

COMMUNITY BENEFITS REPORT

FISCAL YEAR 2018

Beth Israel Lahey Health 
Lahey Hospital & Medical Center

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Massachusetts Attorney General's Community Benefits Guidelines

The Attorney General's Community Benefits Guidelines for Nonprofit Acute-Care Hospitals and The Attorney General's Community Benefits Guidelines for Health Maintenance Organizations (HMOs) include an outline of voluntary principles that encourage Massachusetts hospitals and HMOs to continue to build on their commitment to addressing health and social needs within their communities.

The Guidelines represent a unique, nonregulatory approach that calls on hospitals and HMOs to identify and respond to the unmet needs of the communities they serve by formalizing their approaches to community benefits planning, collaborating with community representatives to identify and create programs that address those needs, and issuing annual reports on their efforts. The Guidelines do not dictate the types of community benefits programs that hospitals and HMOs should provide. They do, however, suggest that hospitals and HMOs tap into their own and their communities' particular resources and areas of expertise to target and meet the needs of medically underserved populations.

The Community Benefits Guidelines for hospitals and HMOs are the result of an extensive process of consultation and partnership between the Attorney General and representatives of the hospital and HMO industries, respectively, and community advocacy groups. These discussions took place at a time of ongoing debate in Massachusetts and around the nation as to whether nonprofit, tax-exempt hospitals were fulfilling their charitable missions. Several Massachusetts hospitals had, on their own initiative, adopted model community benefits guidelines developed by national hospital associations, and the Massachusetts Hospital Association was considering a long-term initiative to produce voluntary guidelines of its own.

The resulting Community Benefits Guidelines were the first of their kind to be issued by an Attorney General. The hospital Guidelines were modeled after community benefits guidelines developed by the Kellogg Foundation, the Catholic Hospital Association, the Voluntary Hospital Association and community benefits legislation in several other states. The HMO Guidelines are similar to the hospital Guidelines and were prompted by recognition of the increased role that HMOs were playing in the health care system.

Source: Excerpt taken from the official website of the Attorney General of Massachusetts. For full guidelines, please go to <https://www.mass.gov/nonprofit-hospital-and-hmo-community-benefits>.

Lahey Hospital & Medical Center's Community Benefits Mission Statement

Lahey Hospital & Medical Center (LHMC) is committed to benefiting the communities we serve by collaborating with community partners to identify health needs, improve the health status of community residents, address health disparities, and educate community members about prevention and self-care.

Lahey Hospital & Medical Center's Community Benefits Plan

LHMC affirms its commitment to identifying and serving the health and wellness needs of its community through a Community Benefits Program. The foundation of this program is a collaborative initiative between LHMC colleagues, community leaders, representatives of community agencies and community residents. Through collaborative planning and coalition building, LHMC serves as a catalyst and a community leader striving to improve the health status of community members.

Community Benefits Advisory Committee — 2018

Name	Organization
Andy Villanueva, Chief Quality Officer	Lahey Hospital & Medical Center
Stathis Antoniades, Chief Operating Officer	Lahey Hospital & Medical Center
Stephen Demers, Senior Vice President for Ambulatory and Clinical Services	Lahey Hospital & Medical Center
Peter Kilcommons, Corporate Controller	Lahey Health
Lisa Neveling, Vice President of Business Development	Lahey Health
Linda McGoldrick	Lahey Hospital & Medical Center Board of Trustees
Kelly Magee Wright	Minuteman Senior Services
Randi Epstein	Community Health Network Area 15
Bruce MacDonald, Executive Director	Metro North YMCA
Eric Conti, President	Middlesex League; Burlington Schools Superintendent
Michael Bonfanti	JB Thomas Lahey Foundation
Christine Healey, Director of Community Relations	Lahey Health
Michelle Snyder, Community Relations Regional Manager	Lahey Health

Key Accomplishments for Fiscal Year 2018

LHMC strengthened its relationship with key partners this year, allowing us to improve the health of those in need. Highlights include the following:

- LHMC continued our successful partnership with Minuteman Senior Services to provide a Serving Health Information Needs of Everyone (SHINE) counselor at the Burlington, Arlington, and Winchester Councils on Aging. This year we were able to serve 700 people through the program in the community, which was an 11% increase over FY17, and 85 people were served by a counselor on-site at the LHMC campus or the Winchester Cancer Center, which was a 21% increase over FY17.
- LHMC expanded our Senior Farmers Market partnership with New Entry Sustainable Farming Project's Community Supported Agriculture (CSA) program to enable 50 seniors in Burlington, 70 seniors in Arlington and now 70 seniors in Billerica to receive free fresh fruits and vegetables once a week for 20 weeks. In FY18, over 30,000 pounds of produce was distributed across all locations.
- LHMC partnered with the North Suburban YMCA and the Burlington and Arlington Council on Aging to offer a free low-impact aerobics class for 24 seniors once a week year-round.
- LHMC allocated \$60,000 in mini-grant funding to local community health, social service, and municipal partners to address health disparities identified in the LHMC Community Health Needs Assessment (CHNA).
- LHMC provided Stop the Bleed trainings to first responders, community members and health care workers. In FY18, LHMC trained 919 community members throughout our community benefits service area at over 30 separate events.
- LHMC provided over 100 hours of clinic time at our free weekly blood pressure clinics at the Burlington Mall.
- LHMC provided a medication disposal box on-site at our pharmacy for use by community residents and collected and disposed of over 470 pounds of unwanted and unused medications.
- LHMC provided breast cancer risk assessments for over 25,000 people to identify those at high risk for the disease.
- LHMC provided funding to support a mobile market in Lowell that increased access to fresh fruits and vegetables for over 1,400 low-income seniors.
- LHMC partnered with the Burlington Recreation Department to provide funding for an outdoor fitness facility for community residents.

- In FY18, LHMC funded a \$25,000 grant to support The Bedford DASH. The Bedford DASH was able to provide more than 2,700 rides to community residents over the course of a year.
- LHMC partnered with the Burbank YMCA in Reading and the North Suburban YMCA in Woburn to provide five sessions of the LIVESTRONG program for cancer survivors. Over 70 people were able to benefit from the classes.
- In FY18, LHMC partnered with the Housing Corporation of Arlington (HCA) to provide a \$30,000 grant to support the addition of a social worker to its team to support its Homelessness Prevention Program (HPP).

Fiscal Year 2018 Community Partners

Burlington Council on Aging	Community Health Network Area 13/14
Arlington Council on Aging	Saheli
Billerica Council on Aging	American Cancer Society
Burlington Youth Soccer Association	Middlesex District Attorney's Office
Minuteman Senior Services	Burlington Rotary Club
Burlington Youth and Family Services	Dementia Friendly Billerica
Arlington Housing Corporation	Peabody Little League
Town of Bedford	Torigian YMCA
Mill City Grows	North Suburban YMCA
Greater Lowell Chamber of Commerce	Burbank YMCA
Community Health Network Area 15	New Entry Sustainable Farming Project
Burlington Public School District	Peabody Fire Department
Burlington Food Pantry	Burlington High School
Woburn Food Pantry	Burlington Adopt-A-Class Program
Middlesex District Attorney's Office	Burlington Emergency Medical Services
Wilmington High School	Billerica High School
Peabody Health Department	Burlington Police Department
Peabody Council on Aging	

Plans for Reporting — Fiscal Year 2019

In FY19, LHMC will continue to work with community partners and hospital leaders to address the needs identified in the 2019 CHNA (currently in development) while taking into consideration the Statewide Priority Needs identified by the Executive Office of Health and Human Services and the Department of Public Health Priorities, which include an increased focus on social determinants of health.

Statewide Focus Areas:

Chronic Disease (Cancer, Heart Disease, Diabetes)

Housing Stability/Homelessness

Mental Illness and Mental Health

Substance Use Disorders

Department of Public Health Priorities: Social Determinants of Health

Built Environment

Social Environment

Housing

Violence

Education

Employment

Community Health Needs Assessment Overview

In FY16, LHMC, in conjunction with all four hospitals in the Lahey Health System, completed the required triannual Community Health Needs Assessment., the purpose of which is to inform and guide the hospital's selection of and commitment to programs and initiatives that address the health needs of the communities it serves. The assessment was conducted in partnership with John Snow Inc., a public health management consulting and research organization.

LHMC Community Benefits Service Area

LHMC serves individuals who come from throughout the United States and from nations around the world. With respect to community benefits, LHMC focuses its efforts more narrowly on the communities in its primary, local service area. More specifically, LHMC's community benefits investments are focused on expanding access, addressing barriers to care and improving the health status of residents living in the following 13, mostly contiguous, municipalities located in Middlesex and Essex counties: Arlington, Bedford, Billerica, Burlington, Lexington, Peabody, Reading, Stoneham, Tewksbury, Wakefield, Wilmington, Winchester and Woburn. LHMC also serves patients from Lowell and Haverhill due to long-standing program affiliations in these cities/towns, and as a result has collected health status information from these communities. However, because these communities are included in other hospitals' community benefits service areas, they have not been included in LHMC's Community Health Improvement Plan (CHIP).

Methodology

The CHNA was conducted in three phases, allowing LHMC to:

- Compile an extensive amount of quantitative and qualitative data
- Engage and involve key internal and external stakeholders
- Develop a report and a detailed CHIP
- Comply with all state and federal community benefits tax requirements

Data Collection

Data sources included a broad array of publicly available secondary data, key informant interviews, community forums and the 2015 LHMC Community Health Survey, which captured information from hundreds of random households in LHMC's primary service area.

Quantitative Data Sources

- Massachusetts Community Health Information Profile (MassCHIP)
- U.S. Census Bureau, American Community Survey 5-Year Estimates (2009-2013)
- Behavioral Risk Factor Surveillance System (BRFSS) (2012-2013 aggregate)
- CHIA Inpatient Discharges
- Massachusetts Health Data Consortium (MHDC) Emergency Department (ED) Visits
- Massachusetts Hospital Inpatient Discharges (2008-2012)

- Massachusetts Cancer Registry (2007-2011)
- Massachusetts Communicable Disease Program (2011-2013)
- Massachusetts Hospital ED Discharges (2008-2012)
- Massachusetts Vital Records (2008-2012)
- Massachusetts Bureau of Substance Abuse Services (BSAS) (2013)
- Massachusetts Board of Health

Qualitative Data Sources: With respect to qualitative data, information gathered through interviews and community forums engaging service providers, health department officials, other community stakeholders and/or community residents provided invaluable insights on major health-related issues, barriers to care, service gaps and at-risk target populations. Overall, nearly 100 people were involved through our interviews, community forums and strategic planning sessions. This is a considerable achievement but is still a relatively small sample, compared with the size of the resident and service provider populations overall. While every effort was made to advertise the community forums and to select a broadly representative group of stakeholders to interview, the selection or inclusion process was not random. In addition, the community forums did not exclude participants if they did not live in the particular region where the meeting was held, so feedback by meeting location does not necessarily reflect the needs or interests of the area in which the meeting was held.

Priority Target Populations

LHMC focuses its activities to meet the needs of all segments of the population with respect to age, race, ethnicity, income, gender identity and sexual orientation to ensure that all residents have the opportunity to live healthy lives. However, based on the assessment's quantitative and qualitative findings, there was broad agreement that LHMC's CHIP should target low-income populations (low-income individuals/families, older adults on fixed incomes, and homeless), older adult populations (frail, isolated older adults), youths/adolescents (13-to-18-year-olds, those in middle school and high school) and other vulnerable populations (diverse racial/ethnic minorities and linguistically isolated populations) that are more likely than other cohorts to face disparities in access and health outcomes.

Community Health Priorities

The LHMC CHNA's approach and process provided ample opportunity to vet the quantitative and qualitative data compiled during the assessment. LHMC has framed the community health needs in three priority areas, which together encompass the broad range of health issues and social determinants of health facing LHMC's community benefits service area. These areas are (1) Wellness, Prevention and Chronic Disease Management; (2) Elder Health; and (3) Behavioral Health (mental health and substance use). LHMC already has a robust CHIP that addresses all the issues identified. However, this most recent CHNA has provided new guidance and invaluable insight on quantitative trends and community perceptions that can be used to inform and refine LHMC's efforts. The core elements of LHMC's updated CHIP are described below.

Fiscal Year 2018 Community Benefits Programs

Health Priority Area #1-Wellness, Prevention and Chronic Disease Management

Lowell Mobile Market Program

Description: In FY18, LHMC provided a grant to Mill City Grows to help increase food access and nutrition education for low-income older adults in Lowell. Over the course of this program, there were 11 weekly Mobile Market stops from May to November and two stops through the winter months at various sites that serve older adults. The Mobile Market would visit each site for a two-to-four-hour time slot, and offer a host of locally grown produce items, both from Mill City Grows' Urban Farms and from other small, local farms in our region.

Operational Goals:

- Ensure Mobile Market has 10 weekly stops with at least two stops in high senior population area.
- Surpass 8,500 Mobile Market transactions (1,500 higher than our 2017 goal).
- Conduct three or more outreach events.
- Conduct surveys with senior-serving organizations.
- Host a cooking class for seniors.
- Distribute \$2,400 in vegetables through incentives, matches and discounts.

Outcome Goals:

- Increase access to fresh produce for 1,400 low-income seniors.
- Increase nutrition education and build healthy eating habits for 200+ low-income seniors.

Results:

- Offered four regular senior-focused mobile market stops at the Lowell Senior Center (weekly), D'Youville Life and Wellness Center (weekly), Summit Elder Care (occasional) and Element Care (monthly).
- Overall Mobile Market transactions were 8,980 for the year.
- Conducted healthy eating demos, and expanded recipe cards for customers, including recipes that feature bone-boosting and vision-boosting foods.
- Provided \$5 vouchers as an incentive to customers.
- Provided \$6,976.87 in incentives to seniors through the grant period.
- Over 1,400 seniors used Senior Farmers Market Coupons at our Mobile Market, meaning that over 1,400 seniors increased their access to fresh, local food through our program.
- Through gardening classes and rooftop garden installation at Element Care, increased food education (both one-time and ongoing) to over 250 seniors in Lowell.

Partners: Lowell Community Health Center, UTEC Inc., International Institute of New England, Mill No. 5, Gaining Ground, Whole Foods, Lowell Public Schools

Hemorrhage-Control Trainings

Description: As a Level II Trauma Center, LHMC is committed to trauma prevention and educating our service area on preventable causes of death. According to the World Health Organization, uncontrolled post-traumatic bleeding is the leading cause of potentially preventable death among trauma patients and an important issue for us to address in our primary service area and beyond. To that end, LHMC joined the Department of Homeland Security's Stop the Bleed program and started to educate local law enforcement and first responders on how to apply tourniquets. Instructors provide hands-on teaching to non-health care workers on the various ways to control bleeding, whether using only their hands or a full trauma first aid kit.

The Stop the Bleed program began after the mass casualty event at Sandy Hook Elementary School, when the Joint Committee to Create a National Policy to Enhance Survivability from Mass Casualty Shooting Events was convened by the American College of Surgeons.

The group reviewed the Sandy Hook autopsies and realized that a large majority of the casualties died from hemorrhaging that could have been prevented. They came up with recommendations based on the premise that massive bleeding from any cause, but particularly from an active shooter or explosive event where a response is delayed, can result in death within 5 to 10 minutes. Similar to how the general public learns and performs CPR, the public must learn proper bleeding-control techniques, including how to use their hands, dressings and tourniquets.

Goal: Teach hemorrhage-control techniques to immediate responders to use in a mass casualty or active shooter event.

Result: In FY18, LHMC trained 919 community members throughout our community benefits service area at over 30 separate events.

Partners: Billerica High School, Woburn Medical Reserve Corps, Burlington Chamber of Commerce, Burlington Public Schools

Fall and Injury Prevention Classes

Description: According to the American Orthopaedic Association, fragility fractures have become nearly epidemic in the United States among older adults, with over 2 million fractures occurring each year — more than the total of heart attacks, strokes and breast cancer combined. Moreover, at least 44 million Americans are affected by osteoporosis or low bone density. Due to an aging population, the number of Americans with osteoporosis or low bone density is expected to increase significantly. Nearly half of all women and more than a quarter of all men will suffer fragility fractures in their lifetime.

In order to combat this growing crisis, LHMC is committed to injury prevention through our Bone Health & Osteoporosis Program and our fall prevention classes. In FY18, LHMC hosted five sessions as part of our Bone

Health Lecture Series and four eight-week sessions of the evidence-based program A Matter of Balance: Managing Concerns About Falls.

Goals: (1) Help older adults view falls and the fear of falling as controllable; set realistic goals for increasing activity; change their environment to reduce fall risk factors; and promote exercise to increase strength, endurance and balance. (2) Provide education on ways to foster and sustain bone health for the community and patients who may have had a fracture or are at risk for one.

Results: The Project Enhance online data system was used to determine the effectiveness of the Matter of Balance program. This report summary reflects patients who either were entered into the database system or completed the Matter of Balance program during FY18. A total of 36 participants enrolled in the program (some had started the program during FY17; two participants did not complete questionnaires, as it is voluntary, and so were not entered into the database), with 46 completing five or more sessions.

Improvement and positive impact were noted in the following key areas:

- Participants could find a way to get up from a fall.
- Participants could find a way to reduce falls.
- Participants could protect themselves from a fall.
- Participants felt they could improve their physical strength.
- Participants could become steadier on their feet.
- Participants felt their concerns about falling did not interfere with normal social activities.
- Participants reported an increased activity level.

The Bone Health Lecture Series served 51 patients in FY18.

Partners: Elder Services of the Merrimack Valley, Burlington Council on Aging

Patient Financial Counselors

Description: The extent to which a person has health insurance that covers or offsets the cost of medical services coupled with access to a full continuum of high-quality, timely, accessible health care services have been shown to be critical to overall health and well-being. Access to a usual source of primary care is particularly important because it greatly impacts one's ability to receive preventive, routine and urgent care, as well as chronic disease management services.

Despite the overall success of the commonwealth's health reform efforts, information captured for this assessment shows that while the vast majority of the area's residents have access to care, significant segments of the population, particularly low-income and racial/ethnic minority populations, face significant barriers to care. These groups struggle to access services due to lack of insurance, cost, transportation, cultural/linguistic barriers, and a shortage of providers willing to serve Medicaid-insured or uninsured patients.

To address these gaps, LHMC employs MassHealth-certified application counselors who can screen patients and assist them in applying for state aid. They also estimate for patients their financial responsibility (copay,

deductible, coinsurance, self-pay). The financial counselors spend about 75 percent of their time with patients related to financial assistance and estimates and helping patients understand their insurance benefits.

Goal: Meet with patients who are uninsured to assess their eligibility for and align them with state financial assistance and Lahey charity programs.

Result: This program serves 20-30 patients per day, or about 7,500 patients per year.

Women's Health Lecture Series

Description: The Women's Leadership Council (WLC) at LHMC was founded in 2004 by a group of female community leaders and physicians with the goal of educating and empowering women to be their own health care advocates. One of the ways that they achieve that mission is through the Women's Health Lecture Series, a forum that supports education and health care advocacy for women of all ages. The lecture topics are derived directly from the LHMC CHNA and are chosen by the WLC Education Committee with input from the Clinical Advisory Committee. The lectures are free and open to the public. The audience averages about 100 people.

In FY18, the WLC hosted two lectures on the following topics:

Aside From That: Screening and a Conversation About Facing Mortality

- Elizabeth Collins, MD

The Changing Landscape of Cancer Care: Translation Research and the Future of Care

- Kimberly Rieger-Christ, PhD
- Linda Weller-Ferris, PhD

Goal: The annual Women's Health Lecture Series strives to educate the community on important and timely health issues.

Result: Approximately 200 people were served through this program in FY18.

J.B. Thomas Lahey Foundation Grant Program

Description: The J.B. Thomas Lahey Foundation at Lahey Medical Center, Peabody, funds programs that support the identified health needs of residents of Peabody, with the goal of improving community health. Based on findings from the most recent CHNA, Peabody residents are largely older, more diverse and more vulnerable to health disparity than the majority of those in the LHMC service area.

Projects are reviewed and approved by a five-member board comprising hospital leadership and community representatives from Peabody. In FY18, the J.B. Thomas Lahey Foundation supported six grants, with amounts ranging from \$50,000 to \$300, that will improve the health of the community.

Goal: Provide annual grant funding for programs that improve the health of residents in Peabody.

Results: In FY18, the J.B. Thomas Lahey Foundation provided \$90,607 in grant funding for the following programs:

- The Citizen's Inn of Peabody Children's enrichment program
- The City of Peabody's Bike Path
- The Torigian Family YMCA Enhance Fitness Program for older adults
- The Peabody Little League First Aid Kits
- The City of Peabody Athletic Department's purchase of five automatic external defibrillators
- No Child Goes Hungry in Peabody Corporation grant to provide meals and snacks to children on weekends and over holidays

Partners: The Citizen's Inn, The City of Peabody, The Torigian Family YMCA, Peabody Little League, No Child Goes Hungry in Peabody Corporation

Cooking Up Good Health Nutrition Program

Description: Based on responses from the LHMC Community Health Survey, the percentage of adult respondents (18+) who reported being either obese or overweight was higher (60.8%) than the percentage for the commonwealth overall (58%). Even more notably, adults in households earning below 200% of the federal poverty level were even more likely to be overweight or obese, with 72% of low-income individuals reporting being either overweight or obese. To help address this need, LHMC hosts the Cooking Up Good Health cooking classes. Led by a registered dietitian, Cooking Up Good Health is a free cooking demonstration and nutrition class series that is open to the entire community. In FY18, LHMC hosted seven sessions of the class where participants learned different culinary tips and nutrition information about meals, snacks, sides and desserts.

Operational Goal: Serve five or more participants per session with the goal in FY19 of serving 10+ participants per session. LHMC is promoting the series to patients during inpatient and outpatient visits, and are targeting the community via Facebook posts and marketing at other community events, such as the Burlington Council on Aging grand opening.

Outcome Goal: Increase culinary skills and knowledge of healthful nutrition.

Result: In FY18, LHMC served over 30 participants, many of whom attended more than one session.

Enhancing the Built Environment: Free Fitness Court in Burlington

Description: Lack of physical fitness and poor nutrition are among the leading risk factors associated with obesity and chronic health issues such as heart disease, hypertension, diabetes, cancer and depression. Adequate nutrition helps prevent disease and is essential for the healthy growth and development of children and adolescents. Overall fitness and the extent to which people are physically active reduce the risk for many chronic conditions and are linked to good emotional health. The 2015 LHMC CHNA identified that approximately 1 in 5 adults (18+) (19%) ate the recommended five servings of fruits and vegetables per day, and roughly the same proportion (21%) reported getting no physical activity in the past 30 days.

As a response, to increase access to and availability of free exercise equipment for the community, LHMC has partnered with the Burlington Recreation Department and the National Fitness Campaign (NFC) to fund an outdoor Fitness Court. NFC Fitness Court is a body-weight circuit-training system designed for adults of all ages and fitness levels. Each Fitness Court features 30 individual pieces of equipment and shock-resistant sports flooring, and comprises exercise stations that allow for up to 28 individuals to use the court at the same time.

Workouts are app-driven and can be tailored for each participant. Research is increasingly demonstrating links between specific community factors, such as the availability of parks, accessibility of healthy foods, and the walkability of neighborhoods, and the choices people make in their daily lives. Having the fitness court available near businesses and the residential living will allow community members to easily incorporate physical activity into their daily routines.

This partnership also envisions limited adult fitness programs such as boot camp, HIIT (high-intensity interval training), speed and agility classes being held at this location. The Parks Department will also work with their current instructors to provide classes specifically for the senior population that would focus on body toning and balance. The Parks Department would also work with NFC to offer some of its programming that focuses specifically on the senior population, such as mobility series (helps to restore baseline functionality and overall joint health and mobility) and senior challenge series (who is the fittest senior in town — to encourage friendly competition). There is also a great opportunity to target youth participants to use this space for fitness programs such as CrossFit, and eventually, the Parks Department would like to work toward some multigenerational programming that would allow for children to exercise alongside their parents and grandparents.

Goal: Modify the built environment to increase access to free fitness opportunities for community residents.

Result: The planning for this program was completed and initial funding secured in FY18, and the fitness equipment will be installed in FY19.

Partners: Burlington Parks and Recreation Department, NFC

Safe Needle Disposal Support

Description: According to the U.S. Environmental Protection Agency, more than 8 million people across the country use more than 3 billion needles, syringes and lancets — also called sharps — to manage medical conditions at home. People use sharps to treat a variety of medical conditions in the home, including allergies, diabetes, cancer, hepatitis and more.

Users of sharps do not always know of or have access to the safest disposal methods and may throw used needles in the trash or flush them down the toilet. These haphazard disposal practices increase community members' risk of exposure, leading to increased risk of contracting a life-altering disease such as HIV/AIDS or hepatitis B or C. As a result, many municipalities are choosing to offer safe, convenient disposal options to sharps users.

In response to a request from the City of Woburn — and considering that Woburn has experienced, per the 2016 Community Health Needs Assessment, chronic disease incidence rates that are significantly higher than the state and county rates — LHMC provided support to the city to maintain a safe needle disposal site for residents. Located in the Board of Health office, the sharps disposal box allows users to dispose of their needles for free, preventing the sharps from being discarded improperly or as part of the household waste stream.

Goal: To reduce the risk of injury or infection caused by needle sticks or punctures from improperly disposed of needles and sharps.

Outcomes: Needle boxes were picked up from the Board of Health 15 times in FY18.

Partners: City of Woburn

Increasing Access to Care: LHMC Transportation Programs

Description: The LHMC CHNA identified transportation as one of the major barriers to care within our service area. While social determinants of health affect all populations, community and organizational experts expressed concern that seniors may feel these effects more acutely. Many older adults live on fixed incomes with limited funds for medical expenses, leaving them less able to afford the high costs associated with negative health outcomes. Transportation was also consistently mentioned as a major barrier to senior well-being, as many elders no longer drive and find themselves with fewer transportation options in LHMC's suburban setting. LHMC also set improving access through transportation as one of our key goals in our CHIP.

In response, LHMC provides a variety of ways to help to bridge the gaps that can be caused by lack of transportation. In FY18, LHMC provided 430 free taxi and Uber rides for those who could not otherwise transport themselves home. In FY18, LHMC also provided 500 parking passes to the Burlington Council on Aging to distribute to residents who they identify as being in need of assistance to help them pay for parking for their previously scheduled appointments.

Goal: Increase access to health care services through improved transportation.

Result: Provided 500 free parking passes for community residents and 420 taxi rides.

Partners: Brentwood Taxi, Uber, Burlington Council on Aging

Increasing Access to Transportation: The Bedford DASH Program

Description: The LHMC CHNA identified transportation as one of the major barriers to care within our service area. While social determinants of health affect all populations, community and organizational experts expressed concern that seniors may feel these effects more acutely. Many older adults live on fixed incomes with limited funds for medical expenses, leaving them less able to afford the high costs associated with negative health outcomes. Transportation was also consistently mentioned as a major barrier to senior well-being, as many elders are no longer driving and find themselves with fewer transportation options in LHMC's suburban setting. LHMC also set improving access through transportation as one of our key goals in our CHIP.

To help address this disparity, in FY18 LHMC funded a \$25,000 grant to support The Bedford DASH. The Bedford DASH is a three-year pilot program launching a resident on-demand shuttle in the town of Bedford. The project is funded by the town of Bedford in cooperation with Middlesex 3 Transportation Management Association and two federal transportation grants through the Massachusetts Department of Transportation's Community Transit Program, along with grant funding in partnership with Lahey Hospital & Medical Center. The DASH is a 14 passenger dial a ride portal-to-portal, wheel chair accessible shuttle available to transport Bedford residents and those who work in Bedford to medical and health appointments as well as other destinations. The DASH operates Monday through Friday, 11AM to 6:00PM. It travels throughout Bedford, Burlington, Lexington, and Billerica. Passengers can book up to three weeks in advance and can schedule a trip

through a live dispatch/call center available Monday thru Friday, 8:30AM-4:00PM. Online booking requests can be made 24 hours a day at www.bedforddash.com

Operational Goal: To offer a door-to-door service for all 14,000 Bedford residents in need of transportation to medical appointments.

Outcome Goal: To remove transportation barriers which lead to rescheduled or missed appointments, delayed care, and unnecessary hospitalizations, the consequences of which lead to unmet health care needs including lack of appropriate medical treatment, poorer preventive care, chronic disease exacerbations, all of which can accumulate and result in poor health outcomes.

Result: Data shows that the 11AM-noon time is popular, averaging about 30 rides per month. Of those trips, approximately 68% were taken by seniors, and 52% of those were taken by disabled residents. In FY18 there were 2,767 total rides/1,148 rides by 65+/479 rides by disabled 65+. Thirty-five percent of survey respondents indicated that they take the shuttle to medical appointments.

Partners: Healthy Bedford Task Force, which includes Youth and Family Services, Board of Health, Department of Public Works and other departments and committees, Bedford Selectmen, Bedford Town Manager's office, Bedford Council on Aging, and Bedford Economic Development Coordinator.

Increasing Access to Care: Housing Corporation of Arlington (HCA) Social Worker Program

Description: Vulnerable and low-income individuals were identified specifically in the most recent LHMC CHNA as targeted populations for community benefits support. In FY18, LHMC partnered with the HCA to provide a \$30,000 grant to support the addition of a social worker to its team to support its Homelessness Prevention Program (HPP). HCA is a nonprofit community development corporation established in 1986 whose mission is to provide and advocate for affordable housing for low- and moderate-income households in Arlington and the surrounding communities, while promoting social and economic diversity. HCA runs two programs: the Affordable Apartment Program and the HPP.

Since 2001, the HPP has provided 803 grants totaling \$985,500 to stabilize struggling households in permanent housing. Grants of up to \$1,500 are awarded to households who can show they will be stable for at least six months. The funds can be used for moving expenses, first month's rent, back rent and security deposits. A community resident completes an application and meets with HCA's social worker to explain their situation, and the HPP Committee approves or rejects the request. If the request is approved, a check is prepared and sent directly to the landlord or moving company.

The housing wait list in Arlington now contains 715 households, and demand currently exceeds the capacity of just one social worker on staff. In FY17, this program served 187 households. LHMC's grant has allowed HCA to hire a new social worker to allow HCA to meet the increasing needs of the populations it serves.

Outcome Goal: Provide support services for at least 260 households in FY18.

Operational Goal: Provide support services for Arlington residents looking for assistance with housing and related resources.

Result: Planning and hiring a social worker began in FY18 and this program will be fully implemented in FY19.

Partner: Arlington Housing Corporation

Healthy State: Web-Based Health News

Description: Recognizing that more people are turning to web-based resources to access health information, Lahey Health, in collaboration with their physicians, clinicians and medical staff created the Healthy State news website. The site provides users with expert, up to date health information designed to educate and encourage participants to incorporate healthy lifestyle changes that can improve their health. The site also includes personal stories and connections to resources. The stories and information featured address a wide range of health and wellness issues identified as priority needs in the community including cancer, substance use, mental health, fitness and exercise, healthy eating, blood pressure, and heart health.

Goals: Healthy State seeks to influence personal health choice, inform people about ways to improve health and prevent or reduce health risks by:

- Increasing knowledge and awareness of health issues
- Influencing behaviors and attitudes towards health issues
- Dispel misconceptions about health

Outcomes:

- There were 81,511 page views recorded in FY18
- More than 6,098 views were from users who accessed the site multiple times
- The average duration for each session was 53 seconds with 1.42 pages viewed

Assessing Risk in the Schools

Description: In August 2017 Lahey supported the Youth Risk Behavior Survey (YRBS) in the Lynnfield Public Schools. The YRBS can determine the prevalence of health behaviors; assess whether health behaviors increase, decrease, or stay the same over time; examine the co-occurrence of health behaviors; provide comparison data for geographies and subpopulations; and monitor progress toward achieving Healthy People objectives and program indicators. The YRBS allows the schools to better understand the extent to which middle school and high school students in the district engage in the risky behaviors.

The 2017 Lynnfield High School and Middle School YRBS asked questions related to depression, suicide, stress, and behavioral health treatment. Some survey highlights were:

For Lynnfield High School students:

- 16.2% of Lynnfield high school students reported feeling sad or hopeless almost every day for two or more weeks in a row.
- 7.6% of students reported that they seriously attempted suicide
- 11.3% of high school students in Lynnfield reported that they currently take medicine or receive treatment for behavioral health, mental health, or emotional conditions.

- For Lynnfield high school students, the most commonly reported causes of negative stress are a busy schedule (32.7%) and school demands/expectations (32.1%).

For Lynnfield middle school students:

- 7.9% of Lynnfield middle school students reported seriously considering attempting suicide, 6.1% reported making a plan about how they would attempt suicide, and 2.5% reported actually attempting suicide.
- The percentage of Lynnfield middle school students who reported currently taking medicine or receiving treatment for behavioral health, mental health, or emotional conditions is 6.5%.

Similar to high school students, the most commonly reported causes of negative stress are school demands/expectations (34.3%) and a busy schedule (27.6%).

Goal: The goal was to use the information compiled by the survey to guide evidence-based activities to address the risky behaviors.

Outcomes:

- The Lynnfield YRBS results were used to develop goals for “A Healthy Lynnfield Coalition”, which is a local coalition established in May, 2017 to address substance use/misuse issues in Lynnfield.
- To meet the pressing mental health needs Lahey also worked with the schools to support a series of workshops that will take place in the 2018-2019 academic year. Workshops will increase awareness around anxiety and depression and educate students about substance use through dramatic performances.

Chronic Disease: Cancer Programs

Free Breast Cancer Risk Assessment

Description: Seven of the 15 towns that are part of LHMC’s primary service area reported statistically higher incidence rates of cancer (all cancer types) than those of the commonwealth overall. The highest cancer incidence rate per 100,000 population was in Wilmington (588), followed by Burlington (579), Tewksbury (578), Billerica (575), Peabody (575), Woburn (562) and Reading (561). These rates compare with 509 for the commonwealth overall and 531 for Essex County. Specifically, breast cancer hospitalization rates for women were statistically higher than those of the commonwealth overall across nearly all the primary service area’s cities/towns. Moreover, according to the LHMC Community Health Survey, rates of mammography screening for women aged 40+ were lower within the past two years than they had been in the past: 80% in LHMC’s primary service area, compared with 85% in the commonwealth overall. Because the risk for breast cancer is not the same for all women, some women need more advanced screening beyond the standard recommendations.

In response to this identified community need, Lahey Health has implemented an assessment screening tool to help community residents determine whether they may be at risk for breast cancer. Using an electronic tablet, people are able to confidentially answer questions that help to determine whether they may be at a

higher risk for breast cancer. The assessment, evaluation and follow-up are all provided at no cost to participants. Results are given to their physicians, who can help them determine whether they might benefit from a higher level of screening beyond regular checkups and mammograms.

Goal: Identify persons who may be at a higher risk for breast cancer and provide screening follow-up to their physicians.

Result: In FY18, LHMC screened 25,005 people and identified 1,033 patients who had a high-risk mutation and 2,358 patients with a high lifetime risk of breast cancer.

Harpley Oncology Fund

Description: As reported in the CHNA, seven of the 15 towns that are part of LHMC's primary service area reported statistically higher incidence rates of cancer (all cancer types) than those of the commonwealth overall. In conjunction, caregiver support was consistently brought up as a serious issue in community interviews and forums, as many elders rely on family members or aides to manage their care. Between navigating the health system, organizing appointments and medications, and making major medical decisions on behalf of their loved one, stress and burnout among caregivers was reported by stakeholders as one of the greatest threats to senior well-being. In direct response, in our most recent CHIP, LHMC identified as a goal enhancing caregiver support and reducing family/caregiver stress.

One way that LHMC is addressing that goal is through the Harpley Cancer Fund. This fund provides grants of up to \$1,500 to families of people undergoing cancer treatment to help provide financial support for private-duty nursing services or end-of-life care. In FY18, this fund was able to help support over 50 individuals and their families.

Goal: Provide grants of up to \$1,500 to people undergoing cancer treatment to help alleviate caregiver/family stress related to cost of care.

Result: In FY18, we were able to provide over 50 grants to people undergoing cancer treatment and their families.

Lahey Integrative Acupuncture Program

Description: As reported in the Community Health Needs Assessment, in the LHMC service area, seven of the 15 towns that are part of LHMC's primary service area reported statistically higher incidence rates of cancer (all cancer types) than the commonwealth. The highest cancer incidence rate per 100,000 population was in Wilmington (588), followed by Burlington (579), Tewksbury (578), Billerica (575), Peabody (575), Woburn (562) and Reading (561). These rates compare to 509 for the commonwealth and 531 for Essex County. Of all respondents to the LHMC Community Health Survey, 11.6% reported that they had been told they have cancer, compared to 11.1% for residents of the commonwealth; 17% of low-income respondents had been told they have cancer.

LHMC offers subsidized integrative acupuncture services to patients undergoing treatment for cancer, to help them reduce stress and anxiety, relieve symptoms and side effects from treatment, and increase their general sense of health and well-being. In FY18, this program was able to support subsidized services for 13 individuals to receive up to 10 sessions of treatment.

Goal: Provide free and reduced cost integrative acupuncture to persons undergoing cancer treatment.

Result: In FY18 this program was able to serve 13 people and provide 60 treatment visits.

Lahey Health Community Conversations on Cancer

Description: In response to the needs identified in the CHNA, Lahey Health/LHMC provided a free community education forum, called Conversations on Cancer, focused on the leading types of cancer identified in LHMC's CHNA and targeted toward the cities and towns with the highest incidence in the service area, including Wilmington, Woburn, Stoneham and Reading.

The program incorporated a speaking program and panel discussion led by leaders from the Lahey Cancer Institute, along with an exhibit hall where attendees had the opportunity to participate in various cancer screenings and hands-on demonstrations, as well as consult with physicians and clinicians.

Speaking Program/Panel Discussion:

- Dennis Begos , MD – Colorectal Cancer: Screening and Surgical Approaches
- Kelley Cornell, MD – Breast Cancer: Screening and Risk Assessment Tools
- Andrew Wiechert, MD – Endometrial Cancer
- Elliot Servais, MD, and Cameron Stock, MD – Complex Chest Diseases
- Cary Meyer, PsyD – Survivorship: Collaborative Cancer Support From Diagnosis Forward

Exhibits/Screenings:

- da Vinci® Surgical Robot Demonstration: Hands-on demonstrations with one of the industry's most sophisticated surgical robots, the da Vinci® Xi
- Low-Dose CT Lung Cancer Screening: A prescreening that provided attendees with the opportunity to find out whether they meet the criteria for low-dose CT lung cancer screening
- Cancer Rehabilitation and Survivorship: An opportunity to talk one-on-one with members of the cancer rehabilitation team about Lahey's comprehensive range of programs and services, including the SEAL Program (Survivor Evaluation at Lahey), and participate in a functional impairment screening designed to manage pain and improve function for patients and survivors to regain their highest quality of life
- Breast Cancer Risk Assessment: A tool that calculates a person's lifetime risk for developing breast cancer
- Skin Cancer Awareness and Education: The latest information on skin cancer prevention along with tools and resources to protect against skin damage
- Colon Cancer Risk Analysis: A quiz to help create awareness of risk factors associated with preventing and detecting colon cancer
- Nutrition and Weight Loss: Information and answers to questions about proper nutrition before, during and after cancer treatment, provided by a registered dietitian

Goal: The goal of the event was to educate community members on the prevention, early detection and treatment of cancer, and to create awareness about support and survivorship programs for those diagnosed with cancer.

Results:

- The event was attended by 150 community members: 70% women, 30% men.

- Of the 150 attendees, 35 percent reported having a friend or family member with cancer, 27 percent reported attending in order to minimize risk for developing cancer, 19 percent reported being survivors and 5 percent reported being currently in treatment.
- Twenty-two women completed a breast cancer risk assessment; of these, six were identified as being at risk and referred for additional follow-up.
- More than 40 people visited the Cancer Rehabilitation and Survivorship exhibit to consult with a physical therapist about recovering physically and emotionally after cancer treatment.
- More than 40 attendees visited the Colon Cancer Awareness exhibit to complete a quiz to learn more about preventing, detecting and managing colon cancer, and the importance of having a colonoscopy.

Partner: American Cancer Society

LIVESTRONG at the YMCA

Description: Over the past several decades, the number of cancer survivors has dramatically increased — from 3 million (1.5% of the U.S. population) in 1971 to 9.8 million in 2001 to 14.5 million (4.6%) in 2014. Projections indicate that the number of cancer survivors will reach at least 19 million by 2024. According to data from the Centers for Disease Control and Prevention (CDC), nearly 8,000 people suffer from cancer in Middlesex County, which includes the North Suburban YMCA’s service area.

To address this issue, LHMC partnered with the Burbank YMCA in Reading and the North Suburban YMCA in Woburn to provide five sessions of the LIVESTRONG program for cancer survivors. LIVESTRONG is a small-group, evidence-based class that helps cancer survivors, or those in the midst of cancer treatment, believe in and achieve a healthier tomorrow and envision life after cancer.

Classes are tailored for all cancer survivors, regardless of stage of diagnosis or treatment, and adapted for all fitness levels. Two trained and certified instructors run each session for 12 weeks, with 8 to 10 participants meeting twice a week. Staff members are trained on the unique physical and emotional needs of cancer survivors, curriculum and best practices. They work with each participant to create an individualized exercise program from pre-program assessment results, and then teach and demonstrate exercise technique and safety considerations. This individualized attention helps participants meet their goals and overcome their specific barriers.

Goal: Create communities among cancer survivors, and guide them through safe physical activity, helping them build supportive relationships leading to an improved quality of life.

Results: In FY18, 29 people at the North Suburban YMCA participated in the program (15 in the spring and 14 in the fall). Of those, 16 completed the 12-week program. The other 13 participants could not complete the program largely because of various surgeries, chemotherapy and overall weakness from their treatment. At the Burbank YMCA, 47 people participated in the program, with an 83% completion rate.

LIVESTRONG at the YMCA has an established research-based evaluation plan that uses pre- and post-assessment tests. The detailed assessments evaluate arm function, range of motion and lymph node prognosis; shoulder flexion, extension and abduction; and posture. Program participants are asked to rate

overall quality of life, ability to perform daily tasks, mobility, eating habits, fitness level, perceived body image, current energy levels and overall happiness.

Pre- and post-assessment data are collected to show participants' progress over the 12 weeks in the areas of cardiovascular endurance, strength, flexibility, mobility and behavioral health. Among participants who graduated, the results were as follows:

- 94% increased their cardiovascular endurance.
- 88% increased their strength.
- 69% increased their flexibility.
- 82% increased their mobility.
- 54% experienced an increase in ability to work.
- 46% increased their ability to perform personal and household activities/chores.
- 38% experienced increased confidence in daily routines.

Partners: North Suburban YMCA, Burbank YMCA

Pink Breast Cancer Survivorship Program

Description: In response to the priorities identified in our CHNA, LHMC partnered with the Burbank YMCA to conduct three sessions of the Pink Breast Cancer Survivorship Program that served 58 individual breast cancer survivors and an additional 90 registrants for the Pink Maintenance Program over the course of the year from fall 2017 to fall 2018 for a total of 148 Pink Program users.

The Pink Program for breast cancer survivors is locally developed and specifically designed to help breast cancer survivors boost energy, increase strength and restore ease of movement while performing daily tasks. Classes are tailored for the different types of breast cancer surgeries and adapted for all fitness levels. The instructors are trained in cancer survivorship, post-rehabilitation exercise and supportive cancer care.

For the duration of participation in the Pink Program, survivors and their families receive a membership at the YMCA.

The CDC estimates that nearly 8,000 people suffer from cancer in Middlesex County, which includes the Reading YMCA's service area. The LHMC CHNA revealed that hospitalization rates for breast cancer in women were statistically higher than those of the commonwealth overall across nearly all the primary service area's cities and towns. However, only Reading had an incidence rate (179) per 100,000 population that was statistically higher than that of the commonwealth overall.

Beyond the physical and emotional effects of cancer, many cancer patients and survivors face severe debt and other financial hardships. Some lose their life savings, others lose their jobs and many are forced to file for bankruptcy. In an article published May 15, 2013, in the journal *Health Affairs*, researchers at the Fred Hutchinson Cancer Research Center in Seattle reported that people with cancer were more than 2.5 times more likely to declare bankruptcy than people without cancer, with the likelihood even greater among younger patients. Because of these financial burdens, the Y provides access to its cancer programs free of charge to all participants.

In addition to addressing the physical and emotional needs of this population, the Pink Program provides social/emotional support that cancer survivors find very valuable. Because cancer can change their lives so drastically, participants welcome meeting others who know what they are going through, and value working with instructors who genuinely care about the progress they make.

Goal: Increase mobility and opportunities for exercise to help breast cancer survivors return to health.

Results: As part of its pre- and post-assessment process, the Pink Program uses the PROMIS-29 Quality of Life Assessment as well as a physical assessment that includes range of motion, flexibility and balance.

Generally, participants experienced significant increases in physical activity, overall quality of life and fitness performance as well as decreases in cancer-related fatigue.

After 12 weeks, participants experienced the following results:

- Balance assessment showed participants' balance improved by an average of 1.47 times as compared with their previous assessment.
- Range of motion assessment was inconclusive, as many began the program with 100% range of motion.
- Participants' strength increased 29% as measured by leg and chest press exercises.
- Walking assessment showed participants averaged a 24% increase in distance.

Emotional Assessments:

PROMIS-29 results show that 60% of all participants had experienced an increase in energy level, including:

- Physical function (ability to do chores, errands, walking and stairs)
- Satisfaction with social role (ability to work and perform personal and household responsibilities and daily routines)
- Less fatigue (feeling tired, run down and unable to start tasks)

Completion Statistics:

- 93% of Pink Program participants who began the program completed it.

Partner: Burbank YMCA

Health Priority Area #2-Elder Health

Serving Health Information Needs of Everyone (SHINE) Program

Description: In FY18, LHMC again partnered with Minuteman Senior Services to provide SHINE counselors for the Arlington, Burlington and Winchester Councils on Aging to assist Medicare beneficiaries with navigating their insurance options and finding financial assistance programs. This is a continuation of our very successful partnership that began in 2015. Every week a trained SHINE liaison is available at the Arlington, Burlington and Winchester Councils on Aging to help Medicare beneficiaries and their caregivers navigate their health

insurance options. A SHINE counselor also is available once a week at LHMC. The counselors can review current coverage, compare costs and benefits of available options, and assist with enrolling those with limited resources in helpful programs. The SHINE program is open to everyone and is not limited to LHMC patients.

This year we were able to serve 700 people through the program in the community, which was an 11% increase over FY17, and 49 people were served by a counselor on-site at the LHMC campus, which was a 22% increase from FY18.

In FY18, approximately 18% of the consumers served through the LHMC partnership with the SHINE program had incomes below 150% of the federal poverty level.

The extent to which a person has health insurance that covers or offsets the cost of medical services coupled with access to a full continuum of high-quality, timely, accessible health care services has been shown to be critical to overall health and well-being. Access to a regular source of primary care is particularly important because it greatly impacts one's ability to receive preventive, routine and urgent care, as well as chronic disease management services.

LHMC's partnership with Minuteman Senior Services continues to address this health care access need directly.

Goal: Provide Medicare enrollees and their families unbiased information to help them better access their medical and prescription drug insurance benefits.

Result: The program provided one-on-one assistance to 785 people, some of whom had more than one interaction with the counselor.

Partners: Arlington, Burlington and Winchester Councils on Aging; Minuteman Senior Services

Low-Impact Aqua Aerobics Program

Description: As reported in the LHMC CHNA, lack of physical fitness and poor nutrition are the leading factors associated with obesity and chronic diseases such as heart disease, hypertension, diabetes and cancer, as well as depression and poor emotional health. According to Massachusetts BRFSS data for 2012-2013, 1 in 4 adults reported getting no physical activity in the 30 days preceding the survey.

To address this need, LHMC again partnered with the North Suburban YMCA and Arlington and Burlington Councils on Aging to offer a free weekly low-impact aqua aerobics class to 24 seniors in both communities. The seniors meet at the Y and participate in a low-impact water exercise program designed to help improve joint flexibility and decrease pain or stiffness. The program has been going on for the past two years and has drawn a consistent base of seniors who participate.

According to the CDC, water-based exercise can benefit older adults by improving their quality of life and decreasing disability. Water-based exercise also improves or maintains the bone health of postmenopausal

women, helps with the mobility of affected joints, decreases pain from osteoarthritis and helps people suffering from some chronic diseases.

Goal: Provide an exercise alternative to seniors with mobility and joint issues.

Result: In FY18, this program was able to serve 24 seniors per week, many of whom attend regularly.

Partners: Arlington and Burlington Councils on Aging, North Suburban YMCA

Increasing Food Access and Nutrition Support for Seniors

Description: Good nutrition helps prevent disease and is essential for healthy growth and development of children and adolescents. Overall fitness and the extent to which people are physically active reduce the risk for many chronic diseases, are linked to good emotional health and help prevent disease. According to Massachusetts BRFSS data from 2012-2013, only 1 in 5 adults in Middlesex County ate the recommended five servings of fruits and vegetables per day. Moreover, according to a recent survey conducted by the Massachusetts Healthy Aging Collaborative, in Arlington only 32 percent, in Burlington 38 percent, and in Billerica 19 percent of seniors are getting the recommended five servings of fruits and vegetables per day.

To continue to address this need, LHMC partnered with World PEAS CSA, an organization that grows organic produce locally for Middlesex County and ran farmers markets for a total of 20 weeks. This year, we also expanded the program from its original sites of Burlington and Arlington and included Billerica. The program served 50-70 seniors per week from June through October, and on average, participants took home six varieties of fresh, local produce each week. Over the course of the program, over 30,000 pounds of produce was distributed to the community.

Goals: To increase access and exposure to fresh fruits and vegetables for senior citizens and to decrease senior social isolation while exposing them to new opportunities at the senior centers.

Results: The 2018 survey results demonstrated that many participants in the Lahey/New Entry Subsidized Farmers Market program earn less than \$30,000 per year. The average age of the participant is 78, and the majority are women. Results also showed that many participants struggle with food insecurity and food access. At Burlington Council on Aging (COA), 53% of respondents said that buying more produce would be hard on their budget, while 56% of respondents at Arlington COA agreed, and 40% at Billerica COA.

About 30% of respondents at Burlington COA agreed that it is difficult to purchase fresh fruits and vegetables where they normally shop, and about 16% reported frequently or sometimes using an emergency food program in the past 12 months. Billerica participants reported 35% and 14% to these questions, respectively, while Arlington participants reported 28% and 19%.

In the postseason survey conducted after the end of the Lahey/New Entry Farmers Market program, senior citizens largely indicated their diet had improved as a result of participation in this program. Eighty-six percent of respondents said that during the program they ate more fruits and vegetables, while 78% said they ate better-quality produce because of this program. These results indicate that the program has made fresh,

healthy food more accessible for senior citizens. These results also indicate that food access and food security are real concerns for many of the senior citizens in our region, and programs such as this are critical to ensuring this population has access to a healthy diet, keeping them in good health into their later years.

This season, Lahey/New Entry also evaluated the impact that this program had on decreasing social isolation. At the end of the season, 90% of respondents said that it is important that this program provides an opportunity to interact/socialize with other people. Staff have reported that senior citizens arrive early to the distribution to meet up and visit with friends. In this space, senior citizens discuss recipes and swap vegetables, talk about what they've been cooking at home, and even invite others to share the meals they have made. Staff at the partner organizations have said that participants truly value the time and space created by the distribution. They have noted decreases in social isolation among participants, as the farmers market gives them an opportunity to engage with their peers and often leads them to stay for other activities at the senior center. This program is actively working to quantify social isolation and hopes to get a clearer picture next season of the program's ability to reduce seniors' isolation. As mentioned above, in some instances this program has also provided the benefit of exposing seniors to other programs that the COAs have to offer by bringing into the center people who might otherwise not have found their way there.

Partners: Arlington, Billerica and Burlington Councils on Aging; New Entry Sustainable Farming Program

Free Senior Exercise Classes

Description: In FY18, LHMC continued its successful biweekly exercise class at the Burlington Council on Aging. Every Monday and Wednesday morning for 52 weeks (one year), a physical therapy assistant leads an exercise class for seniors designed to build muscle strength to help prevent falls and increase physical fitness. This program has served the Council on Aging for many years and is an integral and important part of its exercise programs.

According to CDC data, 1 in 3 seniors falls each year, but fewer than half talk to their health care provider about it. Among seniors, falls are the leading cause of both fatal and nonfatal injuries. In 2012, 2.4 million nonfatal falls among seniors were treated in EDs, and more than 722,000 of these patients were hospitalized. That same year, the direct medical costs of falls, adjusted for inflation, were \$30 billion. The CDC states that seniors can stay independent and reduce their chances of falling by exercising regularly. Moreover, the exercises should focus on increasing leg strength and improving balance, and they should become more challenging over time.

Over the past two decades, obesity rates in the United States have doubled for adults. This trend has spanned all segments of the population, regardless of age, sex, race, ethnicity, education, income or geographic region. Some segments have struggled more than others, but no segment has been unaffected. According to data from the Massachusetts BRFSS for 2012-2013, nearly 60 percent of adults in Middlesex County are considered overweight or obese, and 1 in 4 adults reported getting no physical activity in the 30 days preceding the survey. Rates for specific demographic, socioeconomic and geographic population segments living in LHMC's community benefits service area are likely dramatically higher, based on commonwealth data by

race/ethnicity and age. Overall fitness and physical activity reduce the risk for many chronic diseases, are linked to good emotional health and help prevent disease.

Cardiovascular disease (CVD or heart disease), cancer and cerebrovascular disease (stroke) are the three leading causes of death in the United States, Massachusetts and all the cities/towns in LHMC's community benefits service area. In addition, diabetes is ranked in the top 10 causes of death across all three of these geographic areas. According to the LHMC CHNA, Burlington residents have higher age-adjusted rates (per 100,000 population) of CVD mortality than do residents both in Middlesex County and in the commonwealth overall.

Goal: Provide an exercise class including light cardio, strengthening and stretching for members of the Burlington Senior Center in order to improve the health of the community.

Result: There were 10-20 participants per class.

In FY18, a survey was administered to 18 attendees of the regular exercise class. Survey findings were as follows:

- 67% reported leaving their house once or twice per day.
- 50% self-report having a chronic illness or chronic pain.
- 83% report that their physical and mental health has improved as a result of the class.

Partner: Burlington Council on Aging

Health Priority Area #3-Behavioral Health (Mental Health & Substance Use)

LHMC Domestic Violence Initiative

Description: The 2010 National Intimate Partner and Sexual Violence Survey data for Massachusetts residents mirrored the national data: Nearly 1 in 2 women and 1 in 4 men in Massachusetts have ever experienced sexual violence victimization other than rape. Nearly 1 in 3 women and 1 in 5 men in Massachusetts have experienced rape, physical violence and/or stalking by an intimate partner in their lives. More than 1 in 7 women have been raped.

The problem isn't new. LHMC has long collaborated with local police and community organizations to provide crisis intervention and links to services for victims of domestic violence, and they are committed to alleviating the public health and social problems associated with relationship violence in all forms, including spousal violence and elder abuse. Formed in 1992, LHMC's Domestic Violence Initiative (DVI) is a group that includes physicians and nonclinical staff from departments such as gynecology, general internal medicine, social work and the ED. Community members include law enforcement representatives and local emergency resource groups.

Goals: Heighten awareness of domestic violence, provide crisis intervention and links to services, strengthen community partnerships, and train clinical staff to recognize and respond to the needs of victims.

Results: In FY18, LHMC hosted four quarterly meetings of community organizations that serve victims of domestic violence, to share information and resources. LHMC also partnered with various organizations to host an information table at the hospital to provide information to patients and staff about domestic violence resources and raise awareness about the issue.

Partners: Saheli, Burlington Police Department, REACH Beyond Domestic Violence, Burlington Council on Aging, Burlington Youth and Family Services

Domestic Violence Support Group

Description: The 2010 National Intimate Partner and Sexual Violence Survey data for Massachusetts residents mirrored the national data: Nearly 1 in 2 women and 1 in 4 men in Massachusetts have ever experienced sexual violence victimization other than rape. Nearly 1 in 3 women and 1 in 5 men in Massachusetts have experienced rape, physical violence and/or stalking by an intimate partner in their lives. In response to the community need to address this issue, LHMC has identified raising awareness about domestic violence as a CHIP priority.

In FY18, LHMC partnered with Saheli, a Burlington-based regional serving organization to provide a Saheli-conducted support group. The group met eight times using themes/topics from a manual titled “The Power to Change.” This manual was developed by several European domestic violence agencies to provide support to survivors of domestic violence. Saheli has successfully used this model for several support groups, starting in 2013, to provide group support to survivors/clients. As cited by Saheli, one of the frequent barriers to people being able to attend and benefit from these support groups is access and transportation. Through our partnership, Saheli was able to provide free Uber services for people who were interested in attending. The group included a multiracial population of women from Burlington and surrounding towns such as Lexington, Billerica, Chelmsford, Woburn, Waltham, Somerville and Cambridge. Sessions were structured around seven topics from “The Power to Change” and kicked off with a discussion of Domestic Abuse 101. Additional topics included understanding self-esteem; identifying and meeting personal goals; socialization of South Asian women and gender stereotyping; healthy relationships: identifying and communicating needs; healthy relationships: exploring boundaries; coping with positive and negative emotions; and assertiveness versus aggression.

Goal: Empower women by building positive self-esteem and healthy relationships.

Result: Since this was a recurring group, the same women attended each of the eight sessions. There were between seven and nine attendees each time for spring and fall sessions. Many new clients joined as their time permitted.

The facilitators distributed a weekly evaluation form at the end of each of the first seven sessions and an overall evaluation of the value of the course at the last session.

In their comments, the participants chose superlative descriptors such as “very useful” or “very good for information and handouts.” A number of participants also stated that they were feeling significantly better about themselves and their lives after each session.

Several of them stated that they joined the group to learn about other people’s issues, and that in addition they learned that their problems are not unique and there are systems in place to help. Most of them felt that they were supported and listened to by participants and facilitators, and that they had gained self-esteem and felt stronger about their ability to handle life situations.

Partner: Saheli

Wilmington High School Wildcat Program: Substance Use Awareness and Education

Description: In our most recent CHNA, LHMC identified youth and adolescents as a particular target population to focus on with our community benefits efforts. Additionally, substance use prevention was identified as a health need, and when looking at the youth and adolescent population, alarming trends start to emerge. Based on information from the CHNA, almost a quarter (23%) of high school youth in the commonwealth reported that they were offered, sold or given drugs in the past year. One in 10 (11%) reported current cigarette use, and a third (36%) reported current alcohol use.

In order to help address this population and health priority, in FY18 LHMC partnered with Wilmington High School to assist with providing funding for the Wilmington High School Wildcat Project. The goal of this program is to build on two of our successful community/school district collaborative programs: 1) Mental Health First Aid, funded two years ago by LHMC, and 2) The Wildcat Project Part 1 & 2, a program that has been addressing substance abuse awareness and education since 2009. The major objective of the program is to expand efforts to focus on educating athletes on prescription opioid misuse; pilot an evidence-based life skills curriculum at the intermediate grade level; provide ongoing mental health and substance use education to parents, staff and community members; and increase awareness of available mental health resources.

Operational Goals:

- Educate and build awareness of mental health issues and opioid use/misuse to all parties involved in extracurricular athletics and community members — target population = 800+ student athletes, 200+ staff, 800+ parents and 500+ community members, to be reached via student athlete/parent meetings, student assemblies and behavioral/mental health school/community events.
- Educate students at the intermediate grade level on key risk and protective factors associated with the initiation and escalation of tobacco, alcohol, illicit drug use, target population = 100-200 intermediate level students, to be reached via health curriculum
- To increase awareness of resources available on substance use and misuse, target population = 500+ community members, to be reached district website & school communication via electronic messaging and social media

Outcome Goals:

- Create a safe and supportive school environment for students and families.
- Provide education, awareness & resources on substance use for the school and community

Results: The High School hosted three lectures for approximately 300 parents, students, and school staff on the following topics:

- Part 1: Middlesex Partnership for Youth
- Part 2: The Physiology of Addiction & the Athlete by Dr. Ruth Potee
- Part 3 – Taylor’s Message by Kathi & Chris Sullivan

The lectures were also accompanied by a survey that demonstrated significant outcomes. 47.5% of survey respondents were parents, 46% were students, and 6.6% were a community member, school staff person or other. 76.6% of respondents said that the quality of the lectures was either excellent or very good. 55% of respondents also said that the lectures achieved the goal of providing education about community resource for opioid use and strategies for prevention.

Partner: Wilmington High School

Medication Disposal Box Program

Description: As part of our CHIP commitment to helping to address the need of prescription drug misuse, Lahey Hospital & Medical Center is now providing a medication disposal kiosk to safely dispose of expired or unwanted medication. Medications can be dropped off 24 hours a day, 7 days a week and are safely disposed of in accordance with DEA regulations. According to the NIH National Institute on Drug Abuse, an estimated 54 million people have used medications for nonmedical reasons at least once in their lifetime. Opioids are among the most misused prescriptions – with 75 percent of those who abuse reporting their first opioid was a prescription. The NIH reports that unintentional opioid pain reliever deaths have quadrupled since 1999, and that nearly 80 percent of heroin users reported using prescription opioids prior to heroin.

Goal: To provide a safe and convenient way for residents to dispose of unwanted or unused medications.

Result: In FY 18, LHMC collected and disposed of 471 pounds of medications.

Community Partners: Medsafe

Community Education: A Systems Approach to the Opioid Epidemic

Description: Substance use and mental health were both identified as key priority health needs in the most recent LHMC Community Health Needs Assessment. In particular, impact of these issues on the residents of Middlesex and Essex counties was particularly profound. There is ample quantitative and qualitative information to demonstrate this impact including figures around opioid use overdoses, opioid-related emergency department visits and hospitalizations, and feedback from stakeholder interviews.

One way that we have helped to respond to this key health need to the community is by providing education to first responders, social workers, nurses and other community members through the annual Injury

Prevention & Community Outreach Conference which was focused in FY 18 on the treatment and prevention of people with substance use disorders.

This conference featured speakers from multiple disciplines both within healthcare and from the community who educated the crowd on community-based resources for treatment, public health approaches to care, and alternative therapies.

Goal: Provide education to community members, first responders, healthcare workers, social workers and others on prevention and treatment for substance use disorder.

Result: Over 80 people participated in the conference.

Community Partners: Burlington EMS, the Middlesex District Attorney, Woburn District Court, Lahey Health Behavioral Services

Support Groups

Description: In FY18, LHMC hosted 10 different monthly support groups at LHMC, Burlington and Lahey Medical Center, Peabody. These support groups are directly responsive to a number of identified community health needs in the LHMC service area and serve a diverse population of individuals.

Based on the findings of the most recent CHNA, LHMC will continue to offer a variety of support groups to help educate, support, and assist individuals and families who are going through difficult times. Support groups can help inform, console and lift the spirit, which are all part of the healing process.

Support groups include those for patients and families dealing with numerous types of cancer, including of the head and neck, breast, reproductive system, lung, urological system, and blood; stem-cell transplant; multiple sclerosis; stroke; COPD; kidney transplant; amyotrophic lateral sclerosis (ALS); cardiac disease; liver disease; and diabetes. Another group, Look Good Feel Better, seeks to improve the self-esteem of people undergoing cancer treatments by providing group self-help beauty sessions. Other groups are exclusively for caregivers. All support group programs are free and open to the community.

The topics for these support groups directly relate to identified needs in the LHMC service area. Cancer is the second-leading cause of death in both the United States and the commonwealth, and across all of LHMC's community benefits service area. CVD or heart disease, cancer, and cerebrovascular disease (stroke) are the three leading causes of death in the United States, Massachusetts and all the cities/towns in LHMC's community benefits service area.

Goal: Provide free support group services to help educate, support, and assist individuals and families who are going through difficult times.

Result: LHMC provided 10 support groups related directly to identified needs in the service area.

Grant Funding Provided Through Community Health Network Area (CHNA) Determination of Need (DON)

Payments

Description: In FY18, LHMC continued our six-year Department of Public Health scheduled payments to CHNA 15 and CHNA 13/14 for our ED project. The funding provided goes towards providing grants focused on Youth Behavioral Health and Elder Health — two priority populations in the LHMC CHNA.

In collaboration with CHNA 15, in FY18 LHMC funding provided over 30 grants ranging from \$300 to \$75,000 for organizations within the service area to address identified health issues in their community, such as resources for families experiencing domestic violence, safety checks for Meals on Wheels recipients, and best practices for youth mental health response. Three community workshops focusing on implicit bias, suicide prevention and leveraging Youth Risk Behavior Survey results were also offered in FY18.

In FY18, LHMC DON funding also provided 14 grants totaling \$251,969 for CHNA 13/14. These grants went to fund projects focused on topics such healthy eating, providing access to prescription education for seniors, and resources for parents.

Goal: Provide annual funding to CHNA 13/14 and CHNA 15 for grants that address youth behavioral health and elder health.

Result: In FY18, LHMC DON funds provided grants to the following organizations in our service area:

- Domestic Violence Services Network: Resource Coordination for High-Risk Domestic Violence Families
- Minuteman Senior Services: Enhanced Safety Check for Meals on Wheels Recipients
- Town of Lexington: Best Practices for Mental Health Response
- Bedford Council on Aging: Falls Prevention Program
- First Connections: Working Parents Program
- Social Capital, Inc.: Collaborating for Woburn Students
- BRIO Integrated Theater: Internship Program for Young Adults With Disabilities
- Center for Parents and Teachers: Support Groups for Parents of a Child Who Has Been Diagnosed With a Special Need or Disability
- Grow a Strong Family: How-To Seminars and Webinars
- Hallmark Health: Connecting and Caring: A Program for New and Expectant Mothers
- Ivy Child International: Community Yoga for All
- Lexington Health Department: Community Mental Health First Aid Training
- Lexington Youth and Family Services: SOS: Peer Leaders Preventing Suicide
- Minuteman Senior Services: Nutrition Intervention for People With Dementia
- Saheli: Program to Improve Parenting Among South Asian Families
- Social Capital, Inc: Woburn Unites to Support All Students
- Winchester Multi-Cultural Network: Community Engagement Project Designed to Empower Diverse Groups of Residents
- Family Continuity: Sensory Treatment and Trauma Initiative
- Backyard Growers: Healthy Eating through Gardening for Elder Adults
- Jewish Family & Children's Service: Aging Well at Home Food Connection Project
- NeedyMeds: Community Representative Program

- North Shore Community Action Program: Quality Home Care/Quality Workforce Initiative
- North Shore Elder Services: Evidence-Based Harm Reduction Support Group and Curriculum Development
- YMCA of the North Shore: Enhance Fitness at the YMCA of the North Shore
- Action, Inc.: COMPASS Program Mental Health Component
- Express Yourself: Expressive Arts for Youth with Mental Illness
- YWCA Rape Crisis Center: Consent Education
- Additionally, funding also provided 11 capacity-building grants of up to \$2,000 for organizations to engage in trainings or buy supplies to better meet the needs of their clients

Partners: CHNA 15, CHNA 13/14

Community Outreach Overview FY18

In addition to its well-established community benefits program, LHMC has a diverse and far-reaching community outreach program that provides support to local communities in a variety of ways, including through food and clothing drives, employee volunteerism, health fairs, sponsorships, and leadership on local nonprofit and community boards.

In FY18, LHMC offered the following community benefits programs:

- Held a weekly blood pressure clinic at Burlington Mall.
- Partnered with the Burlington Rotary Club to co-host an event focused on raising awareness around HIV/AIDS.
- Hosted a food drive and collected over 5,000 pounds of food that was donated to local food pantries in the Burlington region.
- Participated in over a dozen health fairs and community events with the goal of providing health education and screenings in the community.

Community Service Overview FY18

Enhancing Educational Opportunities for the Community

Description: Socioeconomic status has long been recognized as a critical determinant of health. Higher socioeconomic status, as measured by income, employment status, occupation, education and the extent to which one lives in areas of economic disadvantage, is closely linked to health status, overall well-being and premature death. Research shows that communities with lower socioeconomic status bear a higher disease burden and have lower life expectancy. Residents of these communities are less likely to be insured, less likely to have a usual source of primary care, more likely to use the ED for emergent and non-emergent care, and less likely to access health services of all kinds, particularly routine and preventive services. Moreover, research shows that children born to low-income families are, as they move into adulthood, less likely to be formally educated, less likely to have job security, more likely to have poor health status and less likely to rise to higher socioeconomic levels.

One way that LHMC is working to address disparities in education is through providing scholarships, grants and educational opportunities for residents of our service area. For the past 12 years, LHMC has partnered with

the Burlington Adopt-A-Class program to provide scholarships for graduating seniors from Burlington High School. LHMC also provided funding for a summer internship position and partners with both Shawsheen Tech and Peabody High School to provide opportunities for medical assistant training for high school students. LHMC also partnered with area schools to provide funding for community education for parents, teachers and students about safe strategies for social media use, breast cancer awareness and heart health.

Goal: Addressing disparities caused by educational gaps by providing scholarships, internships and community education for residents.

Result: In FY18, LHMC provided funding to support scholarships for over 20 graduating high school seniors.

Community Partners: Burlington Youth Soccer Association, Burlington School District, Adopt-A-Class Program