COMMUNITY BENEFITS REPORT

FISCAL YEAR 2017

Lahey Hospital & Medical Center

41 Mall Road
Burlington, MA 01805

Lahey Hospital & Medical Center Community Benefits Report FY17

Massachusetts' Attorney General 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 and build upon their commitment to addressing health and social needs within their communities.

The Guidelines represent a unique, non-regulatory approach that calls upon 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 hospital and the HMO Community Benefits Guidelines 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 a 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.

As a nonprofit health system, Lahey Health acts as a steward of the communities we serve. Our growing network of primary care physicians, specialists, and behavioral and senior care services is collaborating to make a difference in the health of our region, one person at a time.

Lahey Hospital & Medical Center's Community Benefits Plan

Lahey Hospital & Medical Center 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.

Fiscal Year 2017 Community Benefits Committee

Andy Villanueva, Chief Quality Officer	Lahey Hospital & Medical Center
Peter Kilcommons, Corporate Controller	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
Christine Healey, Director of Community Relations	Lahey Health
Michelle Snyder, Community Relations Regional Manager	Lahey Health

Key Accomplishments for Fiscal Year 2017

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

- LHMC partnered with Mill City Grows to provide 33 hands-on family nutrition and cooking classes for over 43 diverse, low-income families in the Lowell region.

- 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, who provided insurance counseling to 631 people, increasing access to care.

- LHMC successfully continued our Senior Farmers Market partnership with World PEAS CSA to enable 50 seniors in Burlington and 70 seniors in Arlington to receive free fresh fruits and vegetables once a week for 20 weeks.

- 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 $50,000 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.

- LHMC partnered with the Burlington Recreation Department to provide 24 sunscreen dispensers that were installed in the parks and sports fields in Burlington. Residents were also provided with skin safety information as a component of the program.

- LHMC provided 31 Stop the Bleed trainings to first responders, community members and health care workers in the Burlington region. In all, almost 400 people were trained in hemorrhage-control techniques.

- LHMC provided over 100 hours of clinic time at our free weekly blood pressure clinics at the Burlington Mall.

- LHMC partnered with the Peabody Health Department, Peabody Fire Department and other community agencies to provide funding for a community-based opioid outreach program.

- LHMC partnered with the Middlesex League on implementation and collection of data on the Youth Risk Behavior Survey. Seven school districts in Middlesex County, in

partnership with Lahey Health, concurrently conducted their survey and gathered data on the greatest area of need among students. Lahey Health also created a publicly available regional report of the information as an enhancement to the 2016 Community Health Needs Assessment (CHNA).

Plans for Reporting for Fiscal Year 2018

In FY18, Lahey Hospital & Medical Center will continue to work with community partners and hospital leaders to address the needs identified in the 2016 CHNA while taking into consideration the Statewide Priority Needs identified by the Executive Office of Health and Human Services:

Priority Community Health Needs Identified in the 2016 CHNA:
Behavioral Health/Substance Abuse
Elder Health — Social Isolation, Depression, Care Management
Wellness, Prevention and Chronic Disease Management

Statewide Priority Needs:
Address Unmet Health Needs of the Uninsured
Chronic Disease Management in Disadvantaged Populations
Promoting Wellness of Vulnerable Populations
Reducing Health Disparities
Supporting Health Care Reform

Fiscal Year 2017 Community Partners

Peabody Council on Aging	Community Health Network Area 15
Burlington Council on Aging	Community Health Network Area 13/14
Arlington Council on Aging	Saheli
Billerica Council on Aging	American Cancer Society
Woburn Council on Aging	Middlesex District Attorney's Office
Minuteman Senior Services	Lexington Police Department
Burlington Youth and Family Services	North Shore Mall
Middlesex League	Billerica Police Department
Elder Services of the Merrimack Valley	Mental Health Association of Greater Lowell
Mill City Grows	North Suburban YMCA
Greater Lowell Chamber of Commerce	Burbank YMCA
Lowell Public School District	World PEAS CSA
Burlington Public School District	Peabody Fire Department

Burlington Food Pantry	Burlington High School
Woburn Food Pantry	American Lung Association's Lung Force
Lowell Police Department	Lowell Transitional Living Center
Wilmington High School	Peabody Veterans Memorial High School
Peabody Health Department	Burlington Police Department
Reach Beyond Domestic Violence	

Fiscal Year 2016 Community Health Needs Assessment

In FY16, LHMC, in conjunction with all 4 hospitals in the Lahey Health System, completed the required triannual Community Health Needs Assessment. The purpose of the CHNA 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 3 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 detailed CHIP
- Comply with all state and federal IRS community benefits 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 minority 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 3 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.

Summary of Highlighted Programs for Fiscal Year 2017

Priority Area 1: Wellness, Prevention and Chronic Disease Management

Lowell Farm to Table Family Cooking Series

Description: In FY17, LHMC continued our successful partnership with Mill City Grows to implement the Farm to Table program, which provides hands-on family nutrition and cooking education for diverse, low-income families in Lowell, Massachusetts, with the goal of getting them to eat more plant-based meals made from scratch. There were 5 workshops offered that were a series of 5 classes, so the same families attended all 5 workshops over the course of 5 weeks and learned 5 different meals and cooking techniques.

Ten 1-time classes were offered intermittently over the course of the year as an "add-on," and those who attended a 1-time class were not obligated to attend another workshop. Those 1-time classes focused on a specific meal or skill. For example, a class about preserving the summer's harvest targeted people who had an abundance of tomatoes ripening in August that they didn't want to waste. Another class about soups, stews and sauces taught participants how to make a nutritious meal with seasonal fall and winter vegetables along with pantry staples.

At the end of each class, all families shared the meal they prepared. After each class, every family received instructions, groceries and a cooking tool to take home so they could make the meal again. This program was offered in direct response to an identified need in the community to increase access for low-income families to information on nutrition.

According to Lowell General Hospital's CHNA, the top health problems identified in focus groups and interviews and supported by public health data included mental health, substance abuse, diabetes, obesity, respiratory diseases (e.g., asthma and chronic obstructive pulmonary disease), cardiovascular disease, and hepatitis B in the Cambodian community.

Lack of physical fitness and poor nutrition are the leading factors associated with obesity and chronic diseases such as heart disease, hypertension, diabetes, cancer and depression. Good nutrition helps prevent disease and is essential for the healthy growth and development of children and adolescents. According to the Centers for Disease Control and Prevention (CDC), children and adolescents who are obese are more likely to be obese as adults and are therefore more at risk for adult health problems such as heart disease, type 2 diabetes, stroke, several types of cancer and osteoarthritis. One study showed that children who became obese as early as age 2 were more likely to be obese as adults. Obese youth are also more likely to have risk factors for cardiovascular disease such as high cholesterol or high blood pressure. In a population-based sample of 5-to-17-year-olds, 70 percent of obese youth had at least 1 risk factor for cardiovascular disease.

Goal: The goal of the Farm to Table program is to increase the number of low-income families that have access to information and food needed to cook affordable, healthy meals at home, thus improving their diets and overall health. LHMC and Mill City Grows aim to get more than 50 percent of families taking the class to agree to make the meal again when they get home.

Results: This marked Mill City Grow's first full year of the Farm to Table program. Over the course of the year, 43 families (116 people) attended 33 workshops, over 1,000 pounds of produce were distributed, and 86 percent of participants completed the workshop series and made at least 1 new meal at home.

Following the conclusion of these classes:

- 100% reported they were comfortable making a meal of primarily vegetables
- 100% said they would recommend the class to someone else
- 74% reported eating meals as a family 4 or more times per week
- 47% reported they make meals from scratch 4 or more times per week

When asked what they found most valuable about the class:

- 66% said learning to cook healthier meals
- 50% said learning where to find and purchase local food

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 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: To teach hemorrhage-control techniques to immediate responders in a mass casualty or active shooter event.

Results: In FY17, we held 31 training sessions and certified 384 individuals.

Partners: Burlington Police/Fire Department, Billerica Police/Fire Department, Lexington Fire Department

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 FY17, LHMC hosted 3 sessions as part of our Bone Health Lecture Series and 5 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 MOB program during FY17. A total of 86 participants enrolled in the program (some had started the program during FY16), with 76 completing 5 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 9 patients in FY17.

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

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 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 North Suburban YMCA to provide 2 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 FY17 27 people participated in the program (15 in the spring and 12 in the fall). Of those, 20 completed the 12-week program. The other 7 participants could not complete the program largely because of various surgeries, chemotherapy and overall weakness from their treatment.

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. Body composition is also measured, which includes height, weight, BMI, and waist and hip girth. 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-assessment and post-assessment data are collected to show participants' progress over the 12 weeks in the areas of cardiovascular endurance, strength, flexibility and mobility. The results were as follows:

- 100% of participants increased their cardiovascular endurance
- 85% of participants increased their strength
- 75% of participants increased their flexibility
- 82% of participants increased their mobility

Partner: North Suburban YMCA

YMCA Pink Program

Description: In response to the priorities identified in our 2016 CHNA, LHMC partnered with the Burbank YMCA to conduct 3 courses of the Pink Breast Cancer Survivorship Program.

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.

During Pink, survivors and their families receive a membership at the YMCA for the duration of the program.

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 the Commonwealth's 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 the Commonwealth's.

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 for breast cancer survivors.

Results: As part of its pre- and post–assessment, 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.

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, the 127 participants who went through the Pink Program experienced the following:

Physical Assessments:

- Walk assessment improved by 19%
- Strength assessment improved by 23%
- Balance assessment improved by 23%

Emotional Assessments (PROMIS-29):

Most participants experienced their largest improvements in the following categories:

- Physical Function (ability to do chores, run errands, walk and climb stairs)
- Satisfaction with Social Role (ability to work, personal and household responsibilities, and daily routines)
- Fatigue (feeling tired, run down, or unable to start tasks)

Community Partner: Burbank YMCA

Skin Cancer Awareness and Prevention Outreach

Description: According to the American Cancer Society, skin cancer is the most common type of cancer in the United States. More skin cancers are diagnosed in the U.S. each year than all other cancers combined, and the number of skin cancer cases has continued to rise over the past few decades.

Skin cancer is killing 1 American every hour, or 10,000 every year. Melanoma, the deadliest form of skin cancer, is the leading cause of death in women ages 25–30 and the second most commonly diagnosed type of cancer in women ages 15–29.3. According to a report by the Burlington Public Health Department, in the town of Burlington, the standardized incidence rates (SIR) for melanoma observed for 2008–2012 was 79.1 for males (95% confidence interval, 44.2–130.5) and 108.9 for females (95% confidence interval, 65.9–159.2). A SIR of more than 100, such as the Burlington female SIR of 108.9, indicates that the incidence reported is higher than what was expected in the town based on the statewide average.

In the LHMC service area, 7 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 2015 LHMC Community Health Survey, 11.6% reported that they had been told they have cancer, compared with 11.1% for residents of the Commonwealth; 17% of low-income respondents had been told they have cancer.

Education and awareness can help prevent skin cancer, and if detected early, skin cancer can often be treated effectively. For that reason, LHMC started a skin cancer awareness and prevention program in partnership with the Burlington Recreation Department and the Town of Burlington, which involved providing 24 sunscreen dispensers and 14 cases of sunscreen to the Burlington Recreation Department for the parks/sports fields in Burlington, as well as a sunscreen dispenser for the Stoneham Boys & Girls Club. LHMC also funded the educational flyer from Impact Melanoma that was distributed with the sunscreen.

Goal: Provide skin cancer education and prevention.

Results: Education, information and free sunscreen were provided to thousands of residents of Burlington who use the sports fields and parks.

Middlesex County Schools Youth Risk Behavior Survey

Description: In direct response to an identified need from the schools in Middlesex County, in 2017 LHMC supported the development of a Middlesex League Youth Risk Behavior Survey (YRBS) and the development of district-level reports for each participating school district as well as a regional report for the entire Middlesex League. This data will be used to continue collaboration with the school districts in Middlesex County to help address disparities and needs as revealed by the survey.

The Youth Risk Behavior Surveillance System (YRBSS), established in 1990, was developed largely to monitor certain risky health behaviors and other priority areas among school-age youths and young adults. In particular, it monitors behaviors related to the following areas: (1) unintentional injuries and violence; (2) mental health; (3) alcohol and other drugs; (4) tobacco; (5) sexual behaviors related to unintended pregnancy and sexually transmitted infections (STIs), including HIV infection; and (6) nutrition and physical activity. Through the YRBS, the YRBSS 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.

Nearly every state in the nation administers the YRBS through a cooperative agreement with the Division of Adolescent and School Health at the Centers for Disease Control and Prevention (CDC). As part of this agreement, the Massachusetts Department of Public Health draws data from a representative sample of cities and towns in the Commonwealth and develops a report of the risks facing the Commonwealth's youth. This effort is extremely valuable, but individual cities and towns are not required to conduct their own assessments, and the Commonwealth's YRBS is not designed to provide information on the variation that exists across the Commonwealth.

Goals: Increase timely access to data, and increase collaboration among Middlesex school districts to address key priority health issues for youth.

Collaborate with the Middlesex League to identify students' most pressing health needs.

Results: Superintendents from the 12 school districts of the Middlesex League participated in introductory calls with John Snow Inc. (JSI) to determine their participation in the collaborative survey effort for 2017. Five districts (Belmont, Lexington, Reading, Watertown and Wilmington) already had plans to administer the survey but affirmed their commitment to be involved in the Middlesex League YRBS in upcoming years. Thus, for this reporting period, JSI worked with 7 school districts (Arlington, Burlington, Melrose, Stoneham, Wakefield, Winchester and Woburn) to administer the survey, collect and analyze data, and write reports of the findings. The Middlesex League region data includes the data of only these 7 school districts. Over the next year, the school districts in the Middlesex League will work collaboratively to develop plans to ensure broader participation in the 2019 YRBS process.

Partners: John Snow Inc., Middlesex League

Student Health Center at Peabody Veterans Memorial High School

Description: In FY17, LHMC, through the JB Thomas/Lahey Fund, supported the Peabody Veterans Memorial Student Health Center (SHC) with funding for services not currently covered by insurance. The mission of the SHC is to provide high-quality comprehensive health care to students in order to support optimal health and academic outcomes. The mission of the SHC aligns closely with the priorities identified by LHMC in its most recent CHNA. For example, the SHC improves access to behavioral health and substance abuse services by offering these services on-site, and integrates those services into primary medical care. The SHC also identifies students with chronic conditions and helps them improve self-management of these conditions.

In addition, the SHC, through its partnership with Haven From Hunger, helps promote wellness through health education and healthy eating.

The SHC provides an integrated model of care in its approach. Services offered include management of chronic illnesses such as asthma and diabetes; urgent care visits; immunizations; routine and sports physicals; health education; and confidential services including reproductive health care and behavioral health services. As evidenced by the center's staffing structure, behavioral health care is a significant focus, with individual therapy and group counseling services provided for issues such as depression, anxiety, stress management and substance use. All students using the clinic are screened for behavioral health needs through use of the CRAFFT Screening Tool for Adolescent Substance Abuse.

Services are provided on-site at PVMHS during the school day; SHC staff also provides behavioral health services on-site 1 day per week to students based at the Peabody Learning Academy, whose student body is at higher risk for behavioral health issues. In addition, a youth health advisory council convened by the office coordinator works to promote a healthy school climate at PVMHS and advocates with state and local legislators regarding youth health issues. Continuity of care is provided by reduced on-site staffing during school breaks as well as through connection with the Peabody Family Health Center operated by North Shore Community Health Inc. The SHC is staffed with 1 FTE nurse practitioner, 1 FTE office coordinator, 1 FTE licensed mental health counselor and 1 FTE licensed clinical social worker, all of whom are employees of North Shore Community Health.

Goal: Provide support and funding for services at the Peabody Veterans Memorial High School Student Health Center that meet a critical, identified community need and that are not currently covered by insurance.

Results: The Peabody Veterans Memorial High School Student Health Center currently is able to serve the needs of Peabody youth who otherwise would not be able to receive necessary services. During the 2016-2017 school year, the center had 2,660 total visits for the following services:

- Medical visits, 1,037
- Behavioral health visits, 1,524
- Summer visits at PVMHS, 99

Partners: Peabody Health Department; Peabody Veterans Memorial High School

Lahey Health Community Conversations on Cancer

Description: In response to the needs identified in the CHNA, Lahey Health provided a free community education forum called Conversations on Cancer, to educate community members on the prevention, early detection and treatment of cancer, and increase awareness about support and survivorship programs for those diagnosed with cancer. The forum addressed colon, breast, lung, gynecological, prostate and skin cancers. The program included educational sessions facilitated by physician leaders from the Lahey Health Cancer Institute, followed by a panel discussion. In addition, attendees had the opportunity to visit an exhibit hall where they could participate in various cancer screenings, hands-on demonstrations, and consultations with physicians and clinicians.

The screenings/exhibits included lung cancer pre-screenings, skin cancer screenings, colon cancer prevention and screening education, breast cancer risk assessment consultations, and a gynecological cancer detection exhibit with hands-on demonstrations of the da Vinci robot.

Goal: To educate community members about prevention, detection, treatment, management and support of cancer.

Results:

· 137 people from throughout Lahey Health's service area attended the event

· The attendees included 69% women, 31% male

· Of the 137 attendees, 34% reported having a friend or family member with cancer, 24% attended for general interest, 15% reported being survivors and 6% reported being currently in treatment

· 27 people participated in the skin cancer screening, and 4 were referred for follow-up

· 6 people participated in the lung cancer screening; and were referred for a low-dose computed tomography scan.

· 30,000 people accessed educational information through social media education and outreach leading up to the event

Partner: American Cancer Society

Lowell Transitional Living Center Medical Respite Beds

Description: As identified in the 2016 Greater Lowell CHNA, low socioeconomic status and poverty were identified by all focus groups and key informants as barriers to obtaining care. Community-level groups acknowledged that often residents are forced to choose between health care and other expenses due to low income and high cost of care. To address the health needs of this key population, in FY17, LHMC partnered with the Lowell Transitional Living Center (LTLC) to provide a medical respite program at the LTLC. Medical respite provides short-

term post-acute medical care for homeless persons who are too ill or frail to recover while living on the streets but are not ill enough to be hospitalized, and helps coordinate post-hospital care. It is a way to provide low-cost, high-quality recuperative services.

Goal: Open a 5-bed respite program in the LTLC's homeless shelter.

Results: This program has reached approximately 130 people. LTLC has continued its partnership with Greater Lawrence Family Health Center's Healthcare for the Homeless program and coordinated care to address mental health along with physical health issues, given how they exacerbate each other, especially in a shelter environment.

The program hired a health and wellness coordinator who began work on Jan. 2. She is tasked with managing the 5-bed medical respite program that will continue to accept individuals who have both physical and mental health needs. The coordinator has begun researching various short instruments for immediate screening of health issues, which will be soon deployed as part of the program's initial intake process. She also is working with the case management teams of individuals who have mental and physical health needs, with the goal of improving these individuals' care management by identifying and meeting their specific needs.

The program will be fully operational in 2018. In 2017 it provided respite for 2 people each day in pull-out reclining chairs, who received special attention from the case management staff and visiting nurses. In the evening these clients were moved to beds in the dorm rooms, with overnight staff tasked with providing wellness checks, administering medication and responding to special needs such as dressing and getting into bed. Individuals stayed on average between 2 and 4 weeks, during which they received a daily nursing visit for a wellness check, treatment, education and assistance with medication, and worked with a case manager as their health improved to address the issues causing their homelessness and to help them find housing. The program has round-the-clock staffing; bathroom, shower and laundry facilities; a full kitchen; daily AA meetings; and a variety of other programs and services.

Partner: Greater Lawrence Family Health Center's Healthcare for the Homeless Program

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. It also estimates 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.

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

Priority Area 2: Elder Health

Serving Health Information Needs of Everyone (SHINE) Program

Description: In FY17 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 the very successful partnership that began in 2015, when the program served 631 people in the community and 38 people on-site at the LHMC campus.

Seniors (65+ years old) across all socioeconomic strata are inherently more likely to face significant barriers to care. This was a significant theme from the interviews and was also strongly conveyed by the quantitative data findings. LHMC's community benefits service area also has a number of towns that defy the typical trend and have high proportions of established, relatively intransient populations of older adults.

LHMC's partnership with Minuteman Senior Services addresses this health care access need directly.

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 those with limited resources enroll in helpful programs. The SHINE program is open to everyone and not limited to LHMC patients.

Goal: To provide Medicare enrollees and their families unbiased information to enable them to better access their medical and prescription drug insurance benefits.

Result: The program provided one-on-one assistance to 669 people, many of whom had more than 1 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 2016 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 for the past 2 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 post-menopausal women, helps with the mobility of affected joints, decreases pain from osteoarthritis and helps people suffering from some chronic diseases.

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

Results: Participants took a survey after the class and self-reported that the classes helped increase their mobility, especially for those who have arthritis or have had an injury; decrease their fear of falls; increase balance; and decrease social isolation by providing a regular activity that gets them out of the house.

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

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 5 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 and in Burlington 38 percent of seniors are getting the recommended 5 servings of fruits and vegetables per day.

To address this need, LHMC partnered with World PEAS Community Supported Agriculture (CSA), an organization that grows organic produce locally for Middlesex County and ran farmers markets for a total of 20 weeks. The program served 50 seniors per week from June through October, and, on average, participants took home 6 varieties of fresh, local produce each week.

Goals: (1) To increase the consumption of fresh, locally grown fruits and vegetables by senior citizens in the Burlington and Arlington areas by eliminating cost as a barrier to access. (2) To decrease social isolation for seniors and provide increased opportunities for seniors to be connected with community services.

Results: The 2017 survey results demonstrated that many participants in the World PEAS Food Hub Subsidized Farmers Market program earned less than $30,000 per year. The average age of participants was 76 and the majority were women. Results also showed that many participants struggle with food insecurity and food access. At Burlington Council on Aging, 50 percent of respondents said that buying more produce would be hard on their budget, while 54 percent of respondents at Arlington agreed. About 24 percent of respondents at Burlington COA agreed that it is difficult to purchase fresh fruits and vegetables where they normally shop, and about 16 percent reported frequently or sometimes using an emergency food program in the past 12 months.

While the results and data suggest that increased consumption of fresh fruits and vegetables has a positive impact on the physical health of the participants in this program, there is another unexpected yet incredibly important benefit. A survey administered in 2017 revealed that more than half (58%) of market users leave the house fewer than 5 times a week, making this market incredibly important for them socially. About 78 percent of market users reported that the market introduced them to new programs at the COA; 68 percent of market users reported that they were able to make a new connection or renew an existing one due to the market.

Staff at the senior centers in Arlington and Burlington have repeatedly reported that the farmers market-style distribution of the fruits and vegetables cultivates a community space that greatly benefits the seniors who participate. Staff have reported that seniors arrive early to the distribution to visit with friends, 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 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 has given them a reason to come into the senior center, engage with their peers and often stay for other activities. Social isolation is a major concern for the elderly, especially those who live alone like the majority of participants in this program. Thus, this program is combating a very real mental health risk.

Partners: Arlington and Burlington Councils on Aging; World PEAS CSA

Senior Exercise Classes

Description: In FY17, LHMC continued its successful biweekly exercise class at the Burlington Council on Aging. Every Monday and Wednesday morning for 52 weeks per year, a physical therapist 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 emergency departments, 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 2 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 certainly 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), cancer and cerebrovascular disease (stroke) are the 3 leading causes of death in the United States, Massachusetts and all the cities/towns in LHMC's community benefit service area. In addition, diabetes is ranked in the top 10 causes across all 3 of these geographic areas. According to the LHMC CHNA, Burlington residents have higher age-adjusted rates (per 100,000 population) of CVD mortality than residents both in Middlesex County and throughout the Commonwealth.

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.

Results: 10-20 participants per class.

In FY17 a survey was administered to 24 attendees of the regular exercise class. Survey findings were as follows:

- 58% reported they only leave their house 1-2 times per day
- 30% self-report having a chronic illness or chronic pain
- 71% also report that their physical and mental health has improved as a result of the class

Partner: Burlington Council on Aging

Stanford Chronic Disease Self-Management Classes

Description: In the LHMC primary service area, certain towns had consistently higher rates of chronic disease hospitalizations or mortality than the Commonwealth overall. Chronic health conditions such as asthma, cardiovascular disease, cerebrovascular disease (stroke), chronic lower respiratory disease (most notably COPD), diabetes, heart failure and hypertension arose as the most common afflictions. Towns in the service area all reported higher than Commonwealth or county averages on 2 or more of these chronic disease indicators.

Even in towns where the hospitalization or death rate for these chronic conditions was not higher than Commonwealth or county averages, qualitative interviews and forums indicated that these diseases were of utmost concern to local health officials. At-risk sub-populations such as low-income or elderly were more likely to be afflicted with one or more of these conditions and to require hospitalization as a result.

In order to address this disparity, in FY17, LHMC conducted 6 Stanford Chronic Disease Self-Management courses at the Woburn and Billerica Councils on Aging. The courses focused on self-management of arthritis, diabetes and chronic pain and occurred once a week for 6 weeks.

The Chronic Disease Self-Management Program (CDSMP) developed by Stanford University is proven to help older adults better manage their chronic conditions, improve their quality of life and lower the cost of health care. CDSMP workshops are designed to help people gain self-confidence in their ability to control their symptoms and learn how their health problems affect their lives. Small-group, highly interactive workshops are 6 weeks long, meeting once a week for 2.5 hours, and are facilitated by a pair of leaders, one or both of whom are non-health professionals with chronic diseases themselves. Workshop topics include how to deal with frustration, fatigue, pain and isolation; ways to maintain and improve flexibility, strength and endurance; managing medications; how to communicate more effectively with family, friends and health professionals; and healthy eating.

Goal: Provide free chronic disease self-management education courses to seniors in the LHMC service area.

Results: The courses served a total of 103 seniors.

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

Lahey Hospital & Medical Center Intergenerational Program

Description: According to qualitative information gathered through interviews and community forums and presented in the 2015 LHMC Community Benefit report, elder health is one of the highest priorities for the LHMC primary service area. Chronic disease, depression, isolation and fragmentation of services were identified as some of the leading issues facing the area's senior population. Demographically, 10 out of 15 towns in the primary service area have higher percentages of residents 65 or older than Commonwealth or county averages, with the highest percentages of seniors in Burlington, Lexington, Peabody and Winchester.

In FY17 LHMC hosted an intergenerational program for seniors in Woburn and Burlington. Seniors were matched with a youth partner and over the course of 3 sessions, participants learned about healthy eating while simultaneously gaining a better understanding of another generation. For seniors, this program helps reduce social isolation by providing opportunities for them to interact both with each other and with the youth participants.

Goals: Increase understanding and knowledge between generations, and increase knowledge of nutrition and healthy eating.

Results: In a survey administered to all 67 people who attended the workshops:

- 92% reported a better understanding of how to read a nutrition label
- 96% reported they could understand the difference between whole foods and processed foods
- 91% reported that they felt better equipped to make their own healthy snacks
- 100% reported that they better understood another generation

Partners: Billerica Council on Aging, Billerica Recreation Department, Woburn Senior Center, North Suburban YMCA

Healthy Eating Workshop

Description: Lack of physical fitness and poor nutrition are the leading factors associated with obesity and chronic diseases such as heart disease, hypertension, diabetes, cancer and depression. Good nutrition helps prevent disease. Overall fitness and physical activity reduce the risk for many chronic diseases and are linked to good emotional health. As noted, according to Massachusetts BRFSS data, only 1 in 5 adults in Middlesex and Essex counties ate the recommended 5 servings of fruits and vegetables per day, and 1 in 4 adults reported getting no physical activity in the 30 days preceding the survey.

In addition to the county and national data illustrating the impact of these conditions on the region, nearly all the interviewees and participants in focus groups and community forums cited these issues as among the leading health concerns in LHMC's community benefit service area.

To address this need, LHMC conducted 3 Healthy Eating Workshops at the Billerica and Woburn Councils on Aging. This hands-on program is designed for seniors who want to be better educated about and adopt a healthier, more nutritious lifestyle. Workshop participants met once a week for 5 weeks. The last session allowed them to put into practice what they learned in the workshop.

Goals: Inform and educate participants about the MyPyramid food guide, and help them develop a personal nutrition lifestyle that meets their needs.

Results: The program served 41 seniors in Billerica and Woburn. In a survey to participants:

- 83% reported that since attending the workshop, they made better choices about what they ate
- Before attending the workshop, only 35% of participants read the nutrition labels on food containers

- After participating, 92% reported that they had a better understanding of food nutrition labels

Partners: Billerica and Woburn Councils on Aging

Priority Area 3: Behavioral Health (Mental Health and Substance Use)

Peabody Opioid Overdose Outreach Program

Description: Mental illness and substance use have a profound impact on the health of people living throughout the United States. CDC data suggest that approximately 1 in 4 adults in the United States has a mental health disorder, and an estimated 22 million Americans struggle with drug or alcohol problems. Depression, anxiety and alcohol abuse are directly associated with chronic disease, and a high proportion of those living with these issues also have a chronic medical condition. The impact of mental health and substance use on the residents of LHMC's service area and in Essex County overall is particularly profound, as demonstrated by ample quantitative and qualitative information. Essex County experienced more than a 200 percent increase in opioid overdose deaths between 2001 and 2014. Specifically, in 2001, 58 deaths due to opioid abuse were reported in Essex County. By 2013 this number had risen to 116, and between 2013 and 2014 the figure rose startlingly to 190 deaths.

According to the 2016 Beverly Hospital Community Benefit Report, Peabody had a rate (479) of opioid-related emergency department (ED) discharges per 100,000 population that was significantly higher than the Commonwealth rate (260).

There was overwhelming agreement across all the community forums that mental health and substance use are 2 major health issues facing the community. The clear sentiment was that these issues impact all segments of the population, from children and youth to young and middle-aged adults to seniors.

To address this need in FY17, LHMC partnered with the City of Peabody to implement an overdose outreach program. A trained firefighter and trained recovery coach visit the homes of individuals who have overdosed, ideally within 1 week of the event, to offer resources, information and support to promote follow-up substance use treatment.

Goal: Provide an outreach team to visit the home of a patient treated in the emergency room for overdose, to facilitate the patient's entry into a treatment program.

Results: In FY17, the outreach program accomplished the following:

- Attempted 170 home visits
- During 26 visits, the team had direct contact with the patient and provided resources and support
- During 53 visits, the team had contact with the patient's family/household members and provided them with information and resources
- When unable to connect with families in person, the team left the information outside of the home

Partners: Peabody Fire Department, Peabody Health Department, Healthy Peabody Collaborative, Peabody Police Department, Atlantic Ambulance, Healthy Streets

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 FY17 LHMC hosted 4 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

Community Opioid Outreach Program Recovery Coach Initiative

Description: As identified in the 2016 Greater Lowell CHNA, the majority of both provider/professional focus groups and community focus groups identified substance abuse and addiction issues, including alcohol addiction, as top health issues for Lowell and Greater Lowell residents. Two provider/professional groups expressed concern about the number of babies born with opioid addiction issues. One professional/provider group acknowledged that Lowell is a "hot spot" for opioid issues, but it is also a growing problem in surrounding cities and towns. First responders cited an increase in drug-related mental health issues among residents. Community groups expressed concern at the lack of services/care for those in their communities who are addicted to drugs or alcohol.

To address this community health need, in FY17 LHMC partnered with Lowell House Inc. (LHI), the Lowell Police Department (LPD), Lowell Fire Department (LFD) and the Mental Health Association of Greater Lowell on their Community Opioid Outreach Program (COOP). COOP provides ongoing case management, follow-up and support to individuals who have recently overdosed on opiates in the city of Lowell. Implementation of the program began in the spring of 2016. The COOP outreach team consists of an LPD officer, an LFD firefighter, and an LHI case manager who aim to follow up with opioid overdose victims within 24-48 hours of the overdose. Upon meeting with overdose victims, the team encourages them to seek treatment, educates them on treatment options and connects them with services when appropriate. A clinician from the Mental Health Association of Greater Lowell (MHA) works with the children of individuals who have recently overdosed.

COOP is designed to assist those at highest risk for death by overdose in the city of Lowell by making contact with them and engaging them in a conversation about their recovery from addiction.

Goals: (1) Provide an effective intervention after an individual has overdosed on opioids. (2) Provide recovery coaching to individuals in Lowell who have overdosed— 50 percent of victims contacted will enter a treatment program for their addiction. (3) Increase the capacity of the COOP team and public/private health agencies to address the opioid crisis.

Results: From October 2016 through November 2017, the grant-funded year, the COOP team made contact with 257 people who had overdosed on opioids; 161 people received at least 1 follow-up visit with the recovery coach. Some examples of positive outcomes include the following:

- Educating people about their addiction

- Providing Narcan and education about overdose prevention and disease prevention
- Helping victims access the various levels of treatment, including detox, medication-assisted treatment, residential and outpatient treatment
- Addressing case management needs including medical, psychiatric, financial and housing needs.

On the community level, successes included building positive relationships with agencies and providers in the Lowell community to foster better, more coordinated care for these individuals, and building trust and rapport with the homeless population in Lowell.

The clinician from MHA received referrals for 31 children, ages 9 months to 16 years. The clinician was able to follow up with 19 of those youths, who ranged in age from 3 to 14 years. The clinician also received referrals for 11 individuals who had recently overdosed and was able to follow up with 10 of them. These services are completely voluntary, and it is up to the individuals and the guardians of the children to accept access to these services.

Partners: Lowell Police and Fire Departments, Lowell Health Department, Mental Health Association of Greater Lowell, Trinity Ambulance

Support Groups

Description: In FY17, LHMC hosted 16 different monthly support groups at LHMC, Burlington; Lahey Medical Center, Peabody; and Lahey Outpatient Center, Lexington. 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 benefit service area. Chronic disease such as cardiovascular disease (heart disease), cancer and cerebrovascular disease (stroke) are the 3 leading causes of death in the United States, Massachusetts and all the cities/towns in LHMC's community benefit service area.

Community Outreach Overview FY17

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, leadership on local nonprofit and community boards, and development of a state-approved model for medication and sharps disposal.

In FY17, LHMC offered the following community benefits programs:

- Hosted a free trauma prevention conference focused on youth health and injury prevention.
- Hosted the Women's Health Lecture Series focused on education for the community on important and timely health topics, derived from the LHMC CHNA
- Hosted an education series for residents of Arlington public housing on topics related to diabetes prevention, healthy eating and exercise
- LHMC clinicians provided medical staff coverage for 4 high schools during football games
- Hosted a community safety event for residents of Beacon Village in partnership with the Burlington Police Department to raise awareness about available resources in the community
- Held a weekly blood pressure clinic at Burlington Mall
- Held a community education event at Northshore Mall on various men's health topics
- Provided a bimonthly lecture series for patients and community members on healthy eating and cooking techniques. Participants were invited to demo the recipes along with the instructor and take home healthy cooking tips.
- In collaboration with Community Health Network Area (CHNA 15), LHMC funding provided over 30 grants ranging from $300-$75,000 for organizations within the service area to address identified health issues in their community. Three community workshops focusing on addiction, cultural proficiency and reducing substance use were offered in FY17.

Community Benefit Expenditures