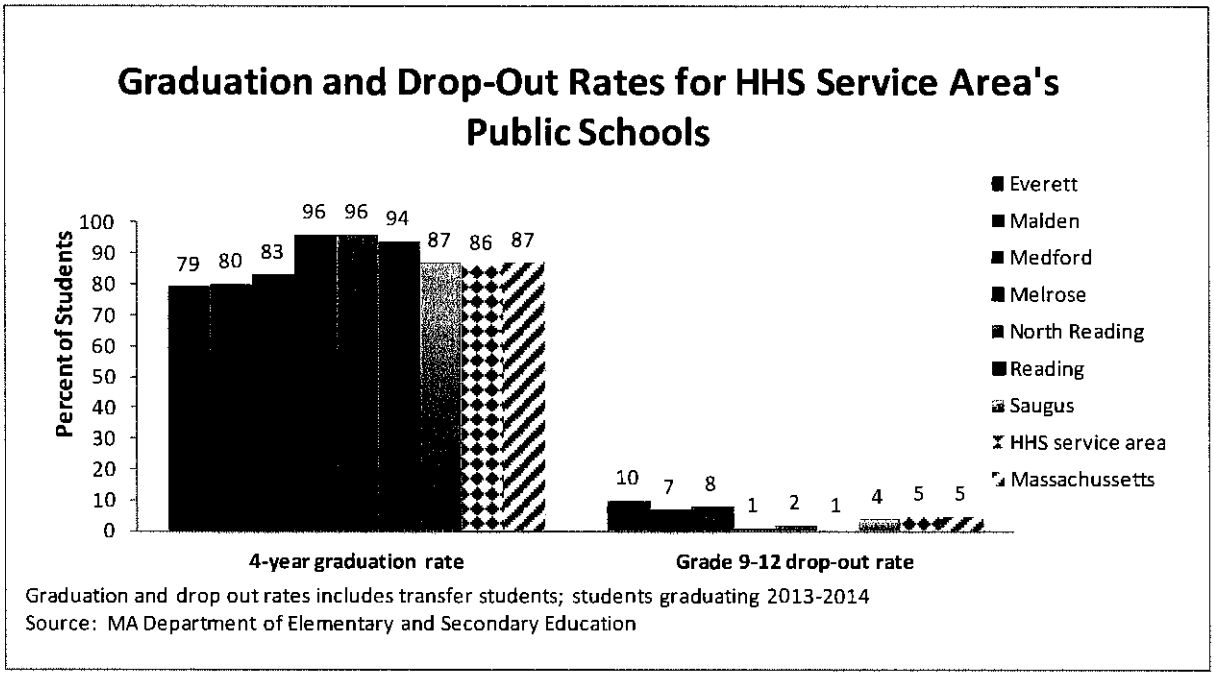
Chart 7: Percent First Language Not English and English Language Learners Students Enrolled in HHS Service Area's Public Schools, 2015 – 2016



^First Language Not English (FLNE): Percentage of enrollment whose first language is a language other than English
+English Language Learner (ELL): Percent of enrollment who are limited English proficient, defined as "a student whose first language is a language other than English who is unable to perform ordinary classroom work in English."

The **high school 4-year graduation and drop-out rates in the overall CB service area are close to the rates of the state** as a whole. Variation within the service area ranges from a graduation rate high of 96%, in Melrose and North Reading, to a low of 79% and 80% in Everett and Malden, respectively. Dropout rates range from a high of 10% in Everett to a low of 1 percent in Melrose, Reading, and Stoneham. See chart 8 below.

Chart 8: High School Graduation and Drop-Out Rates



Graduation and drop out rates includes transfer students; students graduating 2013-2014
Source: MA Department of Elementary and Secondary Education

Top Causes of Hospitalization and Death

The **top causes of hospitalization** are listed below in Table 2. These rates **do not vary appreciably** from the state-wide rates (see Appendix J). The individual communities generally show similar causes in the same order. The only exceptions were in Everett, Malden, and Wakefield, where the fifth highest cause of hospitalization was mental health disorders rather than respiratory-related; and in Melrose, North Reading and Reading, where diabetes ranked second and chronic obstructive pulmonary disease (COPD) ranked first.

Table 2: HHS SERVICE AREA Top 5 Causes of Hospitalization
(n= 122,865)

	#	% of Hospitalizations
1. Diabetes mellitus related	20,465	16.70%
2. Chronic obstructive pulmonary disease, all related	20,026	16.30%
3. Circulatory system diseases, all	16,673	13.60%
4. Digestive system diseases, all	11,820	9.60%
5. Respiratory, pneumonia and influenza related	8,974	7.30%

Source: MASSCHIP, hospitalizations from Uniform Hospital Discharge Data System, 2010-2012

The **top causes of death** are listed below in Table 3. There is one minor difference in service area rates compared to statewide rates: the fifth most-frequent cause of death statewide is digestive system diseases (3.7% of MA deaths) rather than genitourinary diseases. The patterns of the service area as a whole do not vary appreciably compared to the individual communities. In general, the same causes are ranked in the same order; with the exception that in Everett, Malden, Reading, and Saugus, digestive system diseases ranked fifth, comparable to the state as a whole.

Table 3: HHS SERVICE AREA Top 5 Causes of Death
(n= 7,787)

	#	% of Deaths
1. Circulatory system disease, all	2,188	28.10%
2. Mental disorders	769	9.90%
3. Lung cancer	574	7.40%
4. Chronic lower respiratory diseases	364	4.70%
5. Genitourinary disease, all	290	3.70%

Source: MASSCHIP, death data from Registry of Vital Records and Statistics, 2010-2012

PART 4: 2013 HHS CHNA Priorities and the Impact of Actions Taken to Address Them

In 2013, HHS's CHNA identified the following priorities:

- **2013 Primary Priorities**
  - Behavioral Health and Substance Use
  - Cancer
  - Cardiovascular Disease
  - Obesity and Diabetes
  - Access to Care, especially for the uninsured and underinsured
  - Vulnerable Populations, especially women and young children

- **2013 Secondary Priorities**
  - Infectious diseases, including tuberculosis
  - Injury prevention, especially falls and orthopedic injury
  - Respiratory disease, including asthma
  - Sexual assault/domestic violence prevention
  - Disaster readiness and emergency preparation

HHS Community Benefits Accomplishments Addressing 2013 Priorities

To systematically address the identified primary and secondary priorities in the most recent (2013) CHNA, **collaboration in the community** was defined as the first integral component, assisting the organization in identifying and understanding current efforts to address community needs, allowing for sharing of resources and innovations, and preventing duplication of services. From this understanding of assets and resources, Hallmark Health developed a **comprehensive multi-year implementation** plan to define the efforts the hospital would undertake around the identified priorities in its catchment area.

The **2014-2016 Community Benefits Implementation Plan** (CBIP) served to define a 3-year range of programs undertaken by Hallmark Health to provide where possible evidence-based interventions around the CHNA identified health priorities. These efforts were designed to reach both targeted populations and geographic areas, and in other cases, the community-at-large. In many instances, the CBIP programs **aligned closely with core service lines** of Hallmark Health, while also **addressing identified needs of disadvantaged populations.** Programs also **addressed statewide health priorities** and identified health needs of these groups in the local community. The CBIP also reflected **the need to streamline services to best align limited resources** and **take into account the available services and offerings of other institutions,** including proximity to tertiary medical centers in Boston, community based health systems (such as Lahey Health including Winchester Hospital), safety net hospital systems (Cambridge Health Alliance), federally qualified health centers (East Boston Neighborhood Health Center) and other providers offering services in the region.

As required by IRS guidelines, the CBIP **included a list of programs developed to address the needs identified**, including the goals and measures for the programs and the overall budget for implementation. In addition to being periodically amended, the inventory of programs and

services was available to the community, and all projects identified by the Plan were ultimately approved collectively by the hospital's governing body.

Some of the largest community benefits programs addressed the **needs of families at risk**, and **assisted cultural and linguistic minorities living with chronic illness**, such as residents diagnosed with tuberculosis or underserved cultural and linguistic populations engaged through the Asian Elder Diabetes Health Project in Malden. As new health needs emerged, or were identified as critical within the catchment area, the CBIP was amended to add programs that addressed these needs. Other programs that benefit the community, but are either not delineated in the Attorney General's Community Benefits Guidelines, or allowable under federal regulations, are not formally included in the CBIP or reported annually to either the MA Attorney General or as part of the IRS Form 990 filing.

Overall, the CBIP addressed strategies and supported efforts to engage the identified primary and secondary priorities through these activities:

- Supporting membership and leadership activities on boards of local coalitions that align with the Community Benefits Plan, such as board level membership on the Melrose Alliance Against Violence (MAAV), Medford Health Matters, and others as appropriate.
- Subsidizing rent and utilities in-kind for key community partners such as Portal to Hope, Inc. Programs receiving this support must be not-for-profit agencies closely aligned with Hallmark Health Community Benefits programs.
- Offering meeting space to community agencies (in-kind) that supported the Hallmark Health Community Benefits Plan, such as for Alcoholics/Overeaters Anonymous meetings, blood donation drives, the Massachusetts PTA Association, and others
- Supporting ongoing outreach activities to identify new or previously unknown community agencies that support Community Benefits target populations, especially grass roots and faith-based organizations. During the period covered by the CBIP, this included support for the Haitian-American population in the service area, and the country of Haiti, based on assessed need and available resources.
- Through its Community Teams, providing significant outreach and support to community events and programs in the catchment area.
- Reaching out to other local health care systems to explore ways to work collaboratively, in an attempt to avoid unnecessary duplication of services.
- Regularly participating at Community Health Network Area meetings in Region 15,and maintaining a leadership role for Region 16
- Devoting Community Services and HHS Financial Management staff time to document value, monitor, and measure impact of programs and services to Hallmark Health communities, or to develop tools that will enable such evaluation in the future.
- Identifying and securing resources as appropriate to fund community benefits programs; this includes grant writing, securing restricted donations, and fundraising.
- Sponsoring professional memberships as appropriate, such as to the Association for Community Health Improvement (ACHI).

Strategies implemented to address 2013 primary priorities:

Behavioral Health and Substance Use
Target population: Residents managing behavioral health issues and substance use including depression, anxiety, co-occurring substance use disorders, and serious and persistent mental illness. This included a focus on access to care issues, integration of behavioral health and primary care, preventive mental health, and a particular emphasis on geriatric populations and their families/caregivers.

Cancer
Target population: Residents at risk for developing cancer or being treated for cancer, with a focus on lung cancer, colorectal cancer, oral, head and neck cancer, breast cancer, and skin cancer. Efforts focused primarily on screening and prevention efforts to support early detection and treatment of key cancers, as well as reduction of known cancer risk factors, such as tobacco use.

Cardiovascular Disease
Target populations: Residents at risk for developing cardiovascular disease or those experiencing health issues due to undiagnosed or poorly understood risks, including those at risk for developing Congestive Heart Failure (CHF) or for suffering a stroke; men, women, and children with weight management issues, with a specific focus on obesity prevention for adults and children; community members at risk for developing diabetes or with diabetes management issues. Efforts focused on screening and education, including targeted interventions to reach high-risk cultural and linguistic groups impacted by chronic disease.

Access to Care
Target population: Residents needing access to healthcare, especially focused on uninsured or underserved residents of our core communities. This included the recruitment, education, and training of nurses, physicians, other practitioners, and community volunteers needed to care for these populations, as well as direct efforts to increase individuals receiving and maintaining health insurance coverage. Support for initiatives promoting increased diversity and inclusion were also key components of addressing this priority.

Vulnerable Populations
Target population: Residents including elders and families with children and/or adolescents at additional risk due to poverty, isolation, language or cultural barriers, domestic violence, access to care issues, or lack of skills to navigate the health care system, lack of early prenatal care or those in need of developing parenting skills. Efforts focused both on continued management of government-based assistance programs serving expectant and postpartum mothers as well as young families through the first five years of life, such as WIC and Healthy Families, and innovations to address specific social determinants and disparities. Efforts to address elder related issues included programmatic supports, such as adult day health services, as well as evidence-based outreach efforts at key elder housing and community center sites in the region.

Strategies implemented to address 2013 secondary priorities:

Infectious Diseases
Target population: Residents impacted by infectious disease such as Tuberculosis; especially those residing in Everett, Malden, and Medford. Efforts also supported public health initiatives related to infectious disease, as well as maintaining clinic-based support around TB in collaboration with area public health nurses.

Injury Prevention (especially falls and orthopedic injury)
Target population: Residents, including men, women and children, at risk for developing bone and joint injuries or disease with a focus on injury prevention for all ages; specifically falls prevention, arthritis and osteoporosis prevention and detection, and prevention of sports injuries, including head injury in youth. Efforts focused on screening and ongoing education programs designed to more quickly identify and reduce risk of injury in both youth and older adult populations.

Respiratory Disease (including asthma)
Target population: Residents living with respiratory conditions, such as Chronic Obstructive Pulmonary Disease (COPD) or Asthma. Efforts included the provision of patient education and support group opportunities for individuals living with respiratory illness, as well as referrals to other community-based providers or services with more established as appropriate.

Sexual Assault/Domestic Violence Prevention
Target population: Community-wide. Support of various initiatives seeking to prevent sexual assault, and intimate partner violence, defined as patterns of coercive controlling behaviors wherein one person exercises control over another in an intimate relationship. Efforts included support and collaboration with local coalitions, and provision of space and other resources for support groups and other activities.

Disaster Readiness and Emergency Preparation
Target population: Community-wide. Proactive leadership in support of regional preparedness in the event of natural disasters and unexpected emergencies. Efforts focused on leadership engagement at both local and regional Emergency Management Services, as well as preparedness drills and resources above and beyond licensed requirements to support public safety and awareness of known and emerging health and safety threats and concerns. An emphasis on coordination between the health system's home care and physician practice owned entities, local government agencies and health departments, and other local community service providers also made up key aspects of these efforts.

Stakeholder Opinion on Effectiveness in Addressing Priorities

Participants in the internal stakeholder survey were asked to what extent they agreed that HHS has been effective in addressing the priorities in the last three years. Their answers indicated that they were **generally aware of and satisfied with HHS's efforts to address these priorities.** There was some variation by issue, however. Overall, participants felt that HHS was **more effectively addressing the primary than the secondary priorities**: as one participant wrote, "I think HHS works hard to improve health outcomes in our primary priorities. I think we do less of a job on our secondary priorities. However, I think some of the secondary priorities are very specific to particular populations".

Satisfaction was **highest for efforts to address cancer and behavioral health**, closely followed by obesity/diabetes. Among secondary priorities, satisfaction was highest for HHS's effectiveness in addressing sexual assault / domestic violence prevention, and lowest for disaster preparedness.

Participants in the community stakeholder survey were asked about HHS's effectiveness in addressing the priorities overall. Of the 9 participants who answered the question, **4 found HHS's work to be very effective, and 5 found it to be effective**. No participant found it to be slightly effective or not effective.

An unexpected outcome of data collection for several existing Hallmark Health initiatives, based on the community stakeholder survey data, was lack of knowledge of and challenges in forming clear opinions on the effectiveness of interventions and programs. The survey participants were unaware in some cases that an initiative was being undertaken, or aware of an initiative, but unaware it was an identified Hallmark Health Community Benefits program or activity. There were a number of specific and unique factors that contribute to this awareness gap during the 2016 evaluation process. In several communities, the identified stakeholder was either new to their position and had yet to collaborate formally with Hallmark Health, or in working with specialized or targeted populations, had no reason or need to review and understand the full scope of programs and services Hallmark Health engages in. These factors will be clearly addressed during the planning and creation of the 2017-19 Implementation Plan.

Further, in the community forum held on May 24, participants were asked to vote on the following questions: "Do you think these and/or other HHS programs to address these primary priorities have been effective or impactful in your community?"; and "Do you think these and/or other HHS programs to address these secondary priorities have been effective or impactful in your community?" **One hundred percent of participants answered yes** to both questions.

A key factor in evaluating interventions is the consideration of existing infrastructure and programming within the service area or state-wide that addresses the primary and secondary priorities, including prevention efforts at the primary, secondary, and tertiary level that in some cases are already well established in these communities. Established prevention strategies that are highly effective can have the unintended consequence of demonstrating a lower need

around a priority in a community, by nature of their success in impacting key factors around that priority at the primary prevention level.

Evaluation of specific planned interventions is also hindered by significant delays and lack of timely available secondary public health data. This makes real time evaluation of metrics and establishing baselines for health improvement more challenging. Lacking such a definitive data set from which to measure the efficacy of specific programs (beyond process measures) also means that these early-stage evaluations rely on more subjective qualitative measures; this has been particularly true when attempting to assess the first cycle of Implementation Plan activities under IRS regulations.

Comparing 2013 and 2016

Although the methods and processes used in the 2013 Community Health Needs Assessment differ from this needs assessment, a **review of 2013 data** was conducted to inform findings for this current assessment. Please note that the 2013 needs assessment's service area profile included only HHS's six primary communities, whereas the current one includes all nine communities (both primary and secondary) in the community benefits service area. While this in some ways limits an exact side by side comparison of the data between time periods, using community-by-community comparisons offsets this issue, and overall this approach provides a more complete picture of trends and shifts across the region when assessing change during the three year period, and will make for a more optimal and comprehensive review of the region for current and future comparison.

For both the 2013 and 2016 assessments, to generate discussion with community and hospital stakeholders, indicators that had a percent difference of 5% or more than the state were flagged. Below is a summary of current findings based on comparisons to the 2013 HHS service area profile.

- Both top 5 causes of death and top 5 causes of hospitalization remained the same.
- While colorectal cancer incidence continue to be a concern, in 2016 breast cancer was no longer flagged ;lung cancer was newly flagged as higher than state rates.
- New concerns in 2016 were: higher than state rates of emergency department visits related to major cardiovascular disease, mortality rates from acute heart attack (MI), and hospitalizations related to bacterial pneumonia.
- Behavioral health including mental health and substance use disorder remains a concern in the service area: like 2013, the 2016 rates of mental disorder related mortality, alcohol and substance related ED visits, opioid-related ED visits, and opioid related mortality are higher than state-wide rates. These also include concerns related to non-substance related behavioral health issues and population specific concerns, such as dementia and medication related issues in elders.

PART 5: Health Priorities and Target Populations Identified

2016 Health Priorities Identified

Based on a synthesis of the qualitative and quantitative data collected and analyzed, and taking into account the opinions and perspectives of stakeholders throughout the community and hospital system, including public health experts, the following list of **health priorities** was generated for the 2016 CHNA process.

The 2016 primary health priorities are:

- Substance use disorders
- Behavioral health
- Cancer
- Cardiovascular disease
- Diabetes
- Infectious disease
- Access to care including barriers due to language, transportation, housing and food insecurity
- Vulnerable populations

Hallmark Health identified thirteen community health priorities to address over the next three years

The secondary health priorities identified are:

- Preventable injuries and poisonings
- Respiratory disease
- Obesity
- Violence and sexual assault prevention
- Disaster readiness and emergency preparation

Prioritization Process

Throughout the needs assessment process, preliminary results from each phase were **reviewed and discussed with HHS Community Benefits staff and leadership**, including the HHS Community Benefits Advisory Council.

The prioritization process was **influenced by the priorities identified in the previous CHNA completed in 2013**. Throughout the process, including in the community and secondary stakeholder surveys, participants were reminded of the previous list of priorities and asked to assess to what extent HHS had made steps towards addressing these priorities. They were then asked **whether and how this list of priorities should change**.

Upon review of results from all modes of data collection, the group identified and prioritized top health concerns and vulnerable populations for HHS to focus on in accordance with Internal Revenue Service (IRS) requirements. This process took place through a series of meetings between ICH and HHS staff, including two presentations on process and health information

made by ICH to the members of the HHS Community Benefits Advisory Council.

Priority health needs were determined based on:

- Identified needs and gaps in services across the service areas (triangulated from secondary data, surveys and community forums);
- Existing assets, strengths and capacity of Hallmark Health System to address needs;
- Potential assets available to realize meaningful and/or sustainable changes; and
- Organizational priorities identified through conversations with HHS leadership and their engagement with key community stakeholders and civic leaders.

Important aspects considered throughout the prioritization process included **urgency, feasibility of addressing, and likelihood of impact on each health need**. The Community Benefits Advisory Council prioritized a focus on **reducing health disparities, optimizing existing Hallmark Health strengths, knowledge, and readily available resources, and avoiding duplication of services** of other providers and agencies already in place throughout the service area.

Please note: all service area and individual town indicators that are referenced as being higher than the state are those that have a **percent difference of 5%** or more than the state. Additionally, only select communities are discussed here for each priority; comprehensive data on each town can be found in the community profiles in appendix J. Finally data for the **HHS service area** reflects data for the entire population of the nine towns, **not just those people who receive care from Hallmark Health System**.

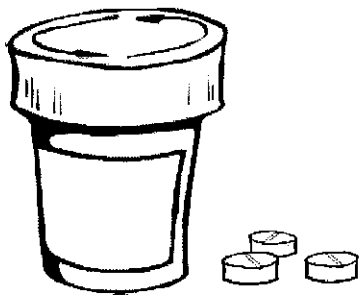
Primary Health Priorities

Substance Use Disorders

Substance use disorders emerged as a major concern across all types of data. Looking at the Community Benefits (CB) service area as a whole, **rates of alcohol/substance use-related ED (emergency department) visits** (1,015 vs. 910.3 per 100,000), and **opioid-related ED visits** (469.1 per 100,000), **hospitalizations** (352.3 vs. 332.4 per 100,000) **and mortality** (12.2 vs. 9.6 per 100,000) were higher than the state. Chart 9 below shows that although there is some variation by community, **every town in the service area reported higher rates of opioid-related hospitalization than the state.** Additionally, all but three towns reported higher than the state-wide rate of **opioid-related mortality** (chart 10). 2010-15 Malden, Medford, Melrose, Reading, Stoneham and Wakefield death certificate data [2] also shows that opioid-related deaths have been generally increasing over the last several years. Looking specifically at **youth**, rates of **alcohol/substance use related ED visits and hospitalizations** and **opioid related ED** visits are higher than the statewide rate for 15-19 year olds (see Appendix J for community specific data). Wakefield and Reading have **more than twice the state rate of opioid ED visits** (488.4 and 400.3 per 100,000 compared to 176.3), North Reading has a rate more than 3 times higher than the state(625.2), and Saugus a rate more than **4 times** higher (724.2 per 100,000).

> "Substance abuse is a wide-spread problem that ultimately affects the entire community"
> --Community stakeholder

Looking at data from local surveys collected by the schools (Youth Risk Behavior Survey (YRBS) or Communities that Care (CTC), depending on the instrument used by each community), a common pattern of substance use and abuse reflects higher rates than the state as a whole. Medford, Melrose, Reading, Saugus, Stoneham and Wakefield all have higher rates of lifetime and/or 30-day alcohol use, and Malden, Medford, Melrose, Reading, Saugus and Wakefield all have rates of lifetime and/or 30 day marijuana use higher than the state. (Note survey data was unavailable for analysis for North Reading).



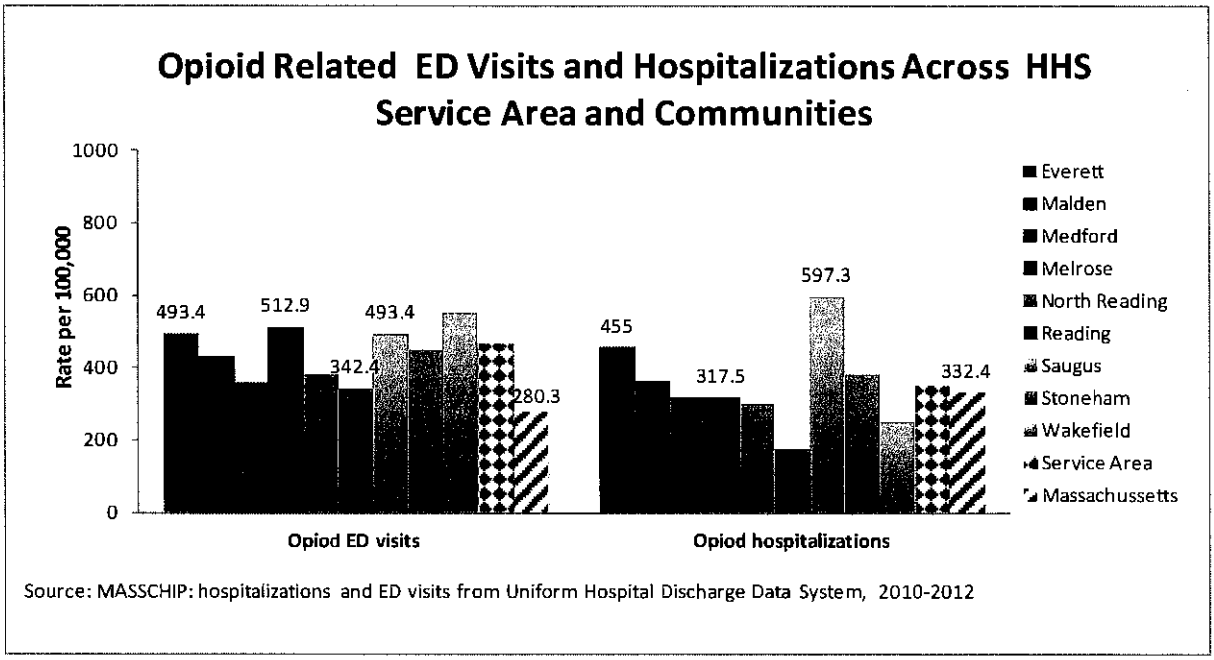
In line with the secondary data, it was clear that **substance use disorders are a large concern** among residents and stakeholders in the HHS service area. Substance use was the **most frequently chosen health concern** for both community stakeholders (10 of 11) and internal stakeholders (10 of 13). Five community stakeholders also cited substance use as the biggest issue to watch out for over the next few years. Youth were particularly noted as being in need of greater and more integrated prevention and treatment services. Substance use disorders

[2] Death certificate data collected by the Mystic Valley Public Health Coalition, through their Massachusetts Opioid Abuse Prevention Collaborative (MOAPC) grant, 2010-2015.

were also **mentioned as a chief concern** at all four community forum events, again, especially amongst youth.

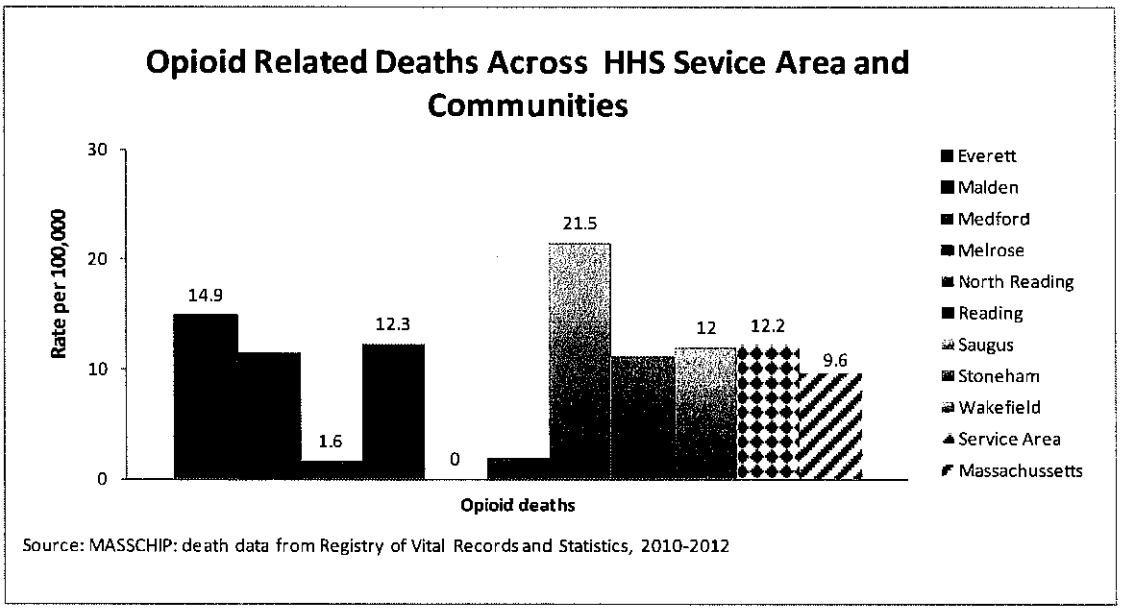
Although there is frequent overlap in addressing substance use disorder and behavioral health as co-occurring conditions, it should be noted that within each condition there are independent areas of focus and opportunities for intervention that are best addressed as two separate priorities with many common and contributing factors and impacts.

Chart 9: Opioid Related ED Visits Hospitalizations



Source: MASSCHIP: hospitalizations and ED visits from Uniform Hospital Discharge Data System, 2010-2012

Chart 10: Opioid Related Deaths



Source: MASSCHIP: death data from Registry of Vital Records and Statistics, 2010-2012

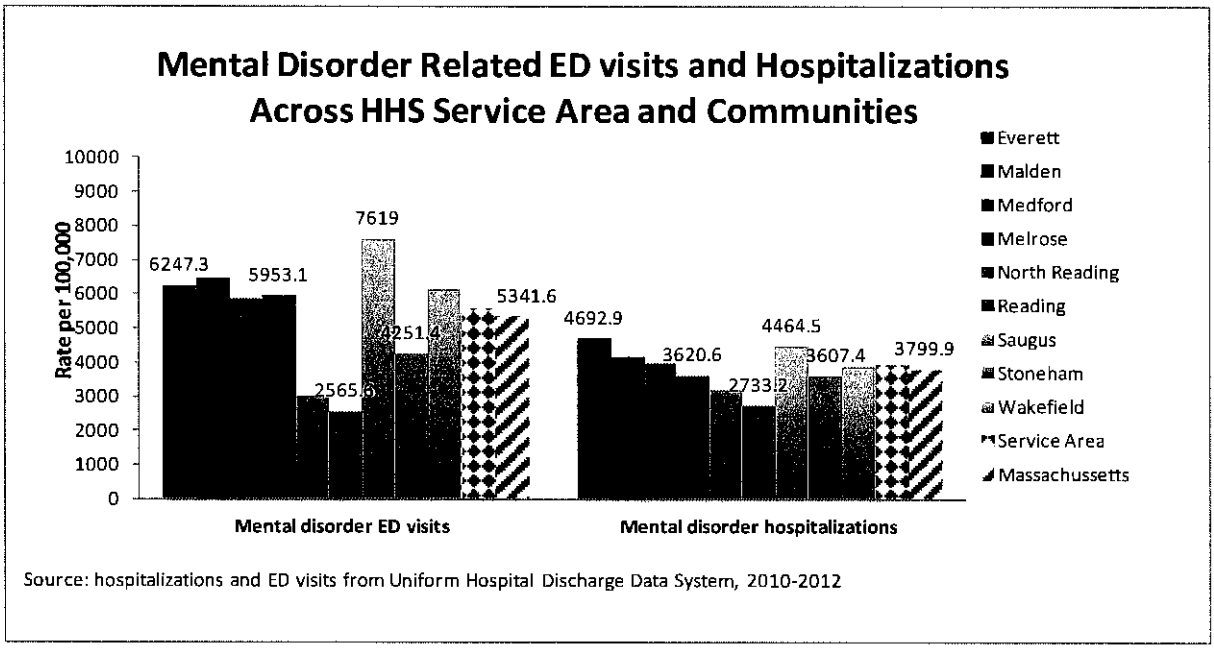
Behavioral Health

Over the HHS CB service area as a whole, the **rates of mental disorder-related mortality (60.7 per 100,000) were generally higher than the statewide rates** (52.6 per 100,000). Mental disorders are also the **second highest cause of death** for the HHS service area as a whole, which is comparable to the state of MA.[3] Looking specifically at adults 65 and older, the rates for both mental disorder-related ED visits (3,830.4 vs. 3,422.3 per 100,000) and hospitalizations (12,010.6 vs. 10764.6 per 100,000) were higher than MA as a whole.

For individual towns (see chart 11), **6 of the 9 communities in the service area** (Malden, Medford, Melrose, Wakefield, Everett and Saugus) had higher rates than MA as a whole for mental disorder health related emergency department (ED) visits. Three of the 9 communities also had **higher rates of mental health related hospitalizations** (Malden, Everett and Saugus).

[3] Please note that the available statistics address "mental disorders", including hospitalizations, ED visits, and mortality related to dementia, which is not usually included in the category of mental health when community members discuss this topic.

Chart 11: Mental Disorder Related ED Visits and Hospitalizations



Source: hospitalizations and ED visits from Uniform Hospital Discharge Data System, 2010-2012

Looking at youth ages 15-19, the rates of mental disorder related ED visits and hospitalizations are higher than the state for the service area as a whole.

Six of the nine communities collected local survey data on mental health through the YRBS or CTC survey (Medford, North Reading and Stoneham did not). This data shows that high school students in Everett, Malden, Melrose, Reading and Saugus all experienced depression at rates higher than the state. Those in Melrose, Reading and Wakefield seriously considered suicide at higher rates, with those in Reading and Wakefield actually attempting suicide at rates higher than the state. Finally, high school students in Everett, Melrose, Reading and Wakefield were bullied at school at higher rates than the state as a whole.

Behavioral health was identified as the **second-highest priority among primary and secondary stakeholder survey participants**. This included recognition of the issue as strongly related to and entirely independent of substance use disorders in terms of community impact and urgency.

> *"As the city of Everett becomes more gentrified…I anticipate that there will be a surge in mental health and behavioral health issues as a result of the economic insecurity and housing instability that many Everett residents will be contending with"*
> *--Community stakeholder*

Participants in all four community **forums also noted behavioral health as an important issue**. During a poll, eight out of twenty-one participants in the May 2016 forums chose it as the health issue that concerned them the most. Participants in the

two 2015 community conversation events mentioned the frequent effects of stress and anxiety on young families, and cultural differences in the way different immigrant groups perceive and experience behavioral health issues.

Cancer

Two main indicators were examined for cancer: incidence (the number of new cases) and mortality (the number of people who die from the disease). In interpreting this data, note that higher incidence and lower mortality suggests that while there are more new cases of the disease, fewer individuals are dying from it; on the other hand, lower incidence and higher mortality suggests that while there were fewer new cases of the disease, more individuals may have been dying from it.

"Cancer is an ongoing concern for Saugus, especially in light of the ash land fill and incinerator"— Community stakeholder

Although the rate of cancer as a whole for the CB service area is comparable to MA, when looking at **specific cancers and at individual towns** definite areas of concern were noted. (The rate of all cancers for the HHS service area is 484.7 per 100,000, compared to a MA-wide rate of 480.1 per 100,000. The rate of all cancer mortality is also comparable to that of the state). The rate of **colorectal cancer**, at 42.3 per 100,000, is higher than the MA rate of 38.0. The **mortality rates for colorectal cancer** (42.3 versus 38.4) and for **lung cancer**, 69.6 versus 65.9), are also higher than the statewide rate. **Lung cancer is also the third highest cause of death**, which is comparable to the state.

Within specific towns, there are multiple areas of concern. When looking at those towns that have rates higher than MA as a whole:

- One community, Saugus, has higher rates of **overall cancer incidence**
- Three communities, Malden, Everett and Saugus, have **higher overall cancer mortality**
- Six towns have higher **breast cancer** incidence rates: Melrose, North Reading, Reading, Saugus, Stoneham, and Wakefield. Three had higher breast cancer mortality rates when compared to the state: Medford North Reading, and Reading
- Two communities have higher **ovarian cancer** incidence rates, Medford and Stoneham, while three (Malden, Wakefield and Stoneham) have higher mortality rates
- The six communities of Malden, Medford, Melrose, Saugus, Stoneham, and Wakefield have higher **colorectal cancer** incidence rates and three, Malden, Melrose and Wakefield, also have higher rates of colorectal cancer mortality
- Three communities (Everett, Malden and Saugus) have higher rates of **lung cancer** incidence, and four (Everett, Malden, Medford and Saugus) have higher rates of lung cancer mortality
- One community, North Reading, has a higher rate of **prostate cancer** incidence (no communities have a higher rate of mortality)
  (See specific community data profiles in Appendix J for data for individual towns)

Cancer followed substance use disorder and behavioral health as the third most frequently indicated health priority by respondents to the internal and stakeholder surveys, with seven

respondents noting it as an area of concern.

Cardiovascular Disease

Looking at the secondary data for cardiovascular disease in the HHS CB service area as a whole, several indicators of concern emerge at or above the state as a whole. **Major cardiovascular disease emergency department visits** (1,348.1 vs. 1,294.1 per 100,000) and **acute heart attack (MI) mortality** (27.4 vs. 25.3 per 100,000) **rates** are higher compared to the state. Circulatory system diseases are the **top cause of mortality**, and the **3rd highest reason for hospitalization** (however both are comparable to the state as a whole). **Major cardiovascular disease hospitalizations for adults 65 and older** (7881.0 vs. 7309.7 per 100,000) were also higher than the state.

Again, service area-wide rates conceal significant variation between the communities (see chart 12 and 13). **Reading** has the lowest rate of hospitalizations for major cardiovascular disease, while **Everett has the highest**. Reading again has the lowest rate of ED visits for major cardiovascular disease, while Everett has a dramatically higher rate than any other community. While Saugus and Everett have the highest and nearly identical rates of cardiovascular disease mortality, Medford has a rate of cardiovascular disease mortality that is much lower than any of the surrounding communities.

When comparing town-specific cardiovascular indicators to the state rates, the following towns were flagged to be higher than the state in these areas:

- Major cardiovascular disease emergency department visits: Everett, Malden and Saugus
- Major cardiovascular disease hospitalizations: Everett, Malden and Medford
- Stroke emergency department visits: Everett, Melrose, North Reading, Saugus and Wakefield
- Stroke hospitalizations: Everett and Melrose
- Acute heart attack (MI) emergency department visits: Everett, Medford, Reading, Stoneham and Wakefield
- Acute heart attack (MI) mortality: Everett

(See specific community data profiles in Appendix J for data for individual towns)

Although cardiovascular disease was not among the most frequently-identified concerns of participants in the stakeholder surveys or the community forum polls, it did arise in the context of lifestyle contributors such as **unhealthy diets and exercise, and obesity.**

Chart 12: Cardiovascular Related Deaths across HHS Service Area and Communities

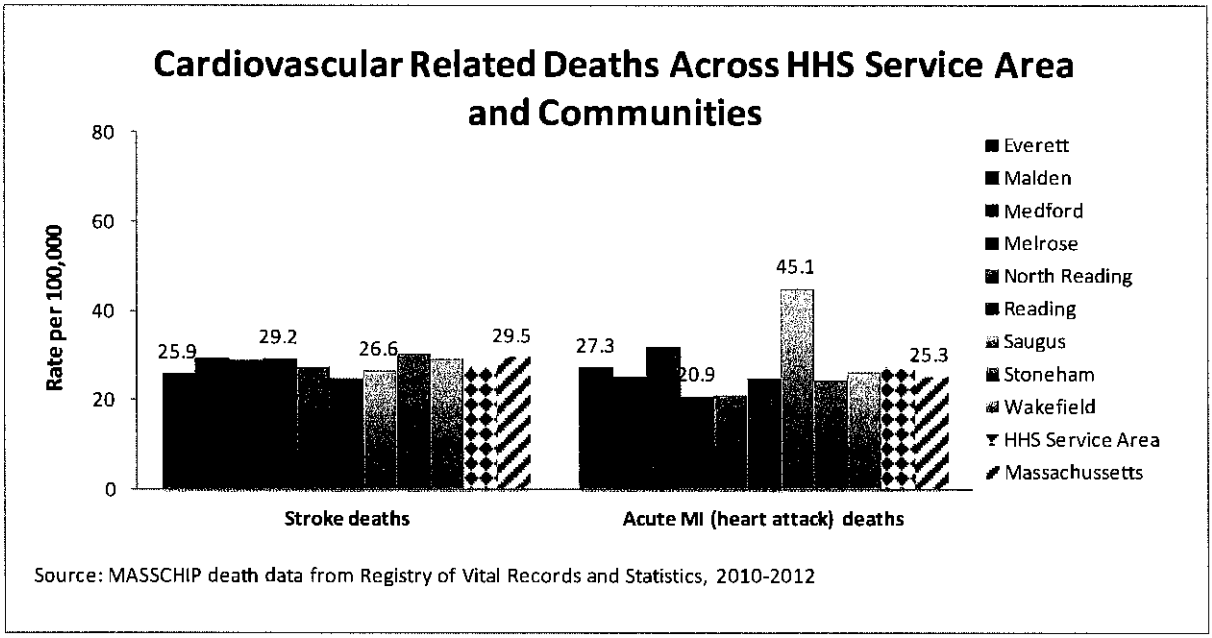
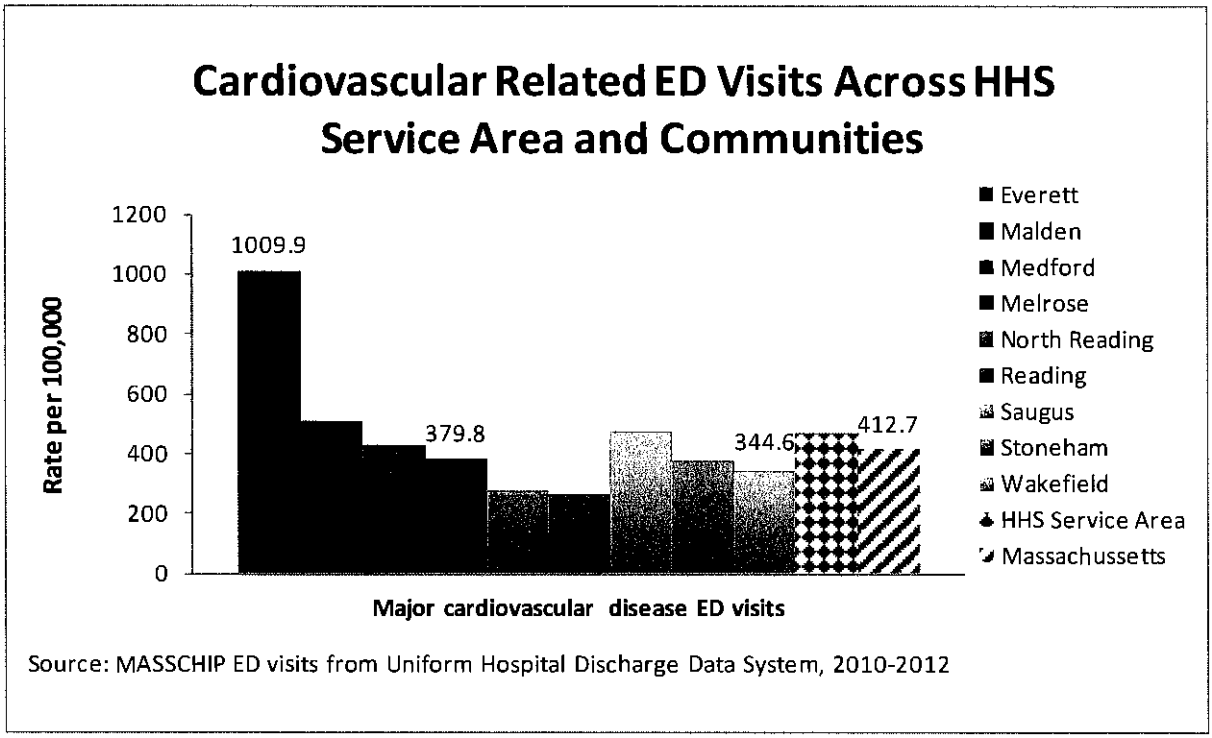


Chart 13: Cardiovascular Related Emergency Department Visits across HHS Service Area and Communities

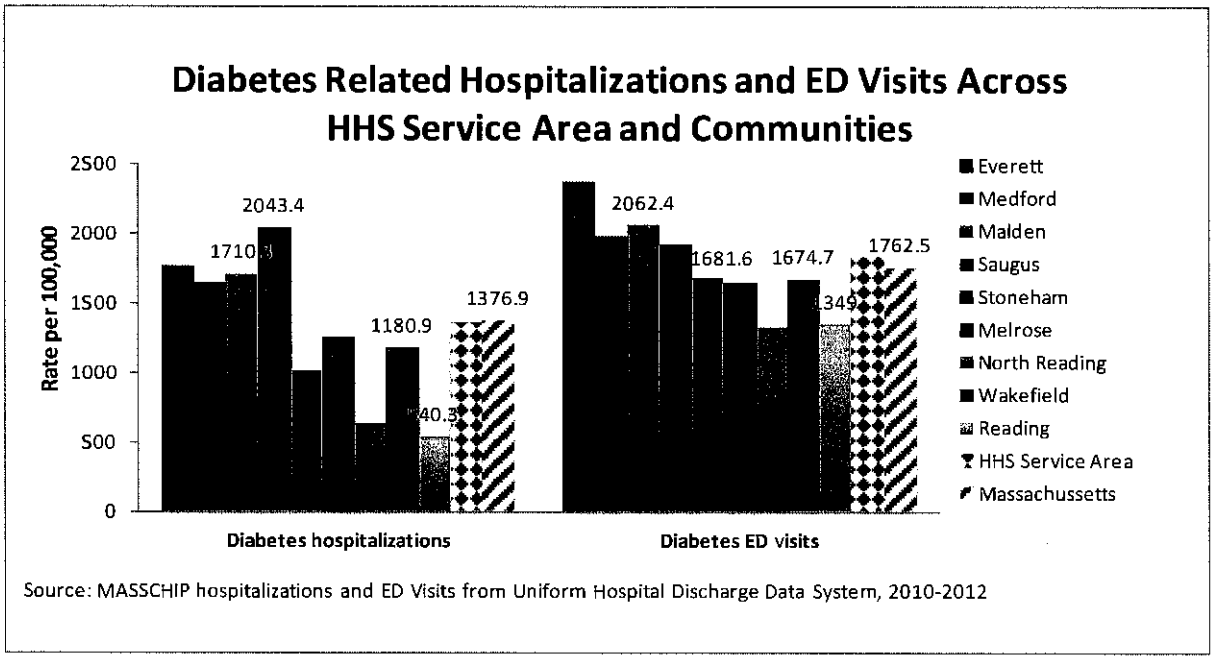


Diabetes

For the HHS community benefits service area as whole, **diabetes is the highest cause of hospitalization**. For adults **ages 65 and older,** the rate of **diabetes related emergency department visits** (4358.0 vs. 4,000.7 per 100,000) **and hospitalizations** (9,259 vs. 8,394.1 per 100,000) are both higher than the MA rates. **Youth ages 15-19** also had a higher rate of **diabetes-related emergency department visits** (413.7 vs. 93.3 per 100,000).

Consistent with other disease and disorder profiles, within each of the communities there were variations (see chart 14). Six communities (Everett, Malden, Medford, Reading, Saugus and Wakefield) had **diabetes related emergency department visit** rates higher than the state as whole. Four communities (Everett, Malden, Medford and Saugus) were flagged with **higher rates of hospitalization** and one (Malden) had a **higher rate of diabetes-related mortality**. In all communities, diabetes was either the first or second highest cause of hospitalization. See Appendix J for specific community profiles.

Chart 14: Diabetes Related Hospitalizations and ED Visits



Source: MASSCHIP hospitalizations and ED Visits from Uniform Hospital Discharge Data System, 2010-2012

Diabetes arose as one of the **major concerns during the second** forum held in August 2015, with community members both reporting having used HHS resources for diabetes care and expressing the need for more such services. In the community stakeholder survey, **diabetes care was similarly reported as a concern**: 4 of the 11 respondents predicted that diabetes would emerge as a priority in the coming years due to rising rates of obesity. As noted in the cardiovascular disease section, the contributing factors of **unhealthy diets, lack of exercise,** and **obesity** were also cited as a concern in the forums and surveys.

Infectious Diseases

Although there is no HHS service area-wide data available for the infectious diseases of HIV/AIDS, hepatitis C, Chlamydia, and tuberculosis, looking at the individual town rates, there are multiple concerns noted. The following towns were flagged with rates higher than the state:

- **HIV /AIDS** prevalence (Everett and Malden) and incidence (Everett, Malden and Medford)
- **Hepatitis C** incidence (Everett and Saugus)
- **Chlamydia** (Everett and Malden)
- **TB incidence** (Malden)

(Note that incidence is the number of new cases, and prevalence is the total number of people living with the disease).

By their nature, infectious disease and risks associated with them are not limited by geographical boundaries, thus it is best to address these through regional and coordinated responses, including specific health messaging and education.

Also of note was that infectious diseases were concerning to participants of the community stakeholder survey. This was largely reflected in the context of the **future prospect of dealing with emerging diseases related to climate change as reported in the news**: the majority of comments were about Zika, with one mention of Ebola as examples of potential concerns in the future.

Access to Care

Overcoming barriers to routinely accessing healthcare emerged as a common concern in the stakeholder surveys and forums. Some barriers commonly mentioned included language barriers, transportation difficulties, economic insecurity/poverty, housing insecurity, and food insecurity. These concerns also extend to impacts on functional access to health services addressed by education and training of clinicians and allied health professionals, to better reflect and fully engage individuals who reflect diversity of racial, cultural, linguistic, sexual orientation, and gender expression.

Community stakeholders participating in the survey exhibited an awareness of how these barriers to care overlapped with one another, discussing them as they related to vulnerable populations. As one stakeholder wrote: "[We serve] an increasingly large immigrant population, which is oftentimes more at risk and unable to access services because of eligibility issues. **Economic instability** is also a major factor for many of [our] clients whom....contend with seasonal and/or **unstable employment** options due to their immigrant status, and low English proficiency". Another wrote that in their work, "Challenges **include lack of access to healthy foods** due to lack of transportation, time or knowledge".

A previous key factor in addressing access to care—enrollment in insurance coverage— remains

an aspect of preserving access. Despite mandates at the state and federal level around insurance coverage, maintenance of coverage has superseded concerns around initial access and enrollment goals. Often issues related to inadequate or loss of insurance coverage correlate specifically to one or more social determinant factors impacting the individual or family.

In the HHS internal stakeholder survey, when asked to select the three health issues that pose the greatest concern in the HHS CB service area, four respondents selected **housing/homelessness**, three each selected **access to care and services for vulnerable populations**, **affordable and accessible transportation**, and **economic insecurity**, and one selected **food insecurity**.

Table 4: Food Insecurity Rates for HHS Communities

Everett	13.1%
Malden	14.5%
Medford	10.9%
Melrose	8.4%
North Reading	5.9%
Reading	5.6%
Saugus	7.6%
Stoneham	8.5%

Access to care and related social determinants was also a predominant theme in the community feedback gathered at community forums. Concerns heard from this group included:

- **Cost of insurance** and co-pays
- The high cost and difficulty of obtaining **healthy food**
- The **economic challenge** associated with high cost of living in the area
- **Lack of safe, affordable housing**
- Lack of **easy-to-access public transportation** in some areas
- **High cost of childcare**
- **Language and cultural barriers for immigrants**, including associated isolation

On reviewing data provided by the Greater Boston Food Bank, rates of **food insecure households** varied in the service area by community[4], from a low of 5.6% in Reading to a high of 14.5% in Malden (see table 4). (Food insecurity is defined as "the household-level economic and social condition of limited or uncertain access to adequate food").

Additionally, a map created by the Greater Boston Food Bank shows **which segments of the**

[4] http://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/definitions-of-food-security.aspx, accessed August 16, 2016.

HHS communities experience food insecurity. Reading, for example, contains no areas in which the food insecure population exceeded 7.5 percent. North Reading, Stoneham and Wakefield have no areas in which the food insecure population is larger than 11.8 percent. In contrast, Medford, Melrose, Everett and Saugus have significant areas in which between 17.3 percent and one quarter of the population is food insecure, and Malden contains large areas in which between a quarter and a half of the population is food insecure. (See Appendix I: Food insecurity in Eastern Massachusetts Map)

Identified Vulnerable Populations

- Older Adults
  - At risk for abuse
  - Limited mobility
  - Isolated / depression
- Immigrants
  - Recently arrived
  - Unaccompanied minors
  - Undocumented status
  - Non-English speakers
- Living in Poverty
  - Homeless/ housing insecurity
  - Lack of access to healthy foods
  - Uninsured
- Children and Families
  - Young/single parents
  - Families with young children
  - Infants
- Other Vulnerabilities
  - People with disabilities
  - Populations prone to substance use
  - Women

Vulnerable Populations

An important priority for HHS is reducing health disparities, and **key to that is identifying the specific and designated vulnerable populations at highest risk** for experiencing these disparities and subsequent health inequity and less successful outcomes. Vulnerable populations in the HHS CB service area were identified by participants in the surveys and the forums, and the secondary data review also helped to map out the health disparities experienced by key populations.

There was broad consensus across the survey responses and in the forums that **older adults** are a vulnerable population. Participants noted that in many cases elders may have limited mobility, experience social isolation, and are at risk for depression, issues of polypharmacy (the use of multiple medications), and caregiver abuse and neglect. **Immigrants**, especially those with limited English language skills, were the population identified next most frequently. Especially vulnerable among immigrants are those who have only recently arrived, those with undocumented status, and unaccompanied minors. The next most-identified vulnerable population was **people living in poverty**, and the associated challenges of obtaining healthy food and being under or uninsured. Especially noted were those experiencing homelessness or housing insecurity. **Children and families** were also mentioned frequently, including challenges for young and/or single parents, changing family structures, and the high cost of standardized, quality childcare.

A number of other vulnerable groups were also identified, **including people with disabilities,**

and populations experiencing disproportionate levels of behavioral health and substance use disorders. Generally speaking, these populations are reflected within other primary priorities identified through secondary data analysis.

Looking at the secondary data, in the service area overall, **adults 65 years old and older** were hospitalized at rates higher than the statewide rates for major cardiovascular disease, diabetes, hip fracture, mental disorder, and bacterial pneumonia. They also had higher than statewide rates of emergency department visits for diabetes, mental disorders (including both behavioral mental health and dementia), and COPD (chronic obstructive pulmonary disease, including emphysema).

Secondary Health Priorities

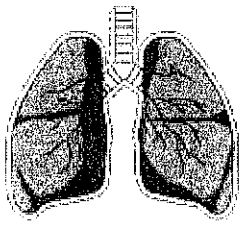
Preventable Injuries (including poisonings)

Accidental injuries are a concern for specific populations and in certain towns. As one stakeholder wrote, the older adult population is growing and "with more seniors, we will see more cases [of] trips and falls". This concern was confirmed by the quantitative data: **Adults 65 and older reported higher rates of hospitalization due to hip fracture injury** (658.4 vs. 621.3 per 100,000) compared to the state. **Youth ages 15-19 have a higher rate of all injury and poisoning hospitalizations** (413.7 vs. 93.3 per 100,000). Everett, Medford, Saugus and Wakefield have a higher rate of all **injury and poisoning** hospitalizations than the state. Everett has a higher rate of all injury and poisoning emergency department visits, Saugus and Wakefield have a higher rate of injury and poisoning mortality, and North Reading, Stoneham and Wakefield have higher rates of **hip fracture injury hospitalizations**. (See Appendix J for specific community data profiles).

Quantitative data suggested that poisoning related incidents may also be an area for greater consideration in the context of injury prevention; these have been areas of ongoing interest and intervention for local and regional law enforcement agencies, including both the Middlesex District Attorney's Office and Middlesex County Sheriff's Department.

Respiratory disease

Bacterial pneumonia-related hospitalizations rates were higher for the HHS CB service area as a whole compared to the state (731.5 vs. 670 per 100,000). Looking at sub-populations, those **65 and older had higher rates of bacterial pneumonia related** hospitalizations (3919.8 vs. 3435.2 per 100,000) **and chronic obstructive pulmonary disease (COPD)** related ED visits (2535.1 vs. 2307.6 per 100,000). **Youth ages 15-19 had higher rates of COPD** related ED visits (2286 vs. 1694.2 per 100,000) and hospitalizations (505.2 vs. 439.8 per 100,000).



Chronic lower respiratory disease was the 4th highest cause of death for the service area as a whole, comparable to the state. **Chronic obstructive pulmonary disease and respiratory, pneumonia and influenza related illnesses were the 3rd and 5th highest causes of hospitalization**, respectively.

> *"Obesity rates are the highest in some of the Latino immigrant populations- this is the underpinning of diabetes, hypertension and cardiac disease..."*
> *--Community stakeholder*

Finally, looking by community, rates of **asthma-related hospitalizations** and **childhood** (age 14 and under) **asthma-related ED visits** were higher than the state rate in Everett. Additionally, the rate of bacterial-pneumonia related hospitalizations was higher in Everett, Malden, Medford, Melrose, Reading, Saugus and Stoneham. (See Appendix J for specific community data profiles).

Obesity

As a contributing factor to diabetes and cardiovascular disease, two major concerns in the service area, obesity reflects a strong secondary priority based on the high level of intersection of multiple primary priorities. The correlation between behavioral health, as well as access to care issues related to food insecurity and lack of access to healthy foods, all reflect on obesity as a common factor impacting health in the region. Four stakeholder survey participants specifically noted obesity as a health concern, and the health system's expertise in bariatric medicine provides unique opportunities to continue addressing this issue on a secondary basis. Among internal stakeholders, **obesity** was identified **one of the top 3 health concerns** facing the service area communities.

Violence

Although quantitative data is unavailable to measure the burden for the communities, **violence** emerged as a concern in the community stakeholder survey. This priority area also reflects an **area of engagement for Hallmark Health in its communities for some time through ongoing coalition work and collaboration**. The concern and threat of violence, including but not limited to **intimate partner abuse, human trafficking, and gang activity**, has been experienced or documented among participants in HHS community based programs. Along with disaster readiness, violence as a secondary priority affords opportunities for community-wide, primary and secondary-based prevention strategies-to enable early intervention and mitigation of violence as it manifests as the result and impact to numerous social determinant factors. In addition to direct staff and program experience, discussion of the topic occurred in the stakeholder surveys, in the context of gang violence, violence and behavioral health and substance abuse, and sexual assault and bullying.

Disaster readiness and emergency preparation

Given the location of Hallmark Health's two hospital campuses and their location in the Metropolitan Boston area, plus the relatively large and diverse population reflected within the community benefit catchment area, **disaster and emergency planning remain an ongoing priority for the health system**. This is a secondary priority in relation to the health system's role as a convener of resources, if not necessarily the leading agency in their deployment and implementation. In addition to natural disasters and unexpected events, including acts of terror, maintaining a coordinated and engaged central emergency response is essential to meeting the requirements of addressing several of the health system's health priorities, including substance use disorders, behavioral health, and infectious disease. This has historically been achieved through regional representation on EMS leadership, local medical direction, and ongoing disaster drills and planning that incorporate other aspects under Hallmark Health, including its VNA and Hospice and affiliated physican practices. The development of a major hotel/casino resort in Everett by 2019 also has the potential to dramatically increase the number of new and non-residential visitors to the service area, as well as creating logistical and functional considerations related to emergency planning and response.

PART 6: Service Area Assets and Resources

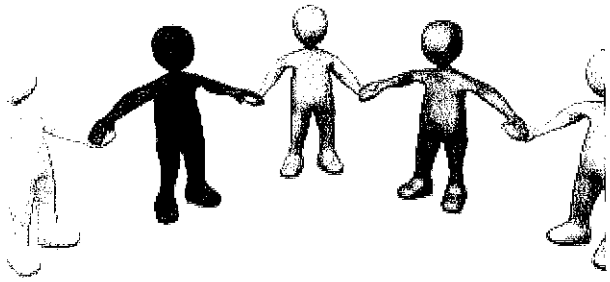
In conducting a comprehensive community health needs assessment, it is important to assess not only community needs but also community assets. This can help identify gaps in resources, reduce duplication of services, and identify areas of strength and existing collaborations to expand upon.

Across the HHS CB service area, a variety of HHS and non-HHS community programs, services, and resources exist to address various health concerns.

Community Strengths and Assets

A primary goal of the stakeholder surveys was to determine what stakeholders see as the health-related characteristics of their communities. When asked to choose the **top 3 assets or strengths** related to health promotion, participants in the HHS internal stakeholder survey chose:

- "beautiful lakes and parks, where many events are held" (4);
- "strong city government /city support" (3);
- "school support, promoting healthy style living with students" (3);
- "proximity to Melrose/Wakefield Hospital / Reading Clinic" (3)".



In comments about community strengths, participants from both the community and stakeholder surveys cited ongoing health efforts, including **various collaborations and partnerships between different sectors in the communities and ongoing community education efforts**. A key area of strength within the region is also the **diversity of stakeholders and available health care delivery options** within or serving the populations within the catchment area. These include among others a Federally Qualified Health Center, safety net hospital, free clinic, intensive home visiting, and community based nutrition and behavioral health services, in addition to an array of primary and specialty physician care. Essential to the value of these assets is engagement and communication that allow organizations that compete in some areas of operations, the opportunity to collaborate as partners through coalitions and in shared efforts that support community health improvement.

Of existing programs, the ones to get the most recognition among participants in the community forums were the **Healthy Families Program** and **WIC**. The **Mobile Food Mart**, the **Visiting Nurses Association**, **Baby Café, and the North Suburban Child and Family Resource Network** were also all familiar to participants.

Strengths of Hallmark Health System in the Community

Community and internal stakeholders cited some of **HHS's strengths in the community**: helping with food access and fighting hunger, including the mobile food bank, facilitating substance abuse prevention coalition meetings, serving on Everett's Joint Committee for Children's Health Care, building relationships across organizations, including health systems, health event sponsorships, partnerships around state and federal grant funding, the Mothers Helping Mothers Clothing store, North Suburban WIC, the community health education, human rights work, and collaborations with community leaders.

> *"HHS has been an integral partner in helping to provide access to fresh food, especially produce, to those who are food insecure ,and [has] done so in a dignified manner."*
> *--Community stakeholder*

One central focus of Hallmark Health's community benefits work is to continue to **foster relationships with a wider array of community groups and local leaders**, including faith-based and grassroots organizations. Such relationships provide insight into how these groups view Hallmark Health System's role in their community, how our system can improve the ways we serve diverse residents, and how the system should strengthen collaboration to best meet divergent health needs.

As part of its efforts to improve health status in the catchment area, Hallmark Health System also participates in a variety of broad-based community coalitions and initiatives that work towards **addressing the specific and general health needs in these cities and towns**. A sample of these memberships include: Mystic Valley Elder Services Provider Task Force; local Councils on Aging; the Healthy Families Community Coalition; The Joint Committee for Children's Health Care in Everett (JCCHCE); Medford Health Matters; Tri-City Hunger Network; Chinese Culture Connection; substance abuse prevention coalitions in Malden, Melrose, Medford, Wakefield, Reading, Saugus, and Stoneham; the Malden's Promise Coalition; DPH Mass in Motion programs in Melrose-Wakefield, Malden, and Everett; and the Melrose, Stoneham, and Wakefield Alliances Against Violence, respectively.

Appendices

A. Organizations Contributing to the Assessment
B. Secondary Data Sources and Indicators Reviewed
C. Report from March 2015 Community Forum
D. Report from August 2015 Community Forum
E. Community Stakeholder Survey Instrument
F. Community Stakeholder Survey Report
G. Internal Stakeholder Survey Instrument
H. Internal Stakeholder Survey Results
I. Food insecurity in Eastern Massachusetts Map
J. Community Data Profiles

APPENDIX A: ORGANIZATIONS CONTRIBUTING TO THE ASSESSMENT

Key Partners

Action for Boston Community Development (ABCD)	Health Care for All	Melrose Substance Abuse Prevention Coalition
American Cancer Society	Health Care Without Harm	Middlesex County District Attorney
Asian American Civic Association	Housing Families, Inc.	Middlesex Recovery
American Diabetes Association	Immigrant Learning Center of Malden	Mt. Auburn Hospital
American Heart Association	Institute for Community Health (ICH)	Mystic Valley Elder Services
American Lung Association	Jewish Child and Family Services	Mystic Valley Public Health Coalition
American Red Cross	Joint Committee for Children's Health Care in Everett (JCCHCE)	Massachusetts Opioid Abuse Prevention Collaborative (MOAPC)
Baby Café USA	Joslin Diabetes Center	Mystic Valley Tobacco & Alcohol Program (MVTAP)
Baby Friendly America	La Comunidad, Inc.	Substance Abuse Prevention Collaborative (SAPC)
Boston Bruins Foundation	Local Arts Councils	North Shore Elder Services
Boys and Girls Clubs of Middlesex County	Local Boards of Health	North Shore Rescue Mission
Bread of Life	Local Chambers of Commerce	Northeastern University
Bayrd & Marshall Foundations	Local Civic Groups (Rotary, Kiwanis)	Oak Grove Improvement Organization
Burbank YMCA of Reading	Local Councils on Aging	Partners HealthCare, Inc.
Cambridge Health Alliance	Local Early Intervention (EI) Programs	Portal to Hope
Cardinal Health Foundation	Local Faith-Based Organizations	Reading Coalition Against Substance Abuse (RCASA)
Catholic Charities	Local Food Recovery Agencies	Regional EMS Providers
Children's Trust of Massachusetts	Malden Early Learning Center (CFCE)	Regis College
Chinese Culture Connection	Malden Homelessness Task Force	RESPOND, Inc.
CMS Innovation Forum	Malden YMCA	The Salvation Army
Community Health Network Area 15 & 16	Malden's Promise Coalition	The Sharewood Project
Community Family Human Services, Inc.	Massachusetts General Hospital	Somerville Cambridge Elder Services
Community Servings, Inc.	Massachusetts Departments of:	South Bay Mental Health Center
Commonwealth Corporation	Children & Families (DCF)	Staples, Inc. & Staples Foundation
Cross Cultural Communications, Inc.	Conservation and Recreation (DCR)	Stoneham Alliance Against Violence
Customized Communication, Inc.	Early Education & Care (EEC)	Stoneham Theatre
East Boston Neighborhood Health Center	Public Health (DPH)	Tailored for Success
Elder Services of the North Shore	Transitional Assistance (DTA)	Triangle, Inc.
Elder Services of Merrimack Valley	MA Executive Office of Elder Affairs	Tri-City Homelessness Task Force
Eliot Community Human Services	MA Health Policy Commission	Tri-City Hunger Network
EMARC	Massachusetts Hospital Association	Tufts Medical Center
Everett CFCE Grant Program	Mass in Motion (Everett, Malden, Medford, Melrose/Wakefield)	Tufts University
Families First	Medford Family Network (CFCE)	WAKE-UP: Wakefield Unified Prevention
Friends of Middlesex Fells Reservation	Medford Health Matters	Wakefield Alliance Against Violence
Friends of Oak Grove	Medford Substance Abuse Task Force	West Medford Community Center
The Greater Boston Food Bank	Melrose Alliance Against Violence	Winchester Hospital/Lahey Health
Greater Lynn Senior Services	Melrose Birth to Five	YouthHarbors @ JRI
Habit OPCO	Melrose Community Coalition	YWCA of Malden
Hallmark Health VNA and Hospice	Melrose Human Rights Commission	Zonta Clubs of Malden and Medford
Hallmark Health Medical Associates	Melrose Family YMCA	Zoo New England-Stone Zoo

APPENDIX B: SECONDARY DATA SOURCES & INDICATORS REVIEWED

Publicly Available Secondary Data Sources & Indicators Reviewed

Data Source	Year(s) Most Recently Available	Data Indicator(s) Reviewed
US Census Bureau American Community Survey (ACS)	2010-2015 (5-Year Estimates)	- Total Population - Age breakdowns (under 5 years old; under 18 years old; 18 to 34 years old; 35 to 64 years old; over 65 years old; over 85 years old) - Race/Ethnicity breakdowns (Asian – non-Hispanic; Black/African American – non-Hispanic; Hispanic; Some other race – non-Hispanic; White – non-Hispanic) - For ethnicities greater than 20%, top 3 origin sub-populations - Foreign-born residents - Country of origin if foreign-born (Africa; Americas; Asia; Europe) - Top 5 languages spoken at home - Highest educational attainment (less than high school; high school; some college; bachelor's degree; graduate/advanced degree) - Income (median household income; median per capita income) - Poverty status (children under 18 in poverty; families in poverty; population 65+ in poverty) - Housing units by structure (1 unit; 2 units, 3-9 units, 10-19 units, 20+ units) - Housing units that are renter-occupied - Median gross rent - Gross rent or owner costs as a percentage of household income (30% or more) - Health Insurance (No health insurance coverage)
FBI Uniform Crime Report	2012	- Crime rates, per 100,000 (violent crimes; property crimes)
US Dept. of Labor Bureau of Labor and Statistics, Local Unemployment Statistics	2014 (Average of Jan to Dec monthly rates)	- Unemployment rate
Massachusetts Department of Elementary and Secondary Education (DESE), School and District Profiles	2015-2016	- Public school enrollment race/ethnicity (African-American; Asian; Hispanic; White; Multi-Race) - Special populations (first language not English; limited English proficient; students with disabilities, low income students)
	2014-2015	- Public school graduation and drop-out rates (students graduating in 4 years; students dropping out)
	2013-2014	- Public school graduates attending college/university
MA DESE and MA Department of Public Health (MDPH), 2013 Health and Risk Behaviors of MA Youth Report, May 2014	2013	Self-reported state high school rates of: - Substance use (alcohol, ever used; alcohol, used in last 30 days; tobacco, ever used; tobacco, used in last 30 days; marijuana, ever used; marijuana, used in last 30 days; prescription opioids, ever used; prescription opioids, used in last 30 days) - Sexual activity (ever had sexual intercourse; used

		condom at last intercourse, of those sexually active) - Mental health (experiencing depression in last 12 months; seriously considering suicide in last 12 months; attempted suicide in last 12 months; was bullied at school in last 12 months)
Local Youth Risk Behavior Surveys or Communities that Care Surveys where available (Everett 2014-2015; Malden 2013-2014; Medford 2015; Melrose 2013; Reading 2015; Saugus 2015; Stoneham 2015; Wakefield 2014)	Various Years (most recent year available in each town)	Self-reported local high school rates of: - Substance use (alcohol, ever used; alcohol, used in last 30 days; tobacco, ever used; tobacco, used in last 30 days; marijuana, ever used; marijuana, used in last 30 days; prescription opioids, ever used; prescription opioids, used in last 30 days) - If available, sexual activity (ever had sexual intercourse; used condom at last intercourse, of those sexually active) - If available, mental health (experiencing depression in last 12 months; seriously considering suicide in last 12 months; attempted suicide in last 12 months; was bullied at school in last 12 months)
Massachusetts Department of Public Health (MDPH) MassCHIP database	Various Years	(see below)
MDPH Massachusetts Cancer Registry	2010-2012 (grouped)	Age-adjusted rates per 100,000 for: - Cancer incidence (all cancers – invasive; female breast; ovarian; prostate; colorectal; lung)
MDPH Registry of Vital Records	2010-2012 (grouped)	Age-adjusted rates per 100,000 for: - Cancer mortality (all cancers – invasive; female breast; ovarian; prostate; colorectal; lung) - Major cardiovascular disease mortality - Cerebrovascular disease (stroke) mortality - Acute myocardial infarction mortality - Diabetes mortality - All injury and poisoning mortality - Mental disorder related mortality - Opioid injury related mortality Age-adjusted rates per 100,000 for: - Premature mortality Mother & Infant health indicators: - Birth rates, age-specific per 1,000 (ages 30-44; ages 20-29; teens aged 15-19) - Inadequacy of prenatal care, percent of births - Low birth weight births, percent of births - Infant mortality, rate per 1,000
MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS)	2010-2012 (grouped)	Age-adjusted rates per 100,000 for: - Major cardiovascular disease hospitalizations - Cerebrovascular disease (stroke) hospitalizations - Acute myocardial infarction (heart attack) emergency department (ED) visits - Diabetes-related ED visits - Diabetes-related hospitalizations - All injury and poisoning ED visits - All injury and poisoning hospitalizations - Hip fracture injury hospitalizations - Mental disorder related ED visits

		- Mental disorder related hospitalizations - Asthma-related hospitalizations - Bacterial pneumonia related hospitalizations - COPD related hospitalizations - Alcohol/substance related ED visits - Alcohol/substance related hospitalizations - Opioid injury related ED visits - Opioid injury related hospitalizations Age-specific rate per 100,000 for: - Childhood asthma ED visits (ages 14 and under) Percent of top five causes of: - Death - Hospitalization
MDPH Bureau of Communicable Disease Control (BCDC) Registries, Division of Epidemiology and Immunization	2012	Crude rates per 100,000 for: - Hepatitis C incidence - TB incidence
	2011	Crude rates per 100,000 for: - HIV/AIDS prevalence - HIV/AIDS incidence
MDPH Division of Sexually Transmitted Disease Prevention	2012	Crude rate per 100,000 for: - Chlamydia incidence

APPENDIX C: REPORT ON MARCH 2015 COMMUNITY FORUM

Executive Summary

North Suburban Child and Family Resource Network

Advisory Council Planning Forum: March 2015

Background

On March 3, 2015, 33 individuals representing early childhood service providers, community-based organizations and parents, participated in a community forum hosted by the North Suburban Child and Family Resource Network (NSCFRN), a program of Hallmark Health and the Wakefield Public Schools, and the Community Service Division of Hallmark Health. The purpose of the forum was two-fold: to conduct a participatory assessment of both needs and health impacts on families and children birth to age 12; and, to inform the NSCFRN of current program strengths, needs, and possibilities for future programming across an expanded service area.

The forum was facilitated by an independent consultant in a *World Café* format that served to create a welcoming environment, maximize networking opportunities, and allow for participatory community discussion. The evening opened with introductions and a review of Hallmark Health's Community Services by Eileen Dern, Director of Community Services and was followed by a review of the North Suburban Child and Family Resource Network, part of the Coordinated Family and Community Engagement (CFCE) Grant in partnership with the Wakefield Public Schools. Molly Goyette, CFCE Grant Director and Kathy Harlow, NSCFRN Program Manager presented this.

The North Suburban Child and Family Resource Network is an-evidence based parenting education and support program designed to meet the needs of parents, caregivers, and educators of children ages birth through age 12. The NSCFRN provides parent education workshops, play and learn groups, conversation sessions, family activities, and information on parenting and community resources in Melrose, Stoneham, and Wakefield and seeks to expand services to Lynnfield, North Reading, Reading and Winchester. NSCFRN services help build parental resilience, support social and emotional development of young children, and provide an array of social connections and concrete supports in times of need.

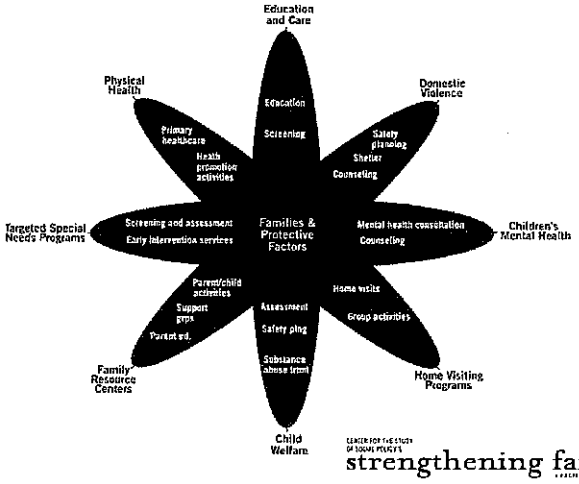
In addition to the NSCFRN, Hallmark Health System manages several early childhood programs and believes that supporting families to be strong and healthy also supports its goal toward improved health for this population. This forum serves as a participatory community needs assessment for both the Community Services Division and the NSCFRN with the intent of informing future Early Childhood programming.

APPENDIX C: REPORT ON MARCH 2015 COMMUNITY FORUM

The Model

The work of the NSCFRN is based on the Strengthening Families model. Strengthening Families, an evidence-based approach developed by The Center for the Study of Social Policy, is fundamentally about small but significant changes in practice, policy and systems designed to increase familial protective factors. Research demonstrates that families can thrive, remain healthy, and be successful when they exhibit five key factors: parental resilience, social connectedness, knowledge of parenting and child development, concrete support in times of need, and social and emotional competence of children. In short, Strengthening Families is about fundamentally changing providers' relationships with parents by:

- Supporting parents' ability to parent effectively
- Involving parents as partners in achieving good outcomes for children
- Engaging parents effectively through programs
- Engaging parents directly in mutually supportive relationships that build protective factors
- Partnering with parents to help design systems and policies that work for children and families



Strengthening Families provides a conceptual way in which parents and NSCFRN partner agencies connect to and integrate their work to support young families and it forms a common framework for shaping the needs and futures services discussed.

During the forum, a reflective exercise encouraged individuals to recall a personal childhood memory depicting one of the five protective factors, grounding them in the personal reality that these protective factors leave a lasting impact. Stories of a child bonding with extended family members who were ever-present; of a child never realizing she grew up in a family without means because of the manner in which her parents persevered; of an adult's success attributed to his single-parent's faith and courage to remain in recovery from substance abuse: these are

just some of the powerful stories that reflect the impact of early childhood exposure to protective factors. Given that less than 5% of children birth to 5 receive any type of preventive services[1], expanding a model that both directly supports families and also increases capacity of early childhood providers to integrate familial protective factors as part of their daily program and practice make good sense.

Vision: A community in which youth and families thrive.

Prior to a discussion of need, impacts, and future possibilities, participants were asked to tell a story of a community that is connected in a way that helped young children & families thrive. The exercise yielded a group vision for what could be. This is what participants said:

In this community, there are happy and healthy kids who play outside and where adults on street corners watch over them. There are no drugs, no weapons, and no judgment. New families are welcomed. Neighbors know each other and who to turn to-- who to call if there is any need. People remember what unites them: rather thon competition, there is mutual support. Churches, public safety, and others serve as role models and engage children in mentoring. There is safety and opportunity for all families. Village laughter can be heard until dark.

Family Needs & Impact

Participants were asked: *What adversely impacts the health and development of children?*

Factors Adversely Impacting Families

- Economic Challenges
- Substance Abuse
- Mental Health
- Changing Family Structure
- Cultural Barriers
- Linguistic Barriers & Isolation
- Lack of standardized, quality

Many items were mentioned that adversely impact young children and families today. Among the most frequently mentioned responses is the **economic challenge** posed by today's economy. An increased cost of living requires two working parents and limits family time as well as resources for wellness activities. Wellness is not a basic need and therefore not a priority. There is an associated stigma of financial instability in wealthier communities, e.g. school lunches are under-enrolled, despite the growing number of qualifying families because families will not publically admit their need. Another impact frequently mentioned is the increased prevalence of community ***substance abuse,*** from the highly visible opiate overdose epidemic, to acceptable use of marijuana by young parents, to on-going parental and adolescent alcohol abuse. In the area of ***mental health***, there is a visible increase in *childhood stress and anxiety* that stems from parents' emphasis on achievement and the importance of getting ahead or being successful. Service providers and early childhood educators indicate that *childhood trauma* is not visible or known because screening is not universal or early enough; therefore, kids' health flies under the radar. This shows up in *increased behavioral ond school performance issues.* The issue of

[1] Introduction to Strengthening Families, Center for the Study of Social Policy

changing family structure with more divorced parents, more single parents, dual working parents, and limited extended family nearby, creates "unhealthy parents" that do not model healthy behaviors for their children. Among these unhealthy behaviors is an unregulated use of parental as well as child use of social media. Finally, multiple ***cultural and linguistic barriers*** impact the health of families. Citizenship, increasing immigrant populations, growing numbers of people with different languages and religions, differing perspectives on the acceptance of violence in various cultures, and cultural influence in seeking health care all contribute to challenges for families in this region. In addition, participants noted that families with English as a Second Language (ESL) needs often experience isolation due to language barriers. Isolation is also experienced for families with children with developmental disabilities.

Future Solutions

Participants were asked: *What possibilities exist to better serve the needs of children and families?*

Possibilities

- One, central community information center or source
- Helpful use of social media
- Increased mental health and substance abuse services
- Supportive work environments

The theme repeated most often was the concept of a ***central community location*** to help families get information, navigate, and access services. Points of access to information are fractured. Families need to talk to multiple providers to find services they need. Families are frustrated with technology that takes away from person-to-person contact desired to them help understand and navigate a complicated system of health care and community supports. Participants agreed that informational websites are not the same as "access" to care and are not always helpful. Pediatrician offices and libraries were among the locations mentioned as possible partner organizations to assist as central points of information. A second theme of the evening centered around parents' and children's misuse of social media and the need for parent education on ***technology as a parenting tool***, including how it can be both beneficial, but also detrimental to family time and social emotional connectedness. A third frequently mentioned item was the need for more ***prevention and treatment for substance abuse and mental health issues***. It is of great concern to families of all ages and its impact is felt in all communities. The Department of Children and Family Services cites that approximately 80% of its cases are substance abuse involved. To early childhood providers and educators, family or parental substance use is not always visible. Lack of available treatment for young children and adolescents was a repeated theme. Participant response also suggested ***partnering with businesses*** to discuss the changing needs of today's families including: flexible hours, policies or practices that hold no retribution for parents needing to tend to sick-child needs, and access to family services through employers. For the NSCFRN this could mean an expansion of Saturday programs for working parents who cannot always attend during the week.

APPENDIX C: REPORT ON MARCH 2015 COMMUNITY FORUM

Existing Services

A list of existing early childhood/family services was generated based on the knowledge of the group. The Birth to Five program, Baby Café, and Parents of Tots programs were familiar and frequently cited, as were the NSCFRN, Healthy Families, WIC and Head Start programs. In addition, public libraries got several mentions, as did local recreation departments, the Stoneham Theater, Friends of the Fells, Breakheart Reservation, and the Stone Zoo. Hallmark Health's services appeared to have wide recognition among participants.

Recommended actions for NSCFRN:

Each community was asked to list its preferred first choice of programs or services that could be supported by the NSCFRN. The list includes:

- Expand play groups to weekends (Stoneham)
- Increase summer programs offerings for children ages 0-6 (Stoneham)
- Offer a Dads' Group: out-door focus (Melrose)
- Conduct training on the Strengthening Families approach for childcare workers, childcare centers, etc. Offer CEU's. (Wakefield)
- Further explore a coordinated approach to communicating available resources; "appoint" an organization to serve as an information hub (Reading, North Reading)
- Build social media and technology use topics into parenting classes
- Engage businesses; engage in advocacy
    - Speak to chambers about needs assessment and family friendly work environments
- Expansion of FRN services and resources.
- Create a directory of services (Representative Brodeur's office)

One recommendation for the NSCFRN is to provide regional training on the Strengthening Families model to build capacity of service providers to increase familial protective factors in their day-to-day practices. This capacity building is an effective way of integrating this evidence informed approach to reach families across many points of service.

A second is to continue to host quarterly forums as a point of communication and sharing of resources. There seems to be great energy among participants supporting this idea of coalition and partnership building.

Collectively data from this community forum suggests broadening the partnership and coalition development role of the NSCFRN. This may include an expansion of its structure, networking function, fundraising, and advocacy role: in short, more focus on organization/coalition development, while maintaining or increasing direct services across a larger service area. Based on this finding, additional planning is recommended to determine how the NSCFRN can meet both its programmatic expansion and organizational development needs.

Hallmark Health Community Services Considerations:

A strong thread of participants identified a gap in services for children ages 4 and 5. The birth-to-three programs need expansion to cover services until a child reaches Kindergarten and are then eligible for a variety of services. It is suggested that the Community Services Division seek innovative ways to expand coverage for children in this age group, either through innovative partnership development, new or innovative funding, or additional service provision. In addition, the strength of Hallmark Health's reputation for community services lends itself to being a voice for the needs of early childhood services. For example, by publishing and sharing assessment priorities with stakeholders, the system can advocate for additional early childhood services, more behavioral health services, or innovative policies that support family health. Finally, it is hoped that this assessment encourages long-term investment on behalf of Hallmark Health in a wide range of Early Childhood Programs.

Hallmark Health System

August 19th 2015

Hallmark Health System

Community Conversation Event

Report

Part 1: Introduction

Hallmark Health System (HHS) held a community conversation event on August 19, 2015. Participants were recruited through HHS community benefits programs including the Mobile Market, and through local community agencies. Recruitment targeted the 9 towns served by the community benefits department, including Everett, Malden, Medford, Melrose, North Reading, Reading, Saugus, Stoneham, and Wakefield.

Participant Demographics	Number
Total # of Participants	**22**
Native Languages	
• English	15
• Haitian Creole	7
Gender	
• Female	20
• Male	2
Estimated Age Group	
• <30	7
• 30-55	8
• >55	7

The participants were seated at 5 tables organized by native language, with 2 tables having Haitian-speaking participants and the other 3 having English-speaking participants. Among the English-speaking tables, 1 table consisted of mostly Everett residents and another had mostly residents of North Reading.

Participants first saw a presentation about the HHS Community Benefits Department, including the populations they serve, and the programs and services they offer. Afterward, each table discussed 5 questions addressing their communities' health needs, existing health programs, the programs that they would like to see, what they would like HHS to know about their communities, and whether the event gave them a better understanding of HHS. Facilitators at each table led these discussions and interpreters translated questions and responses for the Haitian-speaking tables, as needed.

Part 2: Limitations

One of the main limitations of this project was the small sample size. The 22 participants represented only a subset of the towns served by Hallmark Health System and reflected only a few ethnic groups. Additionally, the data contained in this report was gathered from the notes taken by the facilitators or a separate note taker at each table, and therefore is limited to that information the facilitators/ note takers were able to capture.

Part 3: Findings

Section 1: Health Needs

Participants were first asked what they believe are currently the most pressing health needs of the people that live in the nine towns that Hallmark Health System serves. There were 7 key themes, summarized below, that emerged among the different groups as urgent health needs.

See Appendix A for a complete list of participant responses.

Each of the following health needs were noted by 3 of the tables:

Health Insurance

Insurance and medical expenses were cited as current issues. Participants brought up barriers such as prescription co-pays, dental coverage, and difficulty in getting non-emergency coverage for undocumented immigrants. Participants also noted that medications are expensive for those who don't have or qualify for MassHealth.

Healthy Foods

Participants also mentioned healthy foods as a health need for the 9 towns. They pointed out that healthy foods are often difficult to access for those who don't drive, and the farmers market can be expensive. In particular, there is a need for food for families that live in motels.

Housing

Participants cited the need for housing, saying that there needs to be more housing overall, especially that which is affordable and safe. In particular, they noted needing housing for newly arrived immigrants, the elderly, and homeless kids that attend Malden High School.

Mental Health

Mental health and mental illness were also brought up as issues. It was noted that there is a higher prevalence of suicide among the Brazilian population. It was also noted that among the Haitian population, mental illness is very stigmatized, which may be a barrier to treatment.

Transportation

In general, participants agreed that transportation needs improvement. It is especially necessary for families living in motels and for the elderly who lived in areas that The Ride does not reach (e.g. North Reading).

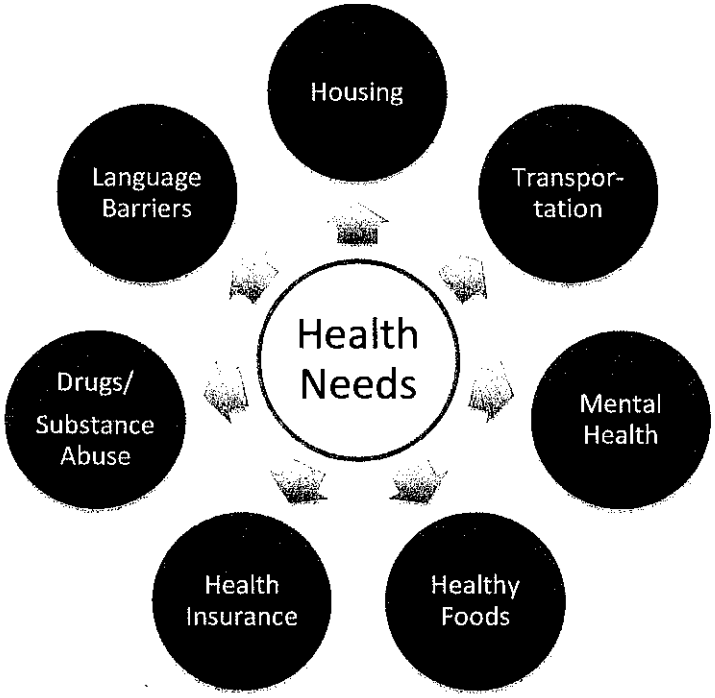
Each of the following health needs were noted by 2 of the tables:

Drugs/Substance Abuse

A couple of groups expressed concern about drugs and substance abuse, especially among youth. Some noted that kids are using drugs (including smoking cigarettes) starting from around the age of 13, and that they are sometimes making their own drugs. Heroin was also cited as a significant issue in these towns among all age groups.

Language Barriers

The two groups with Haitian-speaking participants mentioned that Haitian-speaking seniors feel lost or like they cannot communicate because of their lack of English skills. They often only want to see Haitian-speaking doctors, in spite of the availability of interpreter services (although they may not always be aware of these services). There is a lack of affordable English classes for Haitian immigrants to be able to learn English, and when they first arrive here they would like someone to help guide them.



Section 2: Existing and Future Programs

Participants were asked which existing health services and programs they thought were particularly beneficial to residents in the towns that Hallmark Health System serves. They were then asked what new programs and services could help them and their neighbors be healthier, as well as how existing services could be improved. The responses are summarized below.

APPENDIX D: REPORT FROM AUGUST 2015 COMMUNITY FORUM

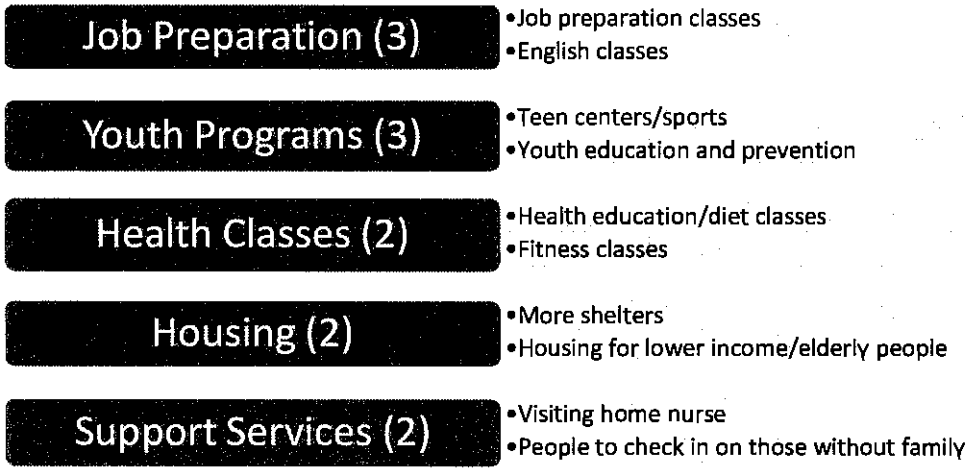
Most Beneficial Existing Services

Four existing services were each noted across 2 of the tables as being particularly beneficial to these towns. These services were **Healthy Families, WIC, the mobile food market, and the Visiting Nurses Association (VNA)**. In total, participants across the 5 tables listed 27 existing services that they thought to be beneficial. Of note, the average number of services listed at the English-speaking tables was 7.3, while at the Haitian-speaking tables it was only 3, perhaps suggesting less awareness among the Haitian-speaking population of the services available.

See Appendix B for a complete list of participant responses.

New Programs and Services Needed

Five types of programs were noted at multiple tables as services that could help the residents of these towns. Several tables brought up **job preparation classes and/or English classes** that could prepare immigrants for jobs. The Haitian population in particular wanted classes where they could learn basic English skills. The second type of desired program was **youth programs** including teen centers, youth education and prevention, and sports. Many participants also **wanted health education, fitness, and diet classes** that would teach residents about STDs, weight loss, and especially diabetes. **Housing** was also brought up, particularly the need for more shelters and housing for lower income and elderly people. Finally, participants would like to see **support services** such as a visiting home nurse or someone who can check in on those who don't have any family. Responses are summarized in the graphic below, where the number of **tables** that brought up each type of desired program is noted in parentheses. See Appendix C for a complete list of participant responses.



Ways to Improve Existing Services

Participants also offered several suggestions for ways to improve existing services. Multiple tables mentioned wanting to **expand the Healthy Families Program** by offering more exercise classes and adding some stress reduction classes. Also mentioned were wanting the **Mobile Market to happen more often**, wanting there to be **more programs that address mental health issues** including depression, and to have **more Haitian-speaking employees and services** available in local health care organizations. Participants also thought that services would be improved by having **better transportation** to the programs. Finally, they suggested giving out **more information about health and existing programs**, and especially giving this information to kids in schools to give to their parents. See Appendix C for a complete list of participant responses.

Section 3: What Hallmark Health System Should Know and What You Learned

Participants were asked what else they would like Hallmark Health System to know about themselves, their family, and their neighbors, as well as whether after this evening they had a better understanding of the health services and programs HHS offers. The responses are listed below.

What else should we know?

- Hallmark Health System is huge in the Everett community, works well with city
- Cambridge Health Alliance (CHA) does not offer programs like HHS, CHA is more with doctors – like the healthcare teen clinic
- Went to HHS radiology center in Stoneham – wonderful HHS employees
- People want to make connections with a real person (and HHS does this)
- [Offer] more health care services in all of HHS' communities so that providers can then refer people to the programs offered
- Everyone knows Dr. Masucci ☺
- I like to work with people who want to help
- I am smart and educated, just don't speak English well
- Be patient with me
- Show me you want to help me
- Parents are keeping their children on their medical insurance until 26. Hard to pay for their insurance and support them
- Offer transportation
- "I'm a diabetic." [Offer] more nutrition programs

Do you have a better understanding of HHS?

- I love and appreciate today
- Yes, I didn't know there are so many services
- Dental services are not provided – what could be done in this area?
- Participants asked whether there are 2 HHS hospitals
- Yes, we do have a better understanding. It was an excellent session
- Learned a lot, very good info
- Yes this was informative. I enjoyed the diabetes program I went to
- Better ways to find out about programs, "I don't use a computer"
- Would like to still know about ESL school

Section 4: Harvesting Ideas

The event concluded with a wrap-up activity to draw out participants' ideas about the community's most pressing health needs, the most valuable existing services, what new program they would most like to see, and what else HHS should know. Each table was given four large pieces of poster paper with a different question written on each. Participants were asked to write their responses to these questions on sticky notes and stick them on the poster paper. Listed below are the four questions and participants' responses.

Note that the number in parentheses indicates the number of **people** who gave that same response. If there is no number, then only one person gave the response.

APPENDIX D: REPORT FROM AUGUST 2015 COMMUNITY FORUM

Top 3 Health Needs that should be Addressed by HHS

Participants were asked what the top 3 health needs were in their community that should be addressed by HHS. Their responses fell into 5 broad categories, summarized below.

Mental and Emotional Health

- Drug/substance abuse/addiction treatment (5)
- Mental health/counseling services (3)
- Exercise programs, e.g. yoga and meditation
- Stress
- Help for shut-ins

Infrastructure

- Housing (4) (including help with senior housing)
- Transportation (3)

Support Programs

- Elderly programming (2) (inluding for dementia)
- More outreach to preemies as they grow
- Have groups to help parents with disabled children
- More community outreach like this
- Weight loss help

Prevention and Education

- Education/health information and availability for programs (2)
- Preventative Care(2)
- ESL education
- Screening

Clinical

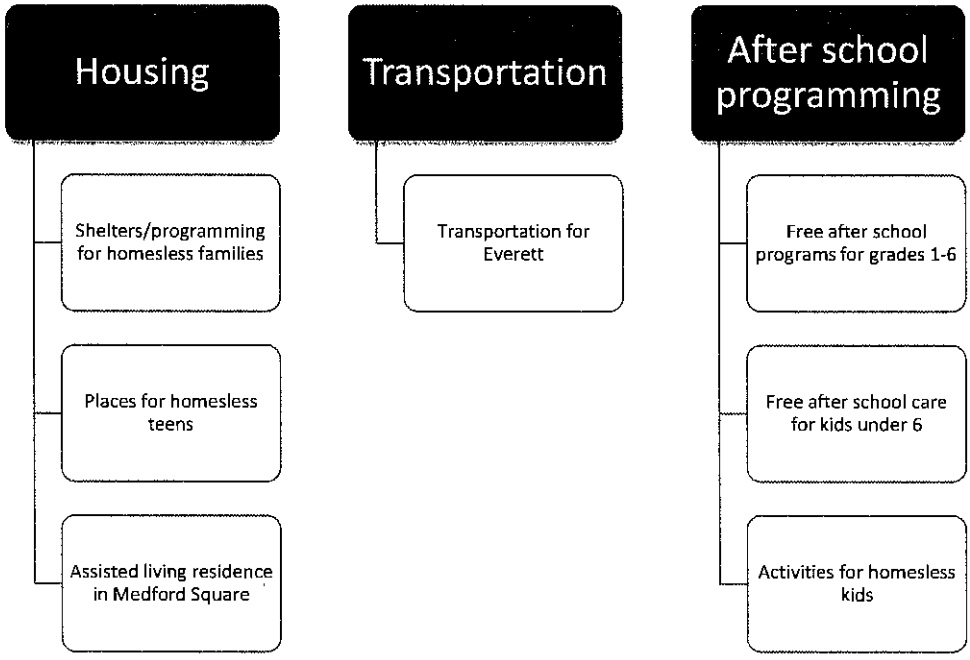
- Diabetes (2)
- More nurses
- Dental Care

APPENDIX D: REPORT FROM AUGUST 2015 COMMUNITY FORUM

Most Valuable Existing Service or Program in Your Community for Keeping You and Your Family Healthy

- Mobile food market (6)
- Food pantry (2)
- WIC (2)
- Healthy Families
- Joslin
- Kids in Grief
- Dalton
- 911
- Counseling
- Community dinners, senior center, health lectures

One New Health Service/Program You Would Most Like to See in Place in Your Community?



- Housing (5)
- Transportation (4)
- After school programming (3)
- Yoga/stress release workshops (2)
- Exercise/more healthy activity (2)
- Easier way to find out about these programs/where to get info on meetings (2)
- Information hotline to help solve family health problems
- Mental health counseling for adults
- I would also like to see the YMCA be family friendly affordable
- Mobile food
- STD [program]
- More marketing among communities

What else would you like us to know?

- Respect us in healthcare needs
- We need understanding of our Haitian culture
- Help meet our [housing] needs better
- We would like for your to [meet] our needs
- How to call and inquire about doctors/offices accepting new patients and languages spoken/available
- Information on helping people plus numerous programs
- Would like more info about availability of ESL and interpreter services
- Not just nurse visit but can doctor do check up too
- Very welcoming and not intimidating, very comfortable, friendly atmosphere
- Mobile food market is very beneficial to Everett/Malden residents
- I am grateful for all that you offer the communities and my family

APPENDIX E: COMMUNITY STAKEHOLDER SURVEY INSTRUMENT

Community Stakeholder Survey Instrument

Thank you very much for taking the time to fill out this survey. Hallmark Health System (HHS) is conducting a needs assessment to better understand the communities they serve, and you have been identified as an important HHS stakeholder.

What you have to tell us is very important. Please be candid with your responses. This survey should take 30-45 minutes ta complete. You may stop the survey and go back to it anytime until you are done.

Hallmark Health System has engaged the Institute for Community Health (ICH) to conduct this survey. ICH will be reviewing and analyzing your responses. Individual answers will be kept confidential and ICH won't include identifying information in the data given to HHS or in the finol report.

Background

1. a) What organization/agency do you work for?

   b) What is your title?

2. Below is a list of the nine communities that make up HHS's self-defined Community Benefits catchment area. Please check all of the towns you are able to provide information about, based on your role and familiarity with their individual strengths and needs:

- ☐ Everett
- ☐ Malden
- ☐ Medford
- ☐ Melrose
- ☐ North Reading
- ☐ Reading
- ☐ Saugus
- ☐ Stoneham
- ☐ Wakefield
- ☐ Most familiar with the region as a whole

Community Assets and Needs

3. For the community or communities identified in Question 2:

   a) What are the top three assets or strengths related to promoting health and wellness?

   b) What are the three health-related issues that pose the greatest concern?

(Please select from list, or add "Others" as needed)

- ☐ Access to health care and services for vulnerable populations
- ☐ Affordable and accessible transportation
- ☐ Economic insecurity
- ☐ Food insecurity
- ☐ Housing insecurity/homelessness

- ☐ Asthma
- ☐ COPD/emphysema
- ☐ Cancer
- ☐ Cardiovascular health
- ☐ Diabetes
- ☐ Overweight/obesity
- ☐ Behavioral/Mental health
- ☐ Substance abuse/use
- ☐ Tobacco use
- ☐ Maternal and child health
- ☐ Teen pregnancy
- ☐ Infectious diseases:
    - ☐ HIV/AIDS
    - ☐ Tuberculosis
    - ☐ Influenza
    - ☐ Emerging Threats (ie. Ebola/Zika etc.)
- ☐ Dental health
- ☐ Emergency preparedness and disaster planning
- ☐ Sexual assault/domestic violence
- ☐ Violence and community safety
- ☐ Other, please explain:

c) For each health concern identified, please describe a specific example of how it currently impacts your identified community or communities:

d) Based on your perspective and on current trends, what, if any, health-related issues do you anticipate will emerge in your community or communities as priorities in the next few years?

4. For the community or communities identified in Question 2:

a) Please identify the two or three most vulnerable populations residing within your community. These can be defined by one or more characteristics such as age, race, ethnicity, immigration status, gender and/or sexual orientation, family structure, disability, economic factors, or any other potential vulnerability.

b) Please explain why you selected these groups as the most vulnerable populations.

c) Please explain any specific successes, challenges and/or opportunities you have identified in working with these populations.

5. In recent years, there has been emphasis from federal and state agencies on the importance of coordinated, regional approaches to prevention and health improvement strategies (such as reducing tobacco use, and substance abuse with a focus on opioids). Based on your experience with these regional efforts to date:

a) What do you think has been successful, with success being measured in either outcomes (measured impacts) or process (greater efficiencies)?

b) What do you think has not worked well, or could be improved upon?

c) What other health or prevention issues could be more effectively addressed on a regional basis?

d) Based on the concerns and areas for improvement that you have noted, what are three concrete things that HHS could do to more effectively address regional health planning and coordination?

Perspectives on Hallmark Health System and Community Services

6. Please indicate the extent to which you agree or disagree with the following statements about Hallmark Health System and how they work with the nine-community catchment area:

(Options: Strongly Agree, Agree, Disagree, Strongly Disagree)

a) I am confident whom to ask at HHS for assistance when a community need is identified.

b) HHS responds in a timely manner to community requests related to health needs and problems.

c) HHS currently does good work in addressing health concerns within its communities.

d) I find the input and contributions of HHS staff valuable when they serve as part of community groups, coalitions, and initiatives.

7. In 2013, HHS identified these priorities as a result of its Community Health Needs Assessment.

Primary Priorities:

- Behavioral Health and Substance Abuse
- Cancer
- Cardiovascular Disease
- Obesity and Diabetes
- Access to Care for the Uninsured/Underinsured
- Vulnerable populations, including women and young children

Secondary Priorities:

- Infectious diseases, including tuberculosis
- Injury prevention, including falls and orthopedic injury
- Respiratory disease, including asthma
- Sexual assault/domestic violence prevention

- Disaster readiness and emergency preparation

a) From your perspective, through its community-based programs and services, to what extent has HHS been effective, in the last three years, in addressing (either through partnership, collaboration or direct initiatives) the above priorities within your community or communities?

(Options: Very Effective, Somewhat Effective, Slightly Effective, Not Effective)

Please describe.

b) Since 2013, has HHS:
i. Achieved any quantitative impacts (ie. improved health outcomes, lower rates of disease incidence or mortality) related to any of these health priorities? Please describe.

ii. Achieved any qualitative impacts (ie. improving health care knowledge, reducing stigma, or perceptions of health or wellness) related to any of these health priorities? Please describe.

iii. Demonstrated any outputs that, though they do not yet reflect change or improvement, have demonstrated potential for positive qualitative or quantitative impact over time? Please describe.

8. HHS Community Services program leaders and staff engage in a range of community-based initiatives and coalitions, working at both local and regional levels to address a variety of health issues and social determinant factors impacting health and wellness. Based on your experience working with HHS staff on these efforts:

a) Please describe any ways in which this participation has been particularly helpful in addressing community or health-related challenges or issues.

b) Please describe any areas for improvement, or areas where different or more intensive engagement by HHS staff would be valuable.

c) Are there any areas of your work where HHS clinical or administrative leaders do not currently engage, but would be considered valuable resources if they were to participate? Please describe.

Conclusion

9. Based on the information requested in this survey, are there any other issues impacting the health and wellness in your communities that HHS might not be fully aware of at this time?

10. Do you have any other comments about HHS, its community-based work, or other information not addressed within this survey?

Thank you very much for your time!

Hallmark Health System
Community Health Needs Assessment

Key Stakeholder Survey Report

July 2016

Summary

The 13 stakeholders who provided feedback on this survey identified a number of health issues of concern for the catchment area communities. Presently, there is broad agreement that **substance abuse** and **behavioral/mental health** issues are the two most important concerns. In discussing emerging concerns, **substance abuse** and **mental health**, together with their correlates, were again both mentioned by several people, along with **infectious diseases** and **obesity**.

When identifying the most **vulnerable populations** in their communities, stakeholders overwhelmingly chose **elders**, describing them as being vulnerable in multiple dimensions. **Immigrants** were also frequently listed, including people who are newly arrived, those who are undocumented, unaccompanied youth, and non-English speakers. Finally, people living in **poverty** were seen to be especially vulnerable. Respondents were clear about their understanding that the dimensions of vulnerability and health concerns are interrelated in complex and mutually reinforcing ways.

Several respondents wrote that they were **not familiar with the work of HHS**, some due to staff turnover at their agencies, others for unspecified reasons. A large number of respondents skipped questions that asked about the work of HHS, which may also indicate a lack of familiarity with the role of HHS.

Despite the lack of familiarity with Hallmark Health System (HHS) among some, the majority of stakeholders reported **positive views of HHS** and the effectiveness of its activities. Especially appreciated were the contributions made by HHS staff serving on community groups, coalitions, and initiatives. There was also a positive feeling about the **effectiveness of HHS in addressing its 2013 community health priorities**. Finally, when asked to suggest opportunities for HHS to improve, the rate of response was low. However, the most-commonly mentioned method suggested by respondents was to facilitate **communication** among organizations and stakeholders in the catchment area. A second suggestion was to increase **partnerships** among organizations, sometimes to provide specific services.

APPENDIX F: COMMUNITY STAKEHOLDERS SURVEY REPORT

Background

This survey was conducted as part of Hallmark Health System's (HHS) 2016 Community Health Needs Assessment (CHNA), with the intent to gather input from key stakeholders of HHS on community health priorities and ways HHS can contribute to community health improvements. Stakeholders were selected from HHS's 9 community benefits catchment area communities: Everett, Malden, Medford, Melrose, North Reading, Reading, Saugus, Stoneham, and Wakefield.

Methods and demographics

Key stakeholder surveys were sent by Hallmark Health System staff via Survey Monkey to 20 individuals selected by HHS as key stakeholders. (See full text of survey in Appendix A). Stakeholders each represented one or more of the communities in HHS's 9 town community benefits catchment area. A total of 13 stakeholders provided useable responses.

Table 1: Number of respondents per community

Everett - 4
Malden - 4
Medford - 1
Melrose - 2
North Reading - 2
Reading - 4
Saugus - 1

Respondents were instructed that they could pass the survey along to someone else in their agencies if they did not think they were the best person to answer the questions. They were also instructed to be honest with their answers, and to skip questions that they were unable to answer. Respondents were told that the Institute for Community Health would be reviewing and analyzing their responses, and that no names or identifying information will be included in any reports.

The respondents consisted of three people who reported their job titles as either CEO or Executive Director, seven people who are directors or managers, and three other public health workers.

Respondents were asked to report which communities they were able to provide information about. Five respondents only chose one of the communities, four reported that they were most familiar with the catchment area as a whole, and five chose two or more communities. Table 1 shows the number of respondents reporting familiarity with each specific community.

Note that the data from several survey questions did not fall into clear patterns that were easily summarized in the body of this document. The responses from these questions are listed in the Appendices.

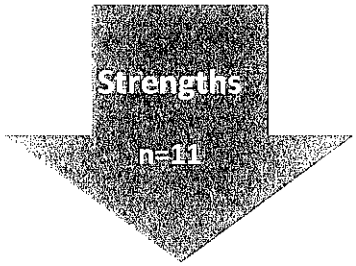
Characteristics of catchment area

A primary goal of the survey was to determine what stakeholders see as the health-related characteristics of their communities.

Strengths: Respondents were given an open-ended opportunity to identify the strengths of their communities. The 11 respondents gave a wide variety of answers: for a complete list, see Appendix B. (Most frequent responses are shown in Table 2). A number of people pointed to ongoing health efforts, including **various collaborations and partnerships** between different sectors in the communities and **ongoing community education efforts.** There were also several responses that pointed to relatively permanent characteristics of the communities, including their proximity to community hospitals and the relatively high education and income levels of the residents, as strengths.

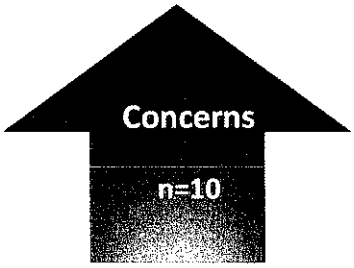
Concerns: Stakeholders were next asked to choose from a list the three health-related issues of most concern in their communities. The responses (N=10) are shown in Table 2. The issue that stood out overwhelmingly in this category was **substance abuse/use**, being chosen by 10 of 11 respondents. The next most concerning issue identified was **behavioral/mental health**, which was selected by 5 of 11. And the third most concerning issue was **cancer**, identified by 3 out of 11 respondents. Finally, access to care for vulnerable populations, food insecurity, housing insecurity, infectious diseases, sexual assault/DV and tobacco use were each selected by 2 respondents. For the list of categories chosen by one person, see appendix C.

Table 2: Health Strengths and Concerns of Catchment Communities



- Nearby hospitals
- Community education programs
- Collaborations between health organizations
- Relatively high income and education levels of residents

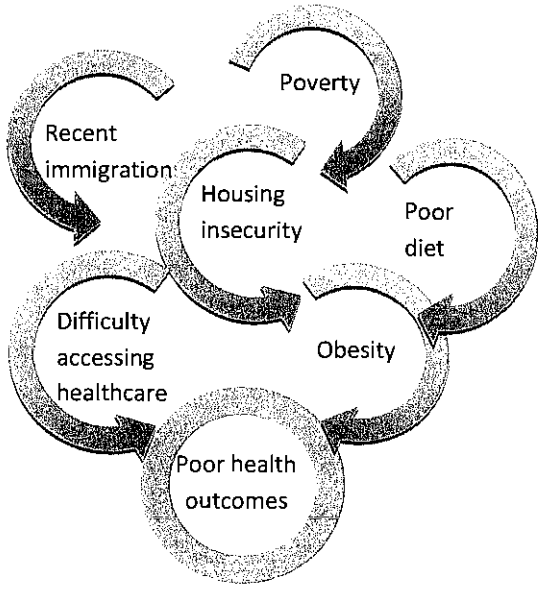
- Substance abuse
- Behavioral/mental health
- Cancer
- Access to care, food insecurity, housing insecurity, infectious diseases, sexual assault/DV, tobacco use



The following categories were provided on the survey, but were not selected by any stakeholders: asthma, COPD/emphysema, teen pregnancy, and violence and community safety. HIV/AIDS and tuberculosis were also not selected, but two people did choose infectious diseases in general.

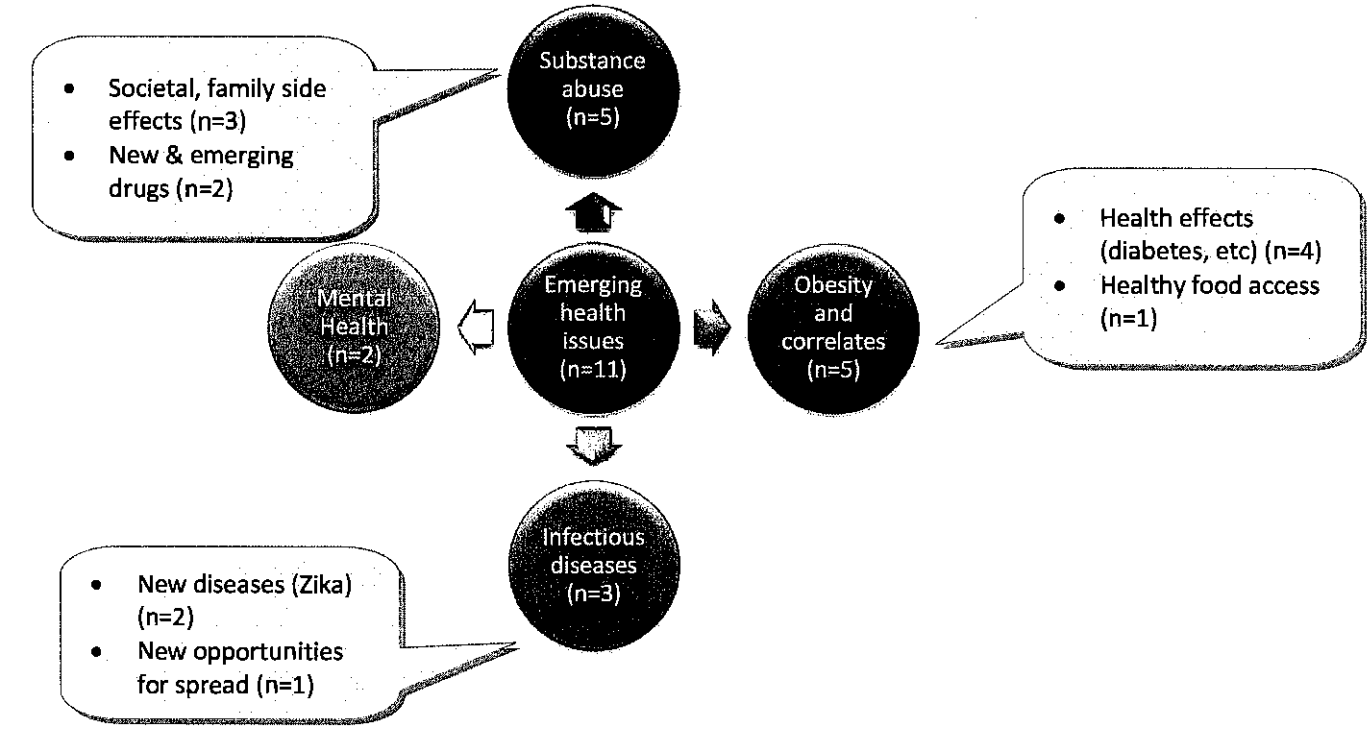
When asked how the health issues of concern currently affect their communities, a myriad of responses were given (see Appendix D). One pattern in these responses was that **particular populations** were identified as being particularly vulnerable to these issues. **Youth**, in particular, were cited as **being especially in need of mental health services and substance abuse treatment and prevention** (4 of 11). **Those living in poverty** and **recent immigrants** were also described as being particularly vulnerable to health concerns (4 of 11 and 2 of 11, respectively). Interestingly, these vulnerable populations cited do not correspond in frequency with the vulnerable populations elicited from a direct question (see page 7). Several respondents (4 of 11) highlighted the ways that many **health concerns are interdependent and connected to the the social determinants of health**. Respondents cited that, for example, homelessness and housing insecurity is related to a poor diet, mental and behavioral health issues are related to domestic violence, diabetes and cardiovascular disease are related to obesity, and recent immigrants are less often able to access health services.

Table 3: Health Concerns are Inter-related



Emerging health issues: Respondents were given an open-ended text box to describe the issues that they predicted would arise as priorities in the next few years. Their responses (n=11) generally fell into four categories, as shown in Table 4. Of these, nearly half of respondents mentioned **substance abuse** and **obesity**, together with the individual and societal causes and consequences of these, as emerging priorities.

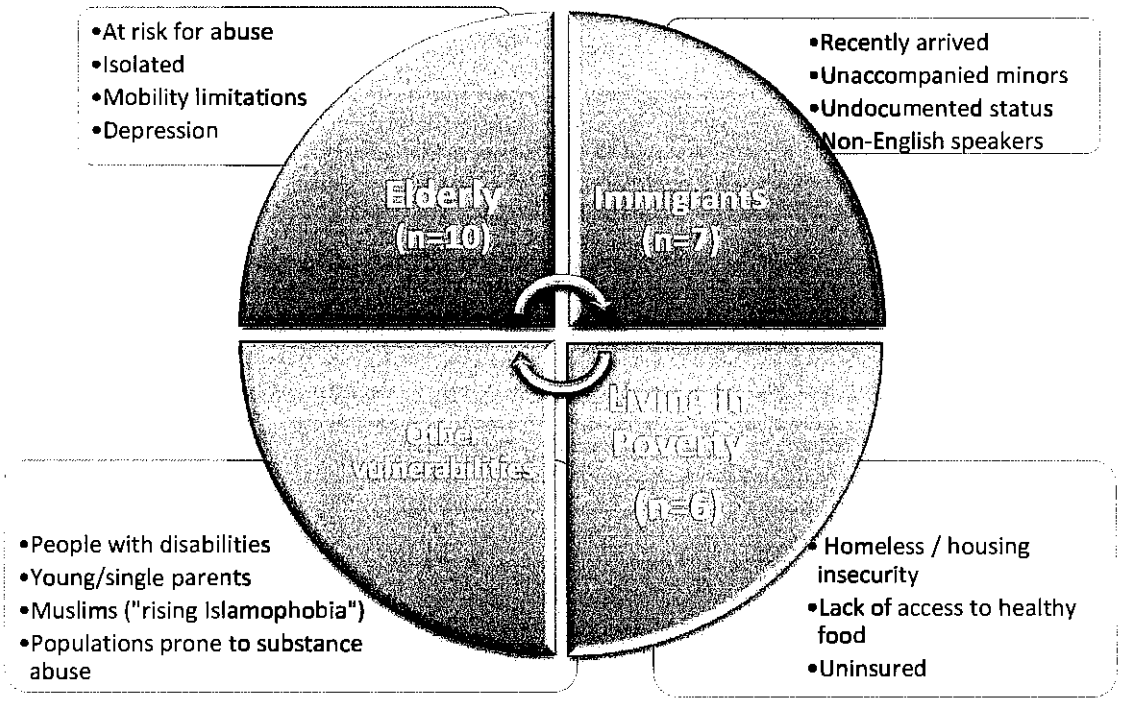
Table 4: Emerging Health Issues



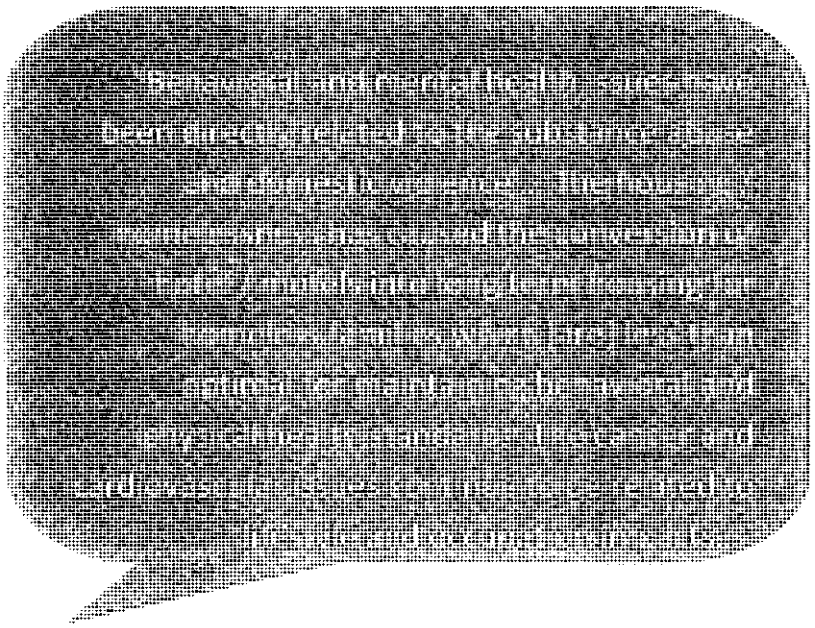
Other concerns mentioned once were caring for an aging population, gentrification in the context of the new casino to be built, cancer, and safe housing.

Vulnerable populations: When asked to identify two or three vulnerable populations in their communities, stakeholders overwhelmingly named the **elderly** (10 of 12). As one respondent wrote, "The elderly are vulnerable in many ways. They may be lonely, depressed, at risk for multiple types of abuse, such as physical or financial abuse. They may be isolated from family or friends and they may have lost their independence." Others point out that seniors

Table 5: Vulnerable Populations Identified by Stakeholders (n = 12)



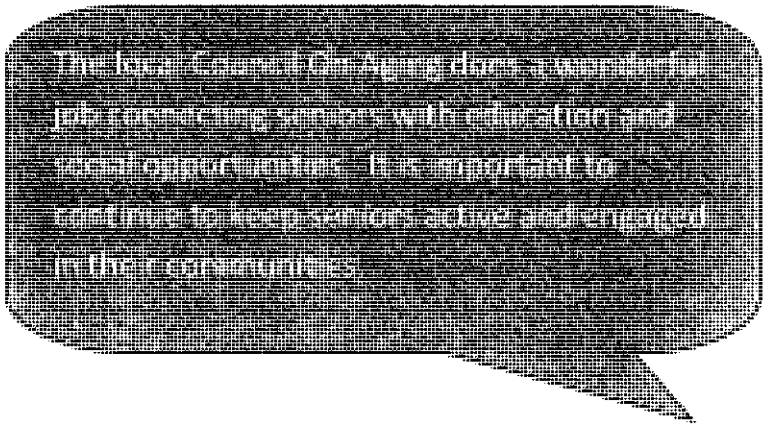
have trouble accessing healthy food and medical care due to financial and transportation limitations. Seven respondents described opportunities to decrease elders' isolation by providing help with access to healthy food, medical care, and social opportunities. Others described special training for those caring for elders: how to identify elder abuse, and how to care for those elders who may be immunocompromised.



The next most-identified vulnerable population was **immigrants** (n=7), including those recently arrived, undocumented people and unaccompanied youth. Three respondents specifically cited **non-English speakers** as a population of concern. Isolation was cited as a reason for the vulnerability of these groups. As one stakeholder wrote, "for immigrants, as people come to this country they may feel isolated and do not know where to go for health related matters".

Half of all respondents (n=6) identified **people living in poverty** as an important vulnerable population. One person cited "the stress/trauma related to extreme poverty", and others identified difficulty accessing healthy food, continuity of care, and homelessness as challenges related to working with those living in poverty.

Muslims were cited in two cases as a population of particular concern due to "growing Islamophobia". Successes in working with this group involved providing appropriate medical care and working with Muslim community organizations.



Notably, two vulnerable groups that have recently been in the national conversation, the LGBTQ community and African American men, were not identified by the stakeholders who completed the survey. Overall, these answers show, once again, that stakeholders understand the ways that health vulnerabilities overlap and reinforce one another.

Feedback on Hallmark Health System

Positive feedback, lower response rate: Stakeholders were asked to rate HHS on a number of issues. The following Table 6 and Table 7 show the questions and answers.

Table 6: Stakeholder Opinions about HHS

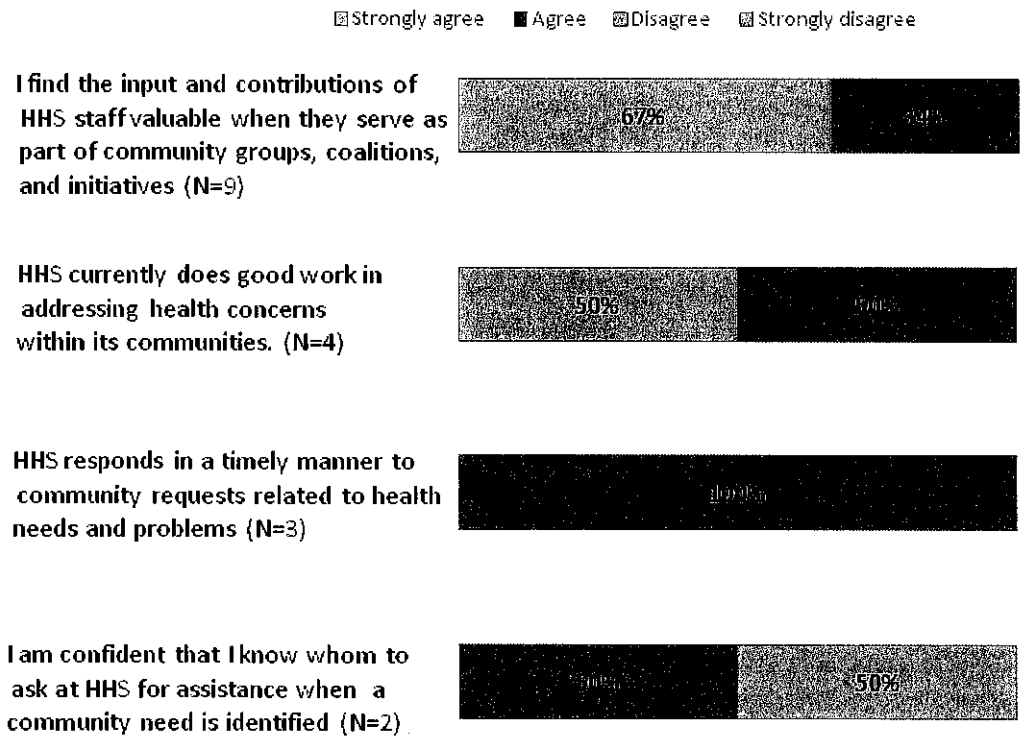
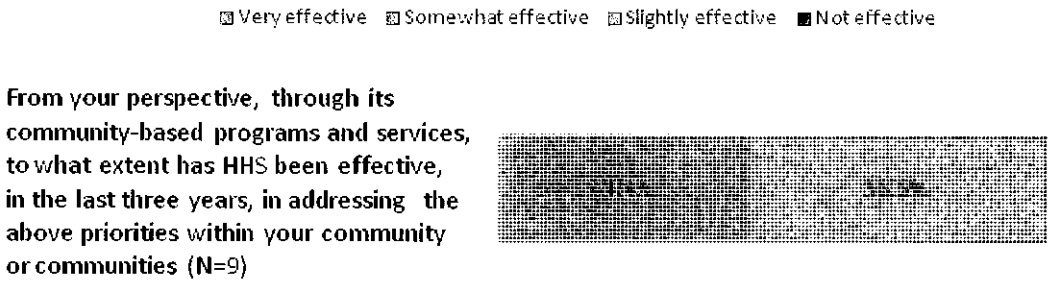
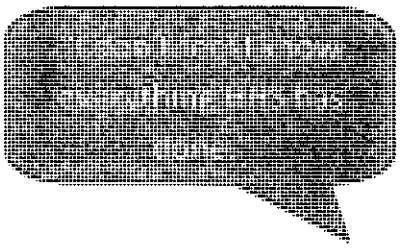


Table 7: Perceptions of Effectiveness of HHS (N=9)

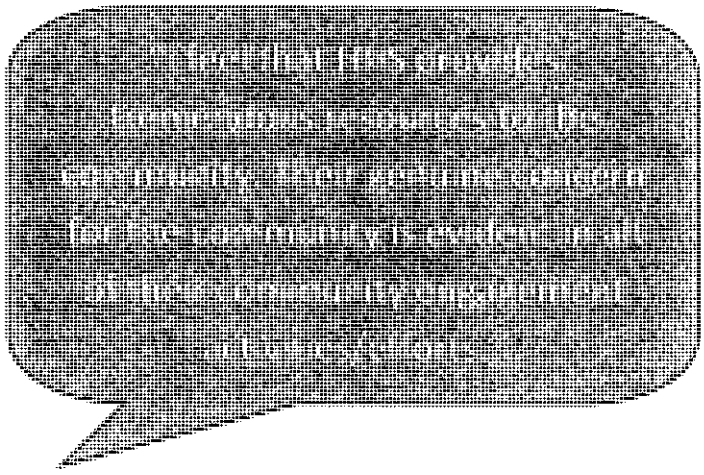




Overall, the feedback given on these quantitative questions shows that **people who replied to the questions felt very positively about the work being done by HHS.** However, more than half of respondents skipped the first three questions. This suggests that respondents, who were not offered a choice of "I don't know", may be unfamiliar with the work of HHS in these areas. This hypothesis is backed up by several respondent comments: "I don't feel I know everything HHS has done", writes one stakeholder, and "I am new [at my organization]... and not that familiar with your work", writes another. Notably, most people (n=9) DID respond to the question about whether HHS staff are valuable when serving as part of community groups, coalitions, and initiatives –all 9 responded that they either strongly agree or agree that HHS staff is valuable. This suggests that **HHS staff are visible and making valued contributions** as members of these groups.

Respondents also answered positively when asked whether HHS has been effective in addressing the listed 2013 community health priorities: 9 out of 9 responded that it has been either very effective or somewhat effective. (The priorities are listed in the text box above).

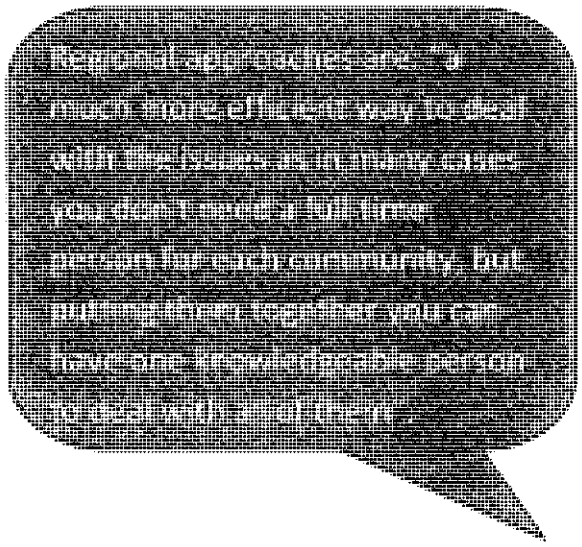
This pattern of positive responses but many skipped questions continues in the responses to open-ended questions. However, the lack of response to the open-ended questions may indicate not only a lack of familiarity, but also a degree of respondent fatigue or lack of time to devote to the survey.



Overall, respondents report **mostly positive impressions of HHS** and its work. Only three stakeholders responded to the questions asking about the impacts achieved by HHS.

However, these respondents reported increasing awareness of health issues through community outreach programs and by sharing useful data with local organizations. They also described HHS's work hosting and organizing working groups and task forces.

Nine participants identified ways collaboration with HHS has been particularly helpful in addressing community health challenges. Of these, five comments highlighted the ways that **HHS staff have helped the organizations to make connections with other groups**. The text of these responses can be found in Appendix E.



Respondents were asked in general to assess the successes of regional approaches to health issues. Of these responses (n=10), 4 mentioned **tobacco control as a successful initiative**, and 2 mentioned **opioid control and treatment**. Three people gave general descriptions of how and why regional approaches work well. Finally, one person described the care transitions model, and one person was overall ambivalent about regional approaches, feeling that each town needed to concentrate on its own issues.

Finally, when invited to make any other comments at the end of the survey, 4 respondents commented. Of these, 3 quotes were glowingly positive about HHS, saying, among other praise, that "HHS provides tremendous resources to the community..." and "HHS has been an amazing partner". The fourth merely wished that HHS could provide money, because some health problems just need to be funded.

Opportunities for HHS improvement: Respondents were given several opportunities to suggest ways HHS could improve its service provision. The first asked respondents to suggest three concrete things HHS could do to more effectively address regional health planning and coordination (see Table 8). The most common category of responses had to do with different types of **communication** that HHS could do (4 of 9): these included facilitating information sharing among stakeholders including local public health departments, the MA Department of Public Health, and other organizations. It also included ensuring that parents or residents have voices on coalitions and navigating HIPAA rather than letting it stand as a barrier.
The next most common suggestion was **increasing collaborations** with other organizations, including in one case the participant's own employer, but also with out of network hospitals and with specific community organizations to offer specific services. Finally, other suggestions included **providing funding, conducting advocacy, and providing trainings**. Appendix F lists the ways stakeholders suggested that regional approaches have not worked well. These responses did not fall into clear categories.

The survey also elicited suggestions for new health topics that could be most effectively addressed by regional approaches. The answers solicited did not fall into clear categories: two people listed Zika, but otherwise there were no duplicates. For a complete list, see Appendix G.

When asked specifically about ways that HHS could improve, only four participants provided

Table 8: Concrete steps HHS could take to improve regional health planning and coordination (n = 9)

Communication / sharing information (n=4)	• Share info across systems (navigating HIPAA) • With all public health depts • With state DPH • Including a parent/resident voice in all coalitions
Collaboration with other organizations (n=3)	• Out of network hospitals • To offer specific services (healthy aging programs, care transitions)
Advocacy (n=2)	• For mental health facilities • For health ed in schools • With insurers to cover care transitions

answers. In general, the answers indicate a desire for **more involvement of HHS in the community**: extending an existing partnership, more presence of outreach workers, and more direct involvement through hands-on approaches vs delegation of responsibilities to emergency preparedness regions. One person also indicated that it would be helpful to have a clearly-communicated point person for specific health and safety issues.

Only three respondents indicated areas where they felt HHS should be more involved: these areas were workplace safety, partnering with the Cambridge Health Alliance, and "maybe some of the School Department's Health Advisory Committees".

APPENDIX G: INTERNAL STAKEHOLDER SURVEY INSTRUMENT

Hallmark Health System Community Needs Assessment
Internal Stakeholder Survey (SAMPLE)

Thank you very much for taking the time to fill out this survey. Hallmark Health System (HHS) is conducting a needs assessment to better understand the communities they serve, and you have been identified as an important HHS stakeholder.

What you have to tell us is very important. Please be candid with your responses.

This survey should take 10-15 minutes to complete.

Hallmark Health System has engaged the Institute for Community Health (ICH) to conduct this survey. ICH will be reviewing and analyzing your responses. Individual answers will be kept confidential.

Background

1. a) What is your name? _____
   b) What is your title? _____

2. Please check all of the towns in which you are active or aware of HHS services, based on your role at HHS (and/or if you reside in these communities):
   __Everett
   __Malden
   __Medford
   __Melrose
   __North Reading
   __Reading
   __Saugus
   __Stoneham
   __Wakefield
   __My work is more regionally focused, across most or all of these communities

Community Assets and Needs

3. For the community (or communities) identified in Question 2:
   a) What are the communities' top three assets or strengths related to promoting health and wellness?
      1) _____
      2) _____
      3) _____

b) What are the three health-related issues that pose the greatest concern?
(Please select from list, or add "Others" as needed)

__Access to health care and services for vulnerable populations

__Affordable and accessible transportation

__Economic insecurity

__Food insecurity

__Housing insecurity/homelessness

__Asthma

__COPD/emphysema

__Cancer

__Cardiovascular health

__Diabetes

__Overweight/obesity

__Behavioral/Mental health

__Substance abuse/use

__Tobacco use

__Maternal and child health

__Teen pregnancy

__Infectious diseases:

- HIV/AIDS
- Tuberculosis
- Influenza
- Emerging Threats (ie. Ebola/Zika etc.)

__Dental health

__Emergency preparedness and disaster planning

__Sexual assault/domestic violence

__Violence and community safety

__Other(s), please explain:

4. For the community or communities identified in Question 2:
   a) Please identify the two or three most vulnerable populations within your community. These can be defined by one or more characteristics such as age, race, ethnicity, immigration status, gender and/or sexual orientation, family structure, disability, economic factors, or any other potential vulnerability.
      1) _____
      2) _____
      3) _____

Perspectives on Hallmark Health System and Community Services

5. Please indicate the extent to which you agree or disagree with the following statements about Hallmark Health System and how they work with the nine-community catchment area:
   a) I am confident whom to ask at HHS for assistance when a community need is identified.
      __Strongly Agree __Agree __Disagree __Strongly Disagree

   b) HHS responds in a timely manner to community requests related to health needs and problems.
      __Strongly Agree __Agree __Disagree __Strongly Disagree

   c) HHS currently does good work in addressing health concerns within its communities.
      __Strongly Agree __Agree __Disagree __Strongly Disagree

   d) I find the input and contributions of HHS staff valuable when they serve as part of community groups, coalitions, and initiatives.
      __Strongly Agree __Agree __Disagree __Strongly Disagree

6. In 2013, HHS identified these priorities as a result of its Community Health Needs Assessment.
   a) From your perspective, through its community-based programs and services, to what extent has HHS been effective, in the last three years, in addressing (either through partnership, collaboration or direct initiatives) the above priorities within your community or communities?

Primary Priorities:

- Behavioral Health and Substance Abuse
  __Strongly Agree __Agree __Disagree __Strongly Disagree
- Cancer
  __Strongly Agree __Agree __Disagree __Strongly Disagree
- Cardiovascular Disease
  __Strongly Agree __Agree __Disagree __Strongly Disagree
- Obesity and Diabetes
  __Strongly Agree __Agree __Disagree __Strongly Disagree
- Access to Care for the Uninsured/Underinsured
  __Strongly Agree __Agree __Disagree __Strongly Disagree

- Vulnerable populations, including women and young children
  __Strongly Agree __Agree __Disagree __Strongly Disagree

Secondary Priorities:

- Infectious diseases, including tuberculosis
  __Strongly Agree __Agree __Disagree __Strongly Disagree
- Injury prevention, including falls and orthopedic injury
  __Strongly Agree __Agree __Disagree __Strongly Disagree
- Respiratory disease, including asthma
  __Strongly Agree __Agree __Disagree __Strongly Disagree
- Sexual assault/domestic violence prevention
  __Strongly Agree __Agree __Disagree __Strongly Disagree
- Disaster readiness and emergency preparation
  __Strongly Agree __Agree __Disagree __Strongly Disagree

b) Since 2013, has HHS:

i. Achieved any quantitative impacts (ie. improved health outcomes, lower rates of disease incidence or mortality) related to any of these health priorities?__Yes __No

ii. Achieved any qualitative impacts (ie. improving health care knowledge, reducing stigma, or perceptions of health or wellness) related to any of these health priorities?__Yes __No

iii. Demonstrated any outputs that, though they do not yet reflect change or improvement, have demonstrated potential for positive qualitative or quantitative impact over time?__Yes __No

Any additional comments (optional)

_____

7. HHS Community Services program leaders and staff engage in a range of community-based initiatives and coalitions, working at both local and regional levels to address a variety of health issues and social determinant factors impacting health and wellness. Based on your experience:

a) Has participation by HHS staff and leaders been helpful in addressing community or health-related challenges or issues?__Yes __No

b) Any additional comments (optional)

_____

Conclusion

8. Please share any other comments below about HHS, our community-based work, or other information you would like to share that has not been addressed within this survey.

_____

Thank you very much for your time!

APPENDIX H: INTERNAL STAKEHOLDER SURVEY RESULTS

Hallmark Health System Community Needs Assessment
Survey Results

# of Surveys Completed: 13 (8 Community Teams, 5 Diversity Committee Members)

Background

1. Please check all of the towns you live and/or work in:
   __Everett/Malden (1)
   __Medford (1)
   __Melrose (4)
   __Reading/North Reading (2)
   __Saugus (0)
   __Stoneham (2)
   __Wakefield (3)
   __My work is more regionally focused, across most/all communities* (5)

Community Assets and Needs

2. For the community (or communities) identified in Question 2:
   a) What are the communities' top three assets or strengths related to promoting health and wellness?
      1) Excellent health facilities
      2) Awareness of good health practices
      3) Literacy and knowledge
      4) Strong City government/City support (3)
      5) Family Network/Young families
      6) ABCD-Poverty agency
      7) Senior Center
      8) Health fairs (2)
      9) Town days
      10) Cancer overnight walk
      11) School involvement, promoting healthy style living with students (3)
      12) Community based-hospital deliveries
      13) Proximity to Melrose-Wakefield Hospital/Reading Clinic (3)
      14) Beautiful lakes and parks, where many events are held (4)
      15) Trust
      16) Comfort/welcomeness
      17) Positivity/encouragement
      18) Food distribution/mobile market
      19) Communications
      20) Interest
      21) Good Advertising

22) N/A (6)
23) Substance abuse coalition (2)
24) MassInMotion (0-5 Programs)

b) What are the three health-related issues that pose the greatest concern? (Please select from list, or add "Others" as needed)

__ Access to health care and services for vulnerable populations (3)

__ Affordable and accessible transportation (3)

__ Economic insecurity (3)

__ Food insecurity (1)

__ **Housing insecurity/homelessness** **(4)**

__Asthma

__COPD/emphysema

__Cancer **(4)**

__Cardiovascular health

__Diabetes

__Overweight/obesity (2)

__Behavioral/Mental health **(9)**

__Substance abuse/use **(10)**

__Tobacco use

__Maternal and child health (1)

__Teen pregnancy

__Infectious diseases:
- HIV/AIDS
- Tuberculosis
- Influenza
- Emerging Threats (ie. Ebola/Zika etc.)

__Dental health

__Emergency preparedness and disaster planning (1)

__Sexual assault/domestic violence

__Violence and community safety

__Other(s), please explain:

3. For the community or communities identified in Question 2:
   a) Please identify the two or three most vulnerable populations within your community. These can be defined by one or more characteristics such as age, race, ethnicity, immigration status, gender and/or sexual orientation, family structure, disability, economic factors, or any other potential vulnerability.

No answer	(2)
1) Elderly population/Seniors	**(10)**
2) Economically challenged people	**(3)**
3) Illegal immigrants	(2)
4) Single parents/family structures	(1)
5) Young children	(1)
6) Teens and young adults with substance addictions	**(3)**
7) The mentally ill, especially those with housing issues	**(4)**
8) Uninsured	(2)
9) Children with special needs	(1)
10) Transgender	(1)

Perspectives on Hallmark Health System and Community Services

4. Please indicate the extent to which you agree or disagree with the following statements about Hallmark Health System and how they work with the nine-community catchment area:
   a) I am confident whom to ask at HHS for assistance when a community need is identified.
   __**Strongly Agree (7)** __Agree (5) __Disagree (1) __Strongly Disagree

   b) HHS responds in a timely manner to community requests related to health needs and problems.
   __Strongly Agree (4) __**Agree (8)** __Disagree (1) __Strongly Disagree

   c) HHS currently does good work in addressing health concerns within its communities.
   __Strongly Agree (5) __**Agree (7)** __Disagree (1) __Strongly Disagree

   d) I find the input and contributions of HHS staff valuable when they serve as part of community groups, coalitions, and initiatives.
   __**Strongly Agree (7)** __Agree (6) __Disagree (0) __Strongly Disagree

5. In 2013, HHS identified these priorities as a result of its Community Health Needs Assessment.
   a) From your perspective, through its community-based programs and services, to what extent has HHS been effective, in the last three years, in addressing (either through partnership, collaboration or direct initiatives) the above priorities within your community or communities?

   Primary Priorities:

   - Behavioral Health and Substance Abuse
   __**Strongly Agree (8)** __ Agree (3) __Disagree (1) __Strongly Disagree n/a (1)

   - Cancer
   __Strongly Agree (1) __**Agree (11)** __Disagree __Strongly Disagree n/a (1)

- Cardiovascular Disease
  __Strongly Agree __**Agree (11)** __Disagree (1) __Strongly Disagree n/a (1)

- Obesity and Diabetes
  __Strongly Agree (5) __**Agree (6)** __Disagree __Strongly Disagree n/a (2)

- Access to Care for the Uninsured/Underinsured
  __Strongly Agree (2) __**Agree (8)** __Disagree (2) __Strongly Disagree n/a (1)

- Vulnerable populations, including women and young children
  __Strongly Agree (2) __**Agree(9)** __Disagree __Strongly Disagree n/a (2)

Secondary Priorities:

- Infectious diseases, including tuberculosis
  __Strongly Agree (2) __**Agree (4)** __Disagree (3) __Strongly Disagree n/a (4)

- Injury prevention, including falls and orthopedic injury
  __**Strongly Agree (3)** __**Agree (3)** __Disagree (2) __Strongly Disagree n/a (5)

- Respiratory disease, including asthma
  __Strongly Agree __**Agree (7)** __Disagree (2) __Strongly Disagree n/a (4)

- Sexual assault/domestic violence prevention
  __Strongly Agree (1) __**Agree (8)** __Disagree (1) __Strongly Disagree n/a (3)

- Disaster readiness and emergency preparation
  __Strongly Agree (2) __Agree (1) __Disagree (2)__Strongly Disagree **n/a (6)**

b) Since 2013, has HHS:

i. Achieved any quantitative impacts (ie. improved health outcomes, lower rates of disease incidence or mortality) related to any of these health priorities?
__**Yes (9)** __No (2) n/a (2)

ii. Achieved any qualitative impacts (ie. improving health care knowledge, reducing stigma, or perceptions of health or wellness) related to any of these health priorities?
__**Yes (10)** __No (1) n/a (2)

iii. Demonstrated any outputs that, though they do not yet reflect change or improvement, have demonstrated potential for positive qualitative or quantitative impact over time?
__**Yes (11)** __No n/a (2)

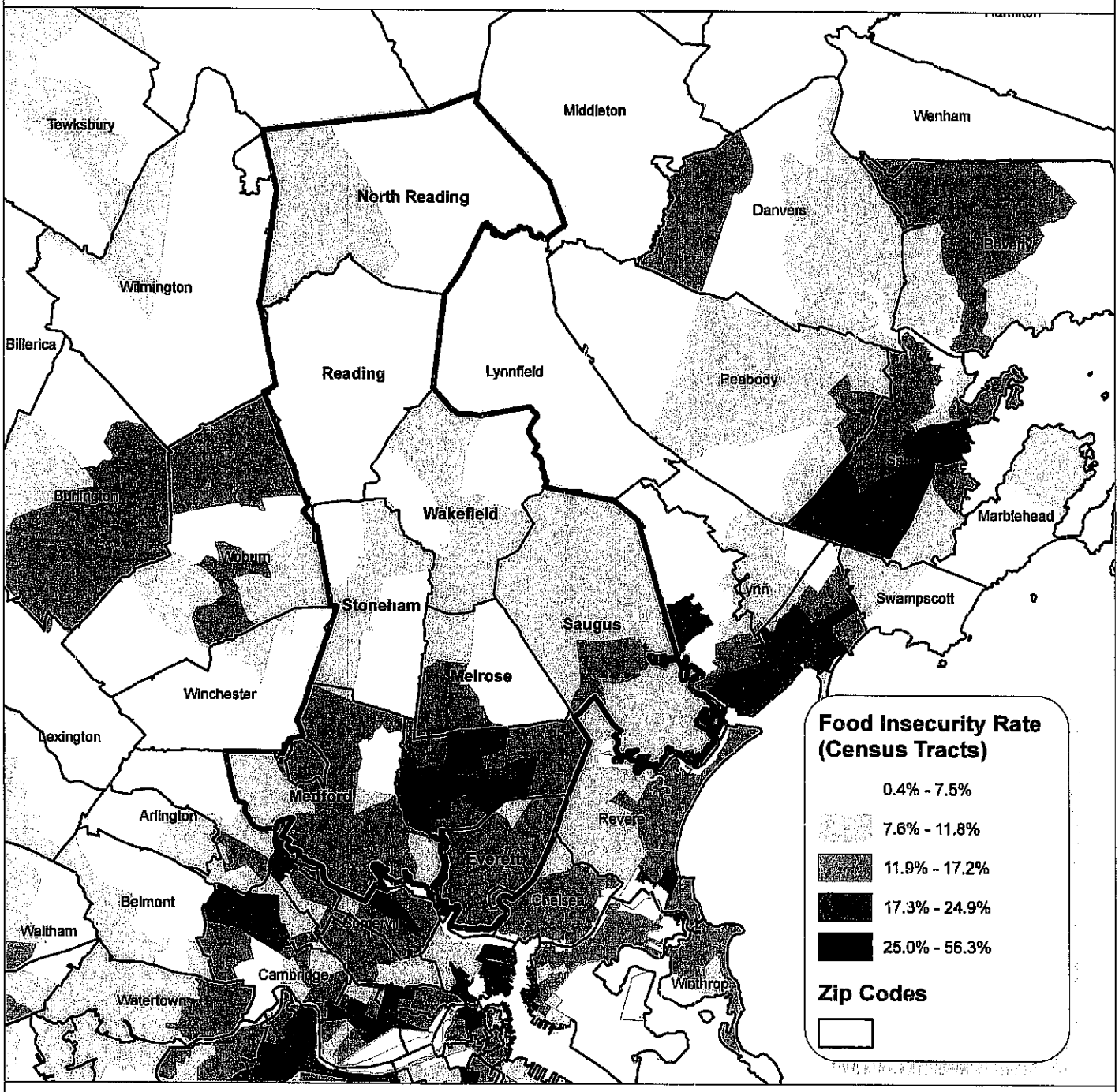
6. HHS Community Services program leaders and staff engage in a range of community-based initiatives and coalitions, working at both local and regional levels to address a variety of health issues and social determinant factors impacting health and wellness. Based on your experience:

a) Has participation by HHS staff and leaders been helpful in addressing community or health-related challenges or issues?
_Yes (9) __No n/a (4)

APPENDIX I: FOOD INSECURITY IN EASTERN MASSACHUSETTS MAP

The Greater Boston FOOD BANK®

2013 FOOD INSECURITY IN EASTERN MASSACHUSETTS



Data Sources:
MassGIS, USPS,
Feeding America†

†Gundersen, C., A. Satoh, A. Dewey, M. Kato and E. Engelhard, *Map the Meal Gap 2015: Food Insecurity Estimates at the County Level.* Feeding America, 2015

D. Taitelbaum,
The Greater Boston Food Bank
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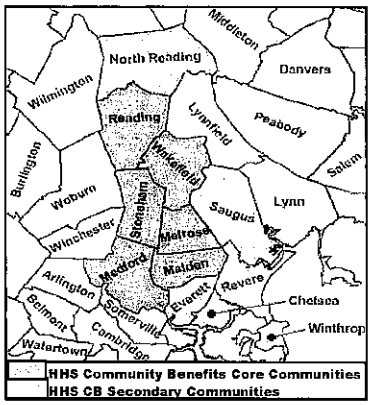
Hallmark Health System Service Area

Core Service Areas[1]: Malden, Medford, Melrose, Reading, Stoneham, Wakefield
Secondary Service Areas[2]: Everett, North Reading, Saugus



Population: 302,797

Demographics compared to the state of Massachusetts as a whole:

- Smaller Hispanic population (8%)
- Larger foreign born population (23%) and fewer speak English at home (71%)
- Higher percentage of residents age 25+ with bachelor's degree or higher (38%)
- Higher median household income ($71,943)
- Higher poverty rates for adults over 65 (11%), lower rates for children under 18 (10%) and families (7%)

Health Conditions

Service area residents experience the following health conditions at rates 5% or higher than residents of Massachusetts as a whole:

Cancer incidence & mortality
- Colorectal cancer incidence
- Lung cancer incidence and mortality

Cardiovascular health
- Major cardiovascular disease ED visits
- Acute myocardial infarction mortality

Mental health
- Mental disorder related mortality

Respiratory health
- Bacterial pneumonia related hospitalizations

Substance abuse:
- Alcohol/substance related ED visits
- Opioid related ED visits, hospitalizations and mortality

Selected age groups

Older adults age 65+:
- Bacterial pneumonia related hospitalizations
- COPD related ED visits and hospitalizations
- Diabetes related ED visits and hospitalizations
- Hip fracture injury hospitalizations
- Major cardiovascular disease hospitalizations
- Mental disorder related ED visits and hospitalizations

Youth age 15-19:
- Alcohol/substance abuse related ED visits and hospitalizations
- All injury and poisoning hospitalizations
- COPD related ED visits and hospitalizations
- Diabetes related ED visits
- Mental disorder related ED visits and hospitalizations
- Opioid related ED visits

Top 3 Causes of Death
1. Circulatory System Diseases
2. Mental Disorders
3. Lung Cancer
Top 3 Causes of Hospitalization
1. Diabetes Mellitus Related
2. COPD Related
3. Circulatory System Diseases

For more detailed information on health indicators and for references, please see the data tables that follow.

[1] Core service areas refer to communities where Hallmark has physical clinical facilities.
[2] Secondary service areas refer to communities where Hallmark works in partnership with other organizations to provide services.

APPENDIX J: COMMUNITY DATA PROFILE FOR HALLMARK SERVICE AREA

SERVICE AREA HEALTH INDICATORS DATA TABLE

Note: Bolding and arrows are used to highlight health conditions where the percent difference between the service area and the state is 5% or more, and to show the direction (upward (ˆ) or downward (ˇ)) of the difference. For demographics and public school enrollment characteristics, only those indicators that differ from the state by a 5% difference or more in the higher direction are flagged. "NA" designates data that is inapplicable (i.e. not reported because the count is too low). A dash designates data that is unavailoble (i.e. does not exist).

SERVICE AREA INDICATOR	SERVICE AREA		MA
	#	%/Rate	%/Rate
Total population	302,797	--	6,657,291
Demographics[3]			
Female	157,959	52%	52%
Age			
Under 5 years	16,688	6%	6%
Under 18 years	42,862	14%	21%
18 to 34 years	74,301	25%	24%
35 to 64 years	126,485	42%	41%
65 and over	42,461	14%	14%
85 and over	6,660	2%	2%
Race/ethnicity[4]			
Asian (non Hispanic)	25,576	**9%ˆ**	6%
Black/African-American (non Hispanic)	21,695	**7%ˆ**	6%
Hispanic	22,630	8%	10%
Some other race (non Hispanic)[5]	1,903	1%	1%
White (non Hispanic)	224,691	74%	75%
Foreign-born residents	68,475	**23%ˆ**	15%
Continent of origin of foreign-born residents			
Africa	5,213	8%	9%
Americas	30,443	**45%ˆ**	38%
Asia	20,871	31%	30%
Europe	11,919	17%	23%
Top 5 languages spoken at home[6]			
English only	202,583	71%	78%
Spanish or Spanish Creole	17,813	6%	8 %
Portuguese or Portuguese Creole	15,164	**5%ˆ**	3%
Chinese	10,836	**4%ˆ**	2%
French Creole	8,926	**3%ˆ**	1%
Social and economic characteristics[7]			
Highest educational attainment			
Less than high school graduate	21,592	10%	11%
High school graduate	59,705	**28%ˆ**	26%
Some college	52,592	24%	24%
Bachelor's degree	49,280	23%	23%
Graduate/advanced degree	32,967	15%	17%
Income			
Median household income	**$71,943ˆ**	--	$67,846

[3] US Census Bureau, American Community Survey (ACS) 2010 to 2014 (5-Year Estimates) (SE)
[4] Excludes "Two or more races"
[5] "Some other race (non-Hispanic)" includes: American Indian and Alaska Native Alone; Native Hawaiian and Other Pacific Islander Alone; and Some Other Race Alone.
[6] These are the top 5 languages spoken at home in the service area. The top 5 languages spoken at home in the state of Massachusetts as a whole are: 1) Only English, 2) Spanish or Spanish Creole, 3)Portuguese, 4) Chinese, 5) French Creole
[7] US Census Bureau, American Community Survey (ACS) 2010 to 2014; US Department of Labor, Bureau of Labor and Statistics, local area unemployment statistics 2012

Per capita income	$35,122	--	$36,441
Poverty status			
Children under 18 living in poverty	6,057	10%	15%
Families living in poverty	4,971	7%	8%
Population 65 and older living in poverty	4,336	**11%^**	9%
Housing units by structure			
1-unit	63,037	52%	57%
2 units	20,632	**17%^**	10%
3 -9 units	15,241	13%	17%
10 -19 units	4,584	4%	4%
20 or more units	18,058	**15%^**	10%
Housing units that are renter-occupied	46,494	**40%^**	38%
Median gross rent	**$1,271^**	--	$1,088
Gross rent or owner costs as a percentage of household income			
30% or more	23,908	**35%^**	32%
Health insurance			
No health insurance coverage	12,972	**4%^**	4%
Unemployment rate[8]	--	--	5.7
Health outcomes[9]			
Cancer incidence (age-adjusted rates per 100,000)[10]			
All cancers (invasive)	3,546	484.7	481.4
Breast cancer (female only)	538	135.2	133.5
Ovarian cancer	36	**9.0˅**	12.1
Prostate cancer	478	**102.6˅**	128.2
Colorectal cancer	320	**42.6^**	38.0
Lung cancer	508	69.2	66.3
Cancer mortality (age-adjusted rates per 100,000)[11]			
All cancers	4,917	477.4	480.1
Breast cancer (female only)	767	137.3	135.1
Ovarian cancer	61	**11.1˅**	11.9
Prostate cancer	382	**115.1˅**	138.3
Colorectal cancer	443	**42.3^**	38.4
Lung cancer	719	**69.6^**	65.9
Cardiovascular health			
Cardiovascular-related hospitalizations (age-adjusted rate per 100,000)[12]			
Major cardiovascular disease hospitalizations	15,290	1348.1	1294.3
Cerebrovascular disease (stroke) hospitalizations	2,486	218.3	224.4
Cardiovascular-related emergency department visits (age-adjusted rate per 100,000)			
Major cardiovascular disease ED visits	5,073	**466.8^**	412.7
Cerebrovascular disease (stroke) ED visits	534	**48.1˅**	51.4
Acute myocardial infarction ED visits	250	22.1	21.9
Cardiovascular mortality (age-adjusted rate per 100,000)[13]			

[8] This is the percent of the workforce that is unemployed. The 2014 unemployment rate is an estimate based on the average of Jan to Dec monthly rates. 9 town aggregates unavailable for unemployment rate.

[9] Health outcomes pulled from MADPH MassCHIP database: http://www.mass.gov/eohhs/researcher/community-health/masschip/.

[10] Age-adjusted cancer incidence rates per 100,000 from MADPH Massachusetts Cancer Registry, grouped for 2010-2012.

[11] Age-adjusted cancer mortality rates per 100,000 from MADPH Registry of Vital Records, grouped for 2010-2012.

[12] Age-adjusted cardiovascular hospitalization and emergency department visit rates per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS), grouped for 2010-2012.

Major cardiovascular disease mortality	2,175	178.9	185.9
Cerebrovascular disease (stroke) mortality	337	**27.5˅**	29.5
Acute myocardial infarction mortality	329	**27. 4˄**	25.3
Diabetes (age-adjusted rates per 100,000)[14]			
Diabetes-related ED visits	14,735	1362.0	1376.9
Diabetes-related hospitalizations	20,465	1841.0	1762.5
Diabetes mortality	129	**10.9˅**	13.7
Infectious disease (crude rates per 100,000)[15]			
HIV/AIDS prevalence[16]	716	N/A	272.8
HIV/AIDS incidence[14]	21	N/A	10.0
Hepatitis C incidence	176	N/A	72.4
Chlamydia incidence	898	N/A	357.3
TB incidence	5	N/A	3.2
Injuries (age-adjusted rates per 100,000)[17]			
All injury and poisoning ED visits	91,428	**9872.1˅**	10484.5
All injury and poisoning hospitalizations	9,366	861.3	829.4
All injury and poisoning mortality	428	**40.8˅**	43.0
Hip fracture injury hospitalizations	1,007	83.3	80.8
Mental health (age-adjusted rates per 100,000)[18]			
Mental disorder-related ED visits	54,166	5567.2	5341.6
Mental disorder-related hospitalizations	3,486	3911.4	3,799.9
Mental disorder-related mortality	769	**60.7˄**	52.6
Mother & infant health[19]			
Birth rates, by age (age-specific rate per 1,000)			
Ages 30-44	7,330	**70.5˄**	60.8
Ages 20-29	3,995	61.5	62.5
Teens (ages 15-19)	255	**9.7˅**	15.5
Inadequate prenatal care (percent of births)	804	7%	7%
Low birth weight (percent of births)	827	**7%˅**	8%
Infant mortality (rate per 1,000)	31	**2.7˅**	4.3
Premature mortality (age-adjusted rate per 100,000)[20]	2,727	271.4	272.2
Respiratory health (age-adjusted rates per 100,000)[21]			
Asthma-related hospitalizations	8,048	**798.9˅**	885.6
Childhood asthma ED visits (age-specific rate per 100,000 for ages 14 and under)	1,106	**693.9˅**	868.0
Bacterial pneumonia-related hospitalizations	8,102	**731.5˄**	670.0
COPD-related hospitalizations	20,026	1865.3	1921.9

[13] Age-adjusted cardiovascular mortality rates per 100,000 from MADPH Registry of Vital Records, grouped for 2010-2012.

[14] Diabetes-related age-adjusted hospitalization rate per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). Diabetes mortality from MADPH Registry of Vital Records. All grouped for 2010-2012.

[15] 9 town aggregates unavailable through MADPH Bureau of Communicable Disease Control (BCDC) Registries, Division of Epidemiology and Immunization and MADPH Division of Sexually Transmitted Disease Prevention.

[16] HIV prevalence and incidence are for 2011 reported rates.

[17] Age-adjusted injury and poisoning hospitalization and emergency department visit rates per 100,000 for from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). Injury and poisoning mortality from MADPH Registry of Vital Records. All grouped for 2010-2012.

[18] Age-adjusted mental disorder hospitalization and emergency department visit rates per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). Mental disorder-related mortality from MADPH Registry of Vital Records. All grouped for 2010-2012.

[19] All mother and infant health data from MADPH Registry of Vital Records. Age-specific birth rates per 1000 and percent of inadequate prenatal care for 2011-2013. Inadequate prenatal care characterized by an inadequate score on Kotelchuk index. Percent of low birth weight births (defined as <2500 grams) and infant mortality rate per 1,000 grouped for 2010-2012 as defined by any deaths due to perinatal conditions via MADPH Registry of Vital Records.

[20] Age-adjusted premature mortality rates per 100,000 from MADPH Registry of Vital Records, grouped for 2010-2012. The premature mortality rate is the rate of deaths occurring among individuals less than 75 years of age.

[21] Asthma-related, pneumonia-related, and COPD-related age-adjusted hospitalization rates per 100,000 and childhood asthma age-specific ED visit rates from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). All grouped for 2010-2012.

Substance abuse (age-adjusted rates per 100,000)[22]			
Alcohol/substance-related ED visits	9,818	**1015.0^**	910.3
Alcohol/substance-related hospitalizations	2,997	**296.4˅**	341.2
Opioid-related ED visits	4,435	**469.1^**	280.3
Opioid-related hospitalizations	3,486	**352.3^**	332.4
Opioid-related mortality	120	**12.2^**	9.6
Health outcomes by specific age groups[23]			
Health of older adults (age 65+)			
Hospitalizations (age-specific rates per 100,000)			
Alcohol/substance-related hospitalizations	292	215.8	211.0
Cerebrovascular disease (stroke) hospitalizations	1,802	1331.5	1324.0
Major cardiovascular disease hospitalizations	10,666	**7881.0^**	7309.7
Diabetes-related hospitalizations	12,531	**9259.0^**	8394.1
All injury and poisoning hospitalizations	2,586	**1910.8˅**	3173.7
Hip fracture injury hospitalizations	891	**658.4^**	621.3
Mental disorder-related hospitalizations	16,255	**12010.6^**	10764.6
Bacterial pneumonia-related hospitalizations	5,305	**3919.8^**	3435.2
COPD-related hospitalizations	11,100	8201.6	7795.8
Emergency department visits (age-specific rates per 100,000)			
Alcohol/substance-related ED visits	201	**148.5˅**	204.1
Cerebrovascular disease (stroke) ED visits	309	**228.3˅**	256.0
Major cardiovascular disease ED visits	2,190	1618.2	1580.1
Acute myocardial infarction ED visits	124	91.6	93.4
Diabetes-related ED visits	5,898	**4358.0^**	4000.7
All injury and poisoning ED visits	10,943	8085.6	8352.8
Hip fracture injury ED visits	82	**60.6˅**	77.6
Mental disorder-related ED visits	5,184	**3830.4^**	3422.3
Bacterial pneumonia-related ED visits	393	290.4	299.5
COPD-related ED visits	3,431	**2535.1^**	2307.6
Health of youth age 15-19			
Hospitolizations (age-specific rates per 100,000)			
Alcohol/substance-related hospitalizations	68	**124.5^**	112.6
Diabetes-related hospitalizations	44	**80.5˅**	106.8
All injury and poisoning hospitalizations	226	**413.7^**	93.3
Opioid-related hospitalizations	55	**100.7˅**	388.6
Mental disorder-related hospitalizations	947	**1733.3^**	1361.2
COPD-related hospitalizations	276	**505.2^**	439.8
Emergency department visits (age-specific rates per 100,000)			
Alcohol/substance-related ED visits	735	**1345.3^**	966.1
Diabetes-related ED visits	145	**265.4^**	223.4
All injury and poisoning ED visits	7,358	13467.3	13144.7
Opioid-related ED visits	180	**329.5^**	176.3
Mental disorder-related ED visits	3,588	**6567.1^**	5740.3
COPD-related ED visits	1,249	**2286.0^**	1694.2
Public school district enrollment characteristics[24]			

[22] Age-adjusted alcohol/substance- and opioid-related hospitalization and emergency department visit rates per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). Opioid mortality from MADPH Registry of Vital Records. All grouped for 2010-20112.

[23] Age-specific hospitalization and emergency department visit rates per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). All grouped for 2010-2012. Age groups do not reflect health concerns for all sub-populations in the service area

Race/ethnicity			
African-American	3,815	**10%^**	9%
Asian	3,046	**8%^**	7%
Hispanic	5,924	16%	19%
White	23,314	63%	63%
Multi-race (non Hispanic)	1,071	3%	3%
Special populations			
First language not English	--	--	19%
Limited English proficient	--	--	9%
Students with disabilities	--	--	17%
Low income	--	--	27%
Public school district graduation and drop-out rates[22]			
Students graduating (4-year)	2,167	86%	87%
Students dropping out	136	**5%^**	5%
Graduates attending college/university	1,976	80%	77%
Youth outcomes: high school health survey data[25]			
Substance use			
Alcohol, ever used	--	--	47%
Alcohol, used in last 30 days	--	--	36%
Tobacco, ever used	--	--	32%
Tobacco, used in last 30 days	--	--	11%
Marijuana, ever used	--	--	33%
Marijuana, used in last 30 days	--	--	16%
Sexual activity			
Ever had sexual intercourse	--	--	38%
Used condom at last intercourse	--	--	58%
Mental health			
Experiencing depression in last 12 months	--	--	22%
Seriously considered suicide in last 12 months	--	--	12%
Attempted suicide in last 12 months	--	--	6%
Was bullied at school in last 12 months	--	--	17%

[24]Massachusetts Department of Elementary and Secondary Education (DESE), School and District Profiles 2015-2016. Public school district graduation and drop-out rates 2014-2015. Public school graduates attending college/university 2012-2013.

[25]Massachusetts Department of Elementary and Secondary Education (DESE), School and District Profiles 2015-2016. Public school district graduation and drop-out rates 2014-2015.Public school graduates attending college/university 2012-2013.

[25]MA DPH. 2013 Health and Risk Behaviors of MA Youth. Accessed: July 2, 2014. http://www.doe.mass.edu/cnp/hprograms/yrbs/2013Report.pdf.

TOP FIVE CAUSES OF DEATH[26]
(2010-2012)

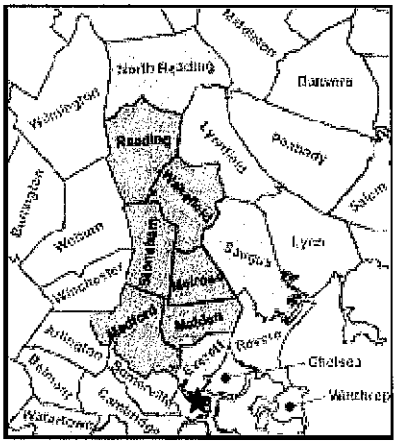
SERVICE AREA (n= 7,787)	#	% of Deaths	MASSACHUSETTS (n=159,125)	#	% of Deaths
1. Circulatory system diseases, all[27]	2,188	28.1%	**1.** Circulatory system Diseases, all	46,326	29.1%
2. Mental disorders[28]	769	9.9%	**2.** Mental disorders	13,571	8.5%
3. Lung cancer	574	7.4%	**3.** Lung cancer	10,403	6.5%
4. Chronic lower respiratory diseases	364	4.7%	**4.** Chronic lower respiratory diseases	7,566	4.8%
5. Genitourinary diseases, all[29]	290	3.7%	**5.** Digestive system diseases	5,959	3.7%

TOP FIVE CAUSES OF HOSPITALIZATION[30]
(2010-2012)

SERVICE AREA (n= 122,865)	#	% of Hosp.	MASSACHUSETTS (n=2,385,158)	#	% of Hosp.
1. Diabetes Mellitus related	20,465	16.7%	**1.** Chronic obstructive pulmonary disease, all related	422,466	17.7%
2. Chronic obstructive pulmonary disease, all related	20,026	16.3%	**2.** Diabetes Mellitus related	399,313	16.7%
3. Circulatory system diseases, all	16,673	13.6%	**3.** Circulatory system diseases, all	321,872	13.5%
4. Digestive system diseases, all	11,820	9.6%	**4.** Digestive system diseases, all	228,302	9.6%
5. Respiratory, pneumonia and influenza related	8,974	7.3%	**5.** Asthma-related	185,915	7.7%

[26] Leading causes of death from Registry of Vital Records and Statistics, Bureau of Health Statistics, Research and Evaluation, MDPH, pulled from MassCHIP. Analysis is for total deaths in years 2010, 2011, and 2012.
[27] Circulatory System Diseases: All includes: "major CVD", "heart disease", "coronary heart disease", "ischemic heart disease", "acute myocardial infarction", "cerebrovascular disease", "heart failure", "hypertensive heart disease", "hypertension", "atherosclerosis", and "rheumatic fever".
[28] Mental disorders include dementias.
[29] Genitourinary Diseases, all includes: "renal failure" and "nephritis, nephrosis
[30] Leading causes of hospitalization from Uniform Hospital Discharge Data System, Massachusetts Division of Health Care Finance and Policy, MDPH, pulled from MassCHIP. Analysis is for discharge data for years 2010, 2011, and 2012. Note that childbirth category (Childbirth, Pregnancy, Puerperium: All) left out of leading causes of hospitalization; childbirths accounted for 9.6% of hospitalizations (227,850) in MA and 10.0% (12,405) in the service area during time period.

EVERETT, MA



Population: 42,758

Demographics compared to Mossachusetts as a whole:

- Larger population of Hispanics (21%) and Black/African-Americans (16%)
- Top Hispanic or Latino origin sub-populations: Salvadoran (10%), Puerto Rican (3%), Dominican Republican (2%)
- Larger foreign born population (41%) and more than half speak a language other than English at home (S6%)
- Lower percentage of residents age 25+ with bachelor's degree or higher (17%)
- Lower median income ($51,056)
- Higher poverty rates for children under 18 (17%), families (12%), and adults over 65 (12%)
- Higher percentage of residents with 30% or more of income spent on gross rent or owner costs (44%)

Health Conditions

Everett residents experience the following health conditions at rates 5% or higher than residents of Massachusetts as a whole:

Cancer incidence & mortality
- All cancer mortality
- Lung cancer incidence and mortality
- Prostate cancer mortality

Cardiovascular health
- Acute myocardial infarction ED visits and mortality
- Major cardiovascular disease ED visits and hospitalizations
- Stroke ED visits and hospitalizations

Diabetes
- Diabetes related ED visits and hospitalizations

Infectious disease
- Chlamydia incidence
- Hepatitis C incidence
- HIV/AIDS prevalence

Injuries and poisonings
- All injury and poisoning ED visits and hospitalizations

Mental health
- Mental disorder related ED visits, hospitalizations, and mortality

Mather & Infant Health
- Inadequate prenatal care

Premature Mortality

Respiratary health
- Asthma related hospitalizations
- Bacterial pneumonia related hospitalizations
- Childhood (ages 14 and under) asthma ED visits
- Chronic Obstructive Pulmonary Disease (COPD) related hospitalizations

Substance abuse
- Alcohol/substance abuse related ED visits and hospitalizations
- Opioid related ED visits, hospitalizations, and mortality

Selected age groups

Older adults age 65+:
- Acute myocardial infarction ED visits
- Alcohol/substance related ED visits and hospitalizations
- Bacterial pneumonia related ED visits and hospitalizations
- COPD related hospitalizations
- Diabetes related ED visits and hospitalizations
- Hip fracture injury ED visits
- Major cardiovascular disease ED visits and hospitalizations
- Mental disorder related hospitalizations
- Stroke hospitalizations

Youth age 15-19:
- All injury and poisoning hospitalizations and ED visits
- COPD related ED visits and hospitalizations
- Diabetes related ED visits
- Mental disorder related hospitalizations
- Pregnancy rates

Top 3 Causes of Death
1. Circulatory System Diseases
2. Mental Disorders
3. Lung Cancer
Top 3 Causes of Hospitalization
1. Diabetes Mellitus Related
2. COPD Related
3. Circulator System Diseases

For more detailed information on Everett health indicators and for references, please see the data tables that follow.

EVERETT HEALTH INDICATORS DATA TABLE

Note: Bolding and arrows are used to highlight health conditions where the percent difference between Everett and the state is 5% or mare, and to show the direction (upward (ˆ) or downward (ˇ)) of the difference. For demagraphics and public school enrollment characteristics, only those indicators that differ from the state by a 5% difference or more in the higher direction are flagged. "NA" designates data that is inapplicable (i.e. not reported because the caunt is too low). A dash designates data that is unavailable (i.e. does not exist).

INDICATOR	Everett		MA
	#	%/Rate	%/Rate
Total population	42,758	--	6,657,291
Demographics[31]			
Female	21,504	50%	52%
Age			
Under 5 years	2,421	**7%ˆ**	6%
Under 18 years	9,605	**23%ˆ**	21%
18 to 34 years	11,356	**27%ˆ**	24%
35 to 64 years	16,913	40%	41%
65 and over	4,884	11%	14%
85 and over	747	2%	2%
Race/ethnicity[32]			
Asian (non Hispanic)	1,696	4%	6%
Black/African-American (non Hispanic)	6,812	**16%ˆ**	6%
Hispanic	8,913	**21%ˆ**	10%
Some other race (non Hispanic)[33]	625	**3%ˆ**	1%
White (non Hispanic)	24,708	54%	75%
Top 3 Hispanic or Latino origin sub-populations[34]			
Salvadoran	4,294	**10%ˆ**	1%
Puerto Rican	1,111	3%	4%
Dominican Republican	766	**2%ˆ**	2%
Foreign-born residents	17,370	**41%ˆ**	15%
Continent of origin of foreign-born residents			
Africa	1,256	7%	9%
Americas	12,683	**73%ˆ**	38%
Asia	1,348	8%	30%
Europe	2,083	12%	23%
Top 5 languages spoken at home[35]			
English only	17,563	44%	78%
Spanish or Spanish Creole	7,755	**19%ˆ**	8%
Portuguese or Portuguese Creole	6,497	**16%ˆ**	3%
French Creole	3,458	**9%ˆ**	2%
Italian	1,054	**3%ˆ**	1%
Social and economic characteristics[36]			
Highest educational attainment			
Less than high school graduate	5,563	**19%ˆ**	11%

[31] US Census Bureau, American Community Survey (ACS) 2010 to 2014 (5-Year Estimates) (Social Explorer)

[32] Excludes "Two or more races"

[33] "Some other race (non-Hispanic)" includes: American Indian and Alaska Native Alone; Native Hawaiian and Other Pacific Islander Alone; and Some Other Race Alone.

[34] These are the top 3 Hispanic or Latino origin sub- populations, based on 20% or more Hispanics reported in race ethnicity. The top 3 Hispanic subgroups in the state of Massachusetts as a whole are 1)Puerto Rican, 2) Dominican Republican 3) Salvadoran

[35] These are the top 5 languages spoken at home in Everett. The top 5 languages spoken at home in the state of Massachusetts as a whole are: 1) Only English, 2) Spanish or Spanish Creole, 3)Portuguese, 4) Chinese, 5) French Creole

[36] US Census Bureau, American Community Survey (ACS) 2010 to 2014; US Department of Labor, Bureau of Labor and Statistics, local area unemployment statistics 2012.

APPENDIX J: COMMUNITY DATA PROFILE FOR EVERETT

INDICATOR	Everett		MA
	#	%/Rate	%/Rate
High school graduate	11,261	**39%**ˆ	26%
Some college	7,537	**26%**ˆ	24%
Bachelor's degree	3,386	12%	23%
Graduate/advanced degree	1,281	5%	17%
Income			
Median household income	$51,056	--	$67,846
Per capita income	$23,419	--	$36,441
Poverty status			
Children under 18 living in poverty	1,660	**17%**ˆ	15%
Families living in poverty	1,287	**12%**ˆ	8%
Population 65 and older living in poverty	555	**12%**ˆ	9%
Housing units by structure			
1-unit	4,109	25%	57%
2 units	5,175	**32%**ˆ	10%
3 -9 units	5,190	**32%**ˆ	17%
10 -19 units	481	3%	4%
20 or more units	1,394	9%	10%
Housing units that are renter-occupied	9,386	**61%**ˆ	38%
Median gross rent	**$1,210**ˆ	--	$1,088
Gross rent or owner costs as a percentage of household income			
30% or more	--	**44%**ˆ	32%
Health insurance			
No health insurance coverage	4,241	**10%**ˆ	4%
Unemployment rate[37]	--	5.7	5.7
Crime Rate[38]			
Violent crime	170	400.2	405.5
Property crime	986	**2321.3**ˆ	2153.0
Health outcomes[39]			
Cancer incidence (age-adjusted rates per 100,000)[40]			
All cancers (invasive)	566	467.8	480.1
Breast cancer (female only)	83	**123.1**ˇ	135.1
Ovarian cancer	7	**10.5**ˇ	11.9
Prostate cancer	58	**109.4**ˇ	128.2
Colorectal cancer	42	**34.3**ˇ	38.4
Lung cancer	100	**85.8**ˆ	65.9
Cancer mortality (age-adjusted rates per 100,000)[41]			
All cancers	228	**187.1**ˆ	166.2
Breast cancer (female only)	10	**13.4**ˇ	19.2
Ovarian cancer	4	**5.7**ˇ	7.6
Prostate cancer	12	**25.6**ˆ	19.8
Colorectal cancer	15	**12.8**ˇ	13.8
Lung cancer	81	**67.1**ˆ	45.4
Cardiovascular health			
Cardiovascular-related hospitalizations (age-adjusted rate per 100,000)[42]			

[37] This is the percent of the workforce that is unemployed. The 2014 unemployment rate is an estimate based on the average of Jan through Dec monthly rates.

[38] FBI Uniform Crime Report, 2012. Violent and Property Crimes Rates per 100,000.

[39] Health outcomes pulled from MADPH MassCHIP database: http://www.mass.gov/eohhs/researcher/community-health/masschip/.

[40] Age-adjusted cancer incidence rates per 100,000 from MADPH Massachusetts Cancer Registry, grouped for 2010-2012.

[41] Age-adjusted cancer mortality rates per 100,000 from MADPH Registry of Vital Records, grouped for 2010-2012.

[42] Age-adjusted cardiovascular hospitalization and emergency department visit rates per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS), grouped for 2010-2012.

APPENDIX J: COMMUNITY DATA PROFILE FOR EVERETT

INDICATOR	Everett		MA
	#	%/Rate	%/Rate
Major cardiovascular disease hospitalizations	1,783	**1455.0**^	1294.3
Cerebrovascular disease (stroke) hospitalizations	296	**242.3**^	224.4
Cardiovascular-related emergency department visits (age-adjusted rate per 100,000)			
Major cardiovascular disease ED visits	1,263	**1009.9**^	412.7
Cerebrovascular disease (stroke) ED visits	67	**54.3**^	51.4
Acute myocardial infarction ED visits	34	**28.3**^	21.9
Cardiovascular mortality (age-adjusted rate per 100,000)[43]			
Major cardiovascular disease mortality	245	193.3	185.9
Cerebrovascular disease (stroke) mortality	32	**25.9**˅	29.5
Acute myocardial infarction mortality	35	**27.3**^	25.3
Diabetes (age-adjusted rates per 100,000)[44]			
Diabetes-related ED visits	2,232	**1772.1**^	1376.9
Diabetes-related hospitalizations	2,919	**2380.5**^	1762.5
Diabetes mortality	14	**11.3**˅	13.7
Infectious disease (crude rates per 100,000)[45]			
HIV/AIDS prevalence[46]	163	**391.2**^	272.8
HIV/AIDS incidence[16]	NA	NA	10.0
Hepatitis C incidence	45	**108.0**^	72.4
Chlamydia incidence	242	**580.9**^	357.3
TB incidence	NA	NA	3.2
Injuries (age-adjusted rates per 100,000)[47]			
All injury and poisoning ED visits	16,032	**12666.4**^	10484.5
All injury and poisoning hospitalizations	1,157	**912.5**^	829.4
All injury and poisoning mortality	52	**40.6**˅	43.0
Hip fracture injury hospitalizations	91	**72.3**˅	80.8
Mental health (age-adjusted rates per 100,000)[48]			
Mental disorder-related ED visits	8,161	**6247.3**^	5341.6
Mental disorder-related hospitalizations	5,952	**4692.9**^	3799.9
Mental disorder-related mortality	97	**74.4**^	52.6
Mother & infant health[49]			
Birth rates, by age (age-specific rate per 1,000)			
Ages 30-44	903	**62.6**	60.8
Ages 20-29	910	**91.1**^	62.5
Teens (ages 15-19)	93	**23.5**^	15.5
Inadequate prenatal care (percent of births)	200	**10%**^	7%
Low birth weight (percent of births)	136	**7%**˅	8%
Infant mortality (rate per 1,000)	8	4.2	4.3
Premature mortality (age-adjusted rate per 100,000)[50]	923	**309.8**^	272.2

[43] Age-adjusted cardiovascular mortality rates per 100,000 from MADPH Registry of Vital Records, grouped for 2010-2012.

[44] Diabetes-related age-adjusted hospitalization rate per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). Diabetes mortality from MADPH Registry of Vital Records. All grouped for 2010-2012.

[45] Crude HIV/AIDS prevalence, HIV/AIDS incidence, Hepatitis C incidence, and TB incidence rates per 100,000 from MADPH Bureau of Communicable Disease Control (BCDC) Registries, Division of Epidemiology and Immunization, for 2012. Crude Chlamydia incidence rate per 100,000 from MADPH Division of Sexually Transmitted Disease Prevention, for 2012. NA indicates data not available

[46] HIV prevalence and incidence are for 2011 reported rates.

[47] Age-adjusted injury and poisoning hospitalization and emergency department visit rates per 100,000 for from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). Injury and poisoning mortality from MADPH Registry of Vital Records. All grouped for 2010-2012.

[48] Age-adjusted mental disorder hospitalization and emergency department visit rates per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). Mental disorder-related mortality from MADPH Registry of Vital Records. All grouped for 2010-2012.

[49] All mother and infant health data from MADPH Registry of Vital Records. Age-specific birth rates per 1000 and percent of inadequate prenatal care for 2011-2013. Inadequate prenatal care characterized by an inadequate score on Kotelchuk index. Percent of low birth weight births (defined as <2500 grams) and infant mortality rate per 1,000 grouped for 2010-2012 as defined by any deaths due to perinatal conditions via MADPH Registry of Vital Records.

APPENDIX J: COMMUNITY DATA PROFILE FOR EVERETT

INDICATOR	Everett #	Everett %/Rate	MA %/Rate
Respiratory health (age-adjusted rates per 100,000)[51]			
Asthma-related hospitalizations	1,214	**972.3**^	885.6
Childhood asthma ED visits (age-specific rate per 100,000 for ages 14 and under)	267	**3109.7**^	1777.0
Bacterial pneumonia-related hospitalizations	340	276.9	275.0
COPD-related hospitalizations	2,895	**2361.9**^	1921.9
Substance abuse (age-adjusted rates per 100,000)[52]			
Alcohol/substance-related ED visits	1,780	**1338.0**^	910.3
Alcohol/substance-related hospitalizations	496	**378.8**^	341.2
Opioid-related ED visits	675	**493.4**^	280.3
Opioid-related hospitalizations	606	**455.0**^	332.4
Opioid-related mortality	20	**14.9**^	9.6
Health outcomes by specific age groups[53]			
Health of older adults (age 65+)			
Hospitalizations (age-specific rates per 100,000)			
Alcohol/substance-related hospitalizations	36	**251.2**^	211.0
Cerebrovascular disease (stroke) hospitalizations	200	**1395.3**^	1324.0
Major cardiovascular disease hospitalizations	1,112	**7757.8**^	7309.7
Diabetes-related hospitalizations	1,491	**10401.8**^	8394.1
All injury and poisoning hospitalizations	444	3097.5	3173.7
Hip fracture injury hospitalizations	78	**544.2**˅	621.3
Mental disorder-related hospitalizations	1,649	**11504.1**^	10764.6
Bacterial pneumonia-related hospitalizations	520	**3627.7**^	3435.2
COPD-related hospitalizations	1,293	**9020.5**^	7795.8
Emergency department visits (age-specific rates per 100,000)			
Alcohol/substance-related ED visits	28	195.3	204.1
Cerebrovascular disease (stroke) ED visits	36	251.2	256.0
Major cardiovascular disease ED visits	464	**3237.1**^	1580.1
Acute myocardial infarction ED visits	17	**118.6**^	93.4
Diabetes-related ED visits	615	**4290.5**^	4000.7
All injury and poisoning ED visits	1,127	**7862.4**˅	8352.8
Hip fracture injury ED visits	15	**104.7**^	77.6
Mental disorder-related ED visits	512	3571.9	3422.3
Bacterial pneumonia-related ED visits	46	**320.9**^	299.5
COPD-related ED visits	343	2392.9	2307.6
Health of youth age 15-19			
Hospitalizations (age-specific rates per 100,000)			
Alcohol/substance-related hospitalizations	NA	NA	112.6
Diabetes-related hospitalizations	NA	NA	106.8
All injury and poisoning hospitalizations	40	**484.3**^	93.3
Opioid-related hospitalizations	NA	NA	388.6
Mental disorder-related hospitalizations	178	**2155.2**^	1361.2
COPD-related hospitalizations	49	**593.3**^	439.8
Emergency department visits (age-specific rates per 100,000)			
Alcohol/substance-related ED visits	69	**835.5**˅	966.1

[50]Age-adjusted premature mortality rates per 100,000 from MADPH Registry of Vital Records, grouped for 2010-2012. The premature mortality rate is the rate of deaths occurring among individuals less than 75 years of age.

[51] Asthma-related, pneumonia-related, and COPD-related age-adjusted hospitalization rates per 100,000 and childhood asthma age-specific ED visit rates from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). All grouped for 2010-2012.

[52] Age-adjusted alcohol/substance- and opioid-related hospitalization and emergency department visit rates per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). Opioid mortality from MADPH Registry of Vital Records. All grouped for 2010-20112.

[53] Age-specific hospitalization and emergency department visit rates per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). All grouped for 2010-2012. Age groups do not reflect health concerns for all sub-populations in Everett

APPENDIX J: COMMUNITY DATA PROFILE FOR EVERETT

INDICATOR	Everett		MA
	#	%/Rate	%/Rate
Diabetes-related ED visits	24	**290.6^**	223.4
All injury and poisoning ED visits	1,308	**15837.3^**	13144.7
Opioid-related ED visits	12	**145.3˅**	176.3
Mental disorder-related ED visits	485	5872.4	5740.3
COPD-related ED visits	217	**2627.4^**	1694.2
Public school district enrollment characteristics[54]			
Race/ethnicity			
African-American	1,283	**18%^**	9%
Asian	349	5%	7%
Hispanic	3,128	**44%^**	19%
White	2,195	31%	63%
Multi-race (non Hispanic)	135	2%	3%
Special populations			
First language not English	--	**59%^**	19%
Limited English proficient	--	**16%^**	9%
Students with disabilities	--	15%	17%
Low income	--	**42%^**	27 %
Public school district graduation and drop-out rates[24]			
Students graduating (4-year)	441	79%	87%
Students dropping out	56	**10%^**	5%
Graduates attending college/university	306	70%	77%
Youth outcomes: high school health survey data[55]			
Substance use			
Alcohol, ever used	--	47%	47%
Alcohol, used in last 30 days	--	17%	36%
Tobacco, ever used	--	20%	32%
Tobacco, used in last 30 days	--	5%	11%
Marijuana, ever used	--	33%	33%
Marijuana, used in last 30 days	--	16%	16%
Prescription opioids, ever used[56]	--	1%	--
Prescription opioids, used in last 30 days[26]	--	0%	--
Sexual activity			
Ever had sexual intercourse	--	39%	38%
Used condom at last intercourse	--	**65%^**	58%
Mental health			
Experiencing depression in last 12 months	--	**29%^**	22%
Seriously considered suicide in last 12 months	--	12%	12%
Attempted suicide in last 12 months	--	6%	6%
Was bullied at school in last 12 months	--	**18%^**	17%

[54] Massachusetts Department of Elementary and Secondary Education (DESE), School and District Profiles 2015-2016. Public school district graduation and drop-out rates 2014-2015.Public school graduates attending college/university 2012-2013.

[55] MA DPH. 2013 Health and Risk Behaviors of MA Youth. Accessed: July 2, 2014. http://www.doe.mass.edu/cnp/hprograms/yrbs/2013Report.pdf. Everett Youth Risk Behavior Survey 2014-2015.

[56] Students in Everett were asked about their use of the opiod Oxycontin specifically without a doctor's prescription.

TOP FIVE CAUSES OF DEATH[57] (2010-2012)					
Everett *(n= 923)*	#	% of Deaths	**MASSACHUSETTS** *(n=159, 125)*	#	% of Deaths
1. Circulatory system diseases, all[58]	248	26.9%	**1.** Circulatory system diseases, all	46,326	29.1%
2. Mental disorders[59]	97	10.5%	**2.** Mental disorders	13,571	8.5%
3. Lung cancer	81	8.8%	**3.** Lung cancer	10,403	6.5%
4. Chronic lower respiratory diseases	46	5.0%	**4.** Chronic lower respiratory diseases	7,566	4.8%
5. Digestive system diseases, all[60]	39	4.2%	**5.** Digestive system diseases, all	5,959	3.7%

TOP FIVE CAUSES OF HOSPITALIZATION[61] (2010-2012)					
Everett *(n= 16,735)*	#	% of Hosp.	**MASSACHUSETTS** *(n=2,385,158)*	#	% of Hosp.
1. Diabetes Mellitus related	2,919	17.4%	**1.** Chronic obstructive pulmonary disease, all related	422,466	17.7%
2. Chronic obstructive pulmonary disease, all related	2,895	17.3%	**2.** Diabetes Mellitus Related	399,313	16.7%
3. Circulatory system diseases, all	1,948	11.6%	**3.** Circulatory system diseases, all	321,872	13.5%
4. Digestive system diseases, all	1,540	9.2%	**4.** Digestive system diseases, all	228,302	9.6%
5. Mental disorders	1,462	8.7%	**5.** Asthma-related	185,915	7.7%

[57] Leading causes of death from Registry of Vital Records and Statistics, Bureau of Health Statistics, Research and Evaluation, MDPH, pulled from MassCHIP. Analysis is for total deaths in years 2010, 2011, and 2012.

[58] Circulatory System Diseases: All includes: "major CVD", "heart disease", "coronary heart disease", "ischemic heart disease", "acute myocardial infarction", "cerebrovascular disease", "heart failure", "hypertensive heart disease", "hypertension", "atherosclerosis", and "rheumatic fever".

[59] Mental disorders include dementias.

[60] Digestive system diseases of the oral cavity, salivary glands and jaws; diseases of the esophagus, stomach and duodenum; appendicitis; hernia of the abdominal cavity; other diseases of the intestines and peritoneum; and diseases of the liver, gallbladder, and biliary tracts/bile ducts.

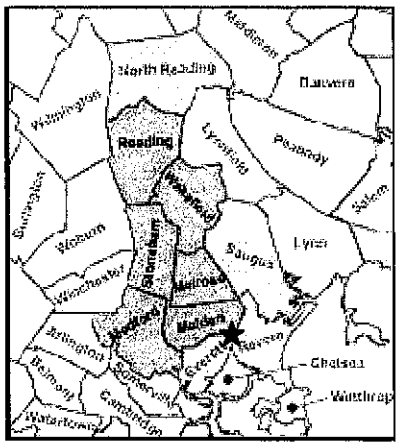
[61] Leading causes of hospitalization from Uniform Hospital Discharge Data System, Massachusetts Division of Health Care Finance and Policy, MDPH, pulled from MassCHIP. Analysis is for discharge data for years 2010, 2011, and 2012. Note that childbirth category (Childbirth, Pregnancy, Puerperium: All) left out of leading causes of hospitalization; childbirths accounted for 9.6% of hospitalizations (227,850) in MA and 12.6% (2,112) in Everett during time period.

MALDEN, MA

Population: 60,309

Demographics compared to the state of Massachusetts as a whole:

- Larger population of Asians (24%) and Black/African-Americans (13%)
- Top 3 Asian origin sub-populations: Chinese (61%), Asian Indian (13%), Vietnamese (12%)
- Larger foreign born population (42%) and about half speak a language other than English at home (51%)
- Lower median income ($55,523) despite of comparable residents age 25+ with bachelor's degree or higher (32%)
- Higher poverty rates for children under 18 (21%), families (13%), and adults over 65 (18%)
- Higher percentage of residents with 30% or more of income spent on gross rent or owner costs (38%)



Health Conditions

Malden residents experience the following health conditions at rates 5% or higher than residents of Massachusetts as a whole:

Cancer incidence & mortality
- All cancer mortality
- Colorectal cancer incidence and mortality
- Lung cancer incidence and mortality
- Ovarian cancer mortality

Cardiovascular health
- Major cardiovascular disease ED visits and hospitalizations

Diabetes
- Diabetes related ED visits, hospitalizations, and mortality

Infectious disease
- Chlamydia incidence
- HIV/AIDS prevalence and incidence
- Tuberculosis incidence

Mental health
- Mental disorder related ED visits and hospitalizations

Mother & Infant health
- Inadequate prenatal care

Respiratory health
- Bacterial pneumonia related hospitalizations

Substance abuse
- Alcohol/substance abuse related ED visits
- Opioid related ED visits, hospitalizations, and mortality

Selected age groups

Older adults age 65+:
- Alcohol/substance related ED visits
- COPD related ED visits
- Diabetes related ED visits and hospitalizations
- Mental disorder related ED visits
- Bacterial pneumonia related hospitalizations

Youth age 15-19:
- All injury and poisoning hospitalizations
- Alcohol/substance related ED visits
- COPD related hospitalizations and ED visits
- Diabetes related ED visits
- Opioid related ED visits
- Mental disorder related hospitalizations and ED visits

Top 3 Causes of Death
1. Circulatory System Diseases
2. Lung Cancer
3. Mental Disorders
Top 3 Causes of Hospitalization
1. Diabetes Mellitus Related
2. COPD Related
3. Circulatory System Diseases

For more detailed information on Malden health indicators and for references, please see the data tables that follow.

MALDEN HEALTH INDICATORS DATA TABLE

Note: Bolding ond arrows are used to highlight health conditions where the percent difference between Malden and the state is 5% or more, and to show the direction (upword (ˆ) or downward (ˇ)) of the difference. For demographics and public school enrollment characteristics, only those indicators that differ fram the state by a 5% difference or more in the higher direction are flagged. "NA" designates data that is inapplicable (i.e. not reported because the count is too low). A dash designates data thot is unavailoble (i.e. does not exist).

INDICATOR	Malden		MA
	#	%/Rate	%/Rate
Total population	60,309	--	6,657,291
Demographics[62]			
Female	31,418	52%	52%
Age			
Under 5 years	2,853	**7%ˆ**	6%
Under 18 years	9,605	**23%ˆ**	21%
18 to 34 years	11,356	**27%ˆ**	24%
35 to 64 years	16,913	40%	41%
65 and over	4,884	11%	14%
85 and over	747	2%	2%
Race/ethnicity[63]			
Asian (non Hispanic)	14,338	**24%ˆ**	6%
Black/African-American (non Hispanic)	7,775	**13%ˆ**	6%
Hispanic	6,709	**11%ˆ**	10%
Some other race (non Hispanic)[64]	729	**1%ˆ**	1%
White (non Hispanic)	28,759	48%	75%
Top 3 Asian Origin sub-populations[65]			
Chinese, except Taiwanese	8,676	**61%ˆ**	7%
Asian Indian	1,801	**13%ˆ**	5%
Vietnamese	1,739	**12%ˆ**	4%
Top 3 Hispanic or Latino Origin Sub-populations			
Salvadoran	1,566	**3%ˆ**	1%
Puerto Rican	1,348	2%	4%
Guatemalan	750	1%	2%
Foreign-born residents	25,551	**42%ˆ**	15%
Continent of origin of foreign-born residents			
Africa	2,448	**10%ˆ**	9%
Americas	9,283	36%	38%
Asia	11,769	**46%ˆ**	30%
Europe	2,051	8%	23%
Top 5 languages spoken at home[66]			
English Only	27,846	49%	78%
Spanish or Spanish Creole	5,045	**9%ˆ**	8%
Portuguese or Portuguese Creole	3,757	**7%ˆ**	3%
French Creole	3,110	**6%ˆ**	2%
Chinese	7,774	**14%ˆ**	2%

[62] US Census Bureau, American Community Survey (ACS) 2010 to 2014 (5-Year Estimates) (SE)
[63] Excludes "Two or more races"
[64] "Some other race (non-Hispanic)" includes: American Indian and Alaska Native Alone; Native Hawaiian and Other Pacific Islander Alone; and Some Other Race Alone.
[65] These are the top 3 Asian origin sub- populations, based on 20% or more Asian reported in race. The top 3 Asian subgroups in the state of Massachusetts as a whole are 1) China, excluding Hong Kong , 2) India 3) Vietnam
[66] These are the top 5 languages spoken at home in Malden. The top 5 languages spoken at home in the state of Massachusetts as a whole are: 1) Only English, 2) Spanish or Spanish Creole, 3)Portuguese, 4) Chinese, 5) French Creole

APPENDIX J: COMMUNITY DATA PROFILE FOR MALDEN

INDICATOR	Malden #	Malden %/Rate	MA %/Rate
Social and economic characteristics[67]			
Highest educational attainment			
Less than high school graduate	6,339	**15%^**	11%
High school graduate	12,648	**30%^**	26%
Some college	9,844	23%	24%
Bachelor's degree	7,438	18%	23%
Graduate/advanced degree	5,935	14%	17%
Income			
Median household income	$55,523	--	$67,846
Per capita income	$26,760	--	$36,441
Poverty status			
Children under 18 living in poverty	2,423	**21%^**	15%
Families living in poverty	1,765	**13%^**	8%
Population 6S and older living in poverty	1,163	**18%^**	9%
Housing units by structure			
1-unit	8,191	34%	57%
2 units	5,100	**21%^**	10%
3 -9 units	3,718	15%	17%
10 -19 units	1,069	4%	4%
20 or more units	S,890	**24%^**	10%
Housing units that are renter-occupied	13,388	**59%^**	38%
Median gross rent	**$1,264^**	--	$1,088
Gross rent or owner costs as a percentage of household income			
30% or more	--	**38%^**	32%
Health insurance			
No health insurance coverage	3,786	**6%^**	4%
Unemployment rate[68]	--	5.3	5.7
Crime Rate[69]			
Violent crime	280	**462.0^**	405.S
Property crime	1,203	1985.0	2153.0
Health outcomes[70]			
Cancer incidence (age-adjusted rates per 100,000)[71]			
All cancers (invasive)	835	458.2	480.1
Breast cancer (female only)	106	**106.3˅**	135.1
Ovarian cancer	10	**10.1˅**	11.9
Prostate cancer	73	**90.5˅**	128.2
Colorectal cancer	83	**45.1^**	38.4
Lung cancer	141	**79.0^**	65.9
Cancer mortality (age-adjusted rates per 100,000)[72]			
All cancers	321	**179.2^**	166.2
Breast cancer (female only)	16	**16.2˅**	19.2
Ovarian cancer	10	**9.3^**	7.6
Prostate cancer	9	**12.4˅**	19.8
Colorectal cancer	31	**16.7^**	13.8
Lung cancer	99	**56.5^**	45.4

[67] US Census Bureau, American Community Survey (ACS) 2010 to 2014; US Department of Labor, Bureau of Labor and Statistics, local area unemployment statistics 2012.

[68] This is the percent of the workforce that is unemployed. The 2014 unemployment rate is an estimate based on the average of Jan through Dec monthly rates.

[69] FBI Uniform Crime Report, 2012. Violent and Property Crimes Rates per 100,000.

[70] Health outcomes pulled from MADPH MassCHIP database: http://www.mass.gov/eohhs/researcher/community-health/masschip/.

[71] Age-adjusted cancer incidence rates per 100,000 from MADPH Massachusetts Cancer Registry, grouped for 2010-2012.

[72] Age-adjusted cancer mortality rates per 100,000 from MADPH Registry of Vital Records, grouped for 2010-2012.

APPENDIX J: COMMUNITY DATA PROFILE FOR MALDEN

INDICATOR	Malden #	Malden %/Rate	MA %/Rate
Cardiovascular health			
Cardiovoscular-related hospitolizations (age-adjusted rate per 100,000)[73]			
Major cardiovascular disease hospitalizations	2,492	**1384.7^**	1294.3
Cerebrovascular disease (stroke) hospitalizations	410	228.7	224.4
Cardiovascular-related emergency department visits (age-adjusted rate per 100,000)			
Major cardiovascular disease ED visits	945	**506.8^**	412.7
Cerebrovascular disease (stroke) ED visits	78	**43.4˅**	51.4
Acute myocardial infarction ED visits	31	**16.9˅**	21.9
Cardiovascular martality (age-adjusted rate per 100,000)[74]			
Major cardiovascular disease mortality	322	**174.7˅**	185.9
Cerebrovascular disease (stroke) mortality	53	29.4	29.5
Acute myocardial infarction mortality	45	25.1	25.3
Diabetes (age-adjusted rates per 100,000)[75]			
Diabetes-related ED visits	3,178	**1710.3^**	1376.9
Diabetes-related hospitalizations	3,741	**2062.4^**	1762.5
Diabetes mortality	29	**15.4^**	13.7
Infectious disease (crude rates per 100,000)[76]			
HIV/AIDS prevalence[77]	261	**439.1^**	272.8
HIV/AIDS incidence[16]	9	**15.1^**	10.0
Hepatitis C incidence	44	74.0	72.4
Chlamydia incidence	252	**423.9^**	357.3
TB incidence	5	**8.4^**	3.2
Injuries (age-adjusted rates per 100,000)[78]			
All injury and poisoning ED visits	18,232	10225.3	10484.5
All injury and poisoning hospitalizations	1,584	865.2	829.4
All injury and poisoning mortality	70	**36.6˅**	43.0
Hip fracture injury hospitalizations	149	82.1	80.8
Mental health (age-adjusted rates per 100,000)[79]			
Mental disorder-related ED visits	12,246	**6438.5^**	5341.6
Mental disorder-related hospitalizations	7,751	**4153.9^**	3799.9
Mental disorder-related mortality	92	**49.6˅**	52.6
Mother & infant health[80]			
Birth rates, by age (age-specific rate per 1,000)			
Ages 30-44	1,456	**66.7^**	60.8
Ages 20-29	1,140	**73.4^**	62.5

[73] Age-adjusted cardiovascular hospitalization and emergency department visit rates per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS), grouped for 2010-2012.

[74] Age-adjusted cardiovascular mortality rates per 100,000 from MADPH Registry of Vital Records, grouped for 2010-2012.

[75] Diabetes-related age-adjusted hospitalization rate per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). Diabetes mortality from MADPH Registry of Vital Records. All grouped for 2010-2012.

[76] Crude HIV/AIDS prevalence, HIV/AIDS incidence, Hepatitis C incidence, and TB incidence rates per 100,000 from MADPH Bureau of Communicable Disease Control (BCDC) Registries, Division of Epidemiology and Immunization, for 2012. Crude Chlamydia incidence rate per 100,000 from MADPH Division of Sexually Transmitted Disease Prevention, for 2012. NA indicates data not available

[77] HIV prevalence and incidence are for 2011 reported rates.

[78] Age-adjusted injury and poisoning hospitalization and emergency department visit rates per 100,000 for from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). Injury and poisoning mortality from MADPH Registry of Vital Records. All grouped for 2010-2012.

[79] Age-adjusted mental disorder hospitalization and emergency department visit rates per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). Mental disorder-related mortality from MADPH Registry of Vital Records. All grouped for 2010-2012.

[80] All mother and infant health data from MADPH Registry of Vital Records. Age-specific birth rates per 1000 and percent of inadequate prenatal care for 2011-2013. Inadequate prenatal care characterized by an inadequate score on Kotelchuk index. Percent of low birth weight births (defined as <2500 grams) and infant mortality rate per 1,000 grouped for 2010-2012 as defined by any deaths due to perinatal conditions via MADPH Registry of Vital Records.

APPENDIX J: COMMUNITY DATA PROFILE FOR MALDEN

INDICATOR	Malden		MA
	#	%/Rate	%/Rate
Teens (ages 15-19)	61	**13.1˅**	15.5
Inadequate prenatal care (percent of births)	279	**11%^**	7%
Low birth weight (percent of births)	202	8%	8%
Infant mortality (rate per 1,000)	6	**2.3˅**	4.3
Premature mortality (age-adjusted rate per 100,000)[81]	484	275.3	272.2
Respiratory health (age-adjusted rates per 100,000)[82]			
Asthma-related hospitalizations	1,624	897.4	885.6
Childhood asthma ED visits (age-specific rate per 100,000 for ages 14 and under)	262	893.8	868.0
Bacterial pneumonia-related hospitalizations	1,394	**776.7^**	670.0
COPD-related hospitalizations	3,577	1986.9	1921.9
Substance abuse (age-adjusted rates per 100,000)[83]			
Alcohol/substance-related ED visits	2,209	**1127.4^**	910.3
Alcohol/substance-related hospitalizations	614	**314.2˅**	341.2
Opioid-related ED visits	869	**428.9^**	280.3
Opioid-related hospitalizations	738	**363.5^**	332.4
Opioid-related mortality	23	**11.4^**	9.6
Health outcomes by specific age groups[84]			
Health of older adults (age 65+)			
Hospitalizations (age-specific rates per 100,000)			
Alcohol/substance-related hospitalizations	36	**171.7˅**	211.0
Cerebrovascular disease (stroke) hospitalizations	270	1287.9	1324.0
Major cardiovascular disease hospitalizations	1,588	7574.9	7309.7
Diabetes-related hospitalizations	2,024	**9654.7^**	8394.1
All injury and poisoning hospitalizations	688	3281.8	3173.7
Hip fracture injury hospitalizations	131	624.9	621.3
Mental disorder-related hospitalizations	2,292	10933.0	10764.6
Bacterial pneumonia-related hospitalizations	770	**3673.0^**	3435.2
COPD-related hospitalizations	1,697	8094.8	7795.8
Emergency department visits (age-specific rates per 100,000)			
Alcohol/substance-related ED visits	50	**238.5^**	204.1
Cerebrovascular disease (stroke) ED visits	43	**205.1˅**	256.0
Major cardiovascular disease ED visits	333	1588.4	1580.1
Acute myocardial infarction ED visits	13	**62.0˅**	93.4
Diabetes-related ED visits	1,093	**5213.7^**	4000.7
All injury and poisoning ED visits	1,681	8018.5	8352.8
Hip fracture injury ED visits	15	**71.6˅**	77.6
Mental disorder-related ED visits	898	**4283.5^**	3422.3
Bacterial pneumonia-related ED visits	66	314.8	299.5
COPD-related ED visits	547	**2609.2^**	2307.6
Health of youth age 15-19			
Hospitalizations (age-specific rates per 100,000)			
Alcohol/substance-related hospitalizations	NA	NA	112.6
Diabetes-related hospitalizations	NA	NA	106.8

[81] Age-adjusted premature mortality rates per 100,000 from MADPH Registry of Vital Records, grouped for 2010-2012. The premature mortality rate is the rate of deaths occurring among individuals less than 75 years of age.

[82] Asthma-related, pneumonia-related, and COPD-related age-adjusted hospitalization rates per 100,000 and childhood asthma age-specific ED visit rates from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). All grouped for 2010-2012.

[83] Age-adjusted alcohol/substance- and opioid-related hospitalization and emergency department visit rates per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). Opioid mortality from MADPH Registry of Vital Records. All grouped for 2010-20112.

[84] Age-specific hospitalization and emergency department visit rates per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). All grouped for 2010-2012. Age groups do not reflect health concerns for all sub-populations in Malden.

APPENDIX J: COMMUNITY DATA PROFILE FOR MALDEN

INDICATOR	Malden		MA
	#	%/Rate	%/Rate
All injury and poisoning hospitalizations	38	**392.5^**	93.3
Opioid-related hospitalizations	NA	NA	388.6
Mental disorder-related hospitalizations	161	**1663.1^**	1361.2
COPD-related hospitalizations	66	**681.8^**	439.8
Emergency department visits (age-specific rates per 100,000)			
Alcohol/substance-related ED visits	114	**1177.6^**	966.1
Diabetes-related ED visits	33	**340.9^**	223.4
All injury and poisoning ED visits	1,295	13376.7	13144.7
Opioid-related ED visits	41	**423.5^**	176.3
Mental disorder-related ED visits	684	**7065.4^**	5740.3
COPD-related ED visits	343	**3543.0^**	1694.2
Public school district enrollment characteristics[85]			
Race/ethnicity			
African-American	1,314	**20%^**	9%
Asian	1524	**23%^**	7%
Hispanic	1,439	**22%^**	19%
White	2,017	31%	63%
Multi-race (non Hispanic)	250	**4%^**	3%
Special populations			
First language not English	--	**50%^**	19%
Limited English proficient	--	**19%^**	9%
Students with disabilities	--	16%	17%
Low income	--	**40%^**	27 %
Public school district graduation and drop-out rates[24]			
Students graduating (4-year)	410	80%	87%
Students dropping out	36	**7%^**	5%
Graduates attending college/university	311	74%	77%
Youth outcomes: high school health survey data[86]			
Substance use			
Alcohol, ever used	--	46%	47%
Alcohol, used in last 30 days	--	18%	36%
Tobacco, ever used	--	24%	32%
Tobacco, used in last 30 days	--	5%	11%
Marijuana, ever used	--	28%	33%
Marijuana, used in last 30 days	--	**17%^**	16%
Prescription opioids, ever used[87]	--	4%	--
Prescription opioids, used in last 30 days[26]	--	2%	--
Sexual activity			
Ever had sexual intercourse	--	29%	38%
Used condom at last intercourse	--	**64%^**	58%
Mental health			
Experiencing depression in last 12 months	--	**28%^**	22%
Seriously considered suicide in last 12 months	--	12%	12%
Attempted suicide in last 12 months	--	**7%^**	6%
Was bullied at school in last 12 months	--	10%	17%

[85] Massachusetts Department of Elementary and Secondary Education (DESE), School and District Profiles 2015-2016. Public school district graduation and drop-out rates 2014-2015.Public school graduates attending college/university 2012-2013.

[86] MA DPH. 2013 Health and Risk Behaviors of MA Youth. Accessed: July 2, 2014. http://www.doe.mass.edu/cnp/hprograms/yrbs/2013Report.pdf. Malden Youth Risk Behavior Survey 2013-2014.

[87] Students in Malden were asked about their use of the opiod Oxycontin specifically.

TOP FIVE CAUSES OF DEATH[88] (2010-2012)					
Malden *(n= 630)*	#	% of Deaths	**MASSACHUSETTS** *(n=159, 125)*	#	% of Deaths
1. Circulatory system diseases, all[89]	325	27.3%	**1.** Circulatory system diseases, all	46,326	29.1%
2. Lung cancer	99	8.3%	**2.** Mental disorders	13,571	8.5%
3. Mental disorders[90]	92	7.7%	**3.** Lung cancer	10,403	6.5%
4. Chronic lower respiratory diseases	64	3.4%	**4.** Chronic lower respiratory diseases	7,566	4.8%
5. Digestive system diseases, all[91]	50	4.2%	**5.** Digestive system diseases, all	5,959	3.7%

TOP FIVE CAUSES OF HOSPITALIZATION[92] (2010-2012)					
Malden *(n= 14,037)*	#	% of Hosp.	**MASSACHUSETTS** *(n=2,385,158)*	#	% of Hosp.
1. Diabetes Mellitus related	3,741	16.3%	**1.** Chronic obstructive pulmonary disease, all related	422,466	17.7%
2. Chronic obstructive pulmonary disease, all related	3,577	15.6%	**2.** Diabetes mellitus related	399,313	16.7%
3. Circulatory system diseases, all	2,718	11.8%	**3.** Circulatory system diseases, all	321,872	13.5%
4. Digestive system diseases, all	2,067	9%	**4.** Digestive system diseases, all	228,302	9.6%
5. Mental disorders	1,934	8.4%	**5.** Asthma related	185,915	7.7%

[88] Leading causes of death from Registry of Vital Records and Statistics, Bureau of Health Statistics, Research and Evaluation, MDPH, pulled from MassCHIP. Analysis is for total deaths in years 2010, 2011, and 2012.

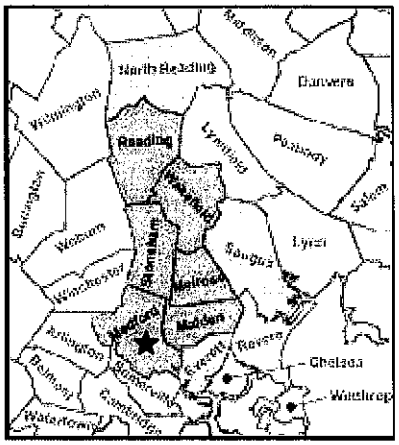
[89] Circulatory System Diseases: All includes: "major CVD", "heart disease", "coronary heart disease", "ischemic heart disease", "acute myocardial infarction", "cerebrovascular disease", "heart failure", "hypertensive heart disease", "hypertension", "atherosclerosis", and "rheumatic fever".

[90] Mental disorders include dementias.

[91] Digestive system diseases of the oral cavity, salivary glands and jaws; diseases of the esophagus, stomach and duodenum; appendicitis; hernia of the abdominal cavity; other diseases of the intestines and peritoneum; and diseases of the liver, gallbladder, and biliary tracts/bile ducts.

[92] Leading causes of hospitalization from Uniform Hospital Discharge Data System, Massachusetts Division of Health Care Finance and Policy, MDPH, pulled from MassCHIP. Analysis is for discharge data for years 2010, 2011, and 2012. Note that childbirth category (Childbirth, Pregnancy, Puerperium: All) left out of leading causes of hospitalization; childbirths accounted for 9.6% of hospitalizations (227,850) in MA and 12.5% (2,859) in Malden during time period.

MEDFORD, MA



Population: 56,981

Demographics compared to the state of Massachusetts as a whole:

- Larger population of Asians (7%) and Black/African-Americans (9%)
- Larger foreign-born population (21%) and most speak English at home (73%)
- Higher percentage of residents age 25+ with bachelor's degree or higher (45%)
- Higher median income ($77,868)
- Lower unemployment rate (4.7% of workforce)
- Lower single housing units (48%) and higher housing with 3+ units
- Lower population without health insurance (3%)

Health Conditions

Medford residents experience the following health conditions at rates 5% or higher than residents of Massachusetts as a whole

Cancer incidence & martality
- Breast cancer mortality
- Ovarian cancer incidence
- Colorectal cancer incidence
- Lung cancer incidence and mortality

Cardiovascular health
- Acute myocardial infarctions ED visits and mortality
- Major cardiovascular diseases hospitalizations

Diabetes
- Diabetes related ED visits and hospitalizations

Infectious diseases
- HIV/AIDS incidence

Injuries
- All injury and poisoning hospitalizations

Mental health
- Mental disorder related ED visits and mortality

Respiratory health
- Bacterial pneumonia related hospitalizations

Substance abuse
- Opioid related ED visits and mortality

Selected age groups

Older adults age 65+:
- Acute myocardial infarction ED visits
- Alcohol/substance related hospitalizations
- All injury and poisoning ED visits and hospitalizations
- Bacterial pneumonia related ED visits and hospitalizations
- COPD related ED visits and hospitalizations
- Diabetes related ED visits and hospitalizations
- COPD (Chronic Obstructive Pulmonary Disorder) related ED visits and hospitalizations
- Hip fracture injury hospitalizations
- Major cardiovascular disease hospitalizations
- Diabetes related ED visits and hospitalizations
- Mental disorder related ED visits and hospitalizations

Youth age 15-19:
- Alcohol/substance related ED visits and hospitalizations
- All injury and poisoning hospitalizations
- COPD related ED visits and hospitalizations
- Mental disorder related ED visits and hospitalizations

Top 3 Causes of Death
1. Circulatory System Diseases
2. Mental Disorders
3. Lung Cancer
Top 3 Causes of Hospitalization
1. Diabetes
2. Chronic Obstructive Pulmonary (COPD)
3. Circulatory System Diseases

For more detailed information on Medford health indicators and for references, please see the data tables that follow.

MEDFORD HEALTH INDICATORS DATA TABLE

Note: Bolding and arrows are used to highlight health conditions where the percent difference between Medford and the state is 5% or more, and to shaw the direction (upward (ˆ) or downward (ˇ)) af the difference. For demagraphics and public school enrollment characteristics, only those indicators that differ from the state by a 5% difference or more in the higher direction are flagged. "NA" designates data that is inapplicable (i.e. not reported because the caunt is too low). A dash designates data that is unavailable (i.e. does not exist).

INDICATOR	Medford		MA
	#	%/Rate	%/Rate
Total population	56,981		6,657,291
Demographics[93]			
Female	30,335	53%	52%
Age			
Under 5 years	2,914	5%	6%
Under 18 years	8,717	15%	21%
18 to 34 years	18,756	**33%ˆ**	24%
35 to 64 years	21,357	38%	41%
65 and over	8,151	14%	14%
85 and over	1,393	2%	2%
Race/ethnicity[94]			
Asian (non Hispanic)	4,240	**7%ˆ**	6%
Black/African-American (non Hispanic)	4,980	**9%ˆ**	6%
Hispanic	2,626	5%	10%
5ome other race (non Hispanic)[95]	335	1%	1%
White (non Hispanic)	43,273	76%	75%
Foreign-born residents	12,012	**21%ˆ**	15%
Continent of origin of foreign-born residents			
Africa	825	7%	9%
Americas	4,479	37%	38%
Asia	3,533	29%	30%
Europe	3,146	**26%ˆ**	23%
Top 5 languages spoken at home[96]			
Speak Only English	39,263	73%	78%
Spanish or Spanish Creole	1,909	4%	8%
French Creole	1,816	**3%ˆ**	3%
Portuguese or Portuguese Creole	2,216	**4%ˆ**	1%
Italian	1,820	**3%ˆ**	0%
Social and economic characteristics[97]			
Highest educational attainment			
Less than high school graduate	3,655	9%	11%
High school graduate	9,969	24%	26%
Some college	9,003	22%	24%
Bachelor's degree	10,206	**25%ˆ**	23%
Graduate/advanced degree	8,287	**20%ˆ**	17%
Income			

[93] US Census Bureau, American Community Survey (ACS) 2010 to 2014 (5-Year Estimates) (SE)

[94] Excludes "Two or more races"

[95] "Some other race (non-Hispanic)" includes: American Indian and Alaska Native Alone; Native Hawaiian and Other Pacific Islander Alone; and Some Other Race Alone.

[96] These are the top 5 languages spoken at home in Medford. The top 5 languages spoken at home in the state of Massachusetts as a whole are: 1) Only English, 2) Spanish or Spanish Creole, 3)Portuguese, 4) Chinese, 5) French Creole

[97] US Census Bureau, American Community Survey (ACS) 2010 to 2014; US Department of Labor, Bureau of Labor and Statistics, local area unemployment statistics 2012

APPENDIX J: COMMUNITY DATA PROFILE FOR MEDFORD

INDICATOR	Medford #	Medford %/Rate	MA %/Rate
Median household income	**$77,868^**	--	$67,846
Per capita income	$36,636	--	$36,441
Poverty status			
Children under 18 living in poverty	1,014	12%	15%
Families living in poverty	876	7%	8%
Population 65 and older living in poverty	826	**11%^**	9%
Housing units by structure			
1-unit	11,161	48%	57%
2 units	5,962	**26%^**	10%
3 -9 units	1,881	8%	17%
10 -19 units	517	2%	4%
20 or more units	3,733	**16%^**	10%
Housing units that are renter-occupied	9,393	**43%^**	38%
Median gross rent	**$1,464 ^**	--	$1,088
Gross rent or owner costs as a percentage of household income			
30% or more	--	**37%^**	32%
Health insurance			
No health insurance coverage	1,839	3%	4%
Unemployment rate[98]		4.7	5.7
Crime Rate[99]			
Violent crime	--	--	405.5
Property crime	--	--	2153.0
Health outcomes[100]			
Cancer incidence (age-adjusted rates per 100,000)[101]			
All cancers (invasive)	946	478.7	480.1
Breast cancer (female only)	132	**126.7˅**	135.1
Ovarian cancer	16	**15.6^**	11.9
Prostate cancer	90	115.3	128.2
Colorectal cancer	94	**47.2^**	38.4
Lung cancer	145	**71.5^**	65.9
Cancer mortality (age-adjusted rates per 100,000)[102]			
All cancers	367	169.5	166.2
Breast cancer (female only)	23	**21.0^**	19.2
Ovarian cancer	10	7.3	7.6
Prostate cancer	12	**14.1˅**	19.8
Colorectal cancer	31	13.5	13.8
Lung cancer	112	**52.2^**	45.4
Cardiovascular health			
Cardiovascular-related hospitalizations (age-adjusted rate per 100,000)[103]			
Major cardiovascular disease hospitalizations	3,041	**1422.1^**	1294.3
Cerebrovascular disease (stroke) hospitalizations	444	**202.5˅**	224.4
Cardiovascular-related emergency department visits (age-adjusted rate per 100,000)			
Major cardiovascular disease ED visits	843	431.6	412.7
Cerebrovascular disease (stroke) ED visits	106	50.2	51.4

[98] This is the percent of the workforce that is unemployed. The 2014 unemployment rate is an estimate based on the average of Jan through Dec monthly rates.
[99] FBI Uniform Crime Report, 2012. Violent and Property Crimes Rates per 100,000.
[100] Health outcomes pulled from MADPH MassCHIP database: http://www.mass.gov/eohhs/researcher/community-health/masschip/.
[101] Age-adjusted cancer incidence rates per 100,000 from MADPH Massachusetts Cancer Registry, grouped for 2010-2012.
[102] Age-adjusted cancer mortality rates per 100,000 from MADPH Registry of Vital Records, grouped for 2010-2012.
[103] Age-adjusted cardiovascular hospitalization and emergency department visit rates per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS), grouped for 2010-2012.

APPENDIX J: COMMUNITY DATA PROFILE FOR MEDFORD

INDICATOR	Medford		MA
	#	%/Rate	%/Rate
Acute myocardial infarction ED visits	66	**32.7**^	21.9
Cardiovascular mortality (age-adjusted rate per 100,000)[104]			
Major cardiovascular disease mortality	446	**29.1**˅	185.9
Cerebrovascular disease (stroke) mortality	74	28.9	29.5
Acute myocardial infarction mortality	71	**31.9** ^	25.3
Diabetes (age-adjusted rates per 100,000)[105]			
Diabetes-related ED visits	3,186	**1652.8**^	130.2
Diabetes-related hospitalizations	4,041	**1982.8**^	1762.5
Diabetes mortality	15	**13.7**˅	13.7
Infectious disease (crude rates per 100,000)[106]			
HIV/AIDS prevalence[107]	154.0	274.2	272.8
HIV/AIDS incidence[15]	12.0	**21.4**^	10.0
Hepatitis C incidence	24.0	**42.7**˅	72.4
Chlamydia incidence	176.0	**313.3**˅	357.3
TB incidence	NA	NA	3.2
Injuries (age-adjusted rates per 100,000)[108]			
All injury and poisoning ED visits	16,783	10096.1	10484.5
All injury and poisoning hospitalizations	1,860	**897.2**^	829.4
All injury and poisoning mortality	84	44.3	43.0
Hip fracture injury hospitalizations	198	82.6	80.8
Mental health (age-adjusted rates per 100,000)[109]			
Mental disorder-related ED visits	10,624	**5879.4**^	2183.9
Mental disorder-related hospitalizations	7,890	3979.9	3799.9
Mental disorder-related mortality	171	**65.5**^	52.6
Mother & infant health[110]			
Birth rates, by age (age-specific rate per 1,000)			
Ages 30-44	1,443	**77.9**^	60.8
Ages 20-29	613	**39.8**˅	62.5
Teens (ages 15-19)	38	**7.5**˅	15.5
Inadequate prenatal care (percent of births)	147	**7%**˅	7%
Low birth weight (percent of births)	148	**7%**˅	8%
Infant mortality (rate per 1,000)	5	**2.4**˅	4.3
Premature mortality (age-adjusted rate per 100,000)[111]	465	272.2	272.2
Respiratory health (age-adjusted rates per 100,000)[112]			
Asthma-related hospitalizations	1,523	849.1	885.6
Childhood asthma ED visits (age-specific rate per 100,000 for	175	**750.6**˅	868.0

[104] Age-adjusted cardiovascular mortality rates per 100,000 from MADPH Registry of Vital Records, grouped for 2010-2012.

[105] Diabetes-related age-adjusted hospitalization rate per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). Diabetes mortality from MADPH Registry of Vital Records. All grouped for 2010-2012.

[106] Crude HIV/AIDS prevalence, HIV/AIDS incidence, Hepatitis C incidence, and TB incidence rates per 100,000 from MADPH Bureau of Communicable Disease Control (BCDC) Registries, Division of Epidemiology and Immunization, for 2012. Crude Chlamydia incidence rate per 100,000 from MADPH Division of Sexually Transmitted Disease Prevention, for 2012. NA indicates data not available

[107] HIV prevalence and incidence are for 2011 reported rates.

[108] Age-adjusted injury and poisoning hospitalization and emergency department visit rates per 100,000 for from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). Injury and poisoning mortality from MADPH Registry of Vital Records. All grouped for 2010-2012.

[109] Age-adjusted mental disorder hospitalization and emergency department visit rates per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). Mental disorder-related mortality from MADPH Registry of Vital Records. All grouped for 2010-2012.

[110] All mother and infant health data from MADPH Registry of Vital Records. Age-specific birth rates per 1,000 and percent of inadequate prenatal care for 2011-2013. Inadequate prenatal care characterized by an inadequate score on Kotelchuk index. Percent of low birth weight births (defined as <2500 grams) and infant mortality rate per 1,000 grouped for 2010-2012 as defined by any deaths due to perinatal conditions via MADPH Registry of Vital Records.

[111] Age-adjusted premature mortality rates per 100,000 from MADPH Registry of Vital Records, grouped for 2010-2012. The premature mortality rate is the rate of deaths occurring among individuals less than 75 years of age.

[112] Asthma-related, pneumonia-related, and COPD-related age-adjusted hospitalization rates per 100,000 and childhood asthma age-specific ED visit rates from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). All grouped for 2010-2012.

INDICATOR	Medford #	Medford %/Rate	MA %/Rate
ages 14 and under)			
Bacterial pneumonia-related hospitalizations	1,722	**823.9^**	275.0
COPD-related hospitalizations	3,928	1993.8	1921.9
Substance abuse (age-adjusted rates per 100,000)[113]			
Alcohol/substance-related ED visits	1,641	903.2	910.3
Alcohol/substance-related hospitalizations	503	**274.5˅**	341.2
Opioid-related ED visits	715	**357.8^**	280.3
Opioid-related hospitalizations	596	317.8	332.4
Opioid-related mortality	25	**1.6˅**	9.6
Health outcomes by specific age groups[114]			
Health of older adults (age 65+)			
Hospitalizations (age-specific rates per 100,000)			
Alcohol/substance-related hospitalizations	59	**229.7^**	211.0
Cerebrovascular disease (stroke) hospitalizations	349	1358.7	1324.0
Major cardiovascular disease hospitalizations	2,249	**8755.7^**	7309.7
Diabetes-related hospitalizations	2,664	**10371.4^**	8394.1
All injury and poisoning hospitalizations	1,131	**4403.2^**	3173.7
Hip fracture injury hospitalizations	176	**685.2^**	621.3
Mental disorder-related hospitalizations	3,661	**14252.9^**	10764.6
Bacterial pneumonia-related hospitalizations	1,195	**4652.3^**	3435.2
COPD-related hospitalizations	2,320	**9032.2^**	7795.8
Emergency department visits (age-specific rates per 100,000)			
Alcohol/substance-related ED visits	24	**93.4˅**	204.1
Cerebrovascular disease (stroke) ED visits	69	268.6	256.0
Major cardiovascular disease ED visits	395	**1537.8^**	1580.1
Acute myocardial infarction ED visits	33	**128.5^**	93.4
Diabetes-related ED visits	1,366	**5318.1^**	4000.7
All injury and poisoning ED visits	2,327	**9059.4^**	8352.8
Hip fracture injury ED visits	12	**46.7˅**	77.6
Mental disorder-related ED visits	1,144	**4453.8^**	3422.3
Bacterial pneumonia-related ED visits	100	**389.3^**	299.5
COPD-related ED visits	744	**2896.5^**	2307.6
Health of youth age 15-19			
Hospitalizotions (oge-specific rates per 100,000)			
Alcohol/substance-related hospitalizations	15	**148.2^**	112.6
Diabetes-related hospitalizations	NA	NA	106.8
All injury and poisoning hospitalizations	47	**464.3^**	93.3
Opioid-related hospitalizations	13	**128.4˅**	388.6
Mental disorder-related hospitalizations	196	**1936.4^**	1361.2
COPD-related hospitalizations	68	**671.8^**	439.8
Emergency department visits (age-specific rates per 100,000)			
Alcohol/substance-related ED visits	166	**1640.0^**	966.1
Diabetes-related ED visits	45	**444.6^**	223.4
All injury and poisoning ED visits	1,357	13406.4	13144.7
Opioid-related ED visits	20	**197.6^**	176.3
Mental disorder-related ED visits	728	**7192.3^**	5740.3
COPD-related ED visits	265	**2618.1^**	1694.2

[113] Age-adjusted alcohol/substance- and opioid-related hospitalization and emergency department visit rates per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). Opioid mortality from MADPH Registry of Vital Records. All grouped for 2010-20112.

[114] Age-specific hospitalization and emergency department visit rates per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). All grouped for 2010-2012. Age groups do not reflect health concerns for all sub-populations in Medford.

APPENDIX J: COMMUNITY DATA PROFILE FOR MEDFORD

INDICATOR	Medford #	Medford %/Rate	MA %/Rate
Public school district enrollment characteristics[115]			
Race/ethnicity			
African-American	643	**15%^**	9%
Asian	386	**9%^**	7%
Hispanic	435	10%	19%
White	2,778	63%	63%
Multi-race (non Hispanic)	182	**4%^**	3%
Special populations			
First language not English	--	**25%^**	19%
Limited English proficient	--	8%	9%
Students with disabilities	--	18%	17%
Low income	--	27%	27 %
Public school district graduation and drop-out rates			
Students graduating (4-year)	282	83%	87%
Students dropping out	27	**8%^**	5%
Graduates attending college/university	234	78%	77%
Youth outcomes: high school health survey data[116]			
Substance use			
Alcohol, ever used	--	**55%^**	47%
Alcohol, used in last 30 days	--	29%	36%
Tobacco, ever used	--	20%	32%
Tobacco, used in last 30 days	--	5%	11%
Marijuana, ever used	--	34%	33%
Marijuana, used in last 30 days	--	**21%^**	16%
Prescription opioids, ever used[117]	--	5%	--
Prescription opioids, used in last 30 days[25]	--	2%	--
Sexual activity			
Ever had sexual intercourse	--	--	38%
Used condom at last intercourse	--	--	58%
Mental health			
Experiencing depression in last 12 months	--	--	22%
Seriously considered suicide in last 12 months	--	--	12%
Attempted suicide in last 12 months	--	--	6%
Was bullied at school in last 12 months	--	--	17%

[115] Massachusetts Department of Elementary and Secondary Education (DESE), School and District Profiles 2015-2016. Public school district graduation and drop-out rates 2014-2015. Public school graduates attending college/university 2012-2013.

[116] MA DPH. 2013 Health and Risk Behaviors of MA Youth. Accessed: July 2, 2014. http://www.doe.mass.edu/cnp/hprograms/yrbs/2013Report.pdf. Medford High School Youth Risk Behavior Survey Results 2014.

[117] Students in Medford were asked about their use of pain relievers, such as Vicodin®, OxyContin® or Tylox®, without a doctor's orders.

TOP FIVE CAUSES OF DEATH[118] (2010-2012)					
Medford *(n= 865)*	#	% of Deaths	**MASSACHUSETTS** *(n=159, 125)*	#	% of Deaths
1. Circulatory system diseases, all[119]	447	29.12%	**1.** Circulatory system diseases, all	46,326	29.1%
2. Mental disorders[120]	171	11.14%	**2.** Mental disorders	13,571	8.5%
3. Lung cancer	112	7.3%	**3.** Lung cancer	10,403	6.5%
4. Chronic lower respiratory diseases	69	4.5%	**4.** Chronic lower respiratory diseases	7,566	4.8%
5. Genitourinary Diseases	66	4.3%	**5.** Digestive system diseases, all	5,959	3.7%

TOP FIVE CAUSES OF HOSPITALIZATION[121] (2010-2012)					
Medford *(n=15,376)*	#	% of Hosp.	**MASSACHUSETTS** *(n=2,385,158)*	#	% of Hosp.
1. Diabetes Mellitus related	4,041	17.4%	**1.** Chronic obstructive pulmonary disease, all related	422,466	17.7%
2. Chronic obstructive pulmonary disease, all related	3,928	16.9%	**2.** Diabetes Mellitus Related	399,313	16.7%
3. Circulatory system diseases, all	3,309	14.3%	**3.** Circulatory system diseases, all	321,872	13.5%
4. Digestive system diseases, all	1,898	8.2%	**4.** Digestive system diseases, all	228,302	9.6%
5. Pneumonia and Influenza related	1,722	7.4%	**5.** Asthma-related	185,915	7.7%

[118] Leading causes of death from Registry of Vital Records and Statistics, Bureau of Health Statistics, Research and Evaluation, MDPH, pulled from MassCHIP. Analysis is for total deaths in years 2010, 2011, and 2012.

[119] Circulatory System Diseases: All includes: "major CVD", "heart disease", "coronary heart disease", "ischemic heart disease", "acute myocardial infarction", "cerebrovascular disease", "heart failure", "hypertensive heart disease", "hypertension", "atherosclerosis", and "rheumatic fever".

[120] Mental disorders include dementias.

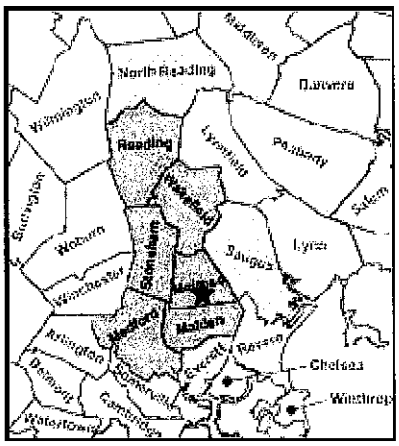
[121] Leading causes of hospitalization from Uniform Hospital Discharge Data System, Massachusetts Division of Health Care Finance and Policy, MDPH, pulled from MassCHIP. Analysis is for discharge data for years 2010, 2011, and 2012. Note that childbirth category (Childbirth, Pregnancy, Puerperium: All) left out of leading causes of hospitalization; childbirths accounted for 9.6% of hospitalizations (227,850) in MA and 9.4% (2,186) in Medford during time period.

MELROSE, MA

Population: 27,509

Demographics compared to the state of Massachusetts as a whole:

- Smaller population of Hispanics (4%), Black/African-Americans (3%), and Asians (4%)
- Smaller foreign born population (12%)
- Higher percentage of residents age 25+ with bachelor's degree or higher (51%)
- Higher median income ($86,409)
- Lower poverty rates for children under 18 (4%) and families (2%)
- Lower percentage of residents with 30% or more of income spent on gross rent or owner costs (29%)
- Lower unemployment rate (4.4)



Health Conditions

Melrose residents experience the following health conditions at rates 5% or higher than residents of Massachusetts as a whole:

Cancer incidence & mortality
- Breast cancer incidence
- Colorectal cancer incidence and mortality

Cardiovascular health
- Stroke ED visits and hospitalizations

Mental health
- Mental disorder related ED visits and mortality

Respiratory health
- Bacterial pneumonia related hospitalizations

Substance abuse
- Opioid-related ED visits and mortality

Selected age groups

Older adults age 65+:
- Alcohol/substance abuse related hospitalizations
- All injury and poisoning ED visits and hospitalizations
- Bacterial pneumonia related hospitalizations
- Chronic Obstructive Pulmonary Disease (COPD) related ED visits and hospitalizations
- Diabetes related ED visits and hospitalizations
- Major cardiovascular disease hospitalizations
- Mental disorder related ED visits and hospitalizations
- Stroke hospitalizations

Youth age 15-19:
- Alcohol/substance abuse related ED visits
- All injury and poisoning hospitalizations
- COPD related ED visits
- Diabetes related ED visits
- Mental disorder related ED visits

Top 3 Causes of Death
1. Circulatory System Diseases
2. Mental Disorders
3. Lung Cancer
Top 3 Causes of Hospitalization
1. COPD Related
2. Diabetes Mellitus Related
3. Circulatory System Diseases

For more detailed information on Melrose health indicators and for references, please see the data tables that follow.

MELROSE HEALTH INDICATORS DATA TABLE

Note: Bolding and arrows are used to highlight health conditions where the percent difference between Melrose and the state is 5% or more, and to show the direction (upward (ˆ) or downward (ˇ)) of the difference. For demographics and public school enrollment characteristics, only those indicators thot differ from the state by a 5% difference or more in the higher direction are flagged. "NA" designates dato that is inapplicable (i.e. not reported because the count is too low). A dash designates data that is unavailable (i.e. does not exist).

INDICATOR	Melrose		MA
	#	%/Rate	%/Rate
Total population	27,509	--	6,657,291
Demographics[122]			
Female	14,292	52%	52%
Age			
Under 5 years	1,922	**7%ˆ**	6%
Under 18 years	5,728	21%	21%
18 to 34 years	5,035	18%	24%
35 to 64 years	12,386	**45%ˆ**	41%
65 and over	4,360	**16%ˆ**	14%
85 and over	749	**3%ˆ**	2%
Race/ethnicity[123]			
Asian (non Hispanic)	1,135	4%	6%
Black/African-American (non Hispanic)	723	3%	6%
Hispanic	1,064	4%	10%
Some other race (non Hispanic)[124]	4	0%	1%
White (non Hispanic)	24,294	**88%ˆ**	75%
Foreign-born residents	3,349	12%	15%
Top 5 languages spoken at home[125]			
English Only	21,922	**86%ˆ**	78%
Spanish or Spanish Creole	621	2%	8%
Portuguese or Portuguese Creole	671	3%	3%
French Creole	374	2%	2%
Chinese	337	1%	2%
Social and economic characteristics[126]			
Highest educational attainment			
Less than high school graduate	1,138	6%	11%
High school graduate	3,764	19%	26%
Some college	5,132	**25%ˆ**	24%
Bachelor's degree	6,010	**30%ˆ**	23%
Graduate/advanced degree	4,231	**21%ˆ**	17%
Income			
Median household income	**$86,409ˆ**	--	$67,846
Per capita income	**$43,866ˆ**	--	$36,441
Poverty status			
Children under 18 living in poverty	209	4%	15%
Families living in poverty	160	2%	8%

[122] US Census Bureau, American Community Survey (ACS) 2010 to 2014 (5-Year Estimates) (SE)

[123] Excludes "Two or more races"

[124] "Some other race (non-Hispanic)" includes: American Indian and Alaska Native Alone; Native Hawaiian and Other Pacific Islander Alone; and Some Other Race Alone.

[125] These are the top 5 languages spoken at home in Melrose. The top 5 languages spoken at home in the state of Massachusetts as a whole are: 1) Only English, 2) Spanish or Spanish Creole, 3}Portuguese, 4) Chinese, 5) French Creole

[126] US Census Bureau, American Community Survey (ACS) 2010 to 2014; US Department of Labor, Bureau of Labor and Statistics, local area unemployment statistics 2012.

APPENDIX J: COMMUNITY DATA PROFILE FOR MELROSE

INDICATOR	Melrose		MA
	#	%/Rate	%/Rate
Population 65 and older living in poverty	367	9%	9%
Housing units by structure			
1-unit	6,857	59%	57%
2 units	1,200	10%	10%
3 -9 units	1,013	9%	17%
10 -19 units	605	**5%**^	4%
20 or more units	2,036	**17%**^	10%
Housing units that are renter-occupied	3,712	33%	38%
Median gross rent	**$1,118**^	--	$1,088
Gross rent or owner costs as a percentage of household income			
30% or more	--	29%	32%
Health insurance			
No health insurance coverage	570	2%	4%
Unemployment rate[127]	--	4.4	5.7
Crime Rate[128]			
Violent crime	38	138.2	405.5
Property crime	313	1137.9	2153.0
Health outcomes[129]			
Cancer incidence (age-adjusted rates per 100,000)[130]			
All cancers (invasive)	479	469.3	480.1
Breast cancer (female only)	79	**145.8**^	135.1
Ovarian cancer	5	**8.7**˅	11.9
Prostate cancer	48	**104.3**˅	128.2
Colorectal cancer	45	**43.7**^	38.4
Lung cancer	62	**59.3**˅	65.9
Cancer mortality (age-adjusted rates per 100,000)[131]			
All cancers	162	**152.8**˅	166.2
Breast cancer (female only)	10	**15.4**˅	19.2
Ovarian cancer	1	**2.3**˅	7.6
Prostate cancer	6	**15.0**˅	19.8
Colorectal cancer	16	**15.0**^	13.8
Lung cancer	37	**35.4**˅	45.4
Cardiovascular health			
Cardiovascular-related hospitalizations (age-adjusted rate per 100,000)[132]			
Major cardiovascular disease hospitalizations	1,453	1349.8	1294.3
Cerebrovascular disease (stroke) hospitalizations	270	**253.4**^	224.4
Cardiovascular-related emergency department visits (age-adjusted rate per 100,000)			
Major cardiovascular disease ED visits	378	**379.8**˅	412.7
Cerebrovascular disease (stroke) ED visits	59	**58.9**^	51.4
Acute myocardial infarction ED visits	20	**18.2**˅	21.9
Cardiovascular mortality (age-adjusted rate per 100,000)[133]			
Major cardiovascular disease mortality	207	**174.6**˅	185.9
Cerebrovascular disease (stroke) mortality	35	29.2	29.5

[127] This is the percent of the workforce that is unemployed. The 2014 unemployment rate is an estimate based on the average of Jan through Dec monthly rates.
[128] FBI Uniform Crime Report, 2012. Violent and Property Crimes Rates per 100,000.
[129] Health outcomes pulled from MADPH MassCHIP database: http://www.mass.gov/eohhs/researcher/community-health/masschip/.
[130] Age-adjusted cancer incidence rates per 100,000 from MADPH Massachusetts Cancer Registry, grouped for 2010-2011. No 2012 data available
[131] Age-adjusted cancer mortality rates per 100,000 from MADPH Registry of Vital Records, grouped for 2010-2012.
[132] Age-adjusted cardiovascular hospitalization and emergency department visit rates per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS), grouped for 2010-2012.
[133] Age-adjusted cardiovascular mortality rates per 100,000 from MADPH Registry of Vital Records, grouped for 2010-2012.

APPENDIX J: COMMUNITY DATA PROFILE FOR MELROSE

INDICATOR	Melrose		MA
	#	%/Rate	%/Rate
Acute myocardial infarction mortality	26	**20.9˅**	25.3
Diabetes (age-adjusted rates per 100,000)[134]			
Diabetes-related ED visits	1,221	**1252.1˅**	1376.9
Diabetes-related hospitalizations	1,711	**1646.0˅**	1762.5
Diabetes mortality	9	**8.2˅**	13.7
Infectious disease (crude rates per 100,000)[135]			
HIV/AIDS prevalence[136]	39	**144.6˅**	272.8
HIV/AIDS incidence[15]	NA	NA	10.0
Hepatitis C incidence	11	**40.8˅**	72.4
Chlamydia incidence	53	**196.5˅**	357.3
TB incidence	NA	NA	3.2
Injuries (age-adjusted rates per 100,000)[137]			
All injury and poisoning ED visits	7,327	**9053.4˅**	10484.5
All injury and poisoning hospitalizations	815	806.2	829.4
All injury and poisoning mortality	37	42.0	43.0
Hip fracture injury hospitalizations	92	79.9	80.8
Mental health (age-adjusted rates per 100,000)[138]			
Mental disorder-related ED visits	4,653	**5953.1˄**	5341.6
Mental disorder-related hospitalizations	3,512	3620.6	3799.9
Mental disorder-related mortality	72	**58.5˄**	52.6
Mother & infant health[139]			
Birth rates, by age (age-specific rate per 1,000)			
Ages 30-44	782	**85.2˄**	60.8
Ages 20-29	212	**50.3˅**	62.5
Teens (ages 15-19)	NA	NA	15.5
Inadequate prenatal care (percent of births)	47	**5%˅**	7%
Low birth weight (percent of births)	66	**7%˅**	8%
Infant mortality (rate per 1,000)	1	**1.0˅**	4.3
Premature mortality (age-adjusted rate per 100,000)[140]	226	**250.8 ˅**	272.2
Respiratory health (age-adjusted rates per 100,000)[141]			
Asthma-related hospitalizations	567	**640.5˅**	885.6
Childhood asthma ED visits (age-specific rate per 100,000 for ages 14 and under)	68	**457.2˅**	868.0
Bacterial pneumonia-related hospitalizations	748	**705.3˄**	670.0
COPD-related hospitalizations	1,766	**1775.7˅**	1921.9
Substance abuse (age-adjusted rates per 100,000)[142]			

[134] Diabetes-related age-adjusted hospitalization rate per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). Diabetes mortality from MADPH Registry of Vital Records. All grouped for 2010-2012.

[135] Crude HIV/AIDS prevalence, HIV/AIDS incidence, Hepatitis C incidence, and TB incidence rates per 100,000 from MADPH Bureau of Communicable Disease Control (BCDC) Registries, Division of Epidemiology and Immunization, for 2012. Crude Chlamydia incidence rate per 100,000 from MADPH Division of Sexually Transmitted Disease Prevention, for 2012. NA indicates data not available

[136] HIV prevalence and incidence are for 2011 reported rates.

[137] Age-adjusted injury and poisoning hospitalization and emergency department visit rates per 100,000 for from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). Injury and poisoning mortality from MADPH Registry of Vital Records. All grouped for 2010-2012.

[138] Age-adjusted mental disorder hospitalization and emergency department visit rates per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). Mental disorder-related mortality from MADPH Registry of Vital Records. All grouped for 2010-2012.

[139] All mother and infant health data from MADPH Registry of Vital Records. Age-specific birth rates per 1,000 and percent of inadequate prenatal care for 2011-2013. Inadequate prenatal care characterized by an inadequate score on Kotelchuk index. Percent of low birth weight births (defined as <2500 grams) and infant mortality rate per 1,000 grouped for 2010-2012 as defined by any deaths due to perinatal conditions via MADPH Registry of Vital Records.

[140] Age-adjusted premature mortality rates per 100,000 from MADPH Registry of Vital Records, grouped for 2010-2012. The premature mortality rate is the rate of deaths occurring among individuals less than 75 years of age.

[141] Asthma-related, pneumonia-related, and COPD-related age-adjusted hospitalization rates per 100,000 and childhood asthma age-specific ED visit rates from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). All grouped for 2010-2012.

INDICATOR	Melrose		MA
	#	%/Rate	%/Rate
Alcohol/substance-related ED visits	629	886.5	910.3
Alcohol/substance-related hospitalizations	203	**247.0**˅	341.2
Opioid-related ED visits	334	**512.9**˄	280.3
Opioid-related hospitalizations	242	317.5	332.4
Opioid-related mortality	9	**12.3**˄	9.6
Health outcomes by specific age groups[143]			
Health of older adults (age 65+)			
Hospitalizations (age-specific rates per 100,000)			
Alcohol/substance-related hospitalizations	31	**242.6**˄	211.0
Cerebrovascular disease (stroke) hospitalizations	206	**1611.9**˄	1324.0
Major cardiovascular disease hospitalizations	1,074	**8403.8**˄	7309.7
Diabetes-related hospitalizations	1,156	**9045.4**˄	8394.1
All injury and poisoning hospitalizations	516	**4037.6**˄	3173.7
Hip fracture injury hospitalizations	86	**672.9**˄	621.3
Mental disorder-related hospitalizations	1,699	**13294.2**˄	10764.6
Bacterial pneumonia-related hospitalizations	550	**4303.6**˄	3435.2
COPD-related hospitalizations	1,186	**9280.1**˄	7795.8
Emergency department visits (age-specific rates per 100,000)			
Alcohol/substance-related ED visits	18	**140.9**˅	204.1
Cerebrovascular disease (stroke) ED visits	31	**242.6**˅	256.0
Major cardiovascular disease ED visits	192	**1502.4**˅	1580.1
Acute myocardial infarction ED visits	11	**86.1**˅	93.4
Diabetes-related ED visits	660	**5164.3**˄	4000.7
All injury and poisoning ED visits	1,167	**9131.5**˄	8352.8
Hip fracture injury ED visits	NA	NA	77.6
Mental disorder-related ED visits	681	**5328.6**˄	3422.3
Bacterial pneumonia-related ED visits	39	305.2	299.5
COPD-related ED visits	437	**3419.4**˄	2307.6
Health of youth age 15-19			
Hospitalizations (age-specific rates per 100,000)			
Alcohol/substance-related hospitalizations	NA	NA	112.6
Diabetes-related hospitalizations	NA	NA	106.8
All injury and poisoning hospitalizations	15	**362.8**˄	93.3
Opioid-related hospitalizations	NA	NA	388.6
Mental disorder-related hospitalizations	54	1306.2	1361.2
COPD-related hospitalizations	11	**266.1**˅	439.8
Emergency department visits (age-specific rates per 100,000)			
Alcohol/substance-related ED visits	59	**1427.2**˄	966.1
Diabetes-related ED visits	12	**290.3**˄	223.4
All injury and poisoning ED visits	553	13376.9	13144.7
Opioid-related ED visits	NA	NA	176.3
Mental disorder-related ED visits	286	**6918.2**˄	5740.3
COPD-related ED visits	88	**2128.7**˄	1694.2
Public school district enrollment characteristics[144]			
Race/ethnicity			
African-American	212	6%	9%

[142] Age-adjusted alcohol/substance- and opioid-related hospitalization and emergency department visit rates per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). Opioid mortality from MADPH Registry of Vital Records. All grouped for 2010-20112.

[143] Age-specific hospitalization and emergency department visit rates per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). All grouped for 2010-2012. Age groups do not reflect health concerns for all sub-populations in Melrose.

[144] Massachusetts Department of Elementary and Secondary Education (DESE), School and District Profiles 2015-2016. Public school district graduation and drop-out rates 2014-2015.Public school graduates attending college/university 2012-2013.

APPENDIX J: COMMUNITY DATA PROFILE FOR MELROSE

INDICATOR	Melrose		MA
	#	%/Rate	%/Rate
Asian	164	4%	7%
Hispanic	134	4%	19%
White	3,055	**82%^**	63%
Multi-race (non Hispanic)	160	**4%^**	3%
Special populations			
First language not English	--	9%	19%
Limited English proficient	--	3%	9%
Students with disabilities	--	15%	17%
Low income	--	10%	27 %
Public school district graduation and drop-out rates[9]			
Students graduating (4-year)	222	**96%^**	87%
Students dropping out	2	1%	5%
Graduates attending college/university	194	**84%^**	77%
Youth outcomes: high school health survey data[145]			
Substance use			
Alcohol, ever used	--	20%	47%
Alcohol, used in last 30 days	--	**48%^**	36%
Tobacco, ever used	--	8%	32%
Tobacco, used in last 30 days	--	11%	11%
Marijuana, ever used	--	**46%^**	33%
Marijuana, used in last 30 days	--	**32%^**	16%
Prescription opioids, ever used[146]	--	15%	--
Prescription opioids, used in last 30 days[25]	--	4%	--
Sexual activity			
Ever had sexual intercourse	--	36%	38%
Used condom at last intercourse	--	**65%^**	58%
Mental health			
Experiencing depression in last 12 months	--	**31%^**	22%
5eriously considered suicide in last 12 months	--	**17%^**	12%
Attempted suicide in last 12 months	--	**7%^**	6%
Was bullied at school in last 12 months	--	**27%^**	17%

[145]MA DPH. 2013 Health and Risk Behaviors of MA Youth. Accessed: July 2, 2014. http://www.doe.mass.edu/cnp/hprograms/yrbs/2013Report.pdf. Melrose Youth Risk Behavior Survey 2013.

[146] Students in Melrose were asked about their use of any prescription drug.

TOP FIVE CAUSES OF HOSPITALIZATION[147] (2010-2012)					
Melrose *(n= 10,983)*	#	% of Hosp.	**MASSACHUSETTS** *(n=2,385,158)*	#	% of Hosp.
1. Chronic obstructive pulmonary disease, all related	1,766	16.1%	**1.** Chronic obstructive pulmonary disease, all related	422,466	17.7%
2. Diabetes Mellitus related	1,711	15.6%	**2.** Diabetes Mellitus Related	399,313	16.7%
3. Circulatory system diseases, all	1,599	14.6%	**3.** Circulatory system diseases, all	321,872	13.5%
4. Digestive system diseases, all	1,110	10.1%	**4.** Digestive system diseases, all	228,302	9.6%
5. Pneumonia and Influenza related	806	7.3%	**5.** Asthma-related	185,915	7.7%

TOP FIVE CAUSES OF DEATH[148] (2010-2012)					
Melrose *(n= 684)*	#	% of Deaths	**MASSACHUSETTS** *(n=159, 125)*	#	% of Deaths
1. Circulatory system diseases, all[149]	208	30.4%	**1.** Circulatory system diseases, all	46,326	29.1%
2. Mental disorders[150]	72	10.5%	**2.** Mental disorders	13,571	8.5%
3. Lung cancer	37	5.4%	**3.** Lung cancer	10,403	6.5%
4. Chronic lower respiratory diseases	32	4.7%	**4.** Chronic lower respiratory diseases	7,566	4.8%
5. Genitourinary diseases, all[151]	22	3.2%	**5.** Digestive system diseases, all[152]	5,959	3.7%

[147] Leading causes of hospitalization from Uniform Hospital Discharge Data System, Massachusetts Division of Health Care Finance and Policy, MDPH, pulled from MassCHIP. Analysis is for discharge data for years 2010, 2011, and 2012. Note that childbirth category (Childbirth, Pregnancy, Puerperium: All) left out of leading causes of hospitalization; childbirths accounted for 9.6% of hospitalizations (227,850) in MA and 9.6% (1,058) in Melrose during time period.

[148] Leading causes of death from Registry of Vital Records and Statistics, Bureau of Health Statistics, Research and Evaluation, MDPH, pulled from MassCHIP. Analysis is for total deaths in years 2010, 2011, and 2012.

[149] Circulatory System Diseases: All includes: "major CVD", "heart disease", "coronary heart disease", "ischemic heart disease", "acute myocardial infarction", "cerebrovascular disease", "heart failure", "hypertensive heart disease", "hypertension", "atherosclerosis", and "rheumatic fever".

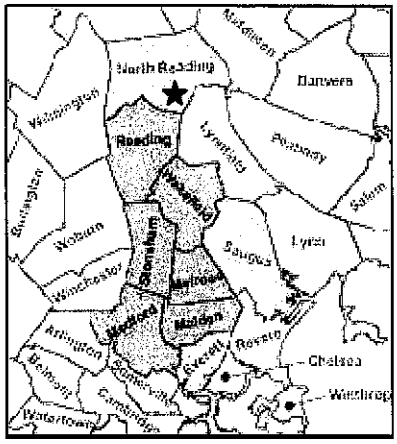
[150] Mental disorders include dementias.

[151] Genitourinary Diseases: All includes: "renal failure" and "nephritis, nephrosis"

[152] Digestive system diseases of the oral cavity, salivary glands and jaws; diseases of the esophagus, stomach and duodenum; appendicitis; hernia of the abdominal cavity; other diseases of the intestines and peritoneum; and diseases of the liver, gallbladder, and biliary tracts/bile ducts.

NORTH READING, MA

Population: 15,249



Demographics compared to the state of Massachusetts as a whole:

- Larger population of Whites (89%)
- Smaller foreign-born population (8%) and most speak English at home (88%)
- Higher percentage of residents age 25+ with bachelor's degree or higher (51%)
- Higher median income ($112,419)
- Lower unemployment rate (4.7% of workforce)
- Higher median gross rent ($1, 420)

Health Conditions

North Reading residents experience the following health conditions at rates 5% or higher than residents of Massachusetts as a whole:

Cancer incidence & mortality
- Breast cancer incidence and mortality
- Prostate cancer incidence

Cardiovascular health
- Stroke ED visits

Injuries and poisonings
- Hip fracture injury hospitalizations

Mental health
- Mental disorder related mortality

Substance abuse
- Opioid related ED visits

Selected age groups

Older adults age 65+:
- All injury and poisoning hospitalizations
- Bacterial pneumonia related hospitalizations
- Stroke ED visits

Youth age 15-19:
- Alcohol/substance related ED visits
- All injury and poisoning hospitalizations
- Mental disorder related hospitalizations
- Opioid related ED visits

Top 3 Causes of Death	
1.	Circulatory System Diseases
2.	Mental Disorders
3.	Lung Cancer

Top 3 Causes of Hospitalization	
1.	Chronic Obstructive Pulmonary (COPD)
2.	Diabetes
3.	Circulatory System Diseases

For more detailed information on North Reading health indicators and for references, please see the data tables that follow.

NORTH READING HEALTH INDICATORS DATA TABLE

Note: Bolding and arrows are used to highlight health conditions where the percent difference between North Reading and the state is 5% or more, and to show the direction (upward (ˆ) or downward (ˇ)) of the difference. For demographics and public school enrollment characteristics, only those indicators that differ from the state by a 5% difference or more in the higher direction are flagged. "NA" designates data that is inapplicable (i.e. not reported because the count is too low). A dash designates data that is unavailable (i.e. does not exist).

INDICATOR	North Reading		MA
	#	%/Rate	%/Rate
Total population	15,249		6,657,291
Demographics[153]			
Female	7,705	51%	52%
Age			
Under 5 years	803	5%	6%
Under 18 years	3,536	**23%ˆ**	21%
18 to 34 years	2,448	16%	24%
35 to 64 years	7,191	**47%ˆ**	41%
65 and over	2,074	14%	14%
85 and over	210	1%	2%
Race/ethnicity[154]			
Asian (non Hispanic)	954	6%	6%
Black/African-American (non Hispanic)	126	1%	6%
Hispanic	258	2%	10%
Some other race (non Hispanic)[155]	40	0%	1%
White (non Hispanic)	13,639	**89%ˆ**	75%
Foreign-born residents	1,147	8%	15%
Top 5 languages spoken at home[156]			
English only	12,761	**88%ˆ**	78%
Spanish or Spanish Creole	258	2%	8%
Portuguese or Portuguese Creole	187	1%	3%
French (incl. Patois, Cajun)	187	**1%ˆ**	1%
Other Asian languages	216	**2%ˆ**	0%
Social and economic characteristics[157]			
Highest educational attainment			
Less than high school graduate	363	3%	11%
High school graduate	2,477	23%	26%
Some college	2,513	23%	24%
Bachelor's degree	3,676	**34%ˆ**	23%
Graduate/advanced degree	1,859	17%	17%
Income			
Median household income	**$112,419ˆ**	--	$67,846
Per capita income	**$47,455ˆ**	--	$36,441
Poverty status			
Children under 18 living in poverty	57	2%	15%
Families living in poverty	108	3%	8%

[153] US Census Bureau, American Community Survey (ACS) 2010 to 2014 (5-Year Estimates) (SE)

[154] Excludes "Two or more races"

[155] "Some other race (non-Hispanic)" includes: American Indian and Alaska Native Alone; Native Hawaiian and Other Pacific Islander Alone; and Some Other Race Alone.

[156] These are the top 5 languages spoken at home in North Reading. The top 5 languages spoken at home in the state of Massachusetts as a whole are: 1) Only English, 2) Spanish or Spanish Creole, 3)Portuguese, 4) Chinese, 5) French Creole

[157] US Census Bureau, American Community Survey (ACS) 2010 to 2014; US Department of Labor, Bureau of Labor and Statistics, local area unemployment statistics 2012

APPENDIX J: COMMUNITY DATA PROFILE FOR NORTH READING

INDICATOR	North Reading #	North Reading %/Rate	MA %/Rate
Population 65 and older living in poverty	180	9%	9%
Housing units by structure			
1-unit	4,776	**84%^**	57%
2 units	82	1%	10%
3 -9 units	125	2%	17%
10 -19 units	204	4%	4%
20 or more units	517	9%	10%
Housing units that are renter-occupied	781	14%	38%
Median gross rent	**$1,420^**	--	$1,088
Gross rent or owner costs as a percentage of household income			
30% or more	--	26%	32%
Health insurance			
No health insurance coverage	165	1%	4%
Unemployment rate[158]		4.7	5.7
Crime Rate[159]			
Violent crime	15	98.8	405.5
Property crime	145	974.8	2153.0
Health outcomes[160]			
Cancer incidence (age-adjusted rates per 100,000)[161]			
All cancers (invasive)	254	500.4	480.1
Breast cancer (female only)	43	**153.0^**	135.1
Ovarian cancer	NA	NA	11.9
Prostate cancer	39	**141.6^**	128.2
Colorectal cancer	17	**33.6v**	38.4
Lung cancer	21	**44.0v**	65.9
Cancer mortality (age-adjusted rates per 100,000)[162]			
All cancers	78	164.4	166.2
Breast cancer (female only)	6	**21.6^**	19.2
Ovarian cancer	0	**0v**	7.6
Prostate cancer	4	19.4	19.8
Colorectal cancer	4	**7.4v**	13.8
Lung cancer	18	**39.6v**	45.4
Cardiovascular health			
Cardiovascular-related hospitolizations (age-adjusted rate per 100,000)[163]			
Major cardiovascular disease hospitalizations	563	**1202.4v**	1294.3
Cerebrovascular disease (stroke) hospitalizations	110	233.3	224.4
Cardiovascular-related emergency department visits (age-adjusted rate per 100,000)			
Major cardiovascular disease ED visits	132	**279.7v**	412.7
Cerebrovascular disease (stroke) ED visits	27	**57.1^**	51.4
Acute myocardial infarction ED visits	NA	NA	21.9
Cardiovascular mortality (age-adjusted rate per 100,000)[164]			
Major cardiovascular disease mortality	132	**169.1v**	185.9
Cerebrovascular disease (stroke) mortality	12	**27.3v**	29.5

[158] This is the percent of the workforce that is unemployed. The 2014 unemployment rate is an estimate based on the average of Jan through Dec monthly rates.
[159] FBI Uniform Crime Report, 2012. Violent and Property Crimes Rates per 100,000.
[160] Health outcomes pulled from MADPH MassCHIP database: http://www.mass.gov/eohhs/researcher/community-health/masschip/.
[161] Age-adjusted cancer incidence rates per 100,000 from MADPH Massachusetts Cancer Registry, grouped for 2010-2012.
[162] Age-adjusted cancer mortality rates per 100,000 from MADPH Registry of Vital Records, grouped for 2010-2012.
[163] Age-adjusted cardiovascular hospitalization and emergency department visit rates per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS), grouped for 2010-2012.
[164] Age-adjusted cardiovascular mortality rates per 100,000 from MADPH Registry of Vital Records, grouped for 2010-2012.

APPENDIX J: COMMUNITY DATA PROFILE FOR NORTH READING

INDICATOR	North Reading #	North Reading %/Rate	MA %/Rate
Acute myocardial infarction mortality	10	**21.0˅**	25.3
Diabetes (age-adjusted rates per 100,000)[165]			
Diabetes-related ED visits	313	**632.6˅**	1376.9
Diabetes-related hospitalizations	617	**1329.1˅**	1762.5
Diabetes mortality	5	**9.5˅**	13.7
Infectious disease (crude rates per 100,000)[166]			
HIV/AIDS prevalence[167]	NA	NA	272.8
HIV/AIDS incidence[15]	0	**0˅**	10.0
Hepatitis C incidence	NA	NA	72.4
Chlamydia incidence	20	**134.3˅**	357.3
TB incidence	0	**0˅**	3.2
Injuries (age-adjusted rates per 100,000)[168]			
All injury and poisoning ED visits	361	**6598.0˅**	10484.5
All injury and poisoning hospitalizations	2,746	826.7	829.4
All injury and poisoning mortality	12	**26.9˅**	43.0
Hip fracture injury hospitalizations	41	**92.7˄**	80.8
Mental health (age-adjusted rates per 100,000)[169]			
Mental disorder-related ED visits	1,159	**2987.4˅**	5341.6
Mental disorder-related hospitalizations	1,405	**3195.7˅**	3799.9
Mental disorder-related mortality	25	**59.0˄**	52.6
Mother & infant health[170]			
Birth rates, by age (age-specific rate per 1,000)			
Ages 30-44	296	**65.5˄**	60.8
Ages 20-29	111	**57.4˅**	62.5
Teens (ages 15-19)	5	**3.4˅**	15.5
Inadequate prenatal care (percent of births)	13	**3%˅**	7%
Low birth weight (percent of births)	25	**6%˅**	8%
Infant mortality (rate per 1,000)	2	NA	4.3
Premature mortality (age-adjusted rate per 100,000)[171]	102	**210.9˅**	272.2
Respiratory health (age-adjusted rates per 100,000)[172]			
Asthma-related hospitalizations	233	**512.6˅**	885.6
Childhood asthma ED visits (age-specific rate per 100,000 for ages 14 and under)	41	**446.9˅**	1777.0
Bacterial pneumonia-related hospitalizations	302	684.2	670.0
COPD-related hospitalizations	658	**1454.5˅**	1921.9
Substance abuse (age-adjusted rates per 100,000)[173]			

[165] Diabetes-related age-adjusted hospitalization rate per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System OD(UHDDS). Diabetes mortality from MADPH Registry of Vital Records. All grouped for 2010-2012.

[166] Crude HIV/AIDS prevalence, HIV/AIDS incidence, Hepatitis C incidence, and TB incidence rates per 100,000 from MADPH Bureau of Communicable Disease Control (BCDC) Registries, Division of Epidemiology and Immunization, for 2012. Crude Chlamydia incidence rate per 100,000 from MADPH Division of Sexually Transmitted Disease Prevention, for 2012. NA indicates data not available

[167] HIV prevalence and incidence are for 2011 reported rates.

[168] Age-adjusted injury and poisoning hospitalization and emergency department visit rates per 100,000 for from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). Injury and poisoning mortality from MADPH Registry of Vital Records. All grouped for 2010-2012.

[169] Age-adjusted mental disorder hospitalization and emergency department visit rates per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). Mental disorder-related mortality from MADPH Registry of Vital Records. All grouped for 2010-2012.

[170] All mother and infant health data from MADPH Registry of Vital Records. Age-specific birth rates per 1,000 and percent of inadequate prenatal care for 2011-2013. Inadequate prenatal care characterized by an inadequate score on Kotelchuk index. Percent of low birth weight births (defined as <2500 grams) and infant mortality rate per 1,000 grouped for 2010-2012 as defined by any deaths due to perinatal conditions via MADPH Registry of Vital Records.

[171] Age-adjusted premature mortality rates per 100,000 from MADPH Registry of Vital Records, grouped for 2010-2012. The premature mortality rate is the rate of deaths occurring among individuals less than 75 years of age.

[172] Asthma-related, pneumonia-related, and COPD-related age-adjusted hospitalization rates per 100,000 and childhood asthma age-specific ED visit rates from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). All grouped for 2010-2012.

APPENDIX J: COMMUNITY DATA PROFILE FOR NORTH READING

INDICATOR	North Reading		MA
	#	%/Rate	%/Rate
Alcohol/substance-related ED visits	254	**707.3**˅	910.3
Alcohol/substance-related hospitalizations	104	**273.1**˅	341.2
Opioid-related ED visits	126	**379.1**˄	280.3
Opioid-related hospitalizations	104	**301.1**˅	332.4
Opioid-related mortality	0	**0**˅	9.6
Health outcomes by specific age groups[174]			
Health of older adults (age 65+)			
Hospitalizations (age-specific rates per 100,000)			
Alcohol/substance-related hospitalizations	12	216.8	211.0
Cerebrovascular disease (stroke) hospitalizations	76	1373.1	1324.0
Major cardiovascular disease hospitalizations	382	**6901.5**˅	7309.7
Diabetes-related hospitalizations	432	**7804.9**˅	8394.1
All injury and poisoning hospitalizations	192	**3468.8**˄	3173.7
Hip fracture injury hospitalizations	36	650.4	621.3
Mental disorder-related hospitalizations	560	**10117.4**˅	10764.6
Bacterial pneumonia-related hospitalizations	219	**3956.6**˄	3435.2
COPD-related hospitalizations	405	**7317.1**˅	7795.8
Emergency department visits (age-specific rates per 100,000)			
Alcohol/substance-related ED visits	NA	NA	204.1
Cerebrovascular disease (stroke) ED visits	15	**271**˄	256.0
Major cardiovascular disease ED visits	64	**1156.3**˅	1580.1
Acute myocardial infarction ED visits	NA	NA	93.4
Diabetes-related ED visits	147	**2655.8**˅	4000.7
All injury and poisoning ED visits	327	**5907.9**˅	8352.8
Hip fracture injury ED visits	NA	NA	77.6
Mental disorder-related ED visits	158	**2854.6**˅	3422.3
Bacterial pneumonia-related ED visits	NA	NA	299.5
COPD-related ED visits	118	**2131.9**˅	2307.6
Health of youth age 15-19			
Hospitalizations (age-specific rates per 100,000)			
Alcohol/substance-related hospitalizations	NA	NA	112.6
Diabetes-related hospitalizations	NA	NA	106.8
All injury and poisoning hospitalizations	14	**460.7**˄	93.3
Opioid-related hospitalizations	NA	NA	388.6
Mental disorder-related hospitalizations	46	**1513.7**˄	1361.2
COPD-related hospitalizations	NA	NA	439.8
Emergency department visits (age-specific rates per 100,000)			
Alcohol/substance-related ED visits	45	**1480.8**˄	966.1
Diabetes-related ED visits	0	**0**˅	223.4
All injury and poisoning ED visits	339	**11155.0**˅	13144.7
Opioid-related ED visits	19	**625.2**˄	176.3
Mental disorder-related ED visits	151	**4968.7**˅	5740.3
COPD-related ED visits	31	**1020.1**˅	1694.2
Public school district enrollment characteristics[175]			
Race/ethnicity			
African-American	15	1%	9%

[173] Age-adjusted alcohol/substance- and opioid-related hospitalization and emergency department visit rates per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). Opioid mortality from MADPH Registry of Vital Records. All grouped for 2010-20112.

[174] Age-specific hospitalization and emergency department visit rates per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). All grouped for 2010-2012. Age groups do not reflect health concerns for all sub-populations in North Reading.

[175] Massachusetts Department of Elementary and Secondary Education (DESE), School and District Profiles 2015-2016. Public school district graduation and drop-out rates 2014-2015.Public school graduates attending college/university 2012-2013.

APPENDIX J: COMMUNITY DATA PROFILE FOR NORTH READING

INDICATOR	North Reading		MA
	#	%/Rate	%/Rate
Asian	91	4%	7%
Hispanic	58	2%	19%
White	2,307	**91%^**	63%
Multi-race (non Hispanic)	61	2%	3%
Special populations			
First language not English	--	1%	19%
Limited English proficient	--	1%	9%
Students with disabilities	--	17%	17%
Low income	--	7%	27%
Public school district graduation and drop-out rates[9]			
Students graduating (4-year)	175	**96%^**	87%
Students dropping out	3	2%	S%
Graduates attending college/university	152	**93%^**	77%
Youth outcomes: high school health survey data[176]			
Substance use			
Alcohol, ever used	--	--	47%
Alcohol, used in last 30 days	--	--	36%
Tobacco, ever used	--	--	32%
Tobacco, used in last 30 days	--	--	11%
Marijuana, ever used	--	--	33%
Marijuana, used in last 30 days	--	--	16%
Prescription opioids, ever used	--	--	--
Prescription opioids, used in last 30 days	--	--	--
Sexual activity			
Ever had sexual intercourse	--	--	38%
Used condom at last intercourse	--	--	S8%
Mental health			
Experiencing depression in last 12 months	--	--	22%
Seriously considered suicide in last 12 months	--	--	12%
Attempted suicide in last 12 months	--	--	6%
Was bullied at school in last 12 months	--	--	17%

[176] MA DPH. 2013 Health and Risk Behaviors of MA Youth. Accessed: July 2, 2014. http://www.doe.mass.edu/cnp/hprograms/yrbs/2013Report.pdf.

TOP FIVE CAUSES OF DEATH[177] (2010-2012)					
North Reading *(n= 265)*	#	% of Deaths	**MASSACHUSETTS** *(n=159, 125)*	#	% of Deaths
1. Circulatory system diseases, all[178]	75	28.3	**1.** Circulatory system diseases, all	46,326	29.1%
2. Mental disorders[179]	25	9.43	**2.** Mental disorders	13,571	8.5%
3. Lung cancer	18	6.79	**3.** Lung cancer	10,403	6.5%
4. Bladder cancer	4	5.13	**4.** Chronic lower respiratory diseases	7,566	4.8%
5. Chronic lower respiratory diseases	11	4.15	**5.** Digestive system diseases, all	5,959	3.7%

TOP FIVE CAUSES OF HOSPITALIZATION[180] (2010-2012)					
North Reading *(n= 4,646)*	#	% of Hosp.	**MASSACHUSETTS** *(n=2,385,158)*	#	% of Hosp.
1. Chronic obstructive pulmonary disease, all related	658	14.2%	**1.** Chronic obstructive pulmonary disease, all related	422,466	17.7%
2. Diabetes Mellitus related	617	13.3%	**2.** Diabetes Mellitus Related	399,313	16.7%
3. Circulatory system diseases, all	616	13.3%	**3.** Circulatory system diseases, all	321,872	13.5%
4. Digestive system diseases, all	468	10.1%	**4.** Digestive system diseases, all	228,302	9.6%
5. Pneumonia and influenza related	326	7.0%	**5.** Asthma-related	185,915	7.7%

[177] Leading causes of death from Registry of Vital Records and Statistics, Bureau of Health Statistics, Research and Evaluation, MDPH, pulled from MassCHIP. Analysis is for total deaths in years 2010, 2011, and 2012.

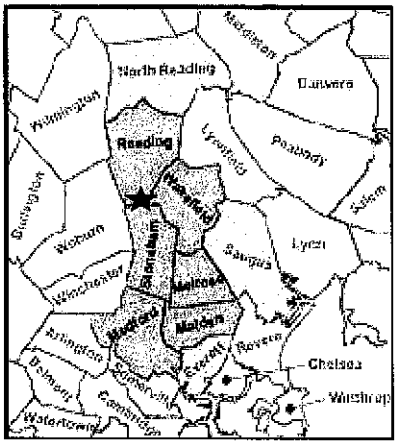
[178] Circulatory System Diseases: All includes: "major CVD", "heart disease", "coronary heart disease", "ischemic heart disease", "acute myocardial infarction", "cerebrovascular disease", "heart failure", "hypertensive heart disease", "hypertension", "atherosclerosis", and "rheumatic fever".

[179] Mental disorders include dementias.

[180] Leading causes of hospitalization from Uniform Hospital Discharge Data System, Massachusetts Division of Health Care Finance and Policy, MDPH, pulled from MassCHIP. Analysis is for discharge data for years 2010, 2011, and 2012. Note that childbirth category (Childbirth, Pregnancy, Puerperium: All) left out of leading causes of hospitalization; childbirths accounted for 9.6% of hospitalizations (227,850) in MA and 9.4% (435) in North Reading during time period.

READING, MA

Population: 25,176



Demographics compared to the state of Massachusetts as a whole:

- Larger population of Whites (91%)
- Smaller foreign-born population (8%) and most speak English at home (90%)
- Higher percentage of residents age 25+ with bachelor's degree or higher (57%)
- Higher median income ($103,913)
- Lower unemployment rate (4% of workforce)
- Higher single housing units (76%) and lower housing with 3+ units
- Lower population without health insurance (2%)

Health Conditions

Reading residents experience the following health conditions at rates 5% or higher than residents of Massachusetts as a whole:

Cancer incidence & mortality
- Breast cancer incidence and mortality
- Prostate cancer mortality

Cardiovascular Health
- Acute myocardial infarctions ED visits

Diabetes
- Diabetes related ED visits

Mental Health
- Mental disorder related ED visits

Respiratory Health
- Bacterial pneumonia related hospitalizations

Substance Abuse
- Opioid related ED visits

Selected age groups

Older adults age 65+:
- All injury and poisoning hospitalizations
- Bacterial pneumonia hospitalizations
- Hip fracture injury hospitalizations

Youth age 15-19:
- All injury and poisoning hospitalizations
- Alcohol/substance related ED visits
- Mental health disorder related hospitalizations
- Opioid related ED visits

Top 3 Causes of Death
1. Circulatory System Diseases
2. Mental Disorders
3. Lung Cancer
Top 3 Causes of Hospitalization
1. Chronic Obstructive Pulmonary (COPD)
2. Diabetes
3. Circulatory System Diseases

For more detailed information on Reading health indicators and for references, please see the data tables that follow.

READING HEALTH INDICATORS DATA TABLE

Note: Bolding ond arrows are used to highlight health conditions where the percent difference between Reading and the state is 5% or more, and to show the direction (upword (ˆ) or downward (ˇ)) of the difference. For demographics and public school enrollment characteristics, only those indicotors that differ from the state by a 5% difference or more in the higher direction are flagged. "NA" designates data that is inapplicable (i.e. not reported because the count is too law). A dash designates data that is unavailable (i.e. does not exist).

	Reading		MA
	#	%/Rate	%/Rate
Total population	25,176		6,657,291
Demographics[181]			
Female	13,016	52%	52%
Age			
Under 5 years	1347	5%	6%
Under 18 years	6,225	**25%ˆ**	21%
18 to 34 years	4,203	17%	24%
35 to 64 years	11,025	**44%ˆ**	41%
65 and over	3,723	15%	14%
85 and over	630	**3%ˆ**	2%
Race/ethnicity[182]			
Asian (non Hispanic)	1,079	4%	6%
Black/African-American (non Hispanic)	279	1%	6%
Hispanic	710	3%	10%
Some other race (non Hispanic)[183]	0	0%	1%
White (non Hispanic)	22,905	**91%ˆ**	75%
Foreign-born residents	2,042	8%	15%
Top 5 languages spoken at home[184]			
Speak Only English	21,488	**90%ˆ**	78%
Spanish or Spanish Creole	224	1%	8%
Italian	335	**1%ˆ**	1%
Other Indic Languages	201	**1%ˆ**	0%
Chinese	195	1%	2%
Social and economic characteristics[185]			
Highest educational attainment			
Less than high school graduate	501	3%	11%
High school graduate	3,180	18%	26%
5ome college	3,812	22%	24%
Bachelor's degree	5,561	**32%ˆ**	23%
Graduate/advanced degree	4,301	**25%ˆ**	17%
Income			
Median household income	**$103,913ˆ**	--	$67,846
Per capita income	**$47,168ˆ**	--	$36,441
Poverty status			
Children under 18 living in poverty	111	2%	15%
Families living in poverty	110	2%	8%

[181] US Census Bureau, American Community Survey (ACS) 2010 to 2014 (5-Year Estimates) (SE)
[182] Excludes "Two or more races"
[183] "Some other race (non-Hispanic)" includes: American Indian and Alaska Native Alone; Native Hawaiian and Other Pacific Islander Alone; and Some Other Race Alone.
[184] These are the top 5 languages spoken at home in Reading. The top 5 languages spoken at home in the state of Massachusetts as a whole are: 1) Only English, 2) Spanish or Spanish Creole, 3)Portuguese, 4) Chinese, 5) French Creole
[185] US Census Bureau, American Community Survey (ACS) 2010 to 2014; US Department of Labor, Bureau of Labor and Statistics, local area unemployment statistics 2012

	Reading		MA
	#	%/Rate	%/Rate
Population 65 and older living in poverty	226	6%	9%
Housing units by structure			
1-unit	7,467	**76%^**	57%
2 units	523	5%	10%
3 -9 units	435	5%	17%
10 -19 units	410	4%	4%
20 or more units	978	10%	10%
Housing units that are renter-occupied	1,889	20%	38%
Median gross rent	**$1,248^**	--	$1,088
Gross rent or owner costs as a percentage of household income			
30% or more	--	32%	32%
Health insurance			
No health insurance coverage	365	2%	4%
Unemployment rate[186]		4.2	5.7
Crime Rate[187]			
Violent crime	10	39.6	405.5
Property crime	189	749.3	2153.0
Health outcomes[188]			
Cancer incidence (age-adjusted rates per 100,000)[189]			
All cancers (invasive)	393	**449.6˅**	480.1
Breast cancer (female only)	80	**163.0^**	135.1
Ovarian cancer	6	11.6	11.9
Prostate cancer	35	**91.0˅**	128.2
Colorectal cancer	31	**33.2˅**	38.4
Lung cancer	51	**60.5˅**	65.9
Cancer mortality (age-adjusted rates per 100,000)[190]			
All cancers	160	174.3	166.2
Breast cancer (female only)	15	**26.8^**	19.2
Ovarian cancer	2	**2.5˅**	7.6
Prostate cancer	8	**23.0^**	19.8
Colorectal cancer	14	14.4	13.8
Lung cancer	38	43.9	45.4
Cardiovascular health			
Cardiovascular-related hospitalizations (age-adjusted rate per 100,000)[191]			
Major cardiovascular disease hospitalizations	1,010	**1109.3˅**	1294.3
Cerebrovascular disease (stroke) hospitalizations	168	**180.8˅**	224.4
Cardiovascular-related emergency department visits (age-adjusted rate per 100,000)			
Major cardiovascular disease ED visits	231	**266.9˅**	412.7
Cerebrovascular disease (stroke) ED visits	34	**37.1˅**	51.4
Acute myocardial infarction ED visits	20	21.1	21.9
Cardiovascular mortality (age-adjusted rate per 100,000)[192]			
Major cardiovascular disease mortality	157	**157.9˅**	185.9
Cerebrovascular disease (stroke) mortality	25	**24.7˅**	29.5

[186] This is the percent of the workforce that is unemployed. The 2014 unemployment rate is an estimate based on the average of Jan through Dec monthly rates.
[187] FBI Uniform Crime Report, 2012. Violent and Property Crimes Rates per 100,000.
[188] Health outcomes pulled from MADPH MassCHIP database: http://www.mass.gov/eohhs/researcher/community-health/masschip/.
[189] Age-adjusted cancer incidence rates per 100,000 from MADPH Massachusetts Cancer Registry, grouped for 2010-2012.
[190] Age-adjusted cancer mortality rates per 100,000 from MADPH Registry of Vital Records, grouped for 2010-2012.
[191] Age-adjusted cardiovascular hospitalization and emergency department visit rates per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS), grouped for 2010-2012.
[192] Age-adjusted cardiovascular mortality rates per 100,000 from MADPH Registry of Vital Records, grouped for 2010-2012.

	Reading		MA
	#	%/Rate	%/Rate
Acute myocardial infarction mortality	25	24.7	25.3
Diabetes (age-adjusted rates per 100,000)[193]			
Diabetes-related ED visits	477	**540.3**˅	130.2
Diabetes-related hospitalizations	1,122	**1249.0**˅	1762.5
Diabetes mortality	12	**12.7**˅	13.7
Infectious disease (crude rates per 100,000)[194]			
HIV/AIDS prevalence[195]	19	**76.8**˅	272.8
HIV/AIDS incidence[15]	NA	NA	10.0
Hepatitis C incidence	8	**32.3**˅	72.4
Chlamydia incidence	30	**121.3**˅	357.3
TB incidence	NA	NA	3.2
Injuries (age-adjusted rates per 100,000)[196]			
All injury and poisoning ED visits	667	**6820.0**˅	10484.5
All injury and poisoning hospitalizations	4,830	**767.2**˅	829.4
All injury and poisoning mortality	20	**27.0**˅	43.0
Hip fracture injury hospitalizations	81	82.5	80.8
Mental health (age-adjusted rates per 100,000)[197]			
Mental disorder-related ED visits	1,695	2565.6	2183.9
Mental disorder-related hospitalizations	2,288	**2733.2**˅	3799.9
Mental disorder-related mortality	53	**49.5**˅	52.6
Mother & infant health[198]			
Birth rates, by age (age-specific rate per 1,000)			
Ages 30-44	591	**76.9**˄	60.8
Ages 20-29	140	**42.5**˅	62.5
Teens (ages 15-19)	6	**2.9**˅	15.5
Inadequate prenatal care (percent of births)	13	**3%**˅	7%
Low birth weight (percent of births)	50	**7%**˅	8%
Infant mortality (rate per 1,000)	2	**2.7**˅	4.3
Premature mortality (age-adjusted rate per 100,000)[199]	183	**227.0**˅	272.2
Respiratory health (age-adjusted rates per 100,000)[200]			
Asthma-related hospitalizations	419	**528.2**˅	885.6
Childhood asthma ED visits (age-specific rate per 100,000 for ages 14 and under)	74	**479.2**˅	1777.0
Bacterial pneumonia-related hospitalizations	542	**609.4**˄	275.0
COPD-related hospitalizations	1,148	**1332.3**˅	1921.9
Substance abuse (age-adjusted rates per 100,000)[201]			

[193] Diabetes-related age-adjusted hospitalization rate per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). Diabetes mortality from MADPH Registry of Vital Records. All grouped for 2010-2012.

[194] Crude HIV/AIDS prevalence, HIV/AIDS incidence, Hepatitis C incidence, and TB incidence rates per 100,000 from MADPH Bureau of Communicable Disease Control (BCDC) Registries, Division of Epidemiology and Immunization, for 2012. Crude Chlamydia incidence rate per 100,000 from MADPH Division of Sexually Transmitted Disease Prevention, for 2012. NA indicates data not available

[195] HIV prevalence and incidence are for 2011 reported rates.

[196] Age-adjusted injury and poisoning hospitalization and emergency department visit rates per 100,000 for from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). Injury and poisoning mortality from MADPH Registry of Vital Records. All grouped for 2010-2012.

[197] Age-adjusted mental disorder hospitalization and emergency department visit rates per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). Mental disorder-related mortality from MADPH Registry of Vital Records. All grouped for 2010-2012.

[198] All mother and infant health data from MADPH Registry of Vital Records. Age-specific birth rates per 1,000 and percent of inadequate prenatal care for 2011-2013. Inadequate prenatal care characterized by an inadequate score on Kotelchuk index. Percent of low birth weight births (defined as <2500 grams) and infant mortality rate per 1,000 grouped for 2010-2012 as defined by any deaths due to perinatal conditions via MADPH Registry of Vital Records.

[199] Age-adjusted premature mortality rates per 100,000 from MADPH Registry of Vital Records, grouped for 2010-2012. The premature mortality rate is the rate of deaths occurring among individuals less than 75 years of age.

[200] Asthma-related, pneumonia-related, and COPD-related age-adjusted hospitalization rates per 100,000 and childhood asthma age-specific ED visit rates from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). All grouped for 2010-2012.

[201] Age-adjusted alcohol/substance- and opioid-related hospitalization and emergency department visit rates per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). Opioid mortality from MADPH Registry of Vital Records. All grouped for 2010-20112.

	Reading		MA
	#	%/Rate	%/Rate
Alcohol/substance-related ED visits	393	**654.3˅**	910.3
Alcohol/substance-related hospitalizations	128	**182.4˅**	341.2
Opioid-related ED visits	181	**342.4˄**	280.3
Opioid-related hospitalizations	109	**177.1˅**	332.4
Opioid-related mortality	1	**1.9˅**	9.6
Health outcomes by specific age groups[202]			
Health of older adults (age 65+)			
Hospitalizations (age-specific rates per 100,000)			
Alcohol/substance-related hospitalizations	13	**124.16˅**	211.0
Cerebrovascular disease (stroke) hospitalizations	127	**1213.0˅**	1324.0
Major cardiovascular disease hospitalizations	734	7010.5	7309.7
Diabetes-related hospitalizations	778	**7430.8˅**	8394.1
All injury and poisoning hospitalizations	428	**4087.9˄**	3173.7
Hip fracture injury hospitalizations	75	**716.3˄**	621.3
Mental disorder-related hospitalizations	1,103	10534.9	10764.6
Bacterial pneumonia-related hospitalizations	379	**3619.9˄**	3435.2
COPD-related hospitalizations	736	**7029.6˅**	7795.8
Emergency department visits (age-specific rates per 100,000)			
Alcohol/substance-related ED visits	NA	NA	204.1
Cerebrovascular disease (stroke) ED visits	22	**210.1˅**	256.0
Major cardiovascular disease ED visits	109	**1041.1˅**	1580.1
Acute myocardial infarction ED visits	NA	NA	93.4
Diabetes-related ED visits	241	**2301.8˅**	4000.7
All injury and poisoning ED visits	683	**6523.4˅**	8352.8
Hip fracture injury ED visits	NA	NA	77.6
Mental disorder-related ED visits	195	**1862.5˅**	3422.3
Bacterial pneumonia-related ED visits	17	**162.4˅**	299.5
COPD-related ED visits	150	**1432.7˅**	2307.6
Health of youth age 15-19			
Hospitalizations (age-specific rates per 100,000)			
Alcohol/substance-related hospitalizations	NA	NA	112.6
Diabetes-related hospitalizations	NA	NA	106.8
All injury and poisoning hospitalizations	12	**266.8˄**	93.3
Opioid-related hospitalizations	NA	NA	388.6
Mental disorder-related hospitalizations	67	**1489.9˄**	1361.2
COPD-related hospitalizations	13	**289.1˅**	439.8
Emergency department visits (age-specific rates per 100,000)			
Alcohol/substance-related ED visits	66	**1467.7˄**	966.1
Diabetes-related ED visits	NA	NA	223.4
All injury and poisoning ED visits	460	**10229.0˅**	13144.7
Opioid-related ED visits	18	**400.3˄**	176.3
Mental disorder-related ED visits	224	**4981.1˅**	5740.3
COPD-related ED visits	28	**622.6˅**	1694.2
Public school district enrollment characteristics[203]			
Race/ethnicity			
African-American	105	2%	9%
Asian	211	5%	7%
Hispanic	79	2%	19%

[202] Age-specific hospitalization and emergency department visit rates per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). All grouped for 2010-2012. Age groups do not reflect health concerns for all sub-populations in Reading.

[203] Massachusetts Department of Elementary and Secondary Education (DESE), School and District Profiles 2015-2016. Public school district graduation and drop-out rates 2014-2015.Public school graduates attending college/university 2012-2013.

APPENDIX J: COMMUNITY DATA PROFILE FOR READING

	Reading		MA
	#	%/Rate	%/Rate
White	3,909	**89%^**	63%
Multi-race (non Hispanic)	83	2%	3%
Special populations			
First language not English	--	2%	19%
Limited English proficient	--	1%	9%
Students with disabilities	--	17%	17%
Low income	--	7%	27%
Public school district graduation and drop-out rates[23]			
Students graduating (4-year)	291	**94%^**	87%
Students dropping out	2	1%	5%
Graduates attending college/university	288	**91%^**	77%
Youth outcomes: high school health survey data[204]			
Substance use			
Alcohol, ever used	--	**55%^**	47%
Alcohol, used in last 30 days	--	**38%^**	36%
Tobacco, ever used	--	18%	32%
Tobacco, used in last 30 days	--	10%	11%
Marijuana, ever used	--	24%	33%
Marijuana, used in last 30 days	--	**24%^**	16%
Prescription opioids, ever used[205]	--	12%	--
Prescription opioids, used in last 30 days[25]	--	10%	--
Sexual activity			
Ever had sexual intercourse	--	26%	38%
Used condom at last intercourse	--	**68%^**	58%
Mental health			
Experiencing depression in last 12 months	--	**29%^**	22%
Seriously considered suicide in last 12 months	--	**17%^**	12%
Attempted suicide in last 12 months	--	**10%^**	6%
Was bullied at school in last 12 months	--	**24%^**	17%

[204] MA DPH. 2013 Health and Risk Behaviors of MA Youth. Accessed: July 2, 2014. http://www.doe.mass.edu/cnp/hprograms/yrbs/2013Report.pdf. Reading Youth Risk Behavior Survey 2015.

[205] Students were asked about their use of any prescription drug without a prescription

TOP FIVE CAUSES OF DEATH[206] (2010-2012)					
Reading *(n=302)*	#	% of Deaths	**MASSACHUSETTS** *(n=159, 125)*	#	% of Deaths
1. Circulatory system diseases, all[207]	158	27.9%	**1.** Circulatory system diseases, all	46,326	29.1%
2. Mental disorders[208]	53	9.4%	**2.** Mental disorders	13,571	8.5%
3. Lung cancer	38	6.7%	**3.** Lung cancer	10,403	6.5%
4. Chronic lower respiratory diseases	33	5.8%	**4.** Chronic lower respiratory diseases	7,566	4.8%
5. Digestive system diseases, all	20	3.5%	**5.** Digestive system diseases, all	5,959	3.7%

TOP FIVE CAUSES OF HOSPITALIZATION[209] (2010-2012)					
Reading *(n=4,674)*	#	% of Hosp.	**MASSACHUSETTS** *(n=2,385,158)*	#	% of Hosp.
1. Chronic obstructive pulmonary disease, all related	1,148	14.7%	**1.** Chronic obstructive pulmonary disease, all related	422,466	17.7%
2. Diabetes Mellitus related	1,122	14.4%	**2.** Diabetes Mellitus Related	399,313	16.7%
3. Circulatory system diseases, all	1,110	14.3%	**3.** Circulatory system diseases, all	321,872	13.5%
4. Digestive system diseases, all	701	9.0%	**4.** Digestive system diseases, all	228,302	9.6%
5. Pneumonia and Influenza Related	593	7.6%	**5.** Asthma-related	185,915	7.7%

[206] Leading causes of death from Registry of Vital Records and Statistics, Bureau of Health Statistics, Research and Evaluation, MDPH, pulled from MassCHIP. Analysis is for total deaths in years 2010, 2011, and 2012.

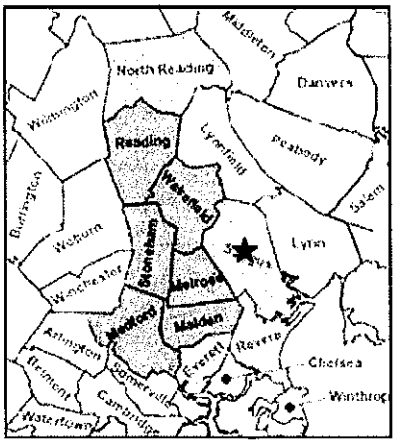
[207] Circulatory System Diseases: All includes: "major CVD", "heart disease", "coronary heart disease", "ischemic heart disease", "acute myocardial infarction", "cerebrovascular disease", "heart failure", "hypertensive heart disease", "hypertension", "atherosclerosis", and "rheumatic fever".

[208] Mental disorders include dementias.

[209] Leading causes of hospitalization from Uniform Hospital Discharge Data System, Massachusetts Division of Health Care Finance and Policy, MDPH, pulled from MassCHIP. Analysis is for discharge data for years 2010, 2011, and 2012. Note that childbirth category (Childbirth, Pregnancy, Puerperium: All) left out of leading causes of hospitalization; childbirths accounted for 9.6% of hospitalizations (227,850) in MA and 9.8% (765) in Reading during time period.

SAUGUS, MA

Population: 25,176



Demographics compared to the state of Massachusetts as a whole:

- Larger population of Whites (90%)
- Smaller foreign-born population (11%) and most speak English at home (85%)
- Lower percentage of residents age 25+ with bachelor's degree or higher (25%)
- Higher median income ($76,141)
- Higher percentage of population over 65 living in poverty (12%)
- Higher single housing units (75%) and lower housing with 3+ units

Health Conditions

Saugus residents experience the following health conditions at <u>rates 5% or higher</u> than residents of Massachusetts as a whole:

Cancer incidence & mortality

- All invasive cancer incidence and mortality
- Breast cancer incidence
- Colorectal cancer incidence
- Lung cancer incidence and mortality
- Ovarian cancer mortality

Cardiovascular Health

- Acute myocardial infarctions mortality
- Cerebrovascular disease (stroke) ED visits
- Major cardiovascular disease ED visits

Diabetes

- Diabetes related ED visits and hospitalizations

Infectious Diseases

- Hepatitis C incidence

Injuries and poisonings

- All injury and poisoning hospitalizations and mortality

Mental Health

- Mental disorder related ED visits, hospitalizations and mortality

Premature mortality

Respiratory Health

- Bacterial pneumonia related hospitalizations

Substance Abuse

- Alcohol/substance related ED visits and hospitalizations
- Opioid related ED visits, hospitalizations, and mortality

Selected age groups

Older adults age 65+:

- Bacterial pneumonia related hospitalizations
- COPD related ED visits
- Diabetes related ED visits

Youth age 15-19:

- Alcohol/substance related ED visits
- All injury and poisoning hospitalizations
- COPD related ED visits and hospitalizations
- Diabetes related ED visits
- Mental disorder related ED visits and hospitalizations
- Opioid related ED visits

Top 3 Causes of Death
1. Circulatory System Diseases
2. Mental Disorders
3. Lung Cancer
Top 3 Causes of Hospitalization
1. Diabetes
2. Chronic Obstructive Pulmonary (COPD)
3. Circulatory System Diseases

For more detailed information on Saugus health indicators and for references, please see the data tables that follow.

SAUGUS HEALTH INDICATORS DATA TABLE

Note: Bolding and arrows are used to highlight health canditians where the percent difference between Saugus and the state is 5% ar more, and to shaw the direction (upward (ˆ) or downward (ˇ)) of the difference. For demographics and public school enrollment charocteristics, only those indicators that differ from the state by a 5% difference or more in the higher direction are flagged. "NA" designates data that is inapplicable (i.e. not reported because the count is too low). A dash designates data that is unavoilable (i.e. does not exist).

INDICATOR	Saugus		MA
	#	%/Rate	%/Rate
Total population	27,369		6,657,291
Demographics[210]			
Female	14,763	54%	52%
Age			
Under 5 years	1,155	4%	6%
Under 18 years	1,155	4%	21%
18 to 34 years	5,030	18%	24%
35 to 64 years	4,292	16%	41%
65 and over	589	2%	14%
85 and over	589	2%	2%
Race/ethnicity[211]			
Asian (non Hispanic)	648	2%	6%
Black/African-American (non Hispanic)	557	2%	6%
Hispanic	1,064	4%	10%
Some other race (non Hispanic)[212]	117	0%	1%
White (non Hispanic)	24,708	**90%ˆ**	75%
Foreign-born residents	2,870	11%	15%
Top 5 languages spoken at home[213]			
Speak Only English	22,150	**85%ˆ**	78%
Spanish or Spanish Creole	887	3%	8%
Portuguese or Portuguese Creole	1,155	**4%ˆ**	3%
Italian	599	**2%ˆ**	1%
Vietnamese	246	**1%ˆ**	1%
Social and economic characteristics[214]			
Highest educational attainment			
Less than high school graduate	1,844	9%	11%
High school graduate	7,332	**36%ˆ**	26%
Some college	6,045	**30%ˆ**	24%
Bachelor's degree	3,615	18%	23%
Graduate/advanced degree	1,461	7%	17%
Income			
Median household income	**$76,141ˆ**		$67,846
Per capita income	$33,800		$36,441
Poverty status			
Children under 18 living in poverty	334	7%	15%
Families living in poverty	320	4%	8%

[210] US Census Bureau, American Community Survey (ACS) 2010 to 2014 (5-Year Estimates) (SE)

[211] Excludes "Two or more races"

[212] "Some other race (non-Hispanic)" includes: American Indian and Alaska Native Alone; Native Hawaiian and Other Pacific Islander Alone; and Some Other Race Alone.

[213] These are the top 5 languages spoken at home in Saugus. The top 5 languages spoken at home in the state of Massachusetts as a whole are: 1) Only English, 2) Spanish or Spanish Creole, 3)Portuguese, 4) Chinese, 5) French Creole

[214] US Census Bureau, American Community Survey (ACS) 2010 to 2014; US Department of Labor, Bureau of Labor and Statistics, local area unemployment statistics 2012

APPENDIX J: COMMUNITY DATA PROFILE FOR SAUGUS

INDICATOR	Saugus		MA
	#	%/Rate	%/Rate
Population 65 and older living in poverty	552	**12%^**	9%
Housing units by structure			
1-unit	8,097	**75%^**	57%
2 units	899	8%	10%
3 -9 units	800	7%	17%
10 -19 units	270	3%	4%
20 or more units	721	7%	10%
Housing units that are renter-occupied	2,372	23%	38%
Median gross rent	$1,139	--	$1,088
Gross rent or owner costs as a percentage of household income			
30% or more	2,892	**36%^**	32%
Health insurance			
No health insurance coverage	969	4%	4%
Unemployment rate[215]		5.3	5.7
Crime Rate[216]			
Violent crime	84	138.2	405.5
Property crime	796	1137.9	2153.0
Health outcomes[217]			
Cancer incidence (age-adjusted rates per 100,000)[218]			
All cancers (invasive)	581	**545.3^**	480.1
Breast cancer (female only)	90	**159.6^**	135.1
Ovarian cancer	NA	NA^	11.9
Prostate cancer	53	**105.5^**	128.2
Colorectal cancer	48	**42.4^**	38.4
Lung cancer	94	**80.9^**	65.9
Cancer mortality (age-adjusted rates per 100,000)[219]			
All cancers	205	**182.8^**	166.2
Breast cancer (female only)	9	**13.7^**	19.2
Ovarian cancer	8	**12.2^**	7.6
Prostate cancer	8	**18.0^**	19.8
Colorectal cancer	12	**10.7^**	13.8
Lung cancer	62	**53.4^**	45.4
Cardiovascular health			
Cardiovascular-related hospitalizations (age-adjusted rate per 100,000)[220]			
Major cardiovascular disease hospitalizations	1,496	1356.7	1294.3
Cerebrovascular disease (stroke) hospitalizations	228	**204.6^**	224.4
Cardiovascular-related emergency department visits (age-adjusted rate per 100,000)			
Major cardiovascular disease ED visits	379	**474.5^**	412.7
Cerebrovascular disease (stroke) ED visits	44	**55.1^**	51.4
Acute myocardial infarction ED visits	11	**13.8^**	21.9
Cardiovascular mortality (age-adjusted rate per 100,000)[221]			
Major cardiovascular disease mortality	225	193.5	185.9
Cerebrovascular disease (stroke) mortality	30	**26.6^**	29.5

[215] This is the percent of the workforce that is unemployed. The 2014 unemployment rate is an estimate based on the average of Jan through Dec monthly rates.
[216] FBI Uniform Crime Report, 2012. Violent and Property Crimes Rates per 100,000.
[217] Health outcomes pulled from MADPH MassCHIP database: http://www.mass.gov/eohhs/researcher/community-health/masschip/.
[218] Age-adjusted cancer incidence rates per 100,000 from MADPH Massachusetts Cancer Registry, grouped for 2010-2012.
[219] Age-adjusted cancer mortality rates per 100,000 from MADPH Registry of Vital Records, grouped for 2010-2012.
[220] Age-adjusted cardiovascular hospitalization and emergency department visit rates per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS), grouped for 2010-2012.
[221] Age-adjusted cardiovascular mortality rates per 100,000 from MADPH Registry of Vital Records, grouped for 2010-2012.

APPENDIX J: COMMUNITY DATA PROFILE FOR SAUGUS

INDICATOR	Saugus #	Saugus %/Rate	MA %/Rate
Acute myocardial infarction mortality	36	**45.1**^	25.3
Diabetes (age-adjusted rates per 100,000)[222]			
Diabetes-related ED visits	1,632	**2043.4**^	130.2
Diabetes-related hospitalizations	2,064	**1923.8**^	1762.5
Diabetes mortality	15	13.7	13.7
Infectious disease (crude rates per 100,000)[223]			
HIV/AIDS prevalence[224]	28	**105.2**˅	272.8
HIV/AIDS incidence[15]	NA	NA	10.0
Hepatitis C incidence	23	**86.4**^	72.4
Chlamydia incidence	50	**187.8**˅	357.3
TB incidence	NA	NA	3.2
Injuries (age-adjusted rates per 100,000)[225]			
All injury and poisoning ED visits	8,723	10922.0	10484.5
All injury and poisoning hospitalizations	889	**916.6**^	829.4
All injury and poisoning mortality	55	**68.9**^	43.0
Hip fracture injury hospitalizations	87	**74.5**˅	80.8
Mental health (age-adjusted rates per 100,000)[226]			
Mental disorder-related ED visits	6,085	**7619.0**^	5341.6
Mental disorder-related hospitalizations	4,181	**4464.5**^	3799.9
Mental disorder-related mortality	92	**79.1**^	52.6
Mother & infant health[227]			
Birth rates, by age (age-specific rate per 1,000)			
Ages 30-44	432	**54.9**˅	60.8
Ages 20-29	284	64.4	62.5
Teens (ages 15-19)	17	**7.2**˅	15.5
Inadequate prenatal care (percent of births)	56	8%	7%
Low birth weight (percent of births)	52	**7%**˅	8%
Infant mortality (rate per 1,000)	2	**2.7**˅	4.3
Premature mortality (age-adjusted rate per 100,000)[228]	308	**325.0**^	272.2
Respiratory health (age-adjusted rates per 100,000)[229]			
Asthma-related hospitalizations	794	902.4	885.6
Childhood asthma ED visits (age-specific rate per 100,000 for ages 14 and under)	89	**725.7**˅	868.0
Bacterial pneumonia-related hospitalizations	787	**749.4**^	670.0
COPD-related hospitalizations	1,963	1941.6	1921.9
Substance abuse (age-adjusted rates per 100,000)[230]			

[222] Diabetes-related age-adjusted hospitalization rate per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). Diabetes mortality from MADPH Registry of Vital Records. All grouped for 2010-2012.

[223] Crude HIV/AIDS prevalence, HIV/AIDS incidence, Hepatitis C incidence, and TB incidence rates per 100,000 from MADPH Bureau of Communicable Disease Control (BCDC) Registries, Division of Epidemiology and Immunization, for 2012. Crude Chlamydia incidence rate per 100,000 from MADPH Division of Sexually Transmitted Disease Prevention, for 2012. NA indicates data not available

[224] HIV prevalence and incidence are for 2011 reported rates.

[225] Age-adjusted injury and poisoning hospitalization and emergency department visit rates per 100,000 for from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). Injury and poisoning mortality from MADPH Registry of Vital Records. All grouped for 2010-2012.

[226] Age-adjusted mental disorder hospitalization and emergency department visit rates per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). Mental disorder-related mortality from MADPH Registry of Vital Records. All grouped for 2010-2012.

[227] All mother and infant health data from MADPH Registry of Vital Records. Age-specific birth rates per 1,000 and percent of inadequate prenatal care for 2011-2013. Inadequate prenatal care characterized by an inadequate score on Kotelchuk index. Percent of low birth weight births (defined as <2500 grams) and infant mortality rate per 1,000 grouped for 2010-2012 as defined by any deaths due to perinatal conditions via MADPH Registry of Vital Records.

[228] Age-adjusted premature mortality rates per 100,000 from MADPH Registry of Vital Records, grouped for 2010-2012. The premature mortality rate is the rate of deaths occurring among individuals less than 75 years of age.

[229] Asthma-related, pneumonia-related, and COPD-related age-adjusted hospitalization rates per 100,000 and childhood asthma age-specific ED visit rates from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). All grouped for 2010-2012.

[230] Age-adjusted alcohol/substance- and opioid-related hospitalization and emergency department visit rates per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). Opioid mortality from MADPH Registry of Vital Records. All grouped for 2010-20112.

APPENDIX J: COMMUNITY DATA PROFILE FOR SAUGUS

INDICATOR	Saugus		MA
	#	%/Rate	%/Rate
Alcohol/substance-related ED visits	992	**1336.1**^	910.3
Alcohol/substance-related hospitalizations	318	**400.9**^	341.2
Opioid-related ED visits	675	**493.4**^	280.3
Opioid-related hospitalizations	436	**597.3**^	332.4
Opioid-related mortality	15	**21.5**^	9.6
Health outcomes by specific age groups[231]			
Health of older adults (age 65+)			
Hospitalizations (age-specific rates per 100,000)			
Alcohol/substance-related hospitalizations	25	**179.44**˅	211.0
Cerebrovascular disease (stroke) hospitalizations	165	**1184.3**˅	1324.0
Major cardiovascular disease hospitalizations	1,051	7543.8	7309.7
Diabetes-related hospitalizations	1,278	**9173.1**^	8394.1
All injury and poisoning hospitalizations	432	3100.8	3173.7
Hip fracture injury hospitalizations	74	**531.2**˅	621.3
Mental disorder-related hospitalizations	1,561	11204.4	10764.6
Bacterial pneumonia-related hospitalizations	529	**3797.0**^	3435.2
COPD-related hospitalizations	1,065	7644.3	7795.8
Emergency department visits (age-specific rates per 100,000)			
Alcohol/substance-related ED visits	17	**122.0**˅	204.1
Cerebrovascular disease (stroke) ED visits	23	**165.1**˅	256.0
Major cardiovascular disease ED visits	189	**1356.6**˅	1580.1
Acute myocardial infarction ED visits	NA	NA	93.4
Diabetes-related ED visits	693	**4974.2**^	4000.7
All injury and poisoning ED visits	1,159	8319.0	8352.8
Hip fracture injury ED visits	NA	NA	77.6
Mental disorder-related ED visits	566	**4062.6**^	3422.3
Bacterial pneumonia-related ED visits	32	**229.7**˅	299.5
COPD-related ED visits	438	**3143.8**^	2307.6
Health of youth age 15-19			
Hospitalizations (age-specific rates per 100,000)			
Alcohol/substance-related hospitalizations	NA	NA	112.6
Diabetes-related hospitalizations	NA	NA	106.8
All injury and poisoning hospitalizations	25	**532.5**^	93.3
Opioid-related hospitalizations	NA	NA	388.6
Mental disorder-related hospitalizations	87	**1853.0**^	1361.2
COPD-related hospitalizations	24	**511.2**^	439.8
Emergency department visits (age-specific rates per 100,000)			
Alcohol/substance-related ED visits	54	**1150.2**^	966.1
Diabetes-related ED visits	13	**276.9**^	223.4
All injury and poisoning ED visits	704	**14994.7**^	13144.7
Opioid-related ED visits	34	**724.2**^	176.3
Mental disorder-related ED visits	330	**7028.8**^	5740.3
COPD-related ED visits	135	**2875.4**^	1694.2
Public school district enrollment characteristics[232]			
Race/ethnicity			
African-American	115	4%	9%
Asian	128	5%	7%
Hispanic	336	13%	19%

[231] Age-specific hospitalization and emergency department visit rates per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). All grouped for 2010-2012. Age groups do not reflect health concerns for all sub-populations in Saugus.

[232] Massachusetts Department of Elementary and Secondary Education (DESE), School and District Profiles 2015-2016. Public school district graduation and drop-out rates 2014-2015.Public school graduates attending college/university 2012-2013.

APPENDIX J: COMMUNITY DATA PROFILE FOR SAUGUS

INDICATOR	Saugus		MA
	#	%/Rate	%/Rate
White	2030	**76%^**	63%
Multi-race (non Hispanic)	37	1%	3%
Special populations			
First language not English	--	12%	19.%
Limited English proficient	--	5%	9%
Students with disabilities	--	15%	17%
Low income	--	25%	27 %
Public school district graduation and drop-out rates			
Students graduating (4-year)	162	87%	87 %
Students dropping out	8	4%	5%
Graduates attending college/university	125	76%	77%
Youth outcomes: high school health survey data[233]			
Substance use			
Alcohol, ever used	--	**62%^**	47%
Alcohol, used in last 30 days	--	38%	36%
Tobacco, ever used	--	11%	32%
Tobacco, used in last 30 days	--	**23%^**	11%
Marijuana, ever used	--	**43%^**	33%
Marijuana, used in last 30 days	--	**23%^**	16%
Prescription opioids, ever used[234]	--	3%	--
Prescription opioids, used in last 30 days[25]	--	5%	--
Sexual activity			
Ever had sexual intercourse	--	**40%^**	38%
Used condom at last intercourse	--	**63%^**	58%
Mental health			
Experiencing depression in last 12 months	--	**29%^**	22%
Seriously considered suicide in last 12 months	--	11%	12%
Attempted suicide in last 12 months	--	--	6%
Was bullied at school in last 12 months	--	17%	17%

[233] MA DPH. 2013 Health and Risk Behaviors of MA Youth. Accessed: July 2, 2014. http://www.doe.mass.edu/cnp/hprograms/yrbs/2013Report.pdf. Saugus Youth Risk Behavior Survey 2015.

[234] Students in Saugus were asked about their use of prescription pain relievers.

TOP FIVE CAUSES OF DEATH[235] (2010-2012)					
Saugus *(n=444)*	#	% of Deaths	**MASSACHUSETTS** *(n=159, 125)*	#	% of Deaths
1. Circulatory system diseases, all[236]	226	27.6%	**1.** Circulatory system diseases, all	46,326	29.1%
2. Mental disorders[237]	92	11.2%	**2.** Mental disorders	13,571	8.5%
3. Lung cancer	62	7.6%	**3.** Lung cancer	10,403	6.5%
4. Chronic lower respiratory diseases	33	4%	**4.** Chronic lower respiratory diseases	7,566	4.8%
5. Digestive system diseases, all	31	3.8%	**5.** Digestive system diseases, all	5,959	3.7%

TOP FIVE CAUSES OF HOSPITALIZATION[238] (2010-2012)					
Saugus *(n=7,748)*	#	% of Hosp.	**MASSACHUSETTS** *(n=2,385,158)*	#	% of Hosp.
1. Diabetes Mellitus related	2,064	18.6%	**1.** Chronic obstructive pulmonary disease, all related	422,466	17.7%
2. Chronic obstructive pulmonary disease, all related	1,963	17.7%	**2.** Diabetes Mellitus Related	399,313	16.7%
3. Circulatory system diseases, all	1,642	14.8%	**3.** Circulatory system diseases, all	321,872	13.5%
4. Digestive system diseases, all	1,196	10.8%	**4.** Digestive system diseases, all	228,302	9.6%
5. Pneumonia and Influenza Related	883	8.0%	**5.** Asthma-related	185,915	7.7%

[235] Leading causes of death from Registry of Vital Records and Statistics, Bureau of Health Statistics, Research and Evaluation, MDPH, pulled from MassCHIP. Analysis is for total deaths in years 2010, 2011, and 2012.

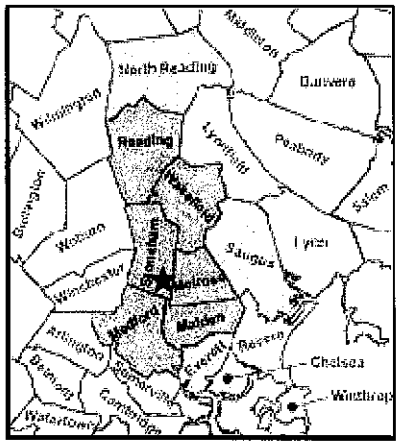
[236] Circulatory System Diseases: All includes: "major CVD", "heart disease", "coronary heart disease", "ischemic heart disease", "acute myocardial infarction", "cerebrovascular disease", "heart failure", "hypertensive heart disease", "hypertension", "atherosclerosis", and "rheumatic fever".

[237] Mental disorders include dementias.

[238] Leading causes of hospitalization from Uniform Hospital Discharge Data System, Massachusetts Division of Health Care Finance and Policy, MDPH, pulled from MassCHIP. Analysis is for discharge data for years 2010, 2011, and 2012. Note that childbirth category (Childbirth, Pregnancy, Puerperium: All) left out of leading causes of hospitalization; childbirths accounted for 9.6% of hospitalizations (227,850) in MA and 7.2% (802) in Saugus during time period.

STONEHAM, MA

Population: 21,611



Demographics compared to the state of Massachusetts as a whole:

- Larger population of Whites (92%)
- Smaller foreign-born population (11%) and most speak English at home (85%)
- Higher percentage of residents age 25+ with bachelor's degree or higher (40%)
- Higher median income ($76,218)
- Lower unemployment rate (5% of workforce)
- Higher single housing units (59%) and lower housing with 3+ units
- Lower population without health insurance (2%)

Health Conditions

Stoneham residents experience the following health conditions at rates 5% or higher than residents of Massachusetts as a whole:

Cancer incidence & martality

- Breast cancer incidence
- Colorectal cancer incidence
- Ovarian cancer incidence

Cardiovascular Health

- Acute myocardial infarctions ED visits

Injuries and paisonings

- Hip fracture injury hospitalizations

Respiratary Health

- Bacterial pneumonia related hospitalizations

Substance Abuse

- Alcohol/substance related ED visits
- Opioid related ED visits, hospitalizations, and mortality

Selected age groups

Older adults age 65+:

- Acute myocardial infarction ED visits and hospitalizations
- All injury and poisoning hospitalizations
- Bacterial pneumonia related hospitalizations
- COPD related hospitalizations
- Hip fracture injury hospitalizations
- Major cardiovascular disease hospitalizations
- Diabetes related hospitalizations
- Mental health related hospitalizations
- Stroke hospitalizations

Youth age 15-19:

- Alcohol/substance related ED visits
- All injury and poisoning hospitalizations
- Mental disorder related hospitalizations

Top 3 Causes of Death
1. Circulatory System Diseases
2. Mental Disorders
3. Lung Cancer
Top 3 Causes of Hospitalization
1. Diabetes
2. Chronic Obstructive Pulmonary (COPD)
3. Circulatory System Diseases

For more detailed information on Stoneham health indicators and for references, please see the data tables that follow.

STONEHAM HEALTH INDICATORS DATA TABLE

Note: Bolding and arrows are used to highlight heolth conditions where the percent difference between Stoneham and the state is 5% or more, and to show the direction (upward (ˆ) or downward (ˇ)) of the difference. Far demographics and public school enrollment charocteristics, only those indicators that differ from the state by a 5% difference or more in the higher direction are flagged. "NA" designates data that is inapplicoble (i.e. not reported because the caunt is toa low). A dash designates data thot is unavailable (i.e. does not exist).

INDICATOR	Stoneham		MA
	#	%/Rate	%/Rate
Total population	21,611		6,657,291
Demographics[239]			
Female	11,761	**54%ˆ**	52%
Age			
Under 5 years	875	4%	6%
Under 18 years	3,855	18%	21%
18 to 34 years	4,277	20%	24%
35 to 64 years	9,533	**44%ˆ**	41%
65 and over	3,946	**18%ˆ**	14%
85 and over	721	**3%ˆ**	2%
Race/ethnicity[240]			
Asian (non Hispanic)	684	3%	6%
Black/African-American (non Hispanic)	302	1%	6%
Hispanic	302	1%	10%
Some other race (non Hispanic)[241]	53	0%	1%
White (non Hispanic)	19,814	**92%ˆ**	75%
Foreign-born residents	2,258	11%	15%
Top 5 languages spoken at home[242]			
Speak Only English	17,697	**85%ˆ**	78%
Spanish or Spanish Creole	504	2%	8%
French (Incl. Patois, Cajun)	204	1%	1%
Portuguese or Portuguese Creole	335	2%	3%
Italian	742	**4%ˆ**	1%
Social and economic characteristics[243]			
Highest educational attainment			
Less than high school graduate	1,120	7%	11%
High school graduate	4,215	26%	26%
Some college	4,398	**27%ˆ**	24%
Bachelor's degree	3,913	**24%ˆ**	23%
Graduate/advanced degree	2,622	16%	17%
Income			
Median household income	**$76,218ˆ**	--	$67,846
Per capita income	**$39,542ˆ**	--	$36,441
Poverty status			
Children under 18 living in poverty	170	4%	15%
Families living in poverty	157	3%	8%

[239] US Census Bureau, American Community Survey (ACS) 2010 to 2014 (5-Year Estimates) (SE)

[240] Excludes "Two or more races"

[241] "Some other race (non-Hispanic)" includes: American Indian and Alaska Native Alone; Native Hawaiian and Other Pacific Islander Alone; and Some Other Race Alone.

[242] These are the top 5 languages spoken at home in Stoneham. The top 5 languages spoken at home in the state of Massachusetts as a whole are: 1) Only English, 2) Spanish or Spanish Creole, 3)Portuguese, 4) Chinese, 5) French Creole

[243] US Census Bureau, American Community Survey (ACS) 2010 to 2014; US Department of Labor, Bureau of Labor and Statistics, local area unemployment statistics 2012

APPENDIX J: COMMUNITY DATA PROFILE FOR STONEHAM

INDICATOR	Stoneham		MA
	#	%/Rate	%/Rate
Population 65 and older living in poverty	170	4%	9%
Housing units by structure			
1-unit	5,582	59%	57%
2 units	606	6%	10%
3 -9 units	652	7%	17%
10 -19 units	719	**8%^**	4%
20 or more units	1,930	**20%^**	10%
Housing units that are renter-occupied	2,971	33%	38%
Median gross rent	**$1,270^**	--	$1,088
Gross rent or owner costs as a percentage of household income			
30% or more	--	31%	32%
Health insurance			
No health insurance coverage	522	2%	4%
Unemployment rate[244]		5.0	5.7
Crime Rate[245]			
Violent crime	29	132.7	405.5
Property crime	259	1185.2	2153.0
Health outcomes[246]			
Cancer incidence (age-adjusted rates per 100,000)[247]			
All cancers (invasive)	447	504.4	480.1
Breast cancer (female only)	79	**169.6^**	135.1
Ovarian cancer	9	**20.9^**	11.9
Prostate cancer	32	**81.0˅**	128.2
Colorectal cancer	40	**44.4^**	38.4
Lung cancer	46	**47.8˅**	65.9
Cancer mortality (age-adjusted rates per 100,000)[248]			
All cancers	154	**156.8˅**	166.2
Breast cancer (female only)	12	19.8	19.2
Ovarian cancer	4	7.3	7.6
Prostate cancer	8	20.0	19.8
Colorectal cancer	7	**6.6˅**	13.8
Lung cancer	39	**40.6˅**	45.4
Cardiovascular health			
Cardiovascular-related hospitalizations (age-adjusted rate per 100,000)[249]			
Major cardiovascular disease hospitalizations	1,304	1315.8	1294.3
Cerebrovascular disease (stroke) hospitalizations	231	227.0	224.4
Cardiovoscular-related emergency department visits (age-adjusted rate per 100,000)			
Major cardiovascular disease ED visits	325	**374.6˅**	412.7
Cerebrovascular disease (stroke) ED visits	45	49.5	51.4
Acute myocardial infarction ED visits	29	**33.1^**	21.9
Cardiovasculor mortality (age-adjusted rate per 100,000)[250]			
Major cardiovascular disease mortality	185	**168.1˅**	185.9
Cerebrovascular disease (stroke) mortality	35	30.6	29.5

[244] This is the percent of the workforce that is unemployed. The 2014 unemployment rate is an estimate based on the average of Jan through Dec monthly rates.
[245] FBI Uniform Crime Report, 2012. Violent and Property Crimes Rates per 100,000.
[246] Health outcomes pulled from MADPH MassCHIP database: http://www.mass.gov/eohhs/researcher/community-health/masschip/.
[247] Age-adjusted cancer incidence rates per 100,000 from MADPH Massachusetts Cancer Registry, grouped for 2010-2012.
[248] Age-adjusted cancer mortality rates per 100,000 from MADPH Registry of Vital Records, grouped for 2010-2012.
[249] Age-adjusted cardiovascular hospitalization and emergency department visit rates per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS), grouped for 2010-2012.
[250] Age-adjusted cardiovascular mortality rates per 100,000 from MADPH Registry of Vital Records, grouped for 2010-2012.

APPENDIX J: COMMUNITY DATA PROFILE FOR STONEHAM

INDICATOR	Stoneham		MA
	#	%/Rate	%/Rate
Acute myocardial infarction mortality	27	24.3	25.3
Diabetes (age-adjusted rates per 100,000)[251]			
Diabetes-related ED visits	866	**1016.6˅**	1376.9
Diabetes-related hospitalizations	1,623	1681.6	1762.5
Diabetes mortality	12	**12.3˅**	13.7
Infectious disease (crude rates per 100,000)[252]			
HIV/AIDS prevalence[253]	26	**121.3˅**	272.8
HIV/AIDS incidence[15]	**0**	**0.0˅**	10.0
Hepatitis C incidence	6	**28.0˅**	72.4
Chlamydia incidence	35	**163.3˅**	357.3
TB incidence	---	---	3.2
Injuries (age-adjusted rates per 100,000)[254]			
All injury and poisoning ED visits	5,916	**9657.9˅**	10484.5
All injury and poisoning hospitalizations	751	850.9	829.4
All injury and poisoning mortality	32	42.3	43.0
Hip fracture injury hospitalizations	106	**91.9˄**	80.8
Mental health (age-adjusted rates per 100,000)[255]			
Mental disorder-related ED visits	2,647	**4251.4˅**	5341.6
Mental disorder-related hospitalizations	2,995	**3607.4˅**	3799.9
Mental disorder-related mortality	52	**44.7˅**	52.6
Mother & infant health[256]			
Birth rates, by age (age-specific rate per 1,000)			
Ages 30-44	476	**74.0˄**	60.8
Ages 20-29	181	**54.7˅**	62.5
Teens (ages 15-19)	NA	NA	15.5
Inadequate prenatal care (percent of births)	22	**3%˅**	7%
Low birth weight (percent of births)	33	**5%˅**	8%
Infant mortality (rate per 1,000)	2	**3˅**	4.3
Premature mortality (age-adjusted rate per 100,000)[257]	196	**253.4˅**	272.2
Respiratory health (age-adjusted rates per 100,000)[258]			
Asthma-related hospitalizations	599	**779.9˅**	885.6
Childhood asthma ED visits (age-specific rate per 100,000 for ages 14 and under)	47	**450.0˅**	868.0
Bacterial pneumonia-related hospitalizations	683	**722.6˄**	670.0
COPD-related hospitalizations	1,558	1767.6	1921.9
Substance abuse (age-adjusted rates per 100,000)[259]			

[251] Diabetes-related age-adjusted hospitalization rate per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). Diabetes mortality from MADPH Registry of Vital Records. All grouped for 2010-2012.

[252] Crude HIV/AIDS prevalence, HIV/AIDS incidence, Hepatitis C incidence, and TB incidence rates per 100,000 from MADPH Bureau of Communicable Disease Control (BCDC) Registries, Division of Epidemiology and Immunization, for 2012. Crude Chlamydia incidence rate per 100,000 from MADPH Division of Sexually Transmitted Disease Prevention, for 2012. NA indicates data not available

[253] HIV prevalence and incidence are for 2011 reported rates.

[254] Age-adjusted injury and poisoning hospitalization and emergency department visit rates per 100,000 for from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). Injury and poisoning mortality from MADPH Registry of Vital Records. All grouped for 2010-2012.

[255] Age-adjusted mental disorder hospitalization and emergency department visit rates per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). Mental disorder-related mortality from MADPH Registry of Vital Records. All grouped for 2010-2012.

[256] All mother and infant health data from MADPH Registry of Vital Records. Age-specific birth rates per 1,000 and percent of inadequate prenatal care for 2011-2013. Inadequate prenatal care characterized by an inadequate score on Kotelchuk index. Percent of low birth weight births (defined as <2500 grams) and infant mortality rate per 1,000 grouped for 2010-2012 as defined by any deaths due to perinatal conditions via MADPH Registry of Vital Records.

[257] Age-adjusted premature mortality rates per 100,000 from MADPH Registry of Vital Records, grouped for 2010-2012. The premature mortality rate is the rate of deaths occurring among individuals less than 75 years of age.

[258] Asthma-related, pneumonia-related, and COPD-related age-adjusted hospitalization rates per 100,000 and childhood asthma age-specific ED visit rates from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). All grouped for 2010-2012.

[259] Age-adjusted alcohol/substance- and opioid-related hospitalization and emergency department visit rates per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). Opioid mortality from MADPH Registry of Vital Records. All grouped for 2010-20112.

APPENDIX J: COMMUNITY DATA PROFILE FOR STONEHAM

INDICATOR	Stoneham		MA
	#	%/Rate	%/Rate
Alcohol/substance-related ED visits	568	**980.2**^	910.3
Alcohol/substance-related hospitalizations	192	**286.1**˅	341.2
Opioid-related ED visits	242	**448.9**^	280.3
Opioid-related hospitalizations	241	**381.8**^	332.4
Opioid-related mortality	6	**11.1**^	9.6
Health outcomes by specific age groups[260]			
Health of older adults (age 65+)			
Hospitalizations (age-specific rates per 100,000)			
Alcohol/substance-related hospitalizations	26	217.7	211.0
Cerebrovascular disease (stroke) hospitalizations	186	**1557.4**^	1324.0
Major cardiovascular disease hospitalizations	992	**8306.1**^	7309.7
Diabetes-related hospitalizations	1,149	**9620.7**^	8394.1
All injury and poisoning hospitalizations	468	**3918.6**^	3173.7
Hip fracture injury hospitalizations	95	**795.5**^	621.3
Mental disorder-related hospitalizations	1,466	**12275.0**^	10764.6
Bacterial pneumonia-related hospitalizations	495	**4144.7**^	3435.2
COPD-related hospitalizations	1,008	**8440.1**^	7795.8
Emergency department visits (age-specific rates per 100,000)			
Alcohol/substance-related ED visits	NA	NA	204.1
Cerebrovascular disease (stroke) ED visits	26	**217.7**˅	256.0
Major cardiovascular disease ED visits	175	**1465.3**˅	1580.1
Acute myocardial infarction ED visits	13	**108.9**^	93.4
Diabetes-related ED visits	419	**3508.3**˅	4000.7
All injury and poisoning ED visits	965	8080.1	8352.8
Hip fracture injury ED visits	NA	NA	77.6
Mental disorder-related ED visits	314	**2629.2**˅	3422.3
Bacterial pneumonia-related ED visits	34	**284.7**˅	299.5
COPD-related ED visits	277	2319.4	2307.6
Health of youth age 15-19			
Hospitalizations (age-specific rates per 100,000)			
Alcohol/substance-related hospitalizations	NA	NA	112.6
Diabetes-related hospitalizations	NA	NA	106.8
All injury and poisoning hospitalizations	15	**436.3**^	93.3
Opioid-related hospitalizations	NA	NA	388.6
Mental disorder-related hospitalizations	55	**1599.8**^	1361.2
COPD-related hospitalizations	12	**349.0**˅	439.8
Emergency department visits (age-specific rotes per 100,000)			
Alcohol/substance-related ED visits	53	**1541.6**^	966.1
Diabetes-related ED visits	NA	NA	223.4
All injury and poisoning ED visits	458	13321.7	13144.7
Opioid-related ED visits	NA	NA	176.3
Mental disorder-related ED visits	199	5788.3	5740.3
COPD-related ED visits	37	**1076.2**˅	1694.2
Public school district enrollment characteristics[261]			
Race/ethnicity			
African-American	47	2%	9%
Asian	92	4%	7%
Hispanic	129	6%	19%

[260] Age-specific hospitalization and emergency department visit rates per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). All grouped for 2010-2012. Age groups do not reflect health concerns for all sub-populations in Stoneham.

[261] Massachusetts Department of Elementary and Secondary Education (DESE), School and District Profiles 2015-2016. Public school district graduation and drop-out rates 2014-2015.Public school graduates attending college/university 2012-2013.

APPENDIX J: COMMUNITY DATA PROFILE FOR STONEHAM

INDICATOR	Stoneham		MA
	#	%/Rate	%/Rate
White	2,005	**85%^**	63%
Multi-race (non Hispanic)	68	3%	3%
Special populations			
First language not English	--	11%	19%
Limited English proficient	--	3%	9%
Students with disabilities	--	**19%^**	17%
Low income	--	15%	27%
Public school district graduation and drop-out rates			
Students graduating (4-year)	159	**94%^**	87%
Students dropping out	2	1%	5%
Graduates attending college/university	157	**88%^**	77%
Youth outcomes: high school health survey data[262]			
Substance use			
Alcohol, ever used	--	**59%^**	47%
Alcohol, used in last 30 days	--	**41%^**	36%
Tobacco, ever used	--	9%	32%
Tobacco, used in last 30 days	--	3%	11%
Marijuana, ever used	--	27%	33%
Marijuana, used in last 30 days	--	15%	16%
Prescription opioids, ever used[263]	--	4%	--
Prescription opioids, used in last 30 days[25]	--	2%	--
Sexual activity			
Ever had sexual intercourse	--	--	38%
Used condom at last intercourse	--	--	58%
Mental health			
Experiencing depression in last 12 months	--	--	22%
Seriously considered suicide in last 12 months	--	--	12%
Attempted suicide in last 12 months	--	--	6%
Was bullied at school in last 12 months	--	--	17%

[262] MA DPH. 2013 Health and Risk Behaviors of MA Youth. Accessed: July 2, 2014. http://www.doe.mass.edu/cnp/hprograms/yrbs/2013Report.pdf.

[263] MA DPH. 2013 Health and Risk Behaviors of MA Youth. Accessed: July 2, 2014. http://www.doe.mass.edu/cnp/hprograms/yrbs/2013Report.pdf.

TOP FIVE CAUSES OF DEATH[264] (2010-2012)					
Stoneham *(n=328)*	#	% of Deaths	**MASSACHUSETTS** *(n=159, 125)*	#	% of Deaths
1. Circulatory system diseases, all[265]	185	29.6%	**1.** Circulatory system diseases, all	46,326	29.1%
2. Mental disorders[266]	52	8.3%	**2.** Mental disorders	13,571	8.5%
3. Lung cancer	39	6.2%	**3.** Lung cancer	10,403	6.5%
4. Genitourinary Diseases	26	4.2%	**4.** Chronic lower respiratory diseases	7,566	4.8%
5. Chronic lower respiratory diseases	26	4.2%	**5.** Digestive system diseases, all	5,959	3.7%

TOP FIVE CAUSES OF HOSPITALIZATION[267] (2010-2012)					
Stoneham *(n=6,306)*	#	% of Hosp.	**MASSACHUSETTS** *(n=2,385,158)*	#	% of Hosp.
1. Diabetes Mellitus Related	1,623	17.6%	**1.** Chronic obstructive pulmonary disease, all related	422,466	17.7%
2. Chronic obstructive pulmonary disease, all related	1,558	16.9%	**2.** Diabetes Mellitus Related	399,313	16.7%
3. Circulatory system diseases, all	1,413	15.3%	**3.** Circulatory system diseases, all	321,872	13.5%
4. Digestive system diseases, all	962	10.4%	**4.** Digestive system diseases, all	228,302	9.6%
5. Pneumonia and Influenza related	750	8.1%	**5.** Asthma-related	185,915	7.7%

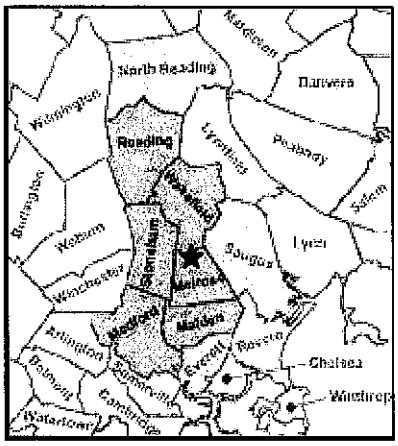
[264] Leading causes of death from Registry of Vital Records and Statistics, Bureau of Health Statistics, Research and Evaluation, MDPH, pulled from MassCHIP. Analysis is for total deaths in years 2010, 2011, and 2012.

[265] Circulatory System Diseases: All includes: "major CVD", "heart disease", "coronary heart disease", "ischemic heart disease", "acute myocardial infarction", "cerebrovascular disease", "heart failure", "hypertensive heart disease", "hypertension", "atherosclerosis", and "rheumatic fever".

[266] Mental disorders include dementias.

[267] Leading causes of hospitalization from Uniform Hospital Discharge Data System, Massachusetts Division of Health Care Finance and Policy, MDPH, pulled from MassCHIP. Analysis is for discharge data for years 2010, 2011, and 2012. Note that childbirth category (Childbirth, Pregnancy, Puerperium: All) left out of leading causes of hospitalization; childbirths accounted for 9.6% of hospitalizations (227,850) in MA and 7.7% (707) in Stoneham during time period.

WAKEFIELD, MA



Population: 25,835

Demographics compared to the state of Massachusetts as a whole:

- Smaller population of Asians (3%), Black/African-Americans (1%), and Hispanics (3%)
- Smaller foreign-born population (7%) and most speak English at home (90%)
- Higher percentage of residents age 25+ with bachelor's degree or higher (45%)
- Higher median income ($85,156)
- Lower unemployment rate (4% of workforce)
- Higher single housing units (65%) and lower housing with 3+ units
- Lower population without health insurance (2%)

Health Conditions

Wakefield residents experience the following health conditions at rates 5% or higher than residents of the state of Massachusetts as a whole:

Cancer incidence & mortality
- Breast cancer incidence
- Colorectal cancer incidence and mortality
- Ovarian cancer mortality

Cardiovasculor Health
- Acute myocardial infarctions ED visits
- Stroke ED visits

Diabetes
- Diabetes related ED visits

Injuries and poisonings
- All injury and poisoning hospitalizations
- Hip fracture injury hospitalizations

Mental Health
- Mental disorder related ED visits and mortality

Mother and infant health
- Low birth weight

Substance Abuse
- Alcohol related ED visits
- Opioid related ED visits and mortality

Selected age groups

Older adults age 65+:
- Acute myocardial infractions ED visits
- Alcohol/substance related ED visits
- All injury and poisoning ED visits and hospitalizations
- Bacterial pneumonia ED visits
- COPD related ED visits
- Hip fracture injury hospitalizations
- Mental health related ED visits and hospitalizations
- Stroke ED visits

Youth age 15-19:
- Alcohol/substance related ED visits
- All injury and poisoning ED visits and hospitalizations
- COPD related ED visits
- Mental disorder related ED visits and hospitalizations
- Opiod related ED visits

Top 3 Causes of Death
1. Circulatory System Diseases
2. Mental Disorders
3. Lung Cancer
Top 3 Causes of Hospitalization
1. Diabetes
2. Chronic Obstructive Pulmonary (COPD)
3. Circulatory System Diseases

For more detailed information on Wakefield health indicators and for references, please see the data tables that follow.

WAKEFIELD HEALTH INDICATORS DATA TABLE

Note: Bolding and arrows are used to highlight heolth conditions where the percent difference between Wakefield and the state is 5% or more, and to show the direction (upward (ˆ) or downward (ˇ)) of the difference. For demographics and public school enrollment characteristics, only those indicators that differ from the state by a 5% difference or more in the higher direction are flagged. "NA" designates data that is inapplicable (i.e. not reported because the count is too low). A dash designates data that is unavailable (i.e. does not exist).

INDICATOR	Wakefield		MA
	#	%/Rate	%/Rate
Total population	25,835		6,657,291
Demographics[268]			
Female	13,165	51%	52%
Age			
Under 5 years	1,417	**6%ˆ**	6%
Under 18 years	5,359	21%	21%
18 to 34 years	5,256	20%	24%
35 to 64 years	11,380	**44%ˆ**	41%
65 and over	3,840	15%	14%
85 and over	518	2%	2%
Race/ethnicity[269]			
Asian (non Hispanic)	802	3%	6%
Black/African-American (non Hispanic)	141	1%	6%
Hispanic	665	3%	10%
Some other race (non Hispanic)[270]	0	0%	1%
White (non Hispanic)	24,035	**93%ˆ**	75%
Foreign-born residents	1,876	7%	15%
Top 5 languages spoken at home[271]			
Speak Only English	21,893	**90%ˆ**	78%
Spanish or Spanish Creole	610	3%	8%
Italian	409	**2%ˆ**	1%
Portuguese or Portuguese Creole	255	1%	1%
Chinese	476	**2%ˆ**	3%
Social and economic characteristics[272]			
Highest educational attainment			
Less than high school graduate	1,069	6%	11%
High school graduate	4,859	26%	26%
Some college	4,308	23%	24%
Bachelor's degree	5,475	**29%ˆ**	23%
Graduate/advanced degree	2,990	16%	17%
Income			
Median household income	**$85,156ˆ**	--	$67,846
Per capita income	**$40,051ˆ**	--	$36,441
Poverty status			
Children under 18 living in poverty	79	2%	15%

[268] US Census Bureau, American Community Survey (ACS) 2010 to 2014 (5-Year Estimates) (SE)

[269] Excludes "Two or more races"

[270] "Some other race (non-Hispanic)" includes: American Indian and Alaska Native Alone; Native Hawaiian and Other Pacific Islander Alone; and Some Other Race Alone.

[271] These are the top 5 languages spoken at home in Wakefield. The top 5 languages spoken at home in the state of Massachusetts as a whole are: 1) Only English, 2) Spanish or Spanish Creole, 3)Portuguese, 4) Chinese, 5) French Creole

[272] US Census Bureau, American Community Survey (ACS) 2010 to 2014; US Department of Labor, Bureau of Labor and Statistics, local area unemployment statistics 2012

INDICATOR	Wakefield		MA
	#	%/Rate	%/Rate
Families living in poverty	188	3%	8%
Population 65 and older living in poverty	324	9%	9%
Housing units by structure			
1-unit	6,797	**65%^**	57%
2 units	1,085	10%	10%
3 -9 units	1,427	14%	17%
10 -19 units	309	3%	4%
20 or more units	859	8%	10%
Housing units that are renter-occupied	2,602	26%	38%
Median gross rent	**$1,179^**	--	$1,088
Gross rent or owner costs as a percentage of household income			
30% or more	--	33%	32%
Health insurance			
No health insurance coverage	515	2%	4%
Unemployment rate[273]		4.4	5.7
Crime Rate[274]			
Violent crime	67	263.6	405.5
Property crime	309	1215.8	2153.0
Health outcomes[275]			
Cancer incidence (age-adjusted rates per 100,000)[276]			
All cancers (invasive)	416	458.8	480.1
Breast cancer (female only)	75	**145.6^**	135.1
Ovarian cancer	NA	NA	11.9
Prostate cancer	41	**95.4^**	128.2
Colorectal cancer	43	**46.1^**	38.4
Lung cancer	59	67.2	65.9
Cancer mortality (age-adjusted rates per 100,000)[277]			
All cancers	149	164.0	166.2
Breast cancer (female only)	9	**17.3^**	19.2
Ovarian cancer	5	**9.0^**	7.6
Prostate cancer	3	**8.7^**	19.8
Colorectal cancer	14	**16.7^**	13.8
Lung cancer	41	44.2	45.4
Cardiovascular health			
Cardiovascular-related hospitalizations (age-adjusted rate per 100,000)[278]			
Major cardiovascular disease hospitalizations	1,194	1284.7	1294.3
Cerebrovascular disease (stroke) hospitalizations	207	223.0	224.4
Cardiovascular-related emergency department visits (age-adjusted rate per 100,000)			
Major cardiovascular disease ED visits	304	**344.6^**	412.7
Cerebrovascular disease (stroke) ED visits	61	**68.8^**	51.4
Acute myocardial infarction ED visits	26	**27.1^**	21.9
Cardiavascular mortality (age-adjusted rate per 100,000)[279]			
Major cardiovascular disease mortality	186	183.2	185.9

[273] This is the percent of the workforce that is unemployed. The 2014 unemployment rate is an estimate based on the average of Jan through Dec monthly rates.

[274] FBI Uniform Crime Report, 2012. Violent and Property Crimes Rates per 100,000.

[275] Health outcomes pulled from MADPH MassCHIP database: http://www.mass.gov/eohhs/researcher/community-health/masschip/.

[276] Age-adjusted cancer incidence rates per 100,000 from MADPH Massachusetts Cancer Registry, grouped for 2010-2012.

[277] Age-adjusted cancer mortality rates per 100,000 from MADPH Registry of Vital Records, grouped for 2010-2012.

[278] Age-adjusted cardiovascular hospitalization and emergency department visit rates per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS), grouped for 2010-2012.

[279] Age-adjusted cardiovascular mortality rates per 100,000 from MADPH Registry of Vital Records, grouped for 2010-2012.

INDICATOR	Wakefield		MA
	#	%/Rate	%/Rate
Cerebrovascular disease (stroke) mortality	30	29.3	29.5
Acute myocardial infarction mortality	27	26.5	25.3
Diabetes (age-adjusted rates per 100,000)[280]			
Diabetes-related ED visits	1,044	**1180.9˅**	1376.9
Diabetes-related hospitalizations	1,533	**1674.7˅**	1762.5
Diabetes mortality	11	**11.2˅**	13.7
Infectious disease (crude rates per 100,000)[281]			
HIV/AIDS prevalence[282]	26	**104.3˅**	272.8
HIV/AIDS incidence[15]	0	**0.0˅**	10.0
Hepatitis C incidence	15	**60.2˅**	72.4
Chlamydia incidence	40	**160.5˅**	357.3
TB incidence	NA	NA	3.2
Injuries (age-adjusted rates per 100,000)[283]			
All injury and poisoning ED visits	6,860	**9575.0˅**	10484.5
All injury and poisoning hospitalizations	761	**874.0˄**	829.4
All injury and poisoning mortality	32	42.5	43.0
Hip fracture injury hospitalizations	98	**102.4˄**	80.8
Mental health (age-adjusted rates per 100,000)[284]			
Mental disorder-related ED visits	4,492	**6147.3˄**	5341.6
Mental disorder-related hospitalizations	3,316	3872.9	3799.9
Mental disorder-related mortality	63	**60.5˄**	52.6
Mother & infant health[285]			
Birth rates, by age (age-specific rate per 1,000)			
Ages 30-44	642	**79.8˄**	60.8
Ages 20-29	236	**58.6˅**	62.5
Teens (ages 15-19)	13	**6.8˅**	15.5
Inadequate prenatal care (percent of births)	24	**3%˅**	7%
Low birth weight (percent of births)	74	**8.3%˄**	7.6%
Infant mortality (rate per 1,000)	2	**2.2˅**	4.3
Premature mortality (age-adjusted rate per 100,000)[286]	214	259.2	272.2
Respiratory health (age-adjusted rates per 100,000)[287]			
Asthma-related hospitalizations	576	**719.0˅**	885.6
Childhood asthma ED visits (age-specific rate per 100,000 for ages 14 and under)	69	**521.4˅**	868.0
Bacterial pneumonia-related hospitalizations	598	670.9	670.0
COPD-related hospitalizations	1,382	**1611.8˅**	1921.9
Substance abuse (age-adjusted rates per 100,000)[288]			

[280] Diabetes-related age-adjusted hospitalization rate per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). Diabetes mortality from MADPH Registry of Vital Records. All grouped for 2010-2012.

[281] Crude HIV/AIDS prevalence, HIV/AIDS incidence, Hepatitis C incidence, and TB incidence rates per 100,000 from MADPH Bureau of Communicable Disease Control (BCDC) Registries, Division of Epidemiology and Immunization, for 2012. Crude Chlamydia incidence rate per 100,000 from MADPH Division of Sexually Transmitted Disease Prevention, for 2012. NA indicates data not available

[282] HIV prevalence and incidence are for 2011 reported rates.

[283] Age-adjusted injury and poisoning hospitalization and emergency department visit rates per 100,000 for from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). Injury and poisoning mortality from MADPH Registry of Vital Records. All grouped for 2010-2012.

[284] Age-adjusted mental disorder hospitalization and emergency department visit rates per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). Mental disorder-related mortality from MADPH Registry of Vital Records. All grouped for 2010-2012.

[285] All mother and infant health data from MADPH Registry of Vital Records. Age-specific birth rates per 1,000 and percent of inadequate prenatal care for 2011-2013. Inadequate prenatal care characterized by an inadequate score on Kotelchuk index. Percent of low birth weight births (defined as <2500 grams) and infant mortality rate per 1,000 grouped for 2010-2012 as defined by any deaths due to perinatal conditions via MADPH Registry of Vital Records.

[286] Age-adjusted premature mortality rates per 100,000 from MADPH Registry of Vital Records, grouped for 2010-2012. The premature mortality rate is the rate of deaths occurring among individuals less than 75 years of age.

[287] Asthma-related, pneumonia-related, and COPD-related age-adjusted hospitalization rates per 100,000 and childhood asthma age-specific ED visit rates from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). All grouped for 2010-2012.

INDICATOR	Wakefield		MA
	#	%/Rate	%/Rate
Alcohol/substance-related ED visits	794	**1149.3**^	910.3
Alcohol/substance-related hospitalizations	212	**276.6**˅	341.2
Opioid-related ED visits	343	**550.8**^	280.3
Opioid-related hospitalizations	182	**251.4**˅	332.4
Opioid-related mortality	8	**12.0**^	9.6
Health outcomes by specific age groups[289]			
Health of older adults (age 65+)			
Hospitalizations (age-specific rates per 100,000)			
Alcohol/substance-related hospitalizations	22	**199.8**˅	211.0
Cerebrovascular disease (stroke) hospitalizations	137	**1244.0**˅	1324.0
Major cardiovascular disease hospitalizations	838	7609.2	7309.7
Diabetes-related hospitalizations	932	8462.7	8394.1
All injury and poisoning hospitalizations	399	**3623.0**^	3173.7
Hip fracture injury hospitalizations	85	**771.8**^	621.3
Mental disorder-related hospitalizations	1,341	**12176.5**^	10764.6
Bacterial pneumonia-related hospitalizations	390	3541.3	3435.2
COPD-related hospitalizations	747	**6782.9**˅	7795.8
Emergency department visits (age-specific rates per 100,000)			
Alcohol/substance-related ED visits	34	**308.7**^	204.1
Cerebrovascular disease (stroke) ED visits	35	**317.8**^	256.0
Major cardiovascular disease ED visits	153	**1389.3**˅	1580.1
Acute myocardial infarction ED visits	17	**154.4**^	93.4
Diabetes-related ED visits	448	4067.9	4000.7
All injury and poisoning ED visits	996	**9043.9**^	8352.8
Hip fracture injury ED visits	NA	NA	77.6
Mental disorder-related ED visits	526	**4776.2**^	3422.3
Bacterial pneumonia-related ED visits	35	**317.8**^	299.5
COPD-related ED visits	270	**2451.7**^	2307.6
Health of youth age 15-19			
Hospitalizations (age-specific rates per 100,000)			
Alcohol/substance-related hospitalizations	NA	NA	112.6
Diabetes-related hospitalizations	NA	NA	106.8
All injury and poisoning hospitalizations	13	**317.5**^	93.3
Opioid-related hospitalizations	NA	NA	388.6
Mental disorder-related hospitalizations	71	**1733.8**^	1361.2
COPD-related hospitalizations	NA	NA	439.8
Emergency department visits (age-specific rates per 100,000)			
Alcohol/substance-related ED visits	82	**2002.4**^	966.1
Diabetes-related ED visits	NA	NA	223.4
All injury and poisoning ED visits	598	**14603.2**^	13144.7
Opioid-related ED visits	20	**488.4**^	176.3
Mental disorder-related ED visits	349	**8522.6**^	5740.3
COPD-related ED visits	76	**1855.9**^	1694.2
Public school district enrollment characteristics[290]			
Race/ethnicity			

[288] Age-adjusted alcohol/substance- and opioid-related hospitalization and emergency department visit rates per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). Opioid mortality from MADPH Registry of Vital Records. All grouped for 2010-20112.

[289] Age-specific hospitalization and emergency department visit rates per 100,000 from MA Division of Health Care Finance and Policy Uniform Hospital Discharge Dataset System (UHDDS). All grouped for 2010-2012. Age groups do not reflect health concerns for all sub-populations in Wakefield.

[290] Massachusetts Department of Elementary and Secondary Education (DESE), School and District Profiles 2015-2016. Public school district graduation and drop-out rates 2014-2015.Public school graduates attending college/university 2012-2013.

APPENDIX J: COMMUNITY DATA PROFILE FOR WAKEFIELD

INDICATOR	Wakefield		MA
	#	%/Rate	%/Rate
African-American	80	2%	9%
Asian	101	3%	7%
Hispanic	185	5%	19%
White	3,020	**86%^**	63%
Multi-race (non Hispanic)	94	3%	3%
Special populations			
First language not English	--	3%	19%
Limited English proficient	--	2%	9%
Students with disabilities	--	16%	17%
Low income	--	12%	27 %
Public school district graduation and drop-out rates			
Students graduating (4-year)	25	**92%^**	87%
Students dropping out	1	2%	5%
Graduates attending college/university	209	**85%^**	77%
Youth outcomes: high school health survey data[291]			
Substance use			
Alcohol, ever used	--	**61%^**	47%
Alcohol, used in last 30 days	--	36%	36%
Tobacco, ever used	--	20%	32%
Tobacco, used in last 30 days	--	10%	11%
Marijuana, ever used	--	**37%^**	33%
Marijuana, used in last 30 days	--	**23%^**	16%
Prescription opioids, ever used[292]	--	6%	--
Prescription opioids, used in last 30 days[25]	--	2%	--
Sexual activity			
Ever had sexual intercourse	--	31%	38%
Used condom at last intercourse	--	19%	58%
Mental health			
Experiencing depression in last 12 months	--	22%	22%
Seriously considered suicide in last 12 months	--	**16%^**	12%
Attempted suicide in last 12 months	--	**10%^**	6%
Was bullied at school in last 12 months	--	**21%^**	17%

[291] MA DPH. 2013 Health and Risk Behaviors of MA Youth. Accessed: July 2, 2014. http://www.doe.mass.edu/cnp/hprograms/yrbs/2013Report.pdf. Wakefield High School Youth Risk Behavior Survey Results 2014.

[292] Students in Wakefield were asked about their use of prescription pain relievers such as Vicodin, Percocet, Hydrocodone or Oxycontin that were not prescribed by a doctor or a nurse.

TOP FIVE CAUSES OF DEATH[1] (2010-2012)					
Wakefield *(n= 348)*	#	% of Deaths	**MASSACHUSETTS** *(n=159, 125)*	#	% of Deaths
1. Circulatory system diseases, all[2]	186	28.8%	**1.** Circulatory system diseases, all	46,326	29.1%
2. Mental disorders[3]	63	9.7%	**2.** Mental disorders	13,571	8.5%
3. Lung cancer	41	6.3%	**3.** Lung cancer	10,403	6.5%
4. Chronic lower respiratory diseases	30	4.6%	**4.** Chronic lower respiratory diseases	7,566	4.8%
5. Genitourinary Diseases	28	4.3%	**5.** Digestive system diseases, all	5,959	3.7%

TOP FIVE CAUSES OF HOSPITALIZATION[4] (2010-2012)					
Wakefield *(n= 6,799)*	#	% of Hosp.	**MASSACHUSETTS** *(n=2,385,158)*	#	% of Hosp.
1. Diabetes Mellitus related	1,533	15.9%	**1.** Chronic obstructive pulmonary disease, all related	422,466	17.7%
2. Chronic obstructive pulmonary disease, all related	1,382	14.3%	**2.** Diabetes Mellitus Related	399,313	16.7%
3. Circulatory system diseases, all	1,297	13.4%	**3.** Circulatory system diseases, all	321,872	13.5%
4. Digestive system diseases, all	931	9.7%	**4.** Digestive system diseases, all	228,302	9.6%
5. Mental disorders	715	7.4%	**5.** Asthma-related	185,915	7.7%

[1] Leading causes of death from Registry of Vital Records and Statistics, Bureau of Health Statistics, Research and Evaluation, MDPH, pulled from MassCHIP. Analysis is for total deaths in years 2010, 2011, and 2012.

[2] Circulatory System Diseases: All includes: "major CVD", "heart disease", "coronary heart disease", "ischemic heart disease", "acute myocardial infarction", "cerebrovascular disease", "heart failure", "hypertensive heart disease", "hypertension", "atherosclerosis", and "rheumatic fever".

[3] Mental disorders include dementias.

[4] Leading causes of hospitalization from Uniform Hospital Discharge Data System, Massachusetts Division of Health Care Finance and Policy, MDPH, pulled from MassCHIP. Analysis is for discharge data for years 2010, 2011, and 2012. Note that childbirth category (Childbirth, Pregnancy, Puerperium: All) left out of leading causes of hospitalization; childbirths accounted for 9.6% of hospitalizations (227,850) in MA and 9.8% (941) in Wakefield during time period.

Community Data Profile Methods

A community needs assessment is conducted to learn the needs of the community. Though numerous methods can be employed, to be most effective the needs assessment process must value the input of the community and its stakeholders. Below is a brief overview of the methods used by the Institute for Community Health to conduct the secondary/community data review for Hallmark Health Systems' (HHS) community needs assessment process:

Indicators Reviewed

Data indicators reviewed for each community include ***demographic and socio economic indicators*** such as total population, gender, age, race/ethnicity, and country of origin, as well as educational attainment, income, poverty, unemployment and crime rates. ***Public school enrollment*** **and** ***graduation rates*** (including race/ethnicity and special populations) were examined by community and the HHS service area. ***Youth risk behaviors*** related to self-reported substance use, sexual activity, and mental health amongst public high school students were also examined using local Youth Risk Behavior Survey (YRBS) or the Communities that Care Survey data for those communities that collected such data and made it available publicly. ***Health outcomes*** were examined for each community and for the HHS service area and in comparison to the state of Massachusetts. These included cancer incidence and mortality; emergency department (ED), hospitalizations and mortality for cardiovascular and diabetes; infectious disease prevalence and incidence, injury related hospitalizations, mental health related hospitalizations and mortality, mother and infant health indicators, premature mortality, respiratory health hospitalizations and ED visits, substance abuse related ED visits and mortality, top causes of death, and top causes of hospitalization.

Data Methods

Data were examined by comparing each community and the HHS service area as whole to the state of Massachusetts. Percent differences were calculated for each indicator and those with a percent difference of +5% or more (e.g. 5% or higher mortality) were flagged for discussion. These comparisons to the state provide the community and stakeholders some perspective as to how the community is doing relative to the state (which is normally used as the standard for benchmarking).

Data were also examined within each community and for the HHS service area. The leading causes of death and hospitalizations were ranked. This review of counts and rates within the community and service area enable the community and stakeholders to understand the magnitude of a health condition at the community level, regardless of whether it differs from the state average or not.

Interpreting the Community Data Profile

The community data profile itself does not prioritize any health problem or concern; rather it informs the needs assessment process and provides the data necessary for community members and stakeholders to discuss their community's health, identify gaps, generate additional information and ultimately to prioritize the health needs of the community.

Limitations

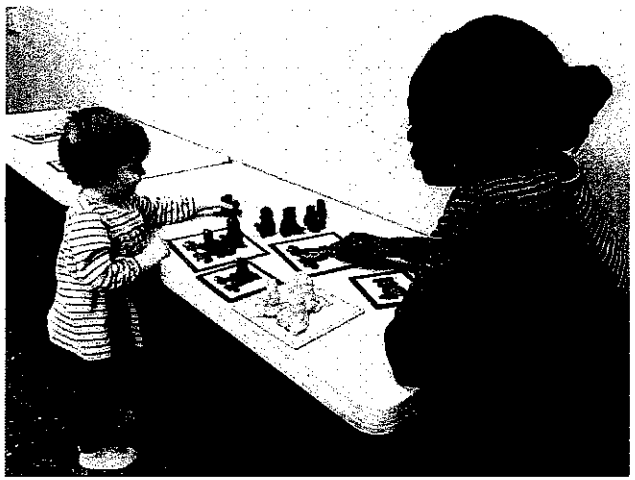
The Institute for Community Health strives to include all available data in the community data profiles. Data profiles may be limited by the unavailability of some important topic areas related to health (e.g. violence) and data may not be as current as we would like due to reporting lags at MA DPH.

Attachment/Exhibit

B

Hallmark Health System

Community Health Implementation Plan 2017-2019



Prepared by the **Institute for Community Health**

*Building **sustainable community health**, together*

Contents

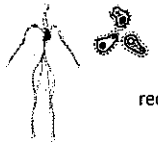
Hallmark Health Community Health Implementation Plan 2017-2019

Reduce the impact of substance use disorders through support of community prevention and intervention efforts

Substance Use Disorders

Reduce stigma and support ongoing community collaborations to address behavioral health

Behavioral Health

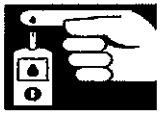


Encourage early detection and intervention to reduce cancer incidence

Cancer

Provide education and training to reduce the incidence and long-term impacts of heart attacks and stroke

Cardiovascular Disease



Educate and screen the population to reduce incidence and impact of diabetes

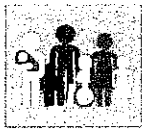
Diabetes

Educate the community on emerging infectious diseases

Infectious Disease

Overcome barriers to healthcare by considering social determinants in our programming

Access to Care



Provide resources and support to vulnerable individuals and families

Vulnerable Populations

Secondary health priorities: preventable injuries and poisonings; respiratory disease; obesity; violence and sexual assault prevention; disaster readiness and emergency planning

Hallmark Health System

About Hallmark Health

Hallmark Health System, Inc. (HHS) was founded in 1997, when four community hospitals in Boston's northern suburbs joined together to form a local nonprofit health system—a coordinated approach to providing hospital, ambulatory and community-based services that were innovative, engaged and committed to improving the health of all who live and work in its service area.

Today, Hallmark Health encompasses **Melrose-Wakefield Hospital** in Melrose and **Lawrence Memorial Hospital** of Medford; **Hallmark Health Medical Center** in Reading; **Hallmark Health Cancer Center, Center for Radiation Oncology, and Center for MRI,** all in Stoneham; **Hallmark Health VNA and Hospice**; **Hallmark Health Medical Associates**; **Lawrence Memorial/Regis College Nursing and Radiography** programs; alliances for **specialized services** including wound care, sleep, and bariatric care; and **more than 700 affiliated physicians** north of Boston.

To bring the best specialty care to residents in the region, Hallmark Health is affiliated with:

- **Joslin Diabetes Center** for diabetes care, with clinical locations at both Melrose-Wakefield Hospital and Lawrence Memorial Hospital of Medford
- **Massachusetts General Hospital** for cardiac care, including procedures performed at the Cardiac & Endovascular Center at Melrose-Wakefield Hospital
- **UMass Memorial Medical Center** for ICU care, as one of only 10 Massachusetts hospitals to offer e-ICU services, at Melrose-Wakefield Hospital
- **Tufts Medical Center** for neonatology, supporting the Maternal/Child Health program at Melrose-Wakefield Hospital, including the Special Care Nursery

The Massachusetts Department of Public Health has designated Melrose-Wakefield Hospital and Lawrence Memorial Hospital as **Primary Stroke Service** hospitals, ready to provide emergency diagnostic and therapeutic services 24 hours a day, seven days a week, to acute stroke patients. Melrose-Wakefield Hospital is designated a **"Baby Friendly"** hospital, a program of the World Health

Organization (WHO) and United Nations Children's Fund (UNICEF). Baby-Friendly birthing facilities create environments for parents and infants to get the best start in life from the very start, supporting breastfeeding and best practice infant care strategies.
In April 2014, Hallmark Health achieved **MAGNET® status**, a reflection of its nursing professionalism, teamwork and excellence in patient care. In 2016, the Vermont Oxford Network, a national nonprofit collaboration of health professionals working to change the landscape of neonatal care, named Melrose-Wakefield Hospital one of only 28 Centers of Excellence across the country in Education and Training for Substance-Exposed Infants.

Hallmark Health's inpatient and ambulatory clinical services reflect excellence in **five key service lines:**

- Orthopedics and Sports Medicine
- Cardiology and Endovascular Medicine
- Gastrointestinal Medicine
- Maternal and Newborn Medicine
- Hematology and Oncology Services

Hallmark Health's **Community Services** division oversees programs that impact both medical and social determinants of health, supported by a mix of federal, state and private funding. These include:

- North Suburban Women, Infants, and Children (WIC) Nutrition Program
- Healthy Families Program and Massachusetts Home Visiting Initiative (HF/MHVI)
- North Suburban Child and Family Resource Network (NSCFRN)
- Dutton Adult Day Health Center
- Aging in Balance Elder Outreach
- Community Health Education
- Lifeline Program

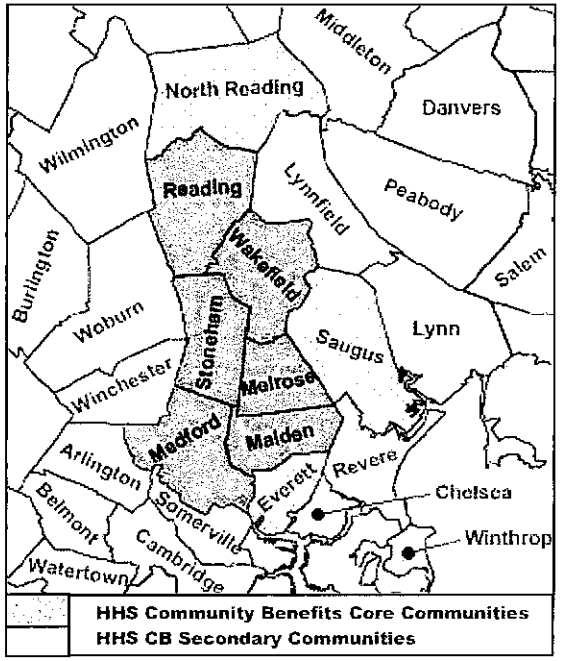
Community Benefits

MISSION STATEMENT

Hallmark Health System, Inc. is **committed to building and sustaining a strong, vibrant and healthy community**. Hallmark Health dedicates appropriate resources to collaborations with community partners and the utilization of community members' input toward improving health services. Hallmark Health pledges to act as a resource and to work with the community during emergencies; to improve access to care; to identify, monitor, and address the unique health care needs within its core communities; and to promote healthier lifestyles for residents through health education and prevention activities.

COMMUNITY BENEFITS STRUCTURE

The Community Services Department of Hallmark Health reports to the **Senior Vice President for Home Care and Community Programs**. The **Director, Community Services** oversees the Manager, Community Benefits and Community Services Operations, a Community Outreach Worker, and the **operational and regulatory functions of eight departments** in the division. These include: Community Health Education, North Suburban Child and Family Resource Network (NSCFRN), North Suburban Women, Infants and Children (WIC) Nutrition Program, Healthy Families and the MA Home Visiting Initiative (HF/MHVI), Aging in Balance-Elder Outreach Program, Lifeline Program, and Robert Dutton M.D. Adult Day Health Center. Other community services and community benefits are provided throughout the system, but report outcomes and impacts, and receive guidance and support from the Community Services Department.



COMMUNITY BENEFITS SERVICE AREA

The HHS community benefits service area consists of **6 core communities: Malden, Medford, Melrose, Reading, Stoneham** and **Wakefield**. It also consists of **3 secondary communities: Everett, North Reading,** and **Saugus**. The core communities are so designated because HHS has actual physical clinical facilities in those communities. Secondary communities are so called because HHS does not have a physical presence in these communities, but does actively collaborate with other organizations to provide services as well as work on coordinated responses regionally inclusive of these cities and towns.

2017-2019 Community Health Implementation Plan

After the CHNA was completed, the HHS Community Benefits Advisory Council and leaders from the health system **reviewed the information gathered, sought community input, and made decisions** about how the health system will utilize the available resources to address the needs identified. The 2017 Community Health Implementation Plan (CHIP) includes some initiatives led solely by Hallmark Health, although the health system has made collaboration a priority, wherever possible, to engage local stakeholders and residents and ensure their critical feedback informs its efforts.

Hallmark Health will make every effort to **use the limited funds available to effectively continue support for programs with high impact**, such as those funded by state grants and serving vulnerable populations. Other programming will be implemented through partnerships with other like-minded organizations, as donations, grants, and other funds are secured to ensure their sustainability.

While the system will touch on most of the health priorities identified in the 2016 Community Health Needs Assessment (CHNA), the CHIP will be limited in the breadth of programming and will not be fully funded to address all aspects of the identified needs. In **each year of the three year CHIP the resources available will be reevaluated and allocated as resources allow**.

2016 Hallmark Health System Community Health Needs Assessment

Every three years as a not-for-profit health system, Hallmark Health System (HHS) **is required to complete a Community Health Needs Assessment (CHNA)**. HHS completed its second formal CHNA process in August 2016 in collaboration with the Institute for Community Health, a not-for-profit organization based in Malden, MA. Using a mixed methods approach, ICH assessed a variety of heath topics and social factors, using a mix of primary and secondary data. The complete assessment is available at hallmarkhealth.org and in hard copy at several locations.

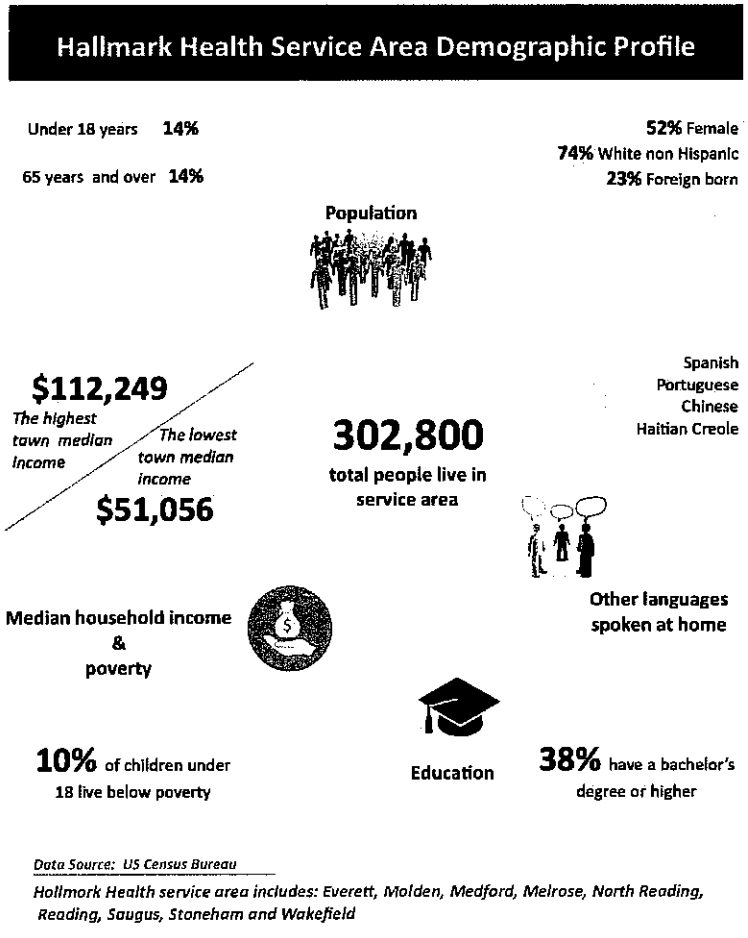
Based on this process, priority health concerns were identified.

Primary health priorities:

- Substance use disorders
- Behavioral health
- Cancer
- Cardiovascular disease
- Diabetes
- Infectious disease
- Access to care including barriers due to language, transportation, housing and food insecurity
- Vulnerable populations

Secondary health priorities:

- Preventable injuries and poisonings
- Respiratory disease
- Obesity
- Violence and sexual assault prevention
- Disaster readiness and emergency preparation



Health Priorities[1]

Primary Priority: Substance Use Disorders

Summary of Need

Substance use disorders were a major concern across all types of data reviewed.

Specific concerns in the HHS community benefits service area as compared to the state:

- Adult opioid-related emergency department visits, hospitalizations and deaths were higher, as were opioid-related emergency visits for 15-19 year olds
- Rates of alcohol/substance use-related emergency department visits were higher for both 15-19 year olds and adults, as were hospitalizations for 15-19 year olds
- Stakeholders identified substance use as their top concern through surveys and community forums

Goal

Build awareness and support efforts in the community around primary prevention, overdose reduction, and recovery-based interventions to reduce the impact of substance use disorders.

Key Strategies

- Provide support to local and regional substance abuse prevention coalitions
- Host the Middlesex County District Attorney's regional Eastern Middlesex Opioid Task Force
- Co-chair the Care Collaborative, comprised of agencies serving mothers and infants with substance use disorders
- Support the regional tobacco prevention efforts in the community
- Provide weekly space to an Alcoholics Anonymous (AA) support group in a handicapped accessible location
- Continue to offer programming such as COACHH (Collaborative Outreach and Adaptive Care at Hallmark Health), HF/MHVI (Healthy Families Program and Massachusetts Home Visiting Initiative), and Grandparents Raising Grandchildren in Harmony, reaching multiple generations within families impacted by substance use disorders

[1] Note that all data described in the 'Summary of Need' sections are from Hallmark Health System's 2016 Community Health Needs Assessment. See the assessment document for detailed data and a list of data sources.

Primary Priority: Behavioral Health

Summary of Need

Behavioral health was also noted to be a major concern across all types of data.

Specific concerns in the HHS community benefits service area as compared to the state:

- Rates of mental disorder-related mortality were higher
- In adults 65 and older, the rates for both mental disorder-related emergency department visits and hospitalizations were higher
- 5 of the 6 towns that collected data on depression in high school aged youth had rates higher than the state
- Behavioral health was identified as the second-highest priority among stakeholder survey participants and was noted as an important issue by community forum participants

Goal

Reduce stigma and support ongoing collaborative efforts in the community to address behavioral health, both independent of and co-occurring with substance use disorders.

Key Strategies

- Offer sliding scale supplemental support for individuals unable to afford mental health services
- Reduce the stigma of mental illness through education and support to families
- Provide a variety of support programs for elders, children, and adults suffering after the loss of a family member or friend
- Act as the fiscal agent for the Moving Beyond Depression program
- Continue to integrate behavioral health needs into primary and chronic disease models of care, including community-based programming and coalition efforts (The Care Collaborative, HF/MHVI, COACHH), as well as with external partners, to support individuals and families impacted by behavioral health challenges

Primary Priority: Cancer

Summary of Need

Although the rate of cancer as a whole for the community benefits service area is comparable to MA, when looking at specific cancers and at individual towns areas of concern were noted.

Specific concerns in the HHS community benefits service area as compared to the state:

- The rate of colorectal cancer is higher
- The mortality rates for colorectal cancer and lung cancer are higher
- Lung cancer is the third highest cause of death, which is comparable to the state
- Six towns have higher breast cancer incidence rates vs. the state. Three have higher breast cancer mortality rates

Goal

Reduce overall incidence of multiple cancers through implementation of environmental improvements, education on healthy behaviors, and encouragement of early detection and intervention, and support efforts to improve quality of life for survivors.

Key Strategies

- Promote healthy living and green technology as root cause prevention measures
- Provide a variety of screenings according to the American Cancer Association standards
- Offer opportunities for cancer patients and their families to receive support to address the challenges of living with the disease
- Continue to promote the ongoing health of patients in recovery
- Through a collaborative effort, provide chronic disease self-management programming in the area and resources and referrals to Live Strong Programs at the local YMCAs

Primary Priority: Cardiovascular Disease

Summary of Need

Specific concerns in the HHS community benefits service area as compared to the state:

- Major cardiovascular disease-related emergency visits are higher
- Rates of acute heart attack mortality are also higher
- Circulatory system diseases are the top cause of mortality, and 3rd highest reason for hospitalization (comparable to the state)
- Rates of major cardiovascular disease hospitalization for adults 65+ are higher
- While not among the most frequently-identified concerns in surveys and community forums, cardiovascular disease did arise in the context of lifestyle factors such as diet, exercise, and obesity

Goal

Reduce the incidence and long-term impacts of cardiovascular disease and stroke through education and training of community members and first responders.

Key Strategies

- Train high school students in a train-the-trainer CPR model, preparing them to train their families and friends
- Provide Emergency Medical Technician (EMT) training focused on stroke and cardiovascular disease education
- Offer heart healthy education to community residents
- Continue to train the community to recognize and respond quickly to the signs of stroke

Primary Priority: Diabetes

Summary of Need

Specific concerns in the HHS community benefits service area as compared to the state:

- Diabetes is the highest cause of hospitalization (vs. 2nd highest cause in the state)
- For adults ages 65 and older, the rates of diabetes-related emergency department visits and hospitalizations are both higher
- Youth ages 15-19 also had a higher rate of diabetes-related emergency department visits
- Diabetes was mentioned as a concern by some of the stakeholders in surveys and forums, as were the contributing factors of unhealthy diets, lack of exercise, and obesity

Goal

Reduce the overall incidence and impact of diabetes for multiple populations in the region through education, screening, and the sharing of resources and referrals.

Key Strategies

- Provide diabetes education and screening throughout the region, especially focused on the underserved
- Offer monthly support groups to area residents with diabetes
- Provide comprehensive diabetes education for newly diagnosed and long term diabetics
- Through a collaborative effort, provide chronic disease self-management programs in the area and resources and referrals to pre-diabetes prevention programs at local YMCAs

Primary Priority: Infectious Disease[2]

Summary of Need

Specific concerns in the HHS community benefits service area:

- HIV/AIDS, Hepatitis C, Chlamydia and Tuberculosis rates were higher than the state for some towns
- Concerns noted in stakeholder surveys were related to the threat of emerging diseases (such as Ebola and Zika) and the need for coordinated efforts in community education and health messaging

Goal

Act as a resource for information to the community around known and emerging infectious diseases, including the role of travel and immigration and its impact on disease models and prevention, and management of infectious diseases within the region.

Key Strategies

- Maintain a clinic for Tuberculosis (TB) to assist local public health officials in supporting individuals with TB in the region
- Produce Health Minute You-Tube videos in collaboration with Wakefield Cable Access TV
- Provide support to local flu clinics
- Promote the travel clinic at Lawrence Memorial Hospital as a resource for issues related to global health and disease management
- Conduct ongoing Continuing Medical Education programs, available for community members to participate in free of charge
- Continue to address emerging diseases through Disaster Readiness, and Emergency Planning efforts (see page 18)

[2] Note that no service area-wide data was available for infectious disease.

Primary Priority: Access to Care

Summary of Need

Overcoming barriers to routinely accessing healthcare emerged as a common concern in the stakeholder surveys and forums. Some barriers frequently mentioned included language barriers, transportation difficulties, economic insecurity/poverty, housing insecurity, and food insecurity.

Specific concerns in HHS community benefits service area:

- Serving the needs of vulnerable populations, including immigrants, older adults, and people/families living in poverty, for whom barriers impact the ability to engage and receive health services, and adversely affect care outcomes
- Maintenance of health insurance coverage continues to be an issue
- Economic instability is a concern for immigrants due to immigration status and low English proficiency
- Housing insecurity is a particular concern due to the high cost of living in the area
- Rates of food insecure households varied in the service area by community, with Reading having the lowest rate and Malden the highest

Goal

Consider the impact of social determinant factors on health in program planning, development and implementation, and explore opportunities for cross-sector collaboration to address these factors, including those outside the scope of traditional health care.

Key Strategies

- Assist several hundred residents annually with applications or re-applications for health insurance, as well as consultations related to health coverage and related financial challenges and issues
- Participate on local boards of directors for agencies serving the underserved
- Assist families with access to family assistance programs such as those through WIC, HF/MHVI, and COACHH
- Continue to work with local schools and colleges to promote the education and training of professional health care workers; especially diverse candidates
- Host a Mobile Food Market monthly in partnership with the Greater Boston Food Bank and area volunteers

Primary Priority: Vulnerable Populations

Summary of Need

Vulnerable populations in the HHS community benefits service area were identified by participants in the stakeholder surveys and community forums.

Specific populations of concern in the HHS community benefits catchment area included:

- Older adults
- Immigrants
- People living in poverty
- Children and families

Goal

Provide concrete supports, resources and referrals to individuals and families within vulnerable populations. These will include both resources focused on reducing health disparities, as well as efforts to promote health equity across the community regardless of socio-economic and other factors.

Key Strategies

- Train youth to provide calls to home-bound elders in the Lifeline Buddy Program
- Monitor health conditions and offer education to elders in the Aging in Balance Program
- Convene annual necessities drives for veterans, children, and low-income residents
- Provide nutrition education and vouchers to low-income eligible recipients through the WIC program
- Offer Adult Day Health services at the Dutton Center ADH for frail elders and Department of Mental Health and Department of Developmental Services participants
- Provide lightly-used children's clothing and equipment, parenting education, and resources and referrals to families in need at the Mothers Helping Mothers Closet. This should allow families additional resources for food and other necessities

Secondary Priorities

Preventable Injuries and Poisonings

Goal: Provide information and training to decrease preventable injuries and poisonings.

Key Strategies:

- Continue to offer the Concussive Injury Prevention Program for school-age children
- Maintain sports medicine trainers in local high schools at a reduced fee to help reduce sports injuries
- Provide education and training for residents with chronic back problems and risk of further injury
- Promote CPR, First Aid, and Safe Sitter babysitting training programs in the community

Respiratory Disease

Goal: Offer programs and services to address prevention of respiratory diseases prevalent in the community.

Key Strategies:

- Provide resources for long-term smokers to be able to successfully quit
- Act as the facilitator for the regional TB clinic overseen by the Massachusetts Department of Public Health
- Continue to promote vaccines as a prevention strategy for adults, elders, and children

Obesity

Goal: Offer programs and services to prevent obesity that promote both weight loss and healthy living.

Key Strategies:

- Provide a minimum of one community-based weight management class annually
- Offer multiple healthy eating and active living programs in the community
- Host three Baby Cafés in the service area
- Support the Medford SNAP Program for elders
- Promote wellness through local Mass in Motion Programs and direct-service organizations such as the Greater Boston Food Bank

Violence and Sexual Assault Prevention

Goal: Provide information and training to support prevention and decrease incidence and impact of domestic violence and sexual assault in the community.

Key Strategies:

- Support local initiatives addressing domestic violence through board and task force participation
- Provide space to *Melrose Alliance Against Violence* for a monthly group for domestic violence survivors
- Offer office space in-kind to *Portal to Hope*
- Facilitate bi-annual round table on domestic violence and intimate partner violence and provide other trainings to employees and community members

Disaster Readiness and Emergency Planning

Goal: To support resiliency and preparation in the community during and after cataclysmic events, including natural disasters, pandemic illness, and terrorism threats.

Key Strategies:

- Provide support to Hallmark Health communities preparing for seasonal flu
- Act as a resource to the community during emergencies or acts of terror
- Ensure local blood supply is available during emergencies and for regular needs
- Sponsor seven community teams to provide support to local communities and bring back information from stakeholders/residents on emerging community needs

Vision of the Future

As of January 1, 2017, Hallmark Health became a third, equal and founding member of Wellforce, a collaboration of value-driven, academic medical and community health care providers in Massachusetts which includes Circle Health in Lowell and Tufts Medical Center in Boston. This affiliation provides tremendous opportunities for Hallmark Health to collaborate with these new partners on best practice strategies that seek to reduce health disparities identified by each organization within its service area. As a member of Wellforce, Hallmark Health maintains oversight and responsibility for this Community Health Implementation Plan and its programs addressing health needs, and will amend this plan as funding or collaboration permits to enhance, broaden, and deepen the scope of its community benefits programming.

Appendices

Appendix A: Overview of Programs and Initiatives Addressing the 2016 Community Health Priorities

Below is a full list of all programs and initiatives planned to address the priorities.

Program/Activities	Primary Community Health Priorities	Substance Use Disorders	Behavioral Health	Cancer	Cardiovascular Disease	Diabetes	Infectious Diseases	Barriers to Access	Vulnerable Populations	Secondary Priorities
Allied Health/Nursing Clinical Training										
Laboratory Science and Phlebotomy								✓	✓	
Physical Therapy & Occupational Therapy								✓	✓	
Pharmacy & Graduate Pharmacist Residency			✓	✓		✓		✓	✓	✓
Pharmacy Technician Training & Scholarships								✓	✓	
Medical Assistant Training & Scholarships								✓	✓	
Environmental Sciences & Physical Plant					✓			✓	✓	✓
Nursing Student Clinical Placements			✓					✓	✓	✓
One on One Nursing Preceptorships			✓					✓	✓	✓
Vocational High School Placements (Periodic)								✓	✓	
Aging in Balance Senior Health Program										
Community Blood Pressure Monitoring Clinics					✓	✓		✓	✓	✓
Chronic Disease/Pain Self Management Programs		✓	✓					✓	✓	✓
Cancer: Thriving and Surviving Program			✓	✓				✓	✓	
Elder Care and Caregiver Lectures		✓	✓		✓	✓	✓	✓	✓	✓
Community Health Education										
First Aid/CPR Classes					✓				✓	✓
Save a Life, Pass it On! High School CPR Training					✓			✓	✓	✓
SafeSitter Babysitter Curriculum								✓	✓	✓
Weight Management/Nutrition Education				✓	✓	✓			✓	✓
Osteoporosis & Fall Prevention Talks		✓							✓	✓

Program/Activities	Primary Community Health Priorities	Substance Use Disorders	Behavioral Health	Cancer	Cardiovascular Disease	Diabetes	Infectious Diseases	Barriers to Access	Vulnerable Populations	Secondary Priorities
Community Health Education *(continued)*										
Healthy Heart Education Series					✓	✓				✓
Community Lectures on Lung Disease				✓			✓		✓	✓
Continuing Medical Education (Open to Public)		✓	✓	✓	✓	✓	✓	✓		✓
Community Services										
Support to Substance Abuse Prevention Coalitions		✓	✓					✓	✓	
Support to Community Health Network Area 16								✓	✓	
Creative Coping for New Mothers Group			✓					✓	✓	✓
Free/Subsidized Transportation Services								✓	✓	
Route 99 Family Shelter Visits		✓	✓					✓	✓	✓
Patient Financial Navigator Services								✓	✓	
In-Kind space for 12-Step Groups (AA/NA/OA)		✓	✓					✓	✓	
Support to Malden's Promise Coalition		✓	✓					✓	✓	
Community-Based Domestic Violence Support		✓	✓						✓	✓
In-kind Space for Portal to Hope DV Services		✓	✓					✓	✓	✓
Care Collaborative (Maternal Behavioral Health)		✓	✓					✓	✓	✓
Community Teams Activities										
Blood Drives with the American Red Cross				✓	✓					✓
Seasonal Toy, Book and Necessities Drives								✓	✓	
Senior Citizen Lunches/Community Suppers								✓	✓	✓
Community Health Fairs & Health-Related Events				✓	✓	✓	✓			✓
Dutton Adult Day Health Center										
Adult Day Health Services		✓	✓					✓	✓	✓
Caregivers Support Group			✓					✓	✓	✓
Emergency Planning & Preparedness										
Medical Direction for Local Area BLS Services		✓	✓		✓			✓		✓

Program/Activities	Primary Community Health Priorities	Substance Use Disorders	Behavioral Health	Cancer	Cardiovascular Disease	Diabetes	Infectious Diseases	Barriers to Access	Vulnerable Populations	Secondary Priorities
Emergency Planning & Preparedness *(continued)*										
Medical Oversight of Melrose ALS/BLS Services		✓	✓		✓			✓		✓
Continuing Education for Area First Responders			✓		✓			✓		✓
Leadership within MA EMS-Region III								✓		✓
Hallmark Health Lifeline Program										
24 Hour Personal Emergency Response Services		✓	✓	✓	✓	✓		✓	✓	✓
Falls Detection Equipment		✓	✓	✓	✓	✓		✓	✓	✓
Medication Dispensing Units		✓	✓	✓	✓	✓		✓	✓	✓
Teen "Testing Buddies" Program								✓	✓	
Healthy Families/MA Home Visiting Initiative										
Home Visiting for First Time Parents Age 24 + Under		✓	✓					✓	✓	✓
Moving Beyond Depression Support		✓	✓					✓	✓	✓
North Suburban Child & Family Resource Network										
Grandparents Raising Grandchildren in Harmony		✓	✓					✓	✓	✓
Middlesex Fells Story Book Walks								✓	✓	✓
Support to Malden CFCE Program								✓	✓	
Help Me Grow (Ages & Stages Screenings)			✓					✓	✓	
North Suburban WIC Program										
Women, Infants and Children's Nutrition						✓	✓	✓	✓	✓
Farmers Market								✓	✓	✓
Mobile Food Market		✓	✓	✓	✓	✓	✓	✓	✓	✓
Mothers Helping Mothers Store		✓	✓	✓	✓	✓	✓	✓	✓	
WIC Baby Cafes in Malden & Everett		✓	✓	✓	✓	✓	✓	✓	✓	✓
Happiest Baby on the Block		✓	✓					✓	✓	✓
Support for Tri-City Hunger Network								✓	✓	✓
WIC Family Support Program		✓	✓					✓	✓	✓

Program/Activities	Primary Community Health Priorities	Substance Use Disorders	Behavioral Health	Cancer	Cardiovascular Disease	Diabetes	Infectious Diseases	Barriers to Access	Vulnerable Populations	Secondary Priorities
North Suburban WIC Program *(continued)*										
Support to Local Mass in Motion Programs				✓	✓			✓		✓
Integrated Breastfeeding Services		✓	✓	✓	✓	✓		✓	✓	✓
Screening, Education and Support Groups										
Asian Elder Diabetes Health Project			✓		✓	✓		✓	✓	✓
Free Blood Sugar Glucose Screenings					✓	✓				✓
Youth Concussion Injury Screening Program			✓						✓	✓
Quarterly Diabetes Support Groups			✓			✓			✓	✓
Diabetes Self-Management Program			✓			✓				✓
Cancer Center Support Groups			✓	✓						
Kids in Grief Support Groups with HH VNA			✓							
Adult Bereavement Support Groups with HH VNA			✓							
Colorectal Cancer Screening and Education				✓				✓	✓	
Skin Cancer Screening and Education				✓				✓	✓	
Oral/Head/Neck Cancer Screening				✓				✓	✓	
Cardiac & Vascular Screenings for Women					✓	✓			✓	✓
Other Programs										
Baby Café in Melrose		✓	✓	✓	✓	✓	✓	✓	✓	✓
Travel Clinic and Health Information							✓			✓
COACHH Program		✓	✓				✓	✓	✓	✓
Health Minutes Video Series				✓	✓	✓	✓			✓
Regional TB Clinic							✓	✓	✓	✓
Tumor Registry				✓						

Appendix B: Glossary

Key Abbreviations Used

AA/NA/OA=Alcoholics Anonymous/Narcotics Anonymous/Overeaters Anonymous
ALS/BLS=Advanced Life Support/Basic Life Support
CFCE=Malden Coordinated Family and Community Engagement program
CHIP= Community health implementation plan
CHNA= Community health needs assessment
COACH= Collaborative Outreach and Adaptive Care at Hallmark Health
CPR=Cardiopulmonary resuscitation
DV=Domestic Violence
EMS=Emergency Medical Services
EMT=Emergency Medical Technician
HF/MHVI= Healthy Families Program and Massachusetts Home Visiting Initiative
HHS=Hallmark Health System
ICU= Intensive care unit
MA=Massachusetts
MRI=Magnetic resonance imaging
NSCFRN= North Suburban Child and Family Resource Network
TB=Tuberculosis
VNA= Visiting Nurse Association
WIC= Women, Infants and Children Nutrition Program

Program Service Areas

Each of the Hallmark Health grant-funded programs provide services to residents in their contracted communities. For WIC, the service area includes Burlington, Everett, Malden, Medford, Melrose, North Reading, Reading, Stoneham, Wakefield, Wilmington, Winchester, and Woburn. For the NSCFRN the communities served are Lynnfield, North Reading, Reading, Melrose, Stoneham, Wakefield, and Winchester. Healthy Families/MHVI is contracted to serve families in Everett, Malden, Medford, North Reading, Reading, Stoneham, and Wakefield. In addition, Lifeline covers all nine Hallmark Health priority communities and many other surrounding communities.

Appendix C: Key Partners

Action for Boston Community Development, Inc. (ABCD)
American Cancer Society
Asian American Civic Association
American Diabetes Association
American Heart Association
American Lung Association
American Red Cross
Association for Community Health Improvement
Baby Café USA
Baby Friendly America
Boys and Girls Clubs of Middlesex County
Boston Bruins Foundation
Bread of Life Malden
Burbank YMCA of Reading
Cambridge Health Alliance
Catholic Charities
Children's Trust Massachusetts
Chinese Culture Connection
CMS Innovation Forum
Commonwealth Corporation
Community Health Network Areas (CHNA) 15 & 16
Community Family Human Services, Inc.
Community Servings
Cross Cultural Communications, Inc.
Early Intervention Programs (Several)
East Boston Neighborhood Health Center
Eliot Community Human Services
EMARC (Eastern Middlesex Association of Retarded Citizens)
Elder Services of the North Shore
Everett Coordinated Family Community Engagement Grant
Families First
Friends of the Middlesex Fells Reservation
Friends of Oak Grove
Greater Boston Food Bank
Greater Lynn Senior Services
Health Care for All
Health Care Without Harm
Housing Families, Inc.
Immigrant Learning Center of Malden
Institute for Community Health (ICH)
Jackson Healthcare – Hospital Charitable Service Awards
Jewish Children and Family Services
Joint Committee for Children's Health Care in Everett
Joslin Diabetes Center
Junior Aid Association of Malden
La Comunidad, Inc.
Life Care Center of Stoneham
Local Arts Councils
Local Boards of Health
Local Chambers of Commerce
Local Civic Groups (such as Rotary and Kiwanis)
Local Councils on Aging
Local faith-based organizations
Local Public Schools
Malden Coordinated Family and Community Engagement Grant
Malden's Promise Coalition
MA Executive Office of Elder Affairs
Tri-City Homelessness Task Force
Malden YMCA

MA Department of Children and Families (DCF)
MA Department of Conservation & Recreation (DCR)
MA Department of Early Education and Care (EEC)
Massachusetts Department of Public Health (DPH)
Massachusetts Department of Transitional Assistance (DTA)
Mass in Motion Coalitions for Everett, Malden, Medford, and Melrose-Wakefield
Massachusetts General Hospital
Massachusetts Health Policy Commission
Massachusetts Hospital Association
Medford Family Network
Medford Health Matters
Medford Substance Abuse Task Force
Melrose Human Rights Council
Melrose Alliance Against Violence
Melrose Birth to Five Coalition
Melrose Community Coalition
Melrose Family YMCA
Melrose Human Rights Commission
Melrose Substance Abuse Prevention Coalition
Merrimack Valley Elder Services
Middlesex Recovery, PC
Middlesex County District Attorney's Office
Middlesex County Sheriff's Department
Mount Auburn Hospital
MotherWoman
Mystic Valley Elder Services
Mystic Valley Public Health Coalition:
-Mystic Valley MA Opioid Abuse Prevention Collaborative
-Mystic Valley Tobacco and Alcohol Program
-Substance Abuse Prevention Collaborative
Northeastern University
Oak Grove Improvement Organization
Partners HealthCare, Inc.
Portal to Hope, Inc.
Reading Substance Abuse Prevention Coalition (RCASA)
Regional EMS Providers
Regis College and other area colleges and universities
Respond, Inc.
South Bay Mental Health Center
Somerville Cambridge Elder Services
Staples, Inc.
Stoneham Alliance Against Violence
Stoneham Substance Abuse Coalition
Tailored for Success
The Stoneham Theater
Tri-City Hunger Network
Tufts Medical Center
Tufts University
The Salvation Army
The Sharewood Project
UMass Memorial Health System
Wakefield Alliance Against Violence
WAKE-UP: Wakefield Unified Prevention
West Medford Community Center
Winchester Hospital/Lahey Health
YouthHarbors Program (JRI)
YWCA of Malden
Zonta Clubs of Medford and Malden
Zoo New England-Stone Zoo

Hallmark Health System
Community Health Improvement Plan (CHIP)
Approved Amendment FY18

The Hallmark Health System (HHS) CHIP has been in operation since it was approved by the HHS Board of Trustees in January 2017. As required by the IRS and the state of Massachusetts through the Attorney General's Office, the comprehensive plan identifies the programs and services the system expects to provide to the community as community benefits during a three year period comprised of fiscal years 2017 through 2019. Community benefits at HHS has historically been a system-wide approach to addressing community health needs with services and programs provided in a de-centralized model of care integrated across many clinical, ambulatory, and community departments.

From the fourth quarter of fiscal 2017 and into the first quarter of fiscal 2018, it became apparent that due to significant financial challenges facing the organization, the community benefits expected to be delivered to the community would need to be reduced.

From page 7 of the CHIP:

"After the CHNA was completed, the HHS Community Benefits Advisory Council and leaders from the health system reviewed the information gathered, sought community input, and made decisions about how the health system will utilize the available resources to address the needs identified. The 2017 Community Health Implementation Plan (CHIP) includes some initiatives led solely by Hallmark Health, although the health system has made collaboration a priority, wherever possible, to engage local stakeholders and residents and ensure their critical feedback informs its efforts.

Hallmark Health will make every effort to use the limited funds available to effectively continue support for programs with high impact, such as those funded by state grants and serving vulnerable populations. Other programming will be implemented through partnerships with other like-minded organizations, as donations, grants, and other funds are secured to ensure their sustainability.

While the system will touch on most of the health priorities identified in the 2016 Community Health Needs Assessment (CHNA), the CHIP will be limited in the breadth of programming and will not be fully funded to address all aspects of the identified needs. In each year of the three year CHIP the resources available will be reevaluated and allocated as resources allow."

Annually, Hallmark Health will make the necessary adjustments to the levels of programs and services offered based on changes in available resources.

To this end, the Hallmark Health Board Governance Committee met on February 12, 2018 to discuss the proposed amendments to the CHIP and recommend those changes to the full Board of Trustees. The Board of Trustees approved changes to the plan unanimously on February 22, 2018. Those changes are listed below.

Primary Priority- Substance Use Disorders- page 9

- Co-chair the Care Collaborative. This group is expected to meet less frequently and with reduced membership. HHS Social Services representatives will decrease their role on the committee to allow for an increase in direct patient care services.
- The Collaborative Outreach and Accountable Care at Hallmark Health (COACHH) Program will end services in February 2018 when funding ends.

Primary Priority- Behavioral Health- page 10

- Reduce stigma of mental illness through education and support to families. Less programming will be offered due to budget reductions.
- The *Moving Beyond Depression* Program is no longer funded by the state.
- New program: Alzheimer's Caregiver Education in collaboration with Tufts Health Plan has been offered in early 2018. The planning for the program began in fiscal 2017.
- New program: Behavioral Health Integration Program (BHIP) is being offered in employed physician offices in collaboration with NEQCA. It is yet to be determined if this program or other behavioral health programs will have losses that will captured as subsidized services.

Primary Priority- Cancer- page 11

- With the Cancer Center becoming licensed under Tufts Medical Center, screening and educational programs will be the shared responsibility of Tufts Medical Center and Hallmark Health.

Primary Priority- Cardiovascular Disease- page 12

- While funding for the school kits is available, the train-the-trainer CPR program has not provided services since the fall of 2017 when the Program Coordinator position was eliminated. Public Affairs/Marketing, in collaboration with Community Services, has reinstated the program in the spring of 2018, but attendance will be lower than in prior years due to the later start-up.
- Other educational components have not been assigned as yet such as EMT training, heart heathy education, and stroke education.

Primary Priority- Diabetes- page 13

- The Diabetes Program was moved to Hallmark Health Medical Associates in May of FY17. Due to changes in the Massachusetts Department of Public Health licensing for

blood screenings, the screening component of the program has been temporarily suspended with the goal to reinstate it when alternate screening methods have been approved.
- A potential partnership is being discussed to better screen and refer the Asian elder population in the Malden area for diabetes services.

Primary Priority- Infectious Disease- page 14
- The HHS TB Clinic was closed by MA DPH in June 2017. The HHS license is active through 2018. The program was reinstated in January 2018, but to date there has been little activity in the program.

Secondary Priority- Obesity- page 17
- It may not be possible to continue to support the Medford SNAP program due to reduced funding.
- Community-based weight management programs are not being offered at this time.
- New programs
    - A summer food program was added for school children in 2017 at the Summer Fun Program in Medford.
    - HHS has taken a leadership role on the new Medford Food Insecurity Task Force.
    - HHS is also represented on the Food Insecurity Task Force of the Greater Boston Food Bank.

Secondary Priority- Disaster Readiness and Emergency Planning- page 18
- Active Shooter training and drills have had limited information reported to capture the work of the program.

Other Program Impacts:
- Aging In Balance (AIB) Senior Health Program- page 20. The program's hours have been reduced to address other community needs.
- Community Health Education- page 20 and page 21. Osteoporosis, Falls Prevention, and Lung Cancer talks have been limited due to diminished resources.
- Community Services- page 21. Route 99 shelter visits ended in August 2017 as most families have been placed in other more desirable housing sites.
- New Programs- pages 21 and 22. Increased funding has been received for parenting groups and HHS has expanded its role with the Malden Public Schools for the Coordinated Family and Community Engagement (CFCE) grant.

Additional Recommendations:

- While it is noted on page 19 of the CHIP that Hallmark Health became a third, equal and founding member of Wellforce on January 1, 2017; there is information on page 4 of the CHIP that has changed such as the following:

- Hallmark Health is no longer affiliated with Joslin Diabetes Center for diabetes care
- Hallmark Health is no longer affiliated with Massachusetts General Hospital for cardiac care.

Attachment/Exhibit

C

Community Health Initiative Narrative

A. Community Health Initiative Monies

The breakdown of Community Health Initiative ("CHI") monies for the proposed Project is as follows:

- Maximum Capital Expenditure: $14,675,550.00
- Community Health Initiative: $733,778.00 (5% of Maximum Capital Expenditure)
- CHI Administrative Fee to be retained: $22,013.00 (3% of the CHI monies)
- CHI Money – less the Administrative Fee: $711,765.00

- CHI Funding for Statewide Initiative: $177,941.00 (25% of CHI monies – less the administrative fee)
- CHI Local Funding: $533,824.00 (75% of CHI monies – less the administrative fee))
- CHI Evaluation Monies: $53,382.00
- CHI Funding for Local Disbursement less the Evaluation Monies: $480,442.00

B. Overview of Applicant's Community Health Needs Assessment

The Applicant for the Determination of Need ("DoN") is a newly formed joint venture founded for the purposes of establishing an ambulatory surgery center ("ASC"). Its members are Shields ASC, LLC ("Shields ASC"), Melrose Wakefield Healthcare (formerly Hallmark Health System "HHS") and Tufts Medical Center Physician Organization ("TMCPO"). Since Melrose Wakefield Healthcare routinely conducts a community health needs assessment ("CHNA"), the joint venture partners are utilizing Melrose Wakefield Healthcare's 2016 CHNA to facilitate the CHI.

Melrose Wakefield Healthcare encompasses Melrose-Wakefield Hospital in Melrose, Lawrence Memorial Hospital of Medford, Breast Health Center in Stoneham, Center for Radiation Oncology in Stoneham, Hallmark Health Medical Center in Reading, Hallmark Health Medical Associates, Hallmark Health Visiting Nurse Association and Hospice, and Lawrence Memorial/Regis College Nursing and Radiography Programs.
Melrose Wakefield Healthcare has designated nine towns as its community benefits catchment or service area. The following six towns represent the system's core service area: Malden, Medford, Melrose, Reading, Stoneham and Wakefield. Three secondary communities are also included: Everett, North Reading and Saugus.

Melrose Wakefield Healthcare developed its last CHNA between March 2015 and August 2016. The CHNA was conducted using a mixed-methods approach in order to form a more robust understanding of the needs and patterns in the communities served. The methods used included: two surveys conducted with community and internal stakeholders; four community forums held with various sub-populations in the HHS communities; and the collection and analysis of secondary quantitative data. These findings were then used to prioritize the health concerns.

HHS's goals for the CHNA included:

- Identifying major health concerns and vulnerable populations in the HHS service area
- Identifying unmet needs and gaps in service
- Gathering recommendations for programs and partnerships to address needs and gaps
- Defining priority focus areas for programming to improve population health
- Identifying opportunities to reduce health disparities

This report provides detailed insight into the health status of the nine communities in the HHS community benefits service area, the 2016 community health priorities, and opportunities for optimizing population health improvement. For the purposes of this CHNA, population health is defined as the health of HHS's patient panel as well as all others who live in the service area communities.

To conduct this CHNA, Hallmark Health System Community Benefits staff primarily partnered with the Institute for Community Health (ICH), a nationally recognized organization in Malden, Massachusetts focused on health status improvement through community-based participatory evaluation, assessment, research, strategic planning and training. ICH's role was to lead the needs assessment process, including collecting, analyzing and reporting on the data.

The Hallmark Health System Community Benefits Advisory Council, comprised of community representatives and community stakeholders as well as HHS leadership, also played a critical role in guiding the CHNA process, reviewing preliminary data, providing feedback, and participating in the prioritization process. ICH staff gave three presentations to the Advisory Council to garner and incorporate feedback as the CHNA process was in progress.

Various consultants and advisors with public health expertise and local community knowledge were brought in as needed throughout the CHNA process, and input was also incorporated from Hallmark Health System's Community Teams leadership, the Hallmark Health Diversity Committee, the Perinatal Advisory Council, and HHS department-level committees for OB/GYN, pediatrics, stroke, and behavioral health issues.

Broad representation of community interests was also achieved through the incorporation of community resident and community stakeholder input as key components of the assessment, through four community forums held in late 2015 and 2016 and two stakeholder surveys conducted in late spring/early summer 2016. Two of the forums were conducted in the World Café style in order to make them accessible to people with diverse backgrounds, including different primary languages.

Data indicators reviewed for each community include demographic and socioeconomic indicators such as total population, gender, age, race/ethnicity, and country of origin, as well as educational attainment, income, poverty, unemployment and crime rates. Public school enrollment and graduation rates (including race/ethnicity and special populations) were examined by community and for the full HHS service area. Youth risk behaviors related to self-reported substance use, sexual activity, and mental health amongst public high school students were also examined using local Youth Risk Behavior Survey (YRBS) or Communities that Care Survey data for those communities that collected such data and made it available publicly. Health outcomes were examined for each community and for the HHS service area and in comparison to the state of Massachusetts. These included cancer incidence and mortality; emergency department (ED), hospitalizations and mortality for cardiovascular and diabetes; infectious disease prevalence and incidence, injury related hospitalizations, mental health

related hospitalizations and mortality, mother and infant health indicators, premature mortality, respiratory health hospitalizations and ED visits, substance abuse related ED visits and mortality, top causes of death, and top causes of hospitalization.

Note that data for the HHS service area reflects data for the entire population of all nine towns, not just those individuals who receive care from Hallmark Health System. This includes residents of the nine towns that receive medical care from practitioners outside the catchment area (such as in Boston), as well as from other regional providers, including Lahey Health and Cambridge Health Alliance, free care programs such as The Sharewood Project, and physician practices and urgent care facilities operated locally by Caregroup, Children's Hospital Boston, and for profit entities.

Data was examined by comparing each community and the HHS service area as whole to the state of Massachusetts. Percent differences were calculated for each indicator and those with a percent difference of +5% or more (e.g. 5% or higher mortality) were flagged for discussion. These comparisons to the state provide the community and stakeholders some perspective as to how the community is doing relative to the state (which is normally used as the standard for benchmarking).

Data was also examined within each community and for the HHS service area. The leading causes of death and hospitalizations were ranked. This review of counts and rates within the community and service area enable the community and stakeholders to understand the magnitude of a health condition at the community level, regardless of whether it differs from the state average or not.

Other local secondary data included food insecurity data provided by the Greater Boston Food Bank and a review of 2010-15 opioid overdose related death certificate data from the Mystic Valley Public Health Coalition's MA Opioid Abuse Prevention Collaborative (MOAPC) grant.

Original primary data was collected for this assessment through community forums and community and internal stakeholder surveys.

Two Community Conversation Events were held in late 2015. Participants were first shown a presentation about the HHS Community Benefits Department, and then participated in discussions in the World Café format. Both evening events took place at Lawrence Memorial Hospital of Medford.

The first event, held March 3, 2015, was hosted by the North Suburban Child and Family Resource Network (NSCFRN), a program of the Wakefield Public Schools and the Community Service Division of Hallmark Health. The 33 participants represented early childhood service providers, community-based organizations and parents. The purpose of the forum was two-fold: to conduct a participatory assessment of both needs and health impacts on families and children birth to age 12; and to inform the NSCFRN of current program strengths, needs, and possibilities for future programming across an expanded service area.

The second event, held August 19, 2015, recruited participants from the wider community, with an emphasis on reaching those served by HHS community benefits programs, including the Mobile Market, as well as by local community-based agencies. Recruitment targeted the nine towns in the community benefits catchment area. Each table discussed five questions addressing their communities' health needs, existing health programs, the programs that they would like to see, what they would like HHS to know about their communities, and whether the

event gave them a better understanding of HHS. Facilitators at each table led these discussions and interpreters translated questions and responses for the Haitian-speaking participants, as needed. Interpreters were also available for residents speaking Spanish, Portuguese, Vietnamese, Chinese (both Mandarin and Cantonese), and Arabic. Unfortunately residents with need for this additional language capacity were not in attendance.

Community stakeholder surveys were sent by Hallmark Health System staff via Survey Monkey to 20 individuals selected by HHS as key stakeholders. Stakeholders each represented one or more of the communities in HHS's nine town community benefits service area. A total of 13 stakeholders provided useable responses.

Respondents were instructed that they could pass the survey along to someone else in their agency if they did not think they were the best person to answer the questions. They were also instructed to be honest with their answers, and to skip questions that they were unable to answer. Respondents were told that the Institute for Community Health would be reviewing and analyzing their responses, and that no names or identifying information will be included in any reports.

The respondents consisted of three people who reported their job titles as either CEO or Executive Director, seven people who are directors or managers, and three other public health workers. Respondents were asked to report which communities they were able to provide information about. Five respondents only chose one of the communities, four reported that they were most familiar with the service area as a whole, and five chose two or more communities.

The survey responses were then analyzed by ICH staff. Quantitative answers were tabulated and used for comparison. Qualitative answers were analyzed using content analysis techniques, and a report detailing the findings was submitted to HHS.

An additional survey with primarily closed-ended questions was conducted to seek additional input from HHS employees already engaged in community-based activities or diversity/inclusion efforts on behalf of the health system. Forty-four unique surveys were emailed to two distinct employee cohorts; thirteen total surveys were completed and returned. Eight participants reported being part of community teams, and five were members of the HHS diversity committee. Of the communities in the service area, most participants reported familiarity with the region as a whole (5), Melrose (4), and Wakefield (3). Two people each reported working with Stoneham and Reading/North Reading, one respondent was most focused on each of Medford and Everett/Malden, and none of the responding participants worked primarily in Saugus.

Throughout the needs assessment process, preliminary results from each phase were reviewed and discussed with HHS Community Benefits staff and leadership, including the HHS Community Benefits Advisory Council.

The prioritization process was influenced by the priorities identified in the previous CHNA completed in 2013. Throughout the process, including in the community and secondary stakeholder surveys, participants were reminded of the previous list of priorities and asked to assess to what extent HHS had made steps towards addressing these priorities. They were then asked whether and how this list of priorities should change.

Upon review of results from all modes of data collection, the group identified and prioritized top health concerns and vulnerable populations for HHS to focus on in accordance with Internal

Revenue Service (IRS) requirements. This process took place through a series of meetings between ICH and HHS staff, including two presentations on process and health information made by ICH to the members of the HHS Community Benefits Advisory Council.

Additionally, two forums were held in May 2016 at Melrose-Wakefield Hospital with a total of 21 participants. At these events, participants reviewed the community data presented in this report and had the opportunity to vote on various questions related to health concerns in their communities and their impressions of the services provided by HHS. A conversation was facilitated afterwards on these same themes.

Priority health needs were determined based on:

- Identified needs and gaps in services across the service areas (triangulated from secondary data, surveys and community forums);
- Existing assets, strengths and capacity of Hallmark Health System to address needs;
- Potential assets available to realize meaningful and/or sustainable changes; and
- Organizational priorities identified through conversations with HHS leadership and their engagement with key community stakeholders and civic leaders.

Important aspects considered throughout the prioritization process included urgency, feasibility of addressing, and likelihood of impact on each health need. The Community Benefits Advisory Council prioritized a focus on reducing health disparities, optimizing existing Hallmark Health strengths, knowledge, and readily available resources, and avoiding duplication of services of other providers and agencies already in place throughout the service area.

Please note: all service area and individual town indicators that are referenced as being higher than the state are those that have a percent difference of 5% or more than the state. Additionally, only select communities are discussed here for each priority; comprehensive data on each town can be found in the community profiles in appendix J. Finally data for the HHS service area reflects data for the entire population of the nine towns, not just persons who receive care from Hallmark Health System.

Attachments are included to highlight the processes noted above.

C. Advisory Committee Duties

Given that this is a Tier 2 CHI, the scope of work that the Advisory Committee will carry includes:

All aspects of Hallmark Health's, now Melrose Wakefield Healthcare Community Benefits program - from assessing health needs and planning to the implementation and evaluation of activities - rely upon the oversight and guidance of its Advisory Council, a cross-section of hospital leaders and community members working together to lead and assure the system remains responsive and effective in addressing health issues.

The Community Benefits Advisory Council includes health system Board and Executive leaders, managers from clinical and administrative areas, and community members who represent partners as well as the geographic, cultural, linguistic and socio-economic diversity of the catchment area.

As of the end of FY 2016, Advisory Council members included:

- A Trustee of Hallmark Health System, Inc. (Representing the Board of Trustees)
- System Vice President of Home Care & Community Programs (Council Chair)
- Executive Vice President & Chief Legal Officer
- Two Hallmark Health employed physicians (Representing OB/GYN and Family Medicine Specialties)
- Controller (Representing Finance)
- Executive Director of the Cancer Center (Representing Nursing)
- Director, Community Services
- Manager, Case Management (Representing Social Services)
- Manager, Central Scheduling, Insurance Coordination, and Interpreter Services
- Manager, Community Benefits and Operations
- Community Representatives (Leaders of local social/health related not-for-profits, and engaged area residents).

The Council membership is being increased to include all the required positions on the Department's recommended list. This process will be completed by August 2018.

The Council meets six times per year to ensure compliance with the Community Health Improvement Plan, review program outcomes, discuss important community health issues, and offer recommendations to the Board of Trustees related to community health needs and disparities. In FY 2016, it had an oversight role in the development of the 2016 Community Health Needs Assessment which serves as the basis for the Community Health Improvement Plan developed in the first quarter of FY 2017. The Council approves any and all amendments to the Improvement Plan resulting from emerging health issues or unplanned changes in capacity and engages new members from the communities served to join the group; prioritizing candidates who can assist the Council and Hallmark Health to better understand community health needs and barriers to access, experienced by various populations in accessing health or community-based services.

Based upon Melrose Wakefield Healthcare's 2016 CHNA and Implementation Plan and aligned with the Department's Health Priorities and the EOHHS Focus Areas, the Advisory Committee is tasked with the determining the Health Priorities for funding in the DoN process. The membership will be expanded to ensure all the Department's required member categories are filled.

D. Allocation Committee Duties

The Allocation Committee is comprised of individuals from the Advisory Committee who do not have a conflict of interest in regard to funding. The scope of work that the Allocation Committee will carry out includes:

- Determining if there is a conflict of interest for any Allocation Committee member, and if so, asking the member to recuse him/herself (a Conflict of Interest Form will be developed).
- Selecting the Health Strategies based on the Health Priorities for CHI funding

- Submitting the Health Priorities Form to the Department of Public Health for review and approval.
- Carrying out a formal request for proposal ("RFP") process for the disbursement of CHI funds.
- Engaging resources that can support and assist applicants with their responses to the RFP.
- Disbursement of CHI funding.
- Providing oversight to a third-party vendor that is selected to carry out the evaluation of CHI-funded projects.

E. Timeline for CHI Activities

Upon a Notice of Determination of Need being issued by the Public Health Council, the current Community Benefits Advisory Committee will commence meeting on this topic area (although they have already discussed their additional role at two prior meetings) and begin the CHI Process. The timeline for CHI activities is as follows:

- One to two months post-approval: The Advisory Committee will begin meeting and reviewing the CHNA to commence the process of selecting Health Priorities for the DoN.
- The Allocation Committee will be convened and their role established.
- Four to six months post-approval: The Advisory Committee has determined the Health Priorities and the Allocation Committee has determined the Health Strategies for funding, with the Allocation Committee submitting the Health Priorities Form to the Department.
- Seven months post-approval: The Allocation Committee is developing the RFP process and determining how this process will work in tandem with current community benefit efforts.
- Seven months post-approval: Melrose Wakefield Healthcare will seek to work with an evaluator that will serve as a technical resource to grantees and implement the evaluation plan for the proposed Project.
- Nine months post-approval: The RFP for funding is released.
- Ten months post-approval: Bidders conferences are held on the RFP.
- Twelve months post-approval: Responses are due for the RFP.
- Fifteen months post-approval: Funding decisions are made, and the disbursement of funds begins.
- Twenty-four months post-approval: The selected evaluator will begin evaluation work.
- The aforementioned process is longer than the process outlined in the DoN Guidelines for Tier 2 projects. However, given Melrose Wakefield Healthcare's previous experience with grant efforts, the Community Benefits staff members believe this extra time is critical to developing a transparent and appropriate RFP process and to demonstrate a higher likelihood of measureable improvements from the funded projects.

F. Request for Additional Years of Funding

Melrose Wakefield Healthcare is seeking additional time to carry out the disbursement of funds for the CHI. Based on previous experience with providing grant funding Melrose Wakefield Healthcare will offer larger, potentially multi-year grants with CHI funding. Consequently, Melrose Wakefield Healthcare is seeking to disburse these monies over a 2 to5 year period to ensure the greatest impact for the largest number of individuals.

In addition, the system will be completing a CHNA in 2019 and wants to ensure that the priorities of 2016 continue to be the community needs in later years. The additional time will allow the system to adjust funding priorities in their community benefits to best align with the DoN funded strategies.

G. Request for Administrative Monies

Regarding the CHI administrative fee as outlined in *Table 1: CHI Funding Tiers and Community Engagement Requirements for Hospitals* in the Department of Public Health's *Determination of Need Community-Based Health Initiative Planning Guideline*, Applicants submitting a Tier 2 CHI are eligible for a three percent (3%) administrative fee. Melrose Wakefield Healthcare will utilize these monies to pay for the resources needed to carry out the RFP/solicitation process.

The Community Services department of Melrose Wakefield Healthcare will oversee the RFP process and will utilize the administrative funding to provide additional staff resources to carry out the oversight of the funded projects and the functions of the chosen evaluator.

H. Evaluation Overview

Melrose Wakefield Healthcare is seeking to use 10% of all CHI funding ($53,382.00) for evaluation. These monies will allow the system to engage a third-party evaluation team to carry out technical assistance and ensure appropriate evaluation of the CHI-funded projects.

Attachment/Exhibit

D

8a. Community Health Initiative

Sector Type	Organization Name	Name of Primary Contact	Title in Organization	Email Address	Phone Number
Municipal Staff	Wakefield Unified Prevention Coalition	Catherine Dhingra	Director	cdhingra@wakefield.ma.us	3392194034
Education	Regis University	Eda George	Trustee	eda.george@regiscollege.edu	7819796000
Housing	Bread of Life	Thomas Feagley	Executive Director	tjfeagley@gmail.com	7813970404
Social Services	Hallmark Health System	Sue Appleyard	Manager	sappleyard@hallmarkhealth.org	7819793439
Planning + Transportation	Metropolitan Area Planning Council	Barry Keppard	Public Health Director, AICP	BKeppard@mapc.org	6179330750
Private Sector/Business	Greater Boston Food Bank	Kathryn Brodowski	Senior Director of Health and Research	kbrodowski@GBFB.org	6175985047
Community Health Center	Lowell Community Health Center	Mercy Anampiu	Health Promotion and Education Manager	mercyan@lchealth.org	9789379700
Community Based Organizations	Hallmark Health System	Elisa Scher	Executive Director	escher@hallmarkhealth.org	7812245877
Community Based Organizations	Hallmark Health System	Eileen Dern	Director	edern@hallmarkhealth.org	7813387552
Community Based Organizations	Hallmark Health System	Barbara Kaufman	Manager	bkaufman@hallmarkhealth.org	7813387572
Community Based Organizations	Hallmark Health System	Amanda Niemi	Manager	aniemi@hallmarkhealth.org	7813387784
Community Based Organizations	Hallmark Health System	Dr. David Richman	Physician	drichman@hallmarkhealth.org	7813384160
Community Based Organizations	Hallmark Health System	Dr. Kristyn Newhall	Physician	Knewhall@hallmarkhealth.org	7813387400
Community Based Organizations	Hallmark Health System	Charles Whipple	Executive Vice President and Chief Legal Officer	cwhipple@hallmarkhealth.org	7819793050
Community Based Organizations	Hallmark Health VNA and Hospice	Diane Farraher-Smith	President of Hallmark Health VNA and Hospice	dfarrahersmith@hallmarkhealth.org	7813387878
Community Based Organizations	Hallmark Health System	Lori Howley	Chief Marketing Officer	Lhowley@hallmarkhealth.org	7813387247
Community Based Organizations	Hallmark Health System	Kelley McCue	Director	kmccue@hallmarkhealth.org	7813387469
Community Based Organizations	Medford Health Matters	Loretta Kemp	Board Secretary-Formerly Deputy Director of TriCAP	Kemp_loretta@yahoo.com	7813952024
Community Based Organizations	Chinese Culture Connection	Mei Hung	Executive Director	meih@chinesecultureconneciton.org	7813216316
Community Based Organizations	Hallmark Health System	Susan Riley	Controller	Sriley@hallmarkhealth.org	7813387424

Attachment/Exhibit

5

RETURN OF PUBLICATION

I, the undersigned, hereby certify under the pains and penalties of perjury, that I am employed by the publishers of the *Medford Transcript* and the following Public/Legal announcement was published in two sections of the newspaper on May 24, 2018 accordingly:

1) "Public Announcement Concerning a Proposed Health Care Project" page A2, Legal Notice Section.

(check one) ✓ Size at least two inches high by three columns wide
_____ Size at least three inches high by two columns wide

2) "Public Announcement Concerning a Proposed Health Care Project" page B5, "B" Section.

(check one) _____ Size at least two inches high by three columns wide
✓ Size at least three inches high by two columns wide

Signature

Debra A. Dillon
Name

Legal Advertising Rep
Title

562723.1

Legal Notices

170 GOVERNORS AVENUE

LEGAL NOTICE

Public Announcement Concerning a Proposed Health Care Project

Medford Surgery Center, LLC ("Applicant") with a principal place of business at 700 Congress Street, Suite 204, Quincy, Massachusetts 02169 intends to file a Notice of Determination of Need with the Massachusetts Department of Public Health for the construction of a freestanding ambulatory surgery center to be located on the grounds of the Hallmark Health Lawrence Memorial Hospital campus at 170 Governors Avenue, Medford, MA 02155. The total value of the Project based on the maximum capital expenditure is $14,675,550. The Applicant does not anticipate any price or service impacts on the Applicant's existing patient panel as a result of the Project. Any ten Taxpayers of Massachusetts may register in connection with the intended Application no later than 30 days of the filing of the Notice of Determination of Need by contacting the Department of Public Health, Determination of Need Program, 250 Washington Street, 6th Floor, Boston, MA 02108.

AD#13691089 Medford Transcript 5/24/18

156 JEROME STREET

LEGAL NOTICE

MORTGAGEE'S SALE OF REAL ESTATE

...of the Power of Sale con-

Certificates, Series 2007-1 dated A
recorded with said registry on Augu
69852 Page 478 and by assignmen
New York Mellon FKA The Bank of N
for the certificateholders of the CW
BACKED CERTIFICATES, SERIE
Bank of New York Mellon FKA The Ba
Trustee for the certificateholders of
ASSET-BACKED CERTIFICATES, SE
February 8, 2018 and recorded wit
February 12, 2018 at Book 70619 Pa
of the conditions of said mortgage and
foreclosing, the same will be sold a
2:00 p.m. on June 19, 2018, on the m
located at 39 HAMLIN AVENUE, MEI
County, Massachusetts, all and sing
described in said mortgage,

TO WIT:

The land in Medford together with the
shown as Lot 20 on a plan of "Hous
belonging to Joseph P. Hamlin, J.O. G
Medford, May 1883", recorded with the
District Registry of Deeds in Book 207,
and described as follows;

NORTHEASTERLY on Hamlin Avenue,

...and said plan ...

Medford Community Coalition Public Meeting - Medford Food Security Task Force: 7 p.m. to

Commission meets every fourth Wednesday of the month at Medford City Hall, Room 201. Interested residents are

classes meet from 6:30 to 8 p.m. at the West Medford Community Center, 111 Arlington St. Tuesday and Wednesday evening

changes are provided with information, support, activities and social engagement in a welcoming space. All are welcome. Refreshments are available. For information: 781-396-6010.

Overeaters Anonymous: 8-9 a.m. and 10-11 a.m. Sundays, 7-8 p.m. Fridays and 9-10 a.m. Saturdays, Lawrence Memorial Hospital, 170 Governors Ave., Medford. Overeaters Anonymous is a 12-step support program for those with eating disorders. For information: 781-641-2303.

Legal Notices

Public Announcement Concerning a Proposed Health Care Project

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MERCURY RECOVERY PROGRAM

New Chamber leader

announces

RETURN OF PUBLICATION

I, the undersigned, hereby certify under the pains and penalties of perjury, that I am employed by the publishers of the *Boston Herald* and the following Public/Legal announcement was published in two sections of the newspaper on May 24, 2018 accordingly:

1) "Public Announcement Concerning a Proposed Health Care Project" page 37, Legal Notice Section.

(check one) ✓ Size at least two inches high by three columns wide
_____ Size at least three inches high by two columns wide

2) "Public Announcement Concerning a Proposed Health Care Project" page 15, Main news Section.

(check one) _____ Size at least two inches high by three columns wide
✓ Size at least three inches high by two columns wide

PUBLIC ANNOUNCEMENT CONCERNING A PROPOSED HEALTH CARE PROJECT

Medford Surgery Center, LLC ("Applicant") with a principal place of business at 700 Congress Street, Suite 204, Quincy, Massachusetts 02169 intends to file a Notice of Determination of Need with the Massachusetts Department of Public Health for the construction of a freestanding ambulatory surgery center to be located on the grounds of the Hallmark Health Lawrence Memorial Hospital campus at 170 Governors Avenue, Medford, MA 02155. The total value of the Project based on the maximum capital expenditure is $14,675,550. The Applicant does not anticipate any price or service impacts on the Applicant's existing patient panel as a result of the Project. Any ten Taxpayers of Massachusetts may register in connection with the intended Application no later than 30 days of the filing of the Notice of Determination of Need by contacting the Department of Public Health, Determination of Need Program, 250 Washington Street, 6th Floor, Boston, MA 02108.

Signature

Laurie Kluse
Name

Legal Advertising Rep
Title

BETH ELLEN O'GRADY
NOTARY PUBLIC
COMMONWEALTH OF MASSACHUSETTS
My Comm. Expires Mar. 20, 2020

PUBLIC ANNOUNCEMENT CONCERNING A PROPOSED HEALTH CARE PROJECT

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LAND COURT NOTICE | LAND COURT NOTICE | LAND COURT NOTICE

COMMONWEALTH OF MASSACHUSETTS
LAND COURT
DEPARTMENT OF THE TRIAL COURT

COMPLA[illegible] O FORECLOSE TAX LIEN

[illegible] No. 97TL115287

LEGAL NOTICES | LEGAL NOTICES | LEGAL NOTICES

PUBLIC ANNOUNCEMENT CONCERNING A PROPOSED HEALTH CARE PROJECT

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Carman: No reason to kill

Carman also acknowledged refusing to take a lie-detector test about how his grandfather was found dead from three bullets in his home in Windsor, Conn., on Dec. 20, 2013, the morning after the two had gone out to dinner and Carman was the last known person to see Chakalos alive.

"A seeming waiver of one [illegible] criminally [illegible] deaths, he has denied killing both his mother and his grandfather. "during any interviews with Windsor Police."

— laurel.sweet@bostonherald.com

PUBLIC ANNOUNCEMENT CONCERNING A PROPOSED HEALTH CARE PROJECT

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Attachment/Exhibit

6

Medford Surgery Center, LLC

Analysis of the Reasonableness of Assumptions Used For and Feasibility of Projected Financials of Medford Surgery Center, LLC For the Years Ending December 31, 2019 Through December 31, 2023

TABLE OF CONTENTS

BERNARD L. DONOHUE, III, CPA

Chestnut Green
8 Cedar Street, Suite 62
Woburn, MA 01801

(781) 569-0070
Fax (781) 569-0460

June 8, 2018

Ms. Sarah Modine
VP, Corporate Development
Shields Health Care Group
Crown Colony Park
700 Congress Street, Suite 204
Quincy, MA 02169

RE: **Analysis of the Reasonableness of Assumptions and Projections Used to Support the Financial Feasibility and Sustainability of the Proposed Ambulatory Surgery Center in Medford, MA by Medford Surgery Center, LLC**

Dear Ms Modine:

I have performed an analysis of the financial projections prepared by Shields Health Care Group ("Shields") detailing the projected operations of the Medford Surgery Center, LLC ("the Medford ASC"). This report details my analysis and findings with regards to the reasonableness of assumptions used in the preparation and feasibility of the financial forecast prepared by the management of Shields ("Management") for the operation of the Medford ASC. This report is to be used by Medford Surgery Center, LLC in its Determination of Need ("DoN") Application – Factor 4(a) and should not be distributed for any other purpose.

I. EXECUTIVE SUMMARY

The scope of my analysis was limited to an analysis of the five year financial projections (the "Projections") prepared by Shields for the operation of the Medford ASC, and the supporting documentation in order to render an opinion as to the reasonableness of assumptions used in the preparation and feasibility of the Projections.

Within the projected financial information, the Projections exhibit a net pre-tax profit margin ranging from 7.6% to 15.1 % for years 2 through 5 of the project. Based upon my review of the relevant documents and analysis of the projected financial statements, I determined the project and continued operating surplus are reasonable expectations and are based upon feasible financial assumptions. Accordingly, I determined that the Projections are feasible and sustainable and not likely to have a negative impact on the patient panel or result in a liquidation of assets of the Medford ASC.

II. RELEVANT BACKGROUND INFORMATION

Shields was founded in 1972 and in 1986 opened its first MRI center. It currently operates over 30 centers throughout New England offering MRI, PET/CT and radiation therapy services. Shields is now partnering with major healthcare providers to develop and manage multi-specialty ambulatory surgery centers. Shields's joint venture partners in the Medford ASC include MelroseWakefield Healthcare (formerly Hallmark Health) and Tufts Medical Center Physician Organization ("TMCPO").

Please refer to the DoN application for a further description of the proposed project and the rationale for the expenditures.

III. SCOPE OF REPORT

The scope of this report is limited to an analysis of the five year financial projections prepared by Shields (the "Projections") and the supporting documentation in order to render an opinion as to the reasonableness of assumptions used in the preparation and feasibility of the Projections. My analysis of the Projections and conclusions contained within this report are based upon my detailed review of all relevant information (see Section IV which references the sources of information). I have gained an understanding of Shields and the Medford ASC through my review of the information provided as well as a review of Shields website and the DoN application.

Reasonableness is defined within the context of this report as supportable and proper, given the underlying information. Feasibility is defined as based on the assumptions used, the plan is not likely to result in insufficient "funds available for capital and ongoing operating costs necessary to support the Proposed Project without negative impacts or consequences to the Applicant's existing Patient Panel" (per Determination of Need, Factor 4(a)).

This report is based upon prospective financial information provided to us by Management. If I had audited the underlying data, matters may have come to my attention that would have resulted in my using amounts that differ from those provided. Accordingly, I do not express an opinion or any other assurances on the underlying data presented or relied upon in this report. I do not provide assurance on the achievability of the results forecasted by Shields because events and circumstances frequently do not occur as expected, and the achievement of the forecasted results are dependent on the actions, plans, and assumptions of management. I reserve the right to update my analysis in the event that I am provided with additional information.

IV. PRIMARY SOURCES OF INFORMATION UTILIZED

In formulating my opinions and conclusions contained in this report, I reviewed documents produced by Management. The documents and information upon which I relied are identified below or are otherwise referenced in this report:

1. Medford Surgery Center, LLC 5-Year Projected Financial Statements and Assumptions received from Management on April 20, 2018

2. Medford Surgery Center, LLC draft DoN Application

3. Determination of Need Application Instructions dated March 2017;
4. CMS.gov (Medicare) Ambulatory Surgical Center Payment System website
5. MA.gov Center for Healthcare Information and Analysis website;
6. Becker's ASC website https://www.beckersasc.com
7. VMG Health Intellimarker Multi-Specialty ASC Study 2017
8. Shields Health Care Group company website https://shields.com.

V. REVIEW OF THE PROJECTIONS

This section of my report summarizes my review of the reasonableness of the assumptions used and feasibility of the Projections. The following table presents the key metrics, as defined below, which compares the operating results of the Projections for the fiscal years 2019 through 2023.

Medford Surgery Center, LLC
Summary of Ratios - As Provided
Projected for the Years Ending December 31, 2019 through 2023

Ratio	2019	2020	2021	2022	2023
Liquidity Ratios					
Current Ratio	2.32	1.87	1.67	1.64	2.12
Days in Accounts Receivables	40.03	32.98	24.84	25.06	25.41
Operating Ratios					
EBITDA ($000's)	$ 438	$ 1,129	$ 1,744	$ 2,101	$ 2,058
EBITDA Margin	8.2%	13.9%	17.7%	19.2%	18.7%
Lease Ratio	1.63	2.61	3.44	3.94	3.88
Net Profit Margin	1.1%	7.6%	12.8%	15.1%	14.8%
Debt Service Coverage (ratio)	2.39	1.37	2.11	2.55	2.49
Solvency Ratios					
Debt to Capitalization (%)	88.2%	84.9%	76.7%	61.3%	43.2%
Members' Equity ($000's)	$ 549	$ 616	$ 850	$ 1,328	$ 1,796

The Key Metrics fall into three primary categories: liquidity, operating and solvency. Liquidity metrics, such as the Current Ratio and Days in Accounts Receivable measure the quality and adequacy of assets to meet current obligations as they come due. Operating metrics, such as earnings before interest, taxes, depreciation and amortization ("EBITDA"), EBITDA Margin, Lease Ratio, Net Profit Margin and Debt Service Coverage are used to assist in the evaluation of management performance in how efficiently resources are utilized. Solvency metrics, such as Debt to Capitalization and Members' Equity, measure the

company's ability to service debt obligations. Additionally, certain metrics can be applicable to multiple categories. The table below shows how each of the Key Metrics are calculated.

Ratio	Calculation
Liquidity Ratios	
Current Ratio	Current assets divided by current liabilities
Days in Accounts Receivables	Accounts receivables divided by (net patient service revenue divided by 365 days)
Operating Ratios	
EBITDA	Earnings before interest, taxes, depreciation and amortization
EBITDA Margin	EBITDA divided by net patient service revenue
Lease Ratio	Earnings before interest, taxes, depreciation, amortization and rent divided by lease payments
Net Profit Margin	Net profit divided by net patient service revenue
Debt Service Coverage (ratio)	Debt service coverage ratio (ratio) = (Net income (loss) + depreciation expense + amortization expense + interest expense) / (Principal payments + interest expense)
Solvency Ratios	
Debt to Capitalization (%)	Debt to Capitalization (%) = (Current portion of long-term obligation + long-term obligations) / (Current portion of long-term obligations + long-term obligations + member's equity)
Members' Equity	Net equity of the Company

1. Revenues

I analyzed the revenues identified by Medford ASC in the Projections. Based upon my discussions with Management, the projected volume was based on a ramp-up schedule for the first three years of operations, with a sustained 80% utilization level for years 4 and 5 of the projection. The payer mix was based on the multiple disciplines of the Medford ASC, including orthopedics, Ear/Nose/Throat (or ENT), plastic surgery and Endoscopy/GI services. Reimbursement rates were based upon current Medicare ASC rates, Medicaid rates and expected Commercial Insurance contracted rates based on discussions with Commercial Insurance providers. In order to determine the reasonableness of the projected revenues, I reviewed the underlying assumptions upon which Management relied.

I first reviewed the Projections to determine the reasonableness of the projected volume. Each of the joint venture partners provided data for the case volume in their contribution area. Shields then created a utilization table, using conservative estimates from the volume contributions and benchmark data for operating room and procedure room average minutes to arrive at year 1 cases and procedures. These cases and procedures were then ramped up until year 4, when full utilization is achieved. Full utilization is considered 80% of available time. I compared the benchmark data to an outside, independent survey of ambulatory surgery centers completed using 2017 data and found that the benchmark data used was reasonable, and that the number of projected cases and procedures per operating room and procedure

room at full utilization were within the ranges of currently operating ambulatory surgery centers as determined by the independent survey.

Next, I reviewed the Projections to determine the reasonableness of the payer mix and reimbursement rates selected for the years 2019 through 2023. To determine the reasonableness of the payer mix in the projections, I compared them to the aforementioned independent survey's payer mix for the Northeast United States, and found them to be within the ranges published by the survey. The Medicare rates are standard rates, using the Medicare Outpatient Prospective Payment System (OPPS) rates as a guide, adjusted for inflation and by a wage index for the specific geographic location of the facility. Medicare also specifies which procedures are able to be performed in an ASC. I compared the Medicare rates used for Year 1 of the Projections to the Medicare rates effective January 1, 2018 as adjusted by inflation and the wage index, included in the 2018 OPPS and ASC Final Rule, published by CMS in the Federal Register on November 13, 2017. The Medicaid rates used in the projection are 80% of the Medicare rate. I tested this assumption by selecting the highest volume cases and procedures from the Shields projections. I then compared the Medicare payment rate, tested above, to the Medicaid rate for Massachusetts taken from the regulations published in 114.3 CMR 47.0, which established the payment rates for cases and procedures in free standing ambulatory surgical facilities. I then calculated the percentage difference between the two rates. While this analysis resulted in a percentage that was lower than the projection, the reduction in revenue was insignificant due to the low Medicaid utilization. The Commercial Insurance rates were based on Management's estimate and experience with similar facilities. It is expected that these rates will be approved at a level of 170% of the Medicare rate. The private pay rates are set as 150% of the Medicare rate and appear reasonable when compared to the Commercial Insurance rates. All of the rates were increased by 1.0% for each of the succeeding years.

Based upon the foregoing, it is my opinion that the revenue projected by Management reflects a reasonable estimation of future revenues of the Medford ASC.

2. Expenses

I analyzed the Salary and Benefits, as well as the Other Operating Expenses for reasonableness and feasibility as related to the Projection of the Medford ASC.

Salaries and Benefits were analyzed both for wage rates used and, as related to clinical care, for the amount of clinical staff hours provided. The staffing hours were compared to the previously mentioned independent survey and were found to be consistent with the survey results. The wage rates for all clinical and administrative categories were also compared to the survey and found that the wage rates were also consistent with the survey results for the Northeast United States. The benefit percentage used in the Projections was comparable to one used in a large physician practice located in the same geographic area as the proposed facility.

Medical Surgical Supplies included in the projections were compared to the previously mentioned independent survey and found to be consistent with the ranges included in the survey. Other expenses were also compared to the survey and found to be reasonable.

Salaries and benefits are projected to increase by 3% per year. Clinical expenses are projected to increase by 1.5% per year. Most other expenses are projected to increase by 1% or 2% per year.

It is my opinion that the operating expenses projected by Management are reasonable in nature.

3. Lease Agreement, Capital Expenditures and Cash Flows

I reviewed the lease terms, projected capital expenditures and future cash flows of the Medford ASC in order to determine whether sufficient funds would be available to support the lease of Medford ASC, payment of the financed equipment debt service and whether the cash flow would be able to support the continued operations.

Based upon my review of the Projections and my discussions with Management, it is my understanding that a 17,500 square foot facility will be leased to the Medford ASC by a separate real estate entity. Rent will be $40 per square foot or $700,000 per year. The lease will include a 2% increase every third year.

A comparable lease report was provide to us by management, which indicated current building rents in the Medford area are consistent with the proposed rent. We also compared the total occupancy costs included in the projections to the independent survey and found them to be within the range in the survey.

Accordingly, I determined that the pro-forma capital expenditures, facility lease, terms of equipment and working capital financing and the resulting impact on the cash flows of Medford ASC are reasonable.

VI. FEASIBILITY

I analyzed the Projections and Key Metrics for Medford ASC. In preparing my analysis I considered multiple sources of information. It is important to note that the Projections do not account for any anticipated changes in accounting standards. These standards, which may have a material impact on individual future years, are not anticipated to have a material impact on the aggregate Projections.

Based upon my review of the relevant documents and analysis of the projected financial statements, I determined the project and continued operating surplus are reasonable and are based upon feasible financial assumptions. Accordingly, I determined that the Projections are feasible and sustainable and not likely to have a negative impact on the patient panel or result in a liquidation of assets of Medford ASC.

Respectively submitted,

Bernard L. Donohue, III, CPA

Attachment/Exhibit

7

The Commonwealth of Massachusetts
HEALTH POLICY COMMISSION
50 MILK STREET, 8TH FLOOR
BOSTON, MASSACHUSETTS 02109
(617) 979-1400

STUART H. ALTMAN
CHAIR

DAVID M. SELTZ
EXECUTIVE DIRECTOR

December 29, 2017

Malisa Schuyler
Wellforce, Inc.
1600 District Ave, #125
Burlington, MA 01803

RE: ACO Certification

Dear Ms. Schuyler:

Congratulations! The Health Policy Commission (HPC) is pleased to inform you that Wellforce, Inc. meets the requirements for ACO Certification. This certification is effective from the date of this letter through December 31, 2019.

The ACO Certification program, in alignment with other state agencies including MassHealth, is designed to accelerate care delivery transformation in Massachusetts and promote a high quality, efficient health system. ACOs participating in the program have met a set of objective criteria focused on core ACO capabilities including supporting patient-centered care and governance, using data to drive quality improvement, and investing in population health. Wellforce, Inc. meets those criteria.

The HPC will promote Wellforce, Inc. as a Certified ACO on our website and in our marketing and public materials. In addition, a logo is enclosed for your use in accordance with the attached Terms of Use. We hope you will use the logo to highlight the ACO Certification to your patients, payers, and others.

The HPC looks forward to your continued engagement in the ACO Certification program over the next two years. In early 2018, HPC staff will contact you to discuss any updates to your submission and to plan a site visit for later in the year.

Thank you for your dedication to providing accountable, coordinated health care to your patients. If you have any questions about this letter or the ACO Certification program, please do not hesitate to contact Catherine Harrison, Deputy Policy Director, at HPC-Certification@state.ma.us or (617) 757-1606.

Best wishes,

David Seltz
Executive Director

Attachment/Exhibit

8

MASSACHUSETTS
HEALTH POLICY COMMISSION

NOTICE OF MATERIAL CHANGE FORM

Health Policy Commission
50 Milk Street, 8th Floor
Boston, MA 02109

551035

GENERAL INSTRUCTIONS

The attached form should be used by a Provider or Provider Organization to provide a Notice of Material Change ("Notice") to the Health Policy Commission ("Commission"), as required under M.G.L. c. 6D, § 13 and 958 CMR 7.00, Notices of Material Change and Cost and Market Impact Reviews. To complete the Notice, it is necessary to read and comply with 958 CMR 7.00, a copy of which may be obtained on the Commission's website at www.mass.gov/hpc. Capitalized terms in this Notice are defined in 958 CMR 7.02. Additional sub-regulatory guidance may be available on the Commission's website (e.g., Technical Bulletins, FAQs). For further assistance, please contact the Health Policy Commission at HPC-Notice@state.ma.us. This form is subject to statutory and regulatory changes that may take place from time to time.

REQUIREMENT TO FILE

This Notice must be submitted by any Provider or Provider Organization with $25 million or more in Net Patient Service Revenue in the preceding fiscal year that is proposing a Material Change, as defined in 958 CMR 7.02. Notice must be filed with the Commission not fewer than 60 days before the consummation or closing of the transaction (i.e., the proposed effective date of the proposed Material Change).

SUBMISSION OF NOTICE

One electronic copy of the Notice, in a portable document form (pdf), should be submitted to the following:

Health Policy Commission HPC-Notice@state.ma.us;

Office of the Attorney General HCD-6D-NOTICE@state.ma.us;

Center for Health Information and Analysis CHIA-Legal@state.ma.us

PRELIMINARY REVIEW AND NOTICE OF COST AND MARKET IMPACT REVIEW

If the Commission considers the Notice to be incomplete, or if the Commission requires clarification of any information to make its determination, the Commission may, within 30 days of receipt of the Notice, notify the Provider or Provider Organization of the information or clarification necessary to complete the Notice.

The Commission will inform each notifying Provider or Provider Organization of any determination to initiate a Cost and Market Impact Review within 30 days of its receipt of a completed Notice and all required information, or by a later date as may be set by mutual agreement of the Provider or Provider Organization and the Commission.

CONFIDENTIALITY

Information on this Notice form itself shall be a public record and will be posted on the Commission's website. Pursuant to 958 CMR 7.09, the Commission shall keep confidential all nonpublic information and documents obtained in connection with a Notice of Material Change and shall not disclose the information or documents to any person without the consent of the Provider or Payer that produced the information or documents, except in a Preliminary Report or Final Report of a Cost and Market Impact Review if the Commission believes that such disclosure should be made in the public interest after taking into account any privacy, trade secret or anti-competitive considerations. The confidential information and documents shall not be public records and shall be exempt from disclosure under M.G.L. c. 4, § 7 cl. 26 or M.G.L. c. 66, § 10.

NOTICE OF MATERIAL CHANGE

DATE OF NOTICE: January 3, 2018

1. Name: Shields Health Care Group, Inc.

2.

Federal TAX ID #	MA DPH Facility ID #	NPI #
04-3164965	N/A	N/A

CONTACT INFORMATION

3. Business Address 1: 700 Congress Street
4. Business Address 2:
5. City: Quincy State: MA Zip Code: 02169
6. Business Website: www.shields.com
7. Contact First Name: Thomas Contact Last Name: Shields
8. Title: President and CEO
9. Contact Phone: 617-376-7400 Extension:
10. Contact Email: tommy@shields.com

DESCRIPTION OF ORGANIZATION

11. *Briefly* describe your organization.

Shields Health Care Group, Inc. ("Shields") through its subsidiary entities and affiliates, provides advanced diagnostic imaging and ambulatory surgery services throughout Massachusetts, including MRI, PET/CT, and radiation therapy services.

TYPE OF MATERIAL CHANGE

12. Check the box that most accurately describes the proposed Material Change involving a Provider or Provider Organization:

- ☐ A Merger or affiliation with, or Acquisition of or by, a Carrier;
- ☐ A Merger with or Acquisition of or by a Hospital or a hospital system;
- ☐ Any other Acquisition, Merger, or affiliation (such as a Corporate Affiliation, Contracting Affiliation, or employment of Health Care Professionals) of, by, or with another Provider, Providers (such as multiple Health Care Professionals from the same Provider or Provider Organization), or Provider Organization that would result in an increase in annual Net Patient Service Revenue of the Provider or Provider Organization of ten million dollars or more, or in the Provider or Provider Organization having a near-majority of market share in a given service or region;
- ☐ Any Clinical Affiliation between two or more Providers or Provider Organizations that each had annual Net Patient Service Revenue of $25 million or more in the preceding fiscal year; provided that this shall not include a Clinical Affiliation solely for the purpose of collaborating on clinical trials or graduate medical education programs; and
- ☑ Any formation of a partnership, joint venture, accountable care organization, parent corporation, management services organization, or other organization created for administering contracts with Carriers or third-party administrators or current or future contracting on behalf of one or more Providers or Provider Organizations.

13. What is the proposed effective date of the proposed Material Change? Upon receipt of all regulatory approvals.

551035

MATERIAL CHANGE NARRATIVE

14. *Briefly* describe the nature and objectives of the proposed Material Change, including any exchange of funds between the parties (such as any arrangement in which one party agrees to furnish the other party with a discount, rebate, or any other type of refund or remuneration in exchange for, or in any way related to, the provision of Health Care Services) and whether any changes in Health Care Services are anticipated in connection with the proposed Material Change:

The proposed material change involves Hallmark Health Corporation ("Hallmark Health"), Tufts Medical Center Physician Organization ("Tufts MCPO") and Shields Health Care Group, Inc. (the "Parties") forming a joint venture to build and operate an ambulatory surgery center ("ASC") to be located at the Lawrence Memorial Hospital campus in Medford. The Parties seek to develop an ASC that will be cost effective and quality driven.

15. *Briefly* describe the anticipated impact of the proposed Material Change, including but not limited to any anticipated impact on reimbursement rates, care referral patterns, access to needed services, and/or quality of care:

The establishment of a freestanding ASC will allow the Parties to offer routine outpatient surgical care in a cost effective, freestanding setting. By expanding the availability of surgery services in the community, this ASC will provide improved access and convenience to patients in the area and will be treated by govemment payors as a freestanding site.

DEVELOPMENT OF THE MATERIAL CHANGE

16. Describe any other Material Changes you anticipate making in the next 12 months:

Shields anticipates making a material change notice filing regarding an imaging joint venture in the near future.

17. Indicate the date and nature of any applications, forms, notices or other materials you have submitted regarding the proposed Material Change to any other state or federal agency:

Shields will participate in making the required filings with the Department of Public Health.

SUPPLEMENTAL MATERIALS

18. Submit the following materials, if applicable, under separate cover to HPC-Notice@state.ma.us.

The Health Policy Commission shall keep confidential all nonpublic information, as requested by the parties, in accordance with M.G.L. c. 6D, § 13(c), as amended by 2013 Mass. Acts, c. 38, § 20 (July 12, 2013).

a. Copies of all current agreement(s) (with accompanying appendices and exhibits) governing the proposed Material Change (e.g., definitive agreements, affiliation agreements);
b. A current organizational chart of your organization
c. Any analytic support for your responses to Questions 14 and 15 above.

[Remainder of this page intentionally left blank]

This signed and notarized Affidavit of Truthfulness and Proper Submission is required for a complete submission.

AFFIDAVIT OF TRUTHFULNESS AND PROPER SUBMISSION

I, the undersigned, certify that:

1. I have read 958 CMR 7.00, Notices of Material Change and Cost and Market Impact Reviews.
2. I have read this Notice of Material Change and the information contained therein is accurate and true.
3. I have submitted the required copies of this Notice to the Health Policy Commission, the Office of the Attorney General, and the Center for Health Information and Analysis as required.

Signed on the 3 day of January, 20 18, under the pains and penalties of perjury.

Signature: _____

Name: Thomas A. Shields

Title: President

FORM MUST BE NOTARIZED IN THE SPACE PROVIDED BELOW:

ANDRIA MENDES
Notary Public
COMMONWEALTH OF MASSACHUSETTS
My Commission Expires
October 23, 2020

Andrie Mendes
Notary Signature

Copies of this application have been submitted electronically as follows:

Office of the Attorney General (1)

Center for Health Information and Analysis (1)

EXPLANATIONS AND DEFINITIONS

1.	Name	Legal business name as reported with Internal Revenue Service. This may be the parent organization or local Provider Organization name.
2.	Federal TAX ID #	9-digit federal tax identification number also known as an employer identification number (EIN) assigned by the internal revenue service.
	MA DPH Facility ID #	If applicable, Massachusetts Department of Public Health Facility Identification Number.
	National Provider Identification Number (NPI)	10-digit National Provider identification number issued by the Centers for Medicare and Medicaid Services (CMS). This element pertains to the organization or entity directly providing service.
3.	Business Address 1	Address location/site of applicant
4.	Business Address 2	Address location/site of applicant continued often used to capture suite number, etc.
5.	City, State, Zip Code	Indicate the City, State, and Zip Code for the Provider Organization as defined by the US Postal Service.
6.	Business Website	Business website URL
7.	Contact Last Name, First Name	Last name and first name of the primary administrator completing the registration form.
8.	Title:	Professional title of the administrator completing the registration form.
9.	Contact Telephone and Extension	10-digit telephone number and telephone extension (if applicable) for administrator completing the registration form
10.	Contact Email	Contact email for administrator
11.	Description of Organization	Provide a brief description of the notifying organization's ownership, governance, and operational structure, including but not limited to Provider type (acute Hospital, physician group, skilled nursing facilities, independent practice organization, etc.), number of licensed beds, ownership type (corporation, partnership, limited liability corporation, etc.), service lines and service area(s).
12.	Type of Material Change	Indicate the nature of the proposed Material Change. *Definitions of terms:* "Carrier", an insurer licensed or otherwise authorized to transact accident or health insurance under M.G.L. c. 175; a nonprofit Hospital service corporation organized under M.G.L. c. 176A; a nonprofit medical service corporation organized under M.G.L. c. 176B; a health maintenance organization organized under M.G.L. c. 176G; and an organization entering into a preferred provider arrangement under M.G.L. c. 176I; provided, that this shall not include an employer purchasing coverage or acting on behalf of its employees or the employees of one or more subsidiaries or affiliated corporations of the employer; provided that, unless otherwise noted, the term "Carrier" shall not include any entity to the extent it offers a policy, certificate or contract that provides coverage solely for dental care services or visions care services.

		"Hospital", any hospital licensed under section 51 of chapter 111, the teaching hospital of the University of Massachusetts Medical School and any psychiatric facility licensed under section 19 of chapter 19. "Net Patient Service Revenue", the total revenue received for patient care from any third party Payer net of any contractual adjustments. For Hospitals, Net Patient Service Revenue should be as reported to the Center under M.G.L. c. 12C, § 8. For other Providers or Provider Organizations, Net Patient Service Revenue shall include the total revenue received for patient care from any third Party payer net of any contractual adjustments, including: (1) prior year third party settlements; and (2) premium revenue, which means per-member-per-month amounts received from a third party Payer to provide comprehensive Health Care Services for that period, for all Providers represented by the Provider or Provider Organization in contracting with Carriers, for all Providers represented by the Provider or Provider Organization in contracting with third party Payers.. "Provider", any person, corporation, partnership, governmental unit, state institution or any other entity qualified under the laws of the Commonwealth to perform or provide Health Care Services. "Provider Organization", any corporation, partnership, business trust, association or organized group of persons, which is in the business of health care delivery or management, whether incorporated or not that represents one or more health care Providers in contracting with Carriers or third-party administrators for the payments of Heath Care Services; provided, that a Provider Organization shall include, but not be limited to, physician organizations, physician-hospital organizations, independent practice associations, Provider networks, accountable care organizations and any other organization that contracts with Carriers for payment for Health Care Services.
13.	Proposed Effective Date of the Proposed Material Change	Indicate the effective date of the proposed Material Change. NOTE: The effective date may not be fewer than 60 days from the date of the filing of the Notice.
14.	Description of the Proposed Material Change	Provide a brief narrative describing the nature and objectives of the proposed Material Change, including any exchange of funds between the parties (such as any arrangement in which one party agrees to furnish the other party with a discount, rebate, or any other type of refund or remuneration in exchange for, or in any way related to, the provision of Health Care Services). Include organizational charts and other supporting materials as necessary to illustrate the proposed change in ownership, governance, or operational structure.
15.	Impact of the Proposed Material Change	Provide a brief description of any analysis conducted by the notifying organization as to the anticipated impact of the proposed Material Change including, but not limited to, the following factors, as applicable: • Costs • Prices, including prices of the Provider or Provider Organization involved in the proposed Merger, Acquisition, affiliation or other proposed Material Change • Utilization • Health Status Adjusted Total Medical Expenses • Market Share • Referral Patterns • Payer Mix • Service Area(s) • Service Line(s) • Service Mix

16.	Future Planned Material Changes	Provide a brief description of the nature, scope and dates of any pending or planned Material Changes, occurring between the notifying organization and any other entity, within the 12 months following the date of the notice.
17.	Submission to Other State or Federal Agencies	Indicate the date and nature of any other applications, forms, notices or other materials provided to other state for federal agencies relative to the proposed Material Change, including but not limited to the Department of Public Health (e.g., Determination of Need Application, Notice of Intent to Acquire, Change in Licensure), Massachusetts Attorney General (e.g., notice pursuant to G.L. c. 180, §8A(c)), U.S. Department of Health and Human Services (e.g., Pioneer ACO or Medicare Shared Savings Program application) and Federal TradeCommission/Department of Justice (e.g., Notification and Report Form pursuant to 15 U.S.C. sec. 18a).

MASSACHUSETTS
HEALTH POLICY COMMISSION

NOTICE OF MATERIAL CHANGE FORM

Health Policy Commission
50 Milk Street, 8th Floor
Boston, MA 02109

551044

GENERAL INSTRUCTIONS

The attached form should be used by a Provider or Provider Organization to provide a Notice of Material Change ("Notice") to the Health Policy Commission ("Commission"), as required under M.G.L. c. 6D, § 13 and 958 CMR 7.00, Notices of Material Change and Cost and Market Impact Reviews. To complete the Notice, it is necessary to read and comply with 958 CMR 7.00, a copy of which may be obtained on the Commission's website at www.mass.gov/hpc. Capitalized terms in this Notice are defined in 958 CMR 7.02. Additional sub-regulatory guidance may be available on the Commission's website (e.g., Technical Bulletins, FAQs). For further assistance, please contact the Health Policy Commission at HPC-Notice@state.ma.us. This form is subject to statutory and regulatory changes that may take place from time to time.

REQUIREMENT TO FILE

This Notice must be submitted by any Provider or Provider Organization with $25 million or more in Net Patient Service Revenue in the preceding fiscal year that is proposing a Material Change, as defined in 958 CMR 7.02. Notice must be filed with the Commission not fewer than 60 days before the consummation or closing of the transaction (i.e., the proposed effective date of the proposed Material Change).

SUBMISSION OF NOTICE

One electronic copy of the Notice, in a portable document form (pdf), should be submitted to the following:

Health Policy Commission HPC-Notice@state.ma.us;

Office of the Attorney General HCD-6D-NOTICE@state.ma.us;

Center for Health Information and Analysis CHIA-Legal@state.ma.us

PRELIMINARY REVIEW AND NOTICE OF COST AND MARKET IMPACT REVIEW

If the Commission considers the Notice to be incomplete, or if the Commission requires clarification of any information to make its determination, the Commission may, within 30 days of receipt of the Notice, notify the Provider or Provider Organization of the information or clarification necessary to complete the Notice.

The Commission will inform each notifying Provider or Provider Organization of any determination to initiate a Cost and Market Impact Review within 30 days of its receipt of a completed Notice and all required information, or by a later date as may be set by mutual agreement of the Provider or Provider Organization and the Commission.

CONFIDENTIALITY

Information on this Notice form itself shall be a public record and will be posted on the Commission's website. Pursuant to 958 CMR 7.09, the Commission shall keep confidential all nonpublic information and documents obtained in connection with a Notice of Material Change and shall not disclose the information or documents to any person without the consent of the Provider or Payer that produced the information or documents, except in a Preliminary Report or Final Report of a Cost and Market Impact Review if the Commission believes that such disclosure should be made in the public interest after taking into account any privacy, trade secret or anti-competitive considerations. The confidential information and documents shall not be public records and shall be exempt from disclosure under M.G.L. c. 4, § 7 cl. 26 or M.G.L. c. 66, § 10.

NOTICE OF MATERIAL CHANGE

DATE OF NOTICE: January 3, 2018

1. Name: Hallmark Health System, Inc.

2.

Federal TAX ID #	MA DPH Facility ID #	NPI #
04-2767880	License # VKB3	1841290467

CONTACT INFORMATION

3. Business Address 1: 170 Governors Avenue
4. Business Address 2:
5. City: Medford State: MA Zip Code: 02155
6. Business Website: www.hallmarkhealth.org
7. Contact First Name: Charles Contact Last Name: Whipple
8. Title: Executive Vice President & Chief Legal Officer
9. Contact Phone: 781-979-3050 Extension:
10. Contact Email: CWhipple@hallmarkhealth.org

DESCRIPTION OF ORGANIZATION

11. *Briefly* describe your organization.

Hallmark Health System, Inc. ("HHS), which is a licensed hospital with two (2) campuses known as Melrose-Wakefield Hospital and Lawrence Memorial Hospital of Medford. In addition, HHS operates a number of satellite locations in its surrounding communities north of Boston.

TYPE OF MATERIAL CHANGE

12. Check the box that most accurately describes the proposed Material Change involving a Provider or Provider Organization:

- ☐ A Merger or affiliation with, or Acquisition of or by, a Carrier;
- ☐ A Merger with or Acquisition of or by a Hospital or a hospital system;
- ☐ Any other Acquisition, Merger, or affiliation (such as a Corporate Affiliation, Contracting Affiliation, or employment of Health Care Professionals) of, by, or with another Provider, Providers (such as multiple Health Care Professionals from the same Provider or Provider Organization), or Provider Organization that would result in an increase in annual Net Patient Service Revenue of the Provider or Provider Organization of ten million dollars or more, or in the Provider or Provider Organization having a near-majority of market share in a given service or region;
- ☐ Any Clinical Affiliation between two or more Providers or Provider Organizations that each had annual Net Patient Service Revenue of $25 million or more in the preceding fiscal year; provided that this shall not include a Clinical Affiliation solely for the purpose of collaborating on clinical trials or graduate medical education programs; and
- ☑ Any formation of a partnership, joint venture, accountable care organization, parent corporation, management services organization, or other organization created for administering contracts with Carriers or third-party administrators or current or future contracting on behalf of one or more Providers or Provider Organizations.

13. What is the proposed effective date of the proposed Material Change? Upon receipt of all regulatory approvals.

551044

MATERIAL CHANGE NARRATIVE

14. ***Briefly*** **describe the nature and objectives of the proposed Material Change, including any exchange of funds between the parties (such as any arrangement in which one party agrees to furnish the other party with a discount, rebate, or any other type of refund or remuneration in exchange for, or in any way related to, the provision of Health Care Services) and whether any changes in Health Care Services are anticipated in connection with the proposed Material Change:**

The proposed material change involves Hallmark Health Corporation ("Hallmark Health"), Tufts Medical Center Physician Organization ("Tufts MCPO") and Shields Health Care Group, Inc. (the "Parties") forming a joint venture to build and operate an ambulatory surgery center ("ASC") to be located at the Lawrence Memorial Hospital campus in Medford. The Parties seek to develop an ASC that will be cost effective and quality driven.

15. ***Briefly*** **describe the anticipated impact of the proposed Material Change, including but not limited to any anticipated impact on reimbursement rates, care referral patterns, access to needed services, and/or quality of care:**

The establishment of a freestanding ASC will allow the Parties to offer routine outpatient surgical care in a cost effective, freestanding setting. By expanding the availability of surgery services in the community, this ASC will provide improved access and convenience to patients in the area and will be treated by government payors as a freestanding site.

DEVELOPMENT OF THE MATERIAL CHANGE

16. **Describe any other Material Changes you anticipate making in the next 12 months:**

None anticipated at this point in time.

17. **Indicate the date and nature of any applications, forms, notices or other materials you have submitted regarding the proposed Material Change to any other state or federal agency:**

Hallmark Health will participate in making the required filings with the Department of Public Health.

Supplemental Materials

18. Submit the following materials, if applicable, under separate cover to HPC-Notice@state.ma.us.

The Health Policy Commission shall keep confidential all nonpublic information, as requested by the parties, in accordance with M.G.L. c. 6D, § 13(c), as amended by 2013 Mass. Acts, c. 38, § 20 (July 12, 2013).

a. Copies of all current agreement(s) (with accompanying appendices and exhibits) governing the proposed Material Change (e.g., definitive agreements, affiliation agreements);
b. A current organizational chart of your organization
c. Any analytic support for your responses to Questions 14 and 15 above.

[Remainder of this page intentionally left blank]

This signed and notarized Affidavit of Truthfulness and Proper Submission is required for a complete submission.

I, the undersigned, certify that:

1. I have read 958 CMR 7.00, Notices of Material Change and Cost and Market Impact Reviews.
2. I have read this Notice of Material Change and the information contained therein is accurate and true.
3. I have submitted the required copies of this Notice to the Health Policy Commission, the Office of the Attorney General, and the Center for Health Information and Analysis as required.

Signed on the 3rd day of January, 2018, under the pains and penalties of perjury.

Signature: Charles R. Whipple

Name: Charles R. Whipple

Title: Executive Vice President and Chief Legal Officer

FORM MUST BE NOTARIZED IN THE SPACE PROVIDED BELOW:

Kelley McCue
Notary Public
COMMONWEALTH OF MASSACHUSETTS
My Commission Expires
October 31, 2019

Kelley McCue
Notary Signature

Copies of this application have been submitted electronically as follows:

Office of the Attorney General (1)

Center for Health Information and Analysis (1)

EXPLANATIONS AND DEFINITIONS

1.	Name	Legal business name as reported with Internal Revenue Service. This may be the parent organization or local Provider Organization name.
2.	Federal TAX ID #	9-digit federal tax identification number also known as an employer identification number (EIN) assigned by the internal revenue service.
	MA DPH Facility ID #	If applicable, Massachusetts Department of Public Health Facility Identification Number.
	National Provider Identification Number (NPI)	10-digit National Provider identification number issued by the Centers for Medicare and Medicaid Services (CMS). This element pertains to the organization or entity directly providing service.
3.	Business Address 1	Address location/site of applicant
4.	Business Address 2	Address location/site of applicant continued often used to capture suite number, etc.
5.	City, State, Zip Code	Indicate the City, State, and Zip Code for the Provider Organization as defined by the US Postal Service.
6.	Business Website	Business website URL
7.	Contact Last Name, First Name	Last name and first name of the primary administrator completing the registration form.
8.	Title:	Professional title of the administrator completing the registration form.
9.	Contact Telephone and Extension	10-digit telephone number and telephone extension (if applicable) for administrator completing the registration form
10.	Contact Email	Contact email for administrator
11.	Description of Organization	Provide a brief description of the notifying organization's ownership, governance, and operational structure, including but not limited to Provider type (acute Hospital, physician group, skilled nursing facilities, independent practice organization, etc.), number of licensed beds, ownership type (corporation, partnership, limited liability corporation, etc.), service lines and service area(s).
12.	Type of Material Change	Indicate the nature of the proposed Material Change. *Definitions of terms:* "Carrier", an insurer licensed or otherwise authorized to transact accident or health insurance under M.G.L. c. 175; a nonprofit Hospital service corporation organized under M.G.L. c. 176A; a nonprofit medical service corporation organized under M.G.L. c. 176B; a health maintenance organization organized under M.G.L. c. 176G; and an organization entering into a preferred provider arrangement under M.G.L. c. 176I; provided, that this shall not include an employer purchasing coverage or acting on behalf of its employees or the employees of one or more subsidiaries or affiliated corporations of the employer; provided that, unless otherwise noted, the term "Carrier" shall not include any entity to the extent it offers a policy, certificate or contract that provides coverage solely for dental care services or visions care services.

		"Hospital", any hospital licensed under section 51 of chapter 111, the teaching hospital of the University of Massachusetts Medical School and any psychiatric facility licensed under section 19 of chapter 19. "Net Patient Service Revenue", the total revenue received for patient care from any third party Payer net of any contractual adjustments. For Hospitals, Net Patient Service Revenue should be as reported to the Center under M.G.L. c. 12C, § 8. For other Providers or Provider Organizations, Net Patient Service Revenue shall include the total revenue received for patient care from any third Party payer net of any contractual adjustments, including: (1) prior year third party settlements; and (2) premium revenue, which means per-member-per-month amounts received from a third party Payer to provide comprehensive Health Care Services for that period, for all Providers represented by the Provider or Provider Organization in contracting with Carriers, for all Providers represented by the Provider or Provider Organization in contracting with third party Payers.. "Provider", any person, corporation, partnership, governmental unit, state institution or any other entity qualified under the laws of the Commonwealth to perform or provide Health Care Services. "Provider Organization", any corporation, partnership, business trust, association or organized group of persons, which is in the business of health care delivery or management, whether incorporated or not that represents one or more health care Providers in contracting with Carriers or third-party administrators for the payments of Heath Care Services; provided, that a Provider Organization shall include, but not be limited to, physician organizations, physician-hospital organizations, independent practice associations, Provider networks, accountable care organizations and any other organization that contracts with Carriers for payment for Health Care Services.
13.	Proposed Effective Date of the Proposed Material Change	Indicate the effective date of the proposed Material Change. NOTE: The effective date may not be fewer than 60 days from the date of the filing of the Notice.
14.	Description of the Proposed Material Change	Provide a brief narrative describing the nature and objectives of the proposed Material Change, including any exchange of funds between the parties (such as any arrangement in which one party agrees to furnish the other party with a discount, rebate, or any other type of refund or remuneration in exchange for, or in any way related to, the provision of Health Care Services). Include organizational charts and other supporting materials as necessary to illustrate the proposed change in ownership, governance, or operational structure.
15.	Impact of the Proposed Material Change	Provide a brief description of any analysis conducted by the notifying organization as to the anticipated impact of the proposed Material Change including, but not limited to, the following factors, as applicable: • Costs • Prices, including prices of the Provider or Provider Organization involved in the proposed Merger, Acquisition, affiliation or other proposed Material Change • Utilization • Health Status Adjusted Total Medical Expenses • Market Share • Referral Patterns • Payer Mix • Service Area(s) • Service Line(s) • Service Mix

16.	Future Planned Material Changes	Provide a brief description of the nature, scope and dates of any pending or planned Material Changes, occurring between the notifying organization and any other entity, within the 12 months following the date of the notice.
17.	Submission to Other State or Federal Agencies	Indicate the date and nature of any other applications, forms, notices or other materials provided to other state for federal agencies relative to the proposed Material Change, including but not limited to the Department of Public Health (e.g., Determination of Need Application, Notice of Intent to Acquire, Change in Licensure), Massachusetts Attorney General (e.g., notice pursuant to G.L. c. 180, §8A(c)), U.S. Department of Health and Human Services (e.g., Pioneer ACO or Medicare Shared Savings Program application) and Federal TradeCommission/Department of Justice (e.g., Notification and Report Form pursuant to 15 U.S.C. sec. 18a).

MASSACHUSETTS
HEALTH POLICY COMMISSION

NOTICE OF MATERIAL CHANGE FORM

Health Policy Commission
50 Milk Street, 8th Floor
Boston, MA 02109

551509

GENERAL INSTRUCTIONS

The attached form should be used by a Provider or Provider Organization to provide a Notice of Material Change ("Notice") to the Health Policy Commission ("Commission"), as required under M.G.L. c. 6D, § 13 and 958 CMR 7.00, Notices of Material Change and Cost and Market Impact Reviews. To complete the Notice, it is necessary to read and comply with 958 CMR 7.00, a copy of which may be obtained on the Commission's website at www.mass.gov/hpc. Capitalized terms in this Notice are defined in 958 CMR 7.02. Additional sub-regulatory guidance may be available on the Commission's website (e.g., Technical Bulletins, FAQs). For further assistance, please contact the Health Policy Commission at HPC-Notice@state.ma.us. This form is subject to statutory and regulatory changes that may take place from time to time.

REQUIREMENT TO FILE

This Notice must be submitted by any Provider or Provider Organization with $25 million or more in Net Patient Service Revenue in the preceding fiscal year that is proposing a Material Change, as defined in 958 CMR 7.02. Notice must be filed with the Commission not fewer than 60 days before the consummation or closing of the transaction (i.e., the proposed effective date of the proposed Material Change).

SUBMISSION OF NOTICE

One electronic copy of the Notice, in a portable document form (pdf), should be submitted to the following:

Health Policy Commission HPC-Notice@state.ma.us;

Office of the Attorney General HCD-6D-NOTICE@state.ma.us;

Center for Health Information and Analysis CHIA-Legal@state.ma.us

PRELIMINARY REVIEW AND NOTICE OF COST AND MARKET IMPACT REVIEW

If the Commission considers the Notice to be incomplete, or if the Commission requires clarification of any information to make its determination, the Commission may, within 30 days of receipt of the Notice, notify the Provider or Provider Organization of the information or clarification necessary to complete the Notice.

The Commission will inform each notifying Provider or Provider Organization of any determination to initiate a Cost and Market Impact Review within 30 days of its receipt of a completed Notice and all required information, or by a later date as may be set by mutual agreement of the Provider or Provider Organization and the Commission.

CONFIDENTIALITY

Information on this Notice form itself shall be a public record and will be posted on the Commission's website. Pursuant to 958 CMR 7.09, the Commission shall keep confidential all nonpublic information and documents obtained in connection with a Notice of Material Change and shall not disclose the information or documents to any person without the consent of the Provider or Payer that produced the information or documents, except in a Preliminary Report or Final Report of a Cost and Market Impact Review if the Commission believes that such disclosure should be made in the public interest after taking into account any privacy, trade secret or anti-competitive considerations. The confidential information and documents shall not be public records and shall be exempt from disclosure under M.G.L. c. 4, § 7 cl. 26 or M.G.L. c. 66, § 10.

NOTICE OF MATERIAL CHANGE

DATE OF NOTICE: January ___, 2018

1. Name: Tufts Medical Center Physicians Organization, Inc.

2.

Federal TAX ID #	MA DPH Facility ID #	NPI #
04-3044706	N/A	N/A

CONTACT INFORMATION

3. Business Address 1: 800 Washington Street
4. Business Address 2:
5. City: Boston State: MA Zip Code: 02111
6. Business Website: www.tuftsmedicalcenter.org
7. Contact First Name: Daniel Contact Last Name: Morash
8. Title: Treasurer
9. Contact Phone: 617-636-5410 Extension:
10. Contact Email: dmorash@tuftsmedicalcenter.org

DESCRIPTION OF ORGANIZATION

11. *Briefly* describe your organization.

Tufts Medical Center Physicians Organization, Inc. ("Tufts MCPO") is Tufts Medical Center's academic physician organization.

TYPE OF MATERIAL CHANGE

12. Check the box that most accurately describes the proposed Material Change involving a Provider or Provider Organization:

- ☐ A Merger or affiliation with, or Acquisition of or by, a Carrier;
- ☐ A Merger with or Acquisition of or by a Hospital or a hospital system;
- ☐ Any other Acquisition, Merger, or affiliation (such as a Corporate Affiliation, Contracting Affiliation, or employment of Health Care Professionals) of, by, or with another Provider, Providers (such as multiple Health Care Professionals from the same Provider or Provider Organization), or Provider Organization that would result in an increase in annual Net Patient Service Revenue of the Provider or Provider Organization of ten million dollars or more, or in the Provider or Provider Organization having a near-majority of market share in a given service or region;
- ☐ Any Clinical Affiliation between two or more Providers or Provider Organizations that each had annual Net Patient Service Revenue of $25 million or more in the preceding fiscal year; provided that this shall not include a Clinical Affiliation solely for the purpose of collaborating on clinical trials or graduate medical education programs; and
- ☑ Any formation of a partnership, joint venture, accountable care organization, parent corporation, management services organization, or other organization created for administering contracts with Carriers or third-party administrators or current or future contracting on behalf of one or more Providers or Provider Organizations.

13. What is the proposed effective date of the proposed Material Change? Upon receipt of all regulatory approvals.

Material Change Narrative

14. *Briefly* describe the nature and objectives of the proposed Material Change, including any exchange of funds between the parties (such as any arrangement in which one party agrees to furnish the other party with a discount, rebate, or any other type of refund or remuneration in exchange for, or in any way related to, the provision of Health Care Services) and whether any changes in Health Care Services are anticipated in connection with the proposed Material Change:

The proposed material change involves Hallmark Health Corporation ("Hallmark Health"), Tufts MCPO and Shields Health Care Group, Inc. (the "Parties") forming a joint venture to build and operate an ambulatory surgery center ("ASC") to be located at the Lawrence Memorial Hospital campus in Medford. The Parties seek to develop an ASC that will be cost effective and quality driven.

15. *Briefly* describe the anticipated impact of the proposed Material Change, including but not limited to any anticipated impact on reimbursement rates, care referral patterns, access to needed services, and/or quality of care:

The establishment of a freestanding ASC will allow the Parties to offer routine outpatient surgical care in a cost effective, freestanding setting. By expanding the availability of surgery services in the community, this ASC will provide improved access and convenience to patients in the area and will be treated by government payors as a freestanding site.

Development of the Material Change

16. Describe any other Material Changes you anticipate making in the next 12 months:

A related party to Tufts MCPO does anticipate filing an imaging related material change in the near future.

17. Indicate the date and nature of any applications, forms, notices or other materials you have submitted regarding the proposed Material Change to any other state or federal agency:

Tufts MCPO will participate in making the required filings with the Department of Public Health.

SUPPLEMENTAL MATERIALS

18. Submit the following materials, if applicable, under separate cover to HPC-Notice@state.ma.us.

The Health Policy Commission shall keep confidential all nonpublic information, as requested by the parties, in accordance with M.G.L. c. 6D, § 13(c), as amended by 2013 Mass. Acts, c. 38, § 20 (July 12, 2013).

a. Copies of all current agreement(s) (with accompanying appendices and exhibits) governing the proposed Material Change (e.g., definitive agreements, affiliation agreements);.
b. A current organizational chart of your organization
c. Any analytic support for your responses to Questions 14 and 15 above.

[Remainder of this page intentionally left blank]

This signed and notarized Affidavit of Truthfulness and Proper Submission is required for a complete submission.

AFFIDAVIT OF TRUTHFULNESS AND PROPER SUBMISSION

I, the undersigned, certify that:

1. I have read 958 CMR 7.00, Notices of Material Change and Cost and Market Impact Reviews.
2. I have read this Notice of Material Change and the information contained therein is accurate and true.
3. I have submitted the required copies of this Notice to the Health Policy Commission, the Office of the Attorney General, and the Center for Health Information and Analysis as required.

Signed on the 5 day of January, 20 18, under the pains and penalties of perjury.

Signature: _____

Name: Daniel Morash

Title: VP and Chief Financial Officer

FORM MUST BE NOTARIZED IN THE SPACE PROVIDED BELOW:

RAYMOND P. ANDERSON
NOTARY PUBLIC
Commonwealth of Massachusetts
My Commission Expires
January 18, 2024

Raymond P. Anderson
Notary Signature

Copies of this application have been submitted electronically as follows:

Office of the Attorney General (1)

Center for Health Information and Analysis (1)

EXPLANATIONS AND DEFINITIONS

1.	Name	Legal business name as reported with Internal Revenue Service. This may be the parent organization or local Provider Organization name.
2.	Federal TAX ID #	9-digit federal tax identification number also known as an employer identification number (EIN) assigned by the internal revenue service.
	MA DPH Facility ID #	If applicable, Massachusetts Department of Public Health Facility Identification Number.
	National Provider Identification Number (NPI)	10-digit National Provider identification number issued by the Centers for Medicare and Medicaid Services (CMS). This element pertains to the organization or entity directly providing service.
3.	Business Address 1	Address location/site of applicant
4.	Business Address 2	Address location/site of applicant continued often used to capture suite number, etc.
5.	City, State, Zip Code	Indicate the City, State, and Zip Code for the Provider Organization as defined by the US Postal Service.
6.	Business Website	Business website URL
7.	Contact Last Name, First Name	Last name and first name of the primary administrator completing the registration form.
8.	Title:	Professional title of the administrator completing the registration form.
9.	Contact Telephone and Extension	10-digit telephone number and telephone extension (if applicable) for administrator completing the registration form
10.	Contact Email	Contact email for administrator
11.	Description of Organization	Provide a brief description of the notifying organization's ownership, governance, and operational structure, including but not limited to Provider type (acute Hospital, physician group, skilled nursing facilities, independent practice organization, etc.), number of licensed beds, ownership type (corporation, partnership, limited liability corporation, etc.), service lines and service area(s).
12.	Type of Material Change	Indicate the nature of the proposed Material Change. *Definitions of terms:* "Carrier", an insurer licensed or otherwise authorized to transact accident or health insurance under M.G.L. c. 175; a nonprofit Hospital service corporation organized under M.G.L. c. 176A; a nonprofit medical service corporation organized under M.G.L. c. 176B; a health maintenance organization organized under M.G.L. c. 176G; and an organization entering into a preferred provider arrangement under M.G.L. c. 176I; provided, that this shall not include an employer purchasing coverage or acting on behalf of its employees or the employees of one or more subsidiaries or affiliated corporations of the employer; provided that, unless otherwise noted, the term "Carrier" shall not include any entity to the extent it offers a policy, certificate or contract that provides coverage solely for dental care services or visions care services.

		"Hospital", any hospital licensed under section 51 of chapter 111, the teaching hospital of the University of Massachusetts Medical School and any psychiatric facility licensed under section 19 of chapter 19. "Net Patient Service Revenue", the total revenue received for patient care from any third party Payer net of any contractual adjustments. For Hospitals, Net Patient Service Revenue should be as reported to the Center under M.G.L. c. 12C, § 8. For other Providers or Provider Organizations, Net Patient Service Revenue shall include the total revenue received for patient care from any third Party payer net of any contractual adjustments, including: (1) prior year third party settlements; and (2) premium revenue, which means per-member-per-month amounts received from a third party Payer to provide comprehensive Health Care Services for that period, for all Providers represented by the Provider or Provider Organization in contracting with Carriers, for all Providers represented by the Provider or Provider Organization in contracting with third party Payers.. "Provider", any person, corporation, partnership, governmental unit, state institution or any other entity qualified under the laws of the Commonwealth to perform or provide Health Care Services. "Provider Organization", any corporation, partnership, business trust, association or organized group of persons, which is in the business of health care delivery or management, whether incorporated or not that represents one or more health care Providers in contracting with Carriers or third-party administrators for the payments of Heath Care Services; provided, that a Provider Organization shall include, but not be limited to, physician organizations, physician-hospital organizations, independent practice associations, Provider networks, accountable care organizations and any other organization that contracts with Carriers for payment for Health Care Services.
13.	Proposed Effective Date of the Proposed Material Change	Indicate the effective date of the proposed Material Change. NOTE: The effective date may not be fewer than 60 days from the date of the filing of the Notice.
14.	Description of the Proposed Material Change	Provide a brief narrative describing the nature and objectives of the proposed Material Change, including any exchange of funds between the parties (such as any arrangement in which one party agrees to furnish the other party with a discount, rebate, or any other type of refund or remuneration in exchange for, or in any way related to, the provision of Health Care Services). Include organizational charts and other supporting materials as necessary to illustrate the proposed change in ownership, governance, or operational structure.
15.	Impact of the Proposed Material Change	Provide a brief description of any analysis conducted by the notifying organization as to the anticipated impact of the proposed Material Change including, but not limited to, the following factors, as applicable: • Costs • Prices, including prices of the Provider or Provider Organization involved in the proposed Merger, Acquisition, affiliation or other proposed Material Change • Utilization • Health Status Adjusted Total Medical Expenses • Market Share • Referral Patterns • Payer Mix • Service Area(s) • Service Line(s) • Service Mix

16.	Future Planned Material Changes	Provide a brief description of the nature, scope and dates of any pending or planned Material Changes, occurring between the notifying organization and any other entity, within the 12 months following the date of the notice.
17.	Submission to Other State or Federal Agencies	Indicate the date and nature of any other applications, forms, notices or other materials provided to other state for federal agencies relative to the proposed Material Change, including but not limited to the Department of Public Health (e.g., Determination of Need Application, Notice of Intent to Acquire, Change in Licensure), Massachusetts Attorney General (e.g., notice pursuant to G.L. c. 180, §8A(c)), U.S. Department of Health and Human Services (e.g., Pioneer ACO or Medicare Shared Savings Program application) and Federal TradeCommission/Department of Justice (e.g., Notification and Report Form pursuant to 15 U.S.C. sec. 18a).

Attachment/Exhibit

9

The Commonwealth of Massachusetts
William Francis Galvin

Minimum Fee: $500.00

Secretary of the Commonwealth, Corporations Division
One Ashburton Place, 17th floor
Boston, MA 02108-1512
Telephone: (617) 727-9640

Special Filing Instructions

Certificate of Organization
(General Laws, Chapter)

Identification Number: 001322852

1. The exact name of the limited liability company is: MEDFORD SURGERY CENTER, LLC

2a. Location of its principal office:
No. and Street: 700 CONGRESS STREET - SUITE 204
City or Town: QUINCY State: MA Zip: 02169 Country: USA

2b. Street address of the office in the Commonwealth at which the records will be maintained:
No. and Street: 700 CONGRESS STREET - SUITE 204
City or Town: QUINCY State: MA Zip: 02169 Country: USA

3. The general character of business, and if the limited liability company is organized to render professional service, the service to be rendered:
TO ENGAGE IN ANY OR ALL LAWFUL ACTIVITIES FOR WHICH LIMITED LIABILITY COMPANIES MAY BE ORGANIZED UNDER THE MASSACHUSETTS LIMITED LIABILITY COMPANY ACT, INCLUDING BUT NOT LIMITED TO THE ACQUISITION, OWNERSHIP, DEVELOPMENT, AND MANAGEMENT OF MEDICAL FACILITIES.

4. The latest date of dissolution, if specified:

5. Name and address of the Resident Agent:
Name: SHIELDS HEALTH CARE GROUP, INC.
No. and Street: 700 CONGRESS STREET - SUITE 204
City or Town: QUINCY State: MA Zip: 02169 Country: USA

I, SHIELDS HEALTH CARE GROUP INC. BY THOMAS SHIELDS, PRES resident agent of the above limited liability company, consent to my appointment as the resident agent of the above limited liability company pursuant to G. L. Chapter 156C Section 12.

6. The name and business address of each manager, if any:

Title	Individual Name First, Middle, Last, Suffix	Address (no PO Box) Address, City or Town, State, Zip Code
MANAGER	THOMAS A. SHIELDS	700 CONGRESS STREET - SUITE 204 QUINCY, MA 02169 USA
MANAGER	PETER FERRARI	700 CONGRESS STREET - SUITE 204 QUINCY, MA 02169 USA

7. The name and business address of the person(s) in addition to the manager(s), authorized to execute documents to be filed with the Corporations Division, and at least one person shall be named if there are no

managers.

Title	Individual Name First, Middle, Last, Suffix	Address (no PO Box) Address, City or Town, State, Zip Code
SOC SIGNATORY	CARMEL A. SHIELDS	700 CONGRESS STREET - SUITE 204 QUINCY, MA 02169 USA
SOC SIGNATORY	JEFFREY RONNER	700 CONGRESS STREET - SUITE 204 QUINCY, MA 02169 USA

8. The name and business address of the person(s) authorized to execute, acknowledge, deliver and record any recordable instrument purporting to affect an interest in real property:

Title	Individual Name First, Middle, Last, Suffix	Address (no PO Box) Address, City or Town, State, Zip Code

9. Additional matters:

THE LIMITED LIABILITY COMPANY SHALL NOT ENGAGE IN ANY ACTIVITY WHICH CONSTI TUTES THE PRACTICE OF MEDICINE REQUIRING REGISTRATION WITH THE MASSACHUSETT S BOARD OF REGISTRATION IN MEDICINE.

SIGNED UNDER THE PENALTIES OF PERJURY, this 13 Day of April, 2018,

THOMAS A. SHIELDS

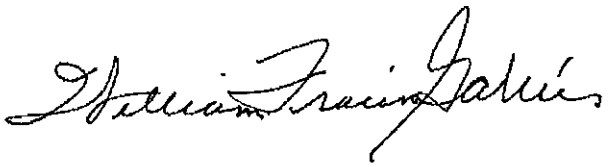
(The certificate must be signed by the person forming the LLC.)

MA SOC Filing Number: 201802096770 Date: 4/13/2018 3:23:00 PM

THE COMMONWEALTH OF MASSACHUSETTS

I hereby certify that, upon examination of this document, duly submitted to me, it appears that the provisions of the General Laws relative to corporations have been complied with, and I hereby approve said articles; and the filing fee having been paid, said articles are deemed to have been filed with me on:

April 13, 2018 03:23 PM



WILLIAM FRANCIS GALVIN

Secretary of the Commonwealth

Attachment/Exhibit

10

Massachusetts Department of Public Health
Determination of Need
Affidavit of Truthfulness and Compliance with Law and Disclosure Form 100.405(B)

Version: 7-6-17

Instructions: Complete Information below. When complete check the box "This document is ready to print:". This will date stamp and lock the form. Print Form. Each person must sign and date the form. When all signatures have been collected, scan the document and e-mail to: **dph.don@state.ma.us** Include all attachments as requested.

Application Number: 18060613-AS

Original Application Date: 6/11/2018

Applicant Name: Medford Surgery Center, LLC

Application Type: Ambulatory Surgery

Applicant's Business Type: ○ Corporation ○ Limited Partnership ○ Partnership ○ Trust ◉ LLC ○ Other

Is the Applicant the sole member or sole shareholder of the Health Facility(ies) that are the subject of this Application? ◉ Yes ○ No

The undersigned certifies under the pains and penalties of perjury:

1. The Applicant is the sole corporate member or sole shareholder of the Health Facility[ies] that are the subject of this Application;
2. I have *~~read~~ been informed of the contents of 105 CMR 100.000, the Massachusetts Determination of Need Regulation;
3. I understand and agree to the expected and appropriate conduct of the Applicant pursuant to 105 CMR 100.800;
4. I have *~~read~~ this application for Determination of Need including all exhibits and attachments, and **~~certify that~~ have been informed that all of the information contained herein is accurate and true;
5. I have submitted the correct Filing Fee and understand it is nonrefundable pursuant to 105 CMR 100.405(B);
6. I have submitted the required copies of this application to the Determination of Need Program, and, as applicable, to all Parties of Record and other parties as required pursuant to 105 CMR 100.405(B);
7. I have caused, as required, notices of intent to be published and duplicate copies to be submitted to all Parties of Record, and all carriers or third-party administrators, public and commercial, for the payment of health care services with which the Applicant contracts, and with Medicare and Medicaid, as required by 105 CMR 100.405(C), et seq.;
8. I **~~have caused~~ will be made if applicable proper notification and submissions to the Secretary of Environmental Affairs pursuant to 105 CMR 100.405(E) and 301 CMR 11.00;
9. If subject to M.G.L. c. 6D, § 13 and 958 CMR 7.00, I have submitted such Notice of Material Change to the HPC - in accordance with 105 CMR 100.405(G);
10. Pursuant to 105 CMR 100.210(A)(3), I certify that both the Applicant and the Proposed Project are in material and substantial compliance and good standing with relevant federal, state, and local laws and regulations, as well as with all ~~previously issued~~ Notices of Determination of Need ***~~and the terms and Conditions attached therein~~;
11. I have *~~read~~ been informed of and understand the limitations on solicitation of funding from the general public prior to receiving a Notice of Determination of Need as established in 105 CMR 100.415;
12. I understand that, if Approved, the Applicant, as Holder of the DoN, shall become obligated to all Standard Conditions pursuant to 105 CMR 100.310, as well as any applicable Other Conditions as outlined within 105 CMR 100.000 or that otherwise become a part of the Final Action pursuant to 105 CMR 100.360;
13. Pursuant to 105 CMR 100.705(A), I certify that the Applicant has Sufficient Interest in the Site or facility; and
14. Pursuant to 105 CMR 100.705(A), I certify that the Proposed Project is authorized under applicable zoning by-laws or ordinances, whether or not a special permit is required; or,
    a. If the Proposed Project is not authorized under applicable zoning by-laws or ordinances, a variance has been received to permit such Proposed Project; or,
    b. The Proposed Project is exempt from zoning by-laws or ordinances.

LLC

All parties must sign. Add additional names as needed.

Name:	Signature:	Date
THOMAS A. SHIELDS		6/6/18

This document is ready to print: ☒ Date/time Stamp: 06/05/2018 5:40 pm

*been informed of the contents of
**have been informed that
***issued in compliance with 105 CMR 100.00, the Massachusetts Determination of Need Regulation effective January 27, 2017