

Community Benefits Mission



"UMass Memorial Health Care is committed to improving the health status of all those it serves, and to addressing the health problems of the poor and other medically underserved populations. In addition, non-medical conditions that negatively impact the health and wellness of our community are addressed."

What Are Community Benefits?

Community Benefits are programs and services provided by not-for-profit hospitals to improve community health. They are designed to respond to identified community needs and address health disparities among disadvantaged and vulnerable populations. Community Benefits are not provided for marketing purposes and must meet at least one of the following criteria:

- Improve access to health care services
- Enhance the health of the community
- Advance medical or health knowledge
- Relieve or reduce burden of government or other community efforts

In 2015, UMass Memorial Health Care contributed nearly \$173 million to positively impact the health and well-being of the communities we serve. Our Community Benefits contributions support charity care, subsidized health services, education of health professionals, research, community-based programming and partnerships. In addition, almost \$10 million in other non-Community Benefits expenses were absorbed through bad debt write-offs and Medicare shortfalls.

2015Community Benefits Total



Other Significant Expenses Total



- * Medicare Bad Debt: Expenses for receivables that can no longer be collected and are written off.
- ** Medicare Shortfall: Net loss incurred for the cost of providing services to Medicare patients versus income received from the Medicare program.

Dear Friends and Colleagues

UMass Memorial Health Care continues to work internally and externally to improve the health of the communities it serves. I am delighted to share our 2015 Community Benefits Annual Report, highlighting new and existing partnerships and programs that link our clinical system with vital community assets to mutually provide resources, and address barriers and social factors that impact health.

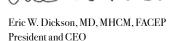
Addressing root causes of community health problems is vital to producing change. We are proud that throughout our health care system, we continue to invest in programs such as workforce development for inner-city and at-risk youth, and support and provide interventions that address social factors of poor health such as poverty, education, food insecurity and access to care.

Utilizing specially trained, culturally competent Community Health Workers (CHW) has become indispensible in our work to address health disparities among vulnerable populations. Innovative programs, such as our comprehensive Pediatric Asthma Intervention and newly launched Senior Falls Prevention Program in our Trauma Department, integrate CHWs as part of the clinical team and are highlighted in this report.

We thank all of our multisectoral partners that play a critical role in incorporating population health models into our Community Benefits approach and improving

the health of all of our residents. We are committed to continuing to build these critical linkages to improve health in our region as we address disparities and those populations most in need.

Please enjoy the enclosed report capturing some of our many Community Benefits initiatives. We look forward to continuing to advance this work in the year ahead.



UMass Memorial Health Care, Inc.



System Hospitals

UMass Memorial Medical Center Patrick Muldoon, FACHE, President Mónica Lowell, Vice President, Community Relations

UMass Memorial - Clinton Hospital Lisa Colombo, DNP, MHA, RN, President and CEO Rosa Fernandez, Manager, Interpreter Services/Community Benefits

UMass Memorial - HealthAlliance Hospital
Deborah Weymouth, FACHE, President and CEO
Kelli Rooney, Manager, Marketing, Public Relations and
Community Relations

UMass Memorial - Marlborough Hospital
Steve Roach, President and CEO
Mary Ann Stein, Director, Volunteer Services and Community Outreach

Inside the Report

- 2. Community Health Needs Assessment and Improvement Plans
- 3. Prevention and Wellness Trust Fund
- 4. Injury Prevention
- 6. Oral and Medical Health
- 8. Focus on Bell Hill
- 10. Pediatric Asthma Intervention
- 12. Youth Programs
- 14. Active Living/Healthy Eating
- 16. Falls Prevention Initiative
- 18. From Our Affiliate Hospitals
- 20. Supporting Community Initiatives

Inside Back Cover: UMass Memorial Health Care System Stats

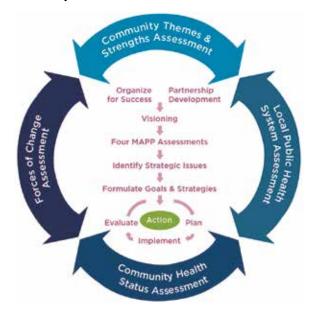
Cover: Victoria Ramos, community health worker, and Cindybeth Palmgren, NP, provide educational materials to a patient in the falls clinic, part of a new community-clinical linkage program in the UMass Memorial Medical Center Trauma Department.

Community Health Needs Assessment (CHA) and Community Health Improvement Plan (CHIP)

As a not-for-profit hospital system, UMass Memorial Medical Center and our community hospitals conduct a Community Health Needs Assessment (CHA) every three years and adopt an implementation strategy to meet identified needs. To complete the 2015 - 2018 CHA, the Medial Center partnered with the Worcester Division of Public Health, Fallon Health and other stakeholders. The assessment includes primary and secondary data from multiple sources. Input was provided through key informant interviews, focus groups, an online survey, and ten community dialogues held in Worcester and surrounding towns. More than 1,777 individuals participated. The CHA implemented the *Mobilizing for Action through Planning and Partnerships* (MAPP), a best practice model for health improvement planning developed by the National Association of County and City Health Officials (NACCHO) and the Centers for Disease Control and Prevention.

The Medical Center co-chaired the leadership process to develop the updated 2016 Community Health Improvement Plan (CHIP) for the greater Worcester region based on findings of the CHA. The CHIP is a roadmap for the future health of the region and intended to be a living document that will continue to be reassessed annually. The Medical Center's Community Benefit Implementation Strategy aligns with the CHIP.

Community Health Needs Assessment Planning

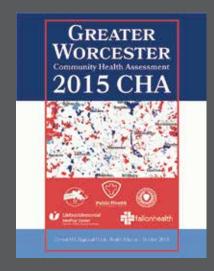


Coalition for a Healthier Greater Worcester

UMass Memorial also co-led the establishment of the Healthy Greater Worcester Coalition, comprised of public, non-profit and private-sector stakeholders. The coalition convenes the Massachusetts Department of Public Health, local health departments, service providers, consumers and members of the general public in Worcester and contiguous towns to implement the CHIP and promote the continuous improvement of health status for all residents in the region. The coalition's mission is "to promote shared learning, reflection and broad engagement that improves community decision-making and quality of life for residents of Greater Worcester."

Priorities Identified in the 2015 - 2018 CHA

- · Access to Care
- · Access to Healthy Foods
- · Cultural Competency
- · Economic Opportunity
- · Mental Health
- · Physical Activity
- · Racism and Discrimination
- · Safety
- · Substance Abuse



Academic Health Department

To enhance the capacity of the Worcester Division of Public Health (WDPH) in support of the CHIP, The Medical Center co-led the development of an Academic Health Department (AHD)/ Center for Public Health Practice at Clark University. An AHD is a formal collaboration between a public health department and an academic institution to more effectively address public health issues. Through the collaboration, academia helps to inform public health practice and WDPH provides unique research and practicum experiences. Medical Center funding supported the hiring of a coordinator. Thirteen student interns worked with WDPH on public health efforts including compilation of data for the 2015 - 2018 CHA.



Prevention and Wellness Trust Fund

UMass Memorial Medical Center worked closely with the Worcester Division of Public Health and other stakeholders to secure second-year funding from the Prevention and Wellness Trust Fund (PWTF). In 2014, a \$7 million grant over three years was awarded to the City of Worcester to address three communitywide public health and disease prevention initiatives: pediatric asthma, hypertension and senior falls.

UMass Memorial Medical Center continues to serve as an ongoing member of the PWTF Governance/ Executive Committee and co-chairs the PWTF Pediatric Asthma Intervention Committee. In 2015, accomplishments included an inpatient pediatric asthma program linking new patients to the full intervention (see pages 10 - 11) and improved coordination of the "Meds-In-School" medication adherence program (see page 17). A Senior Falls Prevention Intervention was also launched through the Medical Center Trauma Department (see page 16).

PWTF Partners

City of Worcester Division of Public Health City of Worcester Healthy Homes Edward M. Kennedy Community Health Center Fallon Health Family Health Center of Worcester Mass Audubon UMass Memorial Plumley Village Health Services UMass Memorial Pediatric Primary Care UMass Memorial Pediatric Pulmonology UMass Memorial Office of Clinical Integration **UMass Memorial Office** of Community Relations Worcester Community Legal Aid Worcester Head Start Program Worcester Public Schools Worcester Senior Center

MEMORIAL SCHOOL A Mobile Safety Street counselor speaks to neighborhood youth about how to cross the street safely. UMass Memorial Health Care

Mobile Safety Street



Esther Borer, photo above, injury prevention coordinator, at UMass Memorial Medical Center, said: "Mobile Safety Street (MSS) is a traveling exhibit that teaches safety at home and away. A small school bus pulls a trailer that opens to create educational vignettes and simulations: the bus itself, a residential street and commercial street, and a house interior. We visit all Head Start preschools and six elementary schools, and several thousand children view it each year.

"Our instruction is age appropriate. Young children might learn to use seat belts on the bus, while older kids might talk about its emergency exits. Most kids think they know how to cross the street, but they really don't. Conversations about street safety include this basic skill as well as bike helmet use, downed power lines and swim buddies. In the home, we talk about open windows, bathwater temperature, uncluttered stairs and kitchen safety.

"A few years ago, a senior in-home safety curriculum was retrofitted to include topics such as falls prevention and emergency preparedness—having information handy for an effective 911 call. MSS visits all Worcester senior sites and we hear some alarming stories. One petite 91 year old told us she used her kitchen drawers as a stepladder to her upper cabinets!"

Injury Prevention: Goods for Guns

A successful, annual gun buyback program, coordinated by the Worcester Police Department and 15 surrounding towns, that promotes safety and teaches proper storage of guns in the home.

Michael Hirsh, MD, surgeon-in-chief of UMass Memorial Children's Medical Center and the Division of Pediatric Surgery and Trauma, and medical director for the Worcester Division of Public Health, noted: "Part of our commitment to the community is to reduce gun injury. Through a lucky confluence of interested leaders — specifically Attorney General Maura Healy, District Attorney Joseph Early, Jr., Mayor Joseph Petty, and Dennis Demitri, MD, UMass Memorial Medical Center physician and past-president of the Massachusetts Medical Society — we have drawn attention to gun violence as a public health problem. City Manager Edward Augustus also became involved because more crimes were being committed with replica guns (reproductions that do not fire). After our 2014 buyback at four retrieval sites in Worcester, the effort expanded to include 20 municipalities and 12 Massachusetts sites with reimbursement for replicas. Local police secured and inspected weapons, with help from hospital volunteers and from local colleges involved in public health. In 2015, we had the highest single day of gun retrieval in 14 years: 323 guns, including 51 replicas.

"This is not about crime reduction or gun control, but rather about injury prevention. Research shows that 65 percent of firearm fatalities are suicides: 21,000 of 33,000 annually. A gun used to protect the home can be found by kids and, more generally, by a despondent person in an impulsive moment. About 85 percent of survivors of failed suicide report that they planned it for less than 15 minutes. With firearms, there is a 93 percent completion rate compared to pills (30 percent), or asphyxiation (80 percent), and 65 percent of teen suicides are with a hunting rifle that was readily available. Buybacks are an opportunity to get unwanted weapons out of the home.

"Goods for Guns doesn't require a lot of money — about \$75 per automatic weapon. Since 2002, more than 2,900 firearms have been collected at a total cost of \$150,000 — less than the health care cost of just four gunshot victims. But this economic view is not as important as the human benefit. 2015 was the first year in which the number of gunshot deaths exceeded that of motor vehicles because we have done so much with motor vehicle laws and improvements, and not enough about guns."



2,902

Guns retrieved 2002 - 2015



Buyback cost per automatic weapon

Surgeon Michael Hirsh, MD, with police chiefs from surrounding municipalities at a press conference for Goods for Guns, held at the UMass Memorial Medical Center trauma bay.





Oral Health Initiative

Ellen Sachs-Leicher, project manager at UMass Memorial Medical Center, said: "An ongoing challenge to dental health for Worcester children has been the lack of fluoridation in drinking water. The Central Massachusetts Oral Health Initiative, a partnership of the UMass Memorial Ronald McDonald Care Mobile and leading oral health providers, works to bring preventive education and care — screenings, sealants and fluoride — to all children, grades K to 12 in Worcester.

"Recently, with support from the public schools, and based on other successful school-based screenings (such as for scoliosis), an 'opt-out' program was piloted at Union Hill Elementary School to increase participation. Children were automatically screened, unless parents opted out of the service. Participation increased to over 80 percent, and surprisingly, nearly 17 percent had dental conditions requiring urgent attention, making it clear that despite our high focus and success in preventive pediatric dental care for more than a decade, there is still a long way to go.

"One remaining hurdle is getting kids to the dentist. Parents experience a variety of barriers such as a lack of transportation, childcare and employment demands, low English proficiency, or other health issues. We work to match families with a community health center that best suits their needs. The Medical Center has been at the table from the very beginning. By keeping the Ronald McDonald Care Mobile on the road and coordinating the initiative, they are steering the direction of oral health in our most underserved communities."

Advancing Oral and Medical Health

A clinic on wheels that brings dental services to 19 Worcester public schools and medical/dental services to 11 city neighborhoods. In addition to onthe-spot treatment, the UMass Memorial Ronald McDonald Care Mobile connects underserved children and families to primary care physicians and other providers.

Sara Connor, NP, manager, and Jamie Russell, RDH, dental hygienist, both of the UMass Memorial Ronald McDonald Care Mobile, talk about the advantages of coordinated medical and dental screenings.

Sara noted, "Dental health is not separate from physical health, and we are very interested in combining our unique perspectives for more comprehensive care. For instance, when I see patients who clearly need a dental hygienist, Jamie can see them right away. Similarly, if Jamie is trying to find a dental home for someone who has risk factors for diabetes, I can test for it on the spot. With school-age kids in particular, our work dovetails well with the annual school physical exam."

Jamie added, "Good dental health translates to good school attendance. It has been estimated that more than 50 million school hours are lost annually, nationwide, due to poor dental health. We visit each school three times a year and, generally, our work is preventive — fluoride treatments, sealants, cleaning, how to brush and how to floss. Of 1,631 children screened, 416 were identified as having decay during the year."

In closing, Sara explained, "It's awful to see a child's mouth full of massive fillings that likely required general anesthesia. This level of dental restoration is a major medical intervention for small children and sets them up for more complex procedures down the road. It has tremendous financial implications for families. Our goal is to try to spot these problems earlier. People have their own hierarchy of what's important and health care isn't always first. For example, one family came to us with five children having recently moved from Alaska. The parents were trying to enroll them into school and needed the physical exams and immunization updates required for admission. They were struggling with so many other things at once. We connected them to insurance enrollers and found pediatricians for the kids. In addition to our professional expertise, our outreach liaison put the family in touch with food pantries, food stamp enrollment and employment assistance — we have resources for just about every need. The Care Mobile is a big relief for families like this who are struggling with multiple health and social factors."

Oral Health Collaborative Partners

- · Edward M. Kennedy Health Center
- · Family Health Center
- · Massachusetts College of Pharmacy and Health Sciences
- · Massachusetts Department of Public Health
- · Quinsigamond Community College Dental Hygiene Program
- · Tufts Dental Hygiene School
- · UMass Memorial Ronald McDonald Care Mobile
- · Worcester Public Schools



Care Mobile medical and dental procedures



Belmont Street Community School

An elementary school located in Worcester's Bell Hill neighborhood near UMass Memorial Medical Center.

Susan Hodgkins, PhD, principal at Belmont Street Community School, said: "As a result of our partnership with UMass Memorial Medical Center, we have been able to offer our students and their families supplemental activities to enrich their educational experiences. Our students participate in fitness classes during the school year, as well as summer months; parents participate in workshops focusing on good nutrition and preparation of healthy meals, wellness and chronic conditions. Chronic absences due to asthma-related health issues are addressed (see pages 10 - 11) with hospital representatives visiting our students' homes to provide targeted support. In addition, the school grounds have been beautified and a community garden was started by hospital staff and school faculty.

"Ana Rodriguez, Medical Center community health worker, is a valued member of the Belmont Street School community. With her assistance, our families are connected with health, housing and outside resources essential for their children's successful participation in school. Ana plays a key role in keeping the lines of communication open between home and school, supporting our attendance efforts through the Medical Center's Pediatric Asthma Intervention program and outreach to families as needed. In addition, parental involvement and participation in our PTO and School Site Council Meetings has increased as a result of her recruitment of Medical Center doctors and health practitioners to share information on a variety of topics, ranging from housing rights to good eating habits. In summary, Ana works behind the scenes to promote a safe and healthy learning environment at Belmont Street School.

"Despite mobility and other challenges inherent to lower socioeconomic populations, Belmont Street School received high ratings from the Massachusetts Department of Elementary and Secondary Education based on our students' performance on the 2013, 2014 and 2015 Spring Massachusetts Comprehensive Assessment System tests. We believe that Medical Center support ensures that our students and families have access to opportunities and resources that have contributed to our school's level of academic achievement."

About Belmont Street School

- \cdot 550 students enrolled in prekindergarten to grade six
- · 92 percent are from low-income households
- · Most live in multifamily dwellings with limited outdoor space
- · 55 percent are English language learners
- · Most parents do not have financial resources or transportation for fitness programs
- \cdot 38 students in grades two to six participated in after school programs
- · More than 80 students took part in the summer exercise program

Focus on Bell Hill

Monica Lowell, vice president, community relations, commented, "UMass Memorial Medical Center is located in Bell Hill, one of the most distressed neighborhoods in Worcester. Families are economically challenged, and have high mobility and great need. Most live in old housing stock with absentee landlords or public housing. Nearly 90 percent of children qualify for free or reduced lunch. The area has limited transportation and is considered a 'food desert' with no major grocery store. And, there is little opportunity for safe play and recreation.

"Through creative and multiple partnerships, we directly engage residents. A designated outreach liaison works with the elementary schools to bring resources such as medical and dental care services, and insurance enrollment through the Ronald McDonald Care Mobile.

"We combat food insecurity through 26 backyard gardens and a community garden in Grant Square Park. The Medical Center employed five inner-city youth at the park and leverages funding for an additional seven, annually. Food stamp vouchers are matched at the Veggie Mobile farmers market, photo below.



"Plumley Village Health Center, a hospital satellite clinic, is located near a public housing site that is home to more than 1,400 families. We are active in Neighborhood Crime Watch and the Bell Hill Task Force. Part of our commitment to being a good neighbor is investing in the people of Bell Hill."



Bell Hill Initiatives

The Regional Environmental Council (REC) developed the **Grant Square** Community Garden in 2010 with support from UMass Memorial Medical Center and the City of Worcester. It has 30 raised beds maintained by the REC YouthGROW program and neighborhood residents. The youthtended garden generated 1,000 pounds of produce for the neighborhood and 15 stops in food-insecure areas across the city through REC's Veggie Mobile farmers market, including three stops in Bell Hill. Medical Center funding doubles the value of food stamps for purchases at the Veggie Mobile, which had \$12,000 in produce sales and \$4,000 in food stamp sales in Bell Hill.

To further address food insecurity, the hospital launched a backyard gardening initiative in 2013. The program brings fresh produce to the area, while educating individuals and families about healthy eating and growing food. The hospital funds materials for the garden beds and leverages resources for their construction by the Worcester Vocational School and the Worcester Carpenters Union. The city provided garden soil and the hospital partnered with REC to provide seedlings and conduct soil testing. Backyard gardens are installed and operating at 25 homes.

To promote community safety and increase resources, the hospital organizes Neighborhood Crime Watch meetings and is a co-organizer of the Bell Hill Task Force. The task force convenes community stakeholders, including Belmont Street Community and City View Schools, Venerini Academy, Rainbow Child Development Center, Worcester Public School Committee, and city and local government officials. The task force coordinates winter clothing drives, assembly and delivery of Thanksgiving food baskets and Christmas gifts to families in need, and works with the school committee to supply books for summer reading. In addition, the Medical Center Facilities Department improved the physical surrounding of Belmont Street Community School.

Pediatric Asthma Intervention

A program, partially supported by a grant from the Prevention and Wellness Trust Fund, addresses pediatric asthma by strengthening clinical-home-school connections.

Beverly Nazarian, MD, UMass Memorial Medical Center pediatric primary care physician, said: "Three years ago, the Medical Center piloted a small asthma home-visiting program when the principal of Belmont Community School raised concerns about the high absentee rate among asthmatic children. As physicians, we tend to focus on medication adherence when asthma is in poor control. The pilot allowed us to expand our view to look at other contributing factors by learning more about the patient's culture, school and home. A community health worker (CHW) already working with the school, began doing asthma-specific home visits to educate families and to evaluate living conditions. About the same time, a second pilot in the Pediatric Pulmonology Department trained school nurses to administer controller medications to persistent asthmatic students while at school. These two interventions taught us about challenges we wouldn't have thought of, like transportation issues, poor housing, even worries about kids with asthma being allowed outside in the cold. It also showed us the value of partnering with schools and families. The Prevention and Wellness Trust Fund grant allowed us to spread this initiative citywide, working with pediatric primary care at UMass Memorial as well as three community health centers, and partnering with all of the Worcester Public Schools, as an community asthma coalition.

"Each practice has a provider champion, clinical care nurse and a CHW who work as a team to improve asthma control for our highest-risk asthmatic patients. Families get to know the CHWs well in a trusted relationship. If a child has been in the emergency department, the asthma nurse communicates with the primary care physician, reviews the Asthma Action Plan (AAP) and arranges follow-up in the office or a home visit by the CHW. We fax a copy of the AAP and medication orders to school nurses and encourage them to tell us about kids who come to their office frequently or who are absent due to asthma. School nurses can review the AAP as well as proper use of their inhaler and spacer with students and families, and encourage parents to schedule a clinic visit when needed.

"We've been lucky to have a great team. Our nurse manager, Kristen Thompson, RN, a former emergency department nurse, is in frequent contact with the schools and with families. Our phenomenal home visitor, Lily Collazo, CHW, is family-centered, flexible individual who meets people where they are. We've learned a lot more about asthma directly from families and schools — certainly more than with a clinic-centric approach."



Worcester Pediatric Asthma Intervention Task Force

In Worcester, the rate of pediatric asthma-related emergency department (ED) visits is double that of the commonwealth. Since 2013, UMass Memorial has co-chaired a comprehensive Pediatric Asthma Intervention to reduce school absenteeism, hospitalizations and emergencies among high-risk asthmatic children. A pilot program, launched by the Medical Center, expanded to a citywide effort including all Worcester Public Schools, Head Start and 10 partners. The evidence-based, community-clinical linkage program uses trained culturally competent CHWs to address asthma triggers in the home. CHWs provide basic education to improve medication adherence for poorly controlled asthma. The Intervention completed more than 300 home visits since the program began (see PWTF partners, page 3).



Home visits completed

Above, left to right, Kristen Thompson, RN, Beverly Nazarian, MD, and Lily Collazo, community health worker, discuss an Asthma Action Plan. Far left, Lily shows a student how to correctly use an inhaler and spacer chamber.

Clinical Coordination

Kristen Thompson, RN, clinical care manager at UMass Memorial Medical Center, noted: "Our clinic sees 702 children from Worcester with asthma, and of those, 259 are classified as persistent. To date, we have 89 patients enrolled in the program with 24 of them competing their one-year visits. Preliminary data shows that there has been a decrease in emergency department (ED) use - which reduces the cost of treatment - and school attendance has also improved. In one case, a patient who went to the ED six times last year hasn't been back. I also work with the pulmonologists and pediatricians to revise Asthma Action Plans (AAPs) and transmit these changes to school nurses."

Lily Collazo, community health worker at UMass Memorial Medical Center, added: "We deal with asthma, but in reality there are other cultural and social factors to consider. At a home visit, I review the AAP and assess the environment to identify asthma triggers such as mold, pests, and smoke in the home or in common areas. Renters may be afraid to ask landlords to remedy problems for fear of retaliation. In addition to bringing asthma-friendly cleaning supplies, covered trash bins and mattress covers, I help families contact the Department of Inspectional Services, and if a landlord doesn't respond, Community Legal Aid (see page 16) can step in. We see that what we are doing makes a difference."

Pediatric Asthma Policy Subcommittee

The committee works to improve environmental asthma triggers in Worcester Public Schools through policy reform that seeks to standardize ductwork, the use of asthma-friendly cleaners and the removal of throw rugs. The committee is initiating a pilot intervention at three schools with the highest rates of absenteeism and high rates of asthmatic students.

HOPE Coalition Youth Worker Training Institute (YWTI)

An interactive, credit-bearing seminar series at Clark University presented by respected local experts from established organizations and tailored to the professional youth/family support worker.

Scott Dowling, right, project manager for the city's Youth Opportunity Office and Recreation Worcester, is a recent graduate of YWTI and one of 150 participants over its 12-year history: "This course addresses youth issues, such as sexual and mental health, drug abuse, how to get kids active, preventing bias and the importance of championing youth development. Speakers and participants form a very diverse group by any measure: race, age, sexual orientation, education and experience. YWTI immediately connected me to a network of 200 city youth workers — a huge resource of ideas and capabilities, and an opportunity to work collaboratively.



"It's essential to build our community — one of Worcester's best assets — by developing high

morale among our youth; to move from a traditional, neighborhood-centric and, perhaps, disconnected view of ourselves, toward a more encompassing view. It slowly but surely changes economic development, public health and other things relating to Worcester's continued success. YWTI creates that communal feeling among youth workers who are growing the future of Worcester. Most of us are young, under 30. We have a lot to give to increase our economic security and love for the city."



More About HOPE Coalition and YWTI

Healthy Options for Prevention and Education (HOPE) Coalition, a program funded by UMass Memorial Medical Center, is a youth-adult partnership of 17 Worcester organizations that seeks to reduce youth violence, substance use and promote adolescent mental health.

Through a collaboration with HOPE and the Department of International Development, Community and Environment at Clark University, YWTI was created for professional youth workers and later opened to Clark students. It is now one of six courses toward a unique Professional Certificate in Youth Work Practice. HOPE members may enroll in YWTI at no cost. See more about Hope Coalition on page 19.



YWTI graduates in 2015

YWTI Trainers

Boys & Girls Club
Clark University
Edward M. Kennedy
Community Health Center
Healthy Options for Prevention and
Education (HOPE) Coalition
Massachusetts Society for the
Prevention of Cruelty to Children
Straight Ahead Ministries
UMass Memorial Medical Center
Worcester Police Department
Worcester State University
YOU, Inc.

Through a series of posters, participants in the YWTI explored the challenges of engaging youth in meaningful activities that build confidence and encourage them to become future leaders.

Summer Youth Program: Recreation Worcester

A free, highly accessible neighborhood-based summer program that minimizes learning loss and promotes positive youth development for almost 1,600 children, ages 7 to 13, annually.

Worcester City Manager Edward Augustus, described the program: "Over the last 10 years, Worcester has spent a lot of money to rehab its parks, strategically located throughout the city, to include water features such as a splash pad or pool. Recreation Worcester piggybacks on the popularity and success of these improvements by providing an eight-week comprehensive curriculum, through the Worcester Education Collaborative, of physical activity, culture, arts and crafts, and learning. The trained, local staff keeps kids busy and at the same time, helps them to attain and maintain educational goals. Recreation Worcester has a feeding component, too — a healthy free lunch and dinner at the park every day. In addition, the Worcester Police Department, National Grid and the Worcester Public Library, among others, contribute their time with other fun and informative activities.

"We used to spend a high percentage of our funding on busing kids from their neighborhoods to aquatic sites around the city, but a lot of them didn't know about the parks in their own neighborhoods. With Recreation Worcester, they have a chance to discover their local park through a longer, fuller day of activities. A tangential benefit of in-park programing is that it helps to crowd out or scare off negative behaviors we don't want, such as violence, and increases all residents' sense of ownership and safety.

"UMass Memorial Medical Center is by far the biggest contributor to Recreation Worcester and its support has allowed us to attract new donors, who gain a sense of confidence when an organization with such high standing in the community contributes at this level. Blue Cross Blue Shield, area colleges and other large companies have stepped forward following UMass Memorial's lead. Without hospital support, there are literally a thousand kids who wouldn't have any type of safe, supervised or structured summer program. Families are also huge beneficiaries. Working parents, some with two or three children, know their children can have a camp-like experience, five days a week, and meals. It's a home run all the way around."

Recreation Worcester Partners

Boys & Girls Club of Worcester Clark University Mosakowski Institute for Public Enterprise Friendly House, Inc. Girls, Inc. Jewish Community Center UMass Memorial Medical Center Worcester Education Collaborative Worcester Office of the City Manager Worcester Division of Public Health Worcester Public Schools Worcester Youth Center Worcester Youth Opportunity Office YMCA of Central Massachusetts YOU, Inc. YWCA of Central Massachusetts

Recreation Worcester provides daily activities and meals during an eight-week summer program that takes place in 10 city parks.





Active Living Healthy Eating

5-4-3-2-1 Go!®

From the Consortium to Lower Obesity in Chicago Children

- · 5 servings of fruit or vegetables
- · 4 glasses of water
- · 3 servings of low-fat dairy
- · 2 hours or less of screen time
- · 1 or more hours of physical activity per day



Studies have found that at the same body mass index (BMI), Asians have a higher risk of hypertension and cardiovascular disease versus white Europeans, and a higher risk of dying early from cardiovascular disease. With support from UMass Memorial Medical Center, Southeast Asian Coalition offers outreach and education to local Asians to prevent obesity. At least 50 youth attended each of several activities with a 5-4-3-2-1 Go!® component, including a weekly opportunity to learn to cook and eat healthy ingredients with their families. This cultural experience not only promotes healthy weight, but also helps improve mental health by alleviating loneliness and isolation, and keeping family members engaged. Youth also participate in weekly physical fitness programs such as lion dance training, which keeps them off the streets, out of gangs and builds a sense of community. Another 50 Asian families learned about the program at English as a Second Language and family literacy classes.

Left, lion dancing requires strength and agility, providing a healthy workout for youth at the Southeast Asian Coalition.

Southeast Asian Coalition (SEAC)

A multiservice organization that advocates for the success of Southeast Asians through culturally responsive programs in economic development, housing, education, health care access, civic engagement and youth.

Anh Vu Sawyer, left, executive director at SEAC, said: "Culturally, Asian immigrants are developing a bad habit of trying to eat 'too well.' In Vietnam, many people can't afford to buy chips or soft drinks, and processed sugary foods are associated with wealth. In America, purchasing these foods, which are cheap and readily available, seems convenient to refugees as they struggle to resettle. But to some extent, it is also a status symbol. Obesity among Asian youth and adults is growing exponentially, and despite our smaller size, we have high cholesterol, diabetes and heart issues.

"For three years, we have promoted 5-4-3-2-1 Go!®, an evidence-based healthy eating program. Weekly cooking lessons include cultural ingredients and dairy alternatives because of our general lactose intolerance. Youth learn to evaluate food advertising to make healthier choices. Signage and messaging are posted throughout the center and we carry it into the community through our Asian festivals and lion dancing, an amazing physical activity for youth that combines martial arts and teamwork.

"We quickly found that a program originally developed for youth became a good goal for all age groups. Many of our people struggle with mental health — anxiety, depression and post-traumatic stress. They are victims of war, hardship and injustice, and many arrived with nothing. Here, finding a job is difficult, the weather is harsh, and there is a language barrier. Our incidence of suicide is higher than other non-English speaking groups. We know that physical activity and a healthy diet are good first steps to address these issues.

"I am grateful for the philanthropic spirit I have learned from the people of Worcester and our partners like UMass Memorial Medical Center. SEAC began in 1999 by helping Vietnamese immigrants. About four years ago we were honored to open our doors to groups from Burma, Nepal and Bhutan, Iran, Iraq, Syria, Worcester Muslim Community Link, and Living Waters (Native Americans). We recognize the importance of a friendly and safe place where people can rebuild their lives and communities in a way that is culturally-sensitive and linguistically-responsive, helping them to heal and thrive faster."



YWCA of Central Massachusetts

Staff at the YWCA discussed 5-2-1-0 Let's Go!, that promotes healthy eating habits to children and engages them in more physical activity.

Patty Flanagan, director of wellness and health equity, said: "At the YWCA, our curriculum for 102 preschoolers includes daily physical activity and weekly structured swim and gym time. Part of the challenge is finding even more time for physical activity. In addition to purchasing new gross motor equipment, we hired a yoga instructor to help children develop body awareness and the mind-body connection."

Darlene Belliveau, director of children's services, continued: "The YWCA also cut out juice during snack time (water only), and kept class screen time to 15 minutes. When we presented these ideas to parents, they were excited to get involved. They share our challenge of finding enough time to fit it all in. Some families took these ideas home by improving their meals and exercising together."

Linda Cavaioli, executive director, said: "The YWCA has had a 'lifelong' partnership with UMass Memorial Medical Center. It gives us the credibility that parents want and we have access to populations that might not otherwise be reached. Together, we seek common goals, best practices and sustainable programs. With Medical Center support for our preschool, we were able to leverage funds from two other sources to bring 5-2-1-0 Let's Go! to elementary, middle and high school youth as well. As a result, it has been fully adopted into our curriculum."

5-2-1-0 Let's Go!

A nationally recognized childhood obesity program from Maine

- · 5 servings of fruits and veggies
- · 2 hours or less of recreational computer/TV time
- · 1 hour of exercise
- · 0 sugar drinks, water instead
- · Meets MyPlate guidelines

Innovations

UMass Memorial Community Relations and the University of Massachusetts Medical School have developed a hotspotting project that places medical students in the Office of Clinical Integration to work closely with socially complex patients to address their barriers to health. Hotspotting is vital to understanding the health complexities of communities and certain so-called "high utilizers," i.e., patients, who enter the health care system frequently for a variety of conditions. By analyzing the social determinants of health at a neighborhood level, new strategies can be implemented to dramatically lower costs and improve health outcomes. The project aims to find correlations in clinical data - repeated emergency department use and prevalent chronic conditions.

The partnership of the UMass Memorial Legal Department and Community **Legal Aid, Inc.** (CLA) assists low income, Medicaid-eligible families in addressing socially complex living conditions that adversely affect health. Most recently, CLA was a key partner in the pediatricasthma prevention pilot program, a model that has expanded into a comprehensive, multi-sectoral, citywide intervention (see pages 10 - 11). The newly created relationship targets 200 patients and leverages pro bono services with several law firms and volunteer lawyers to address the multiple social factors that impact patient health.

200

Patients will use CLA services from 2015 to 2017

Cindybeth S. Palmgren, NP, follows up with a patient in the falls clinic.

Opposite page, the pediatric asthma intervention program uses childfriendly equipment and educational materials.



Senior Falls Prevention Initiative

An innovative citywide effort, launched by the UMass Memorial Medical Center Trauma Department with support from the Prevention and Wellness Trust Fund (PWTF) targets patients, 65 years and older.

Many believe falling is an inevitable part of aging. In Massachusetts alone, from 2000 to 2010, death rates from fall-related injuries rose by 158 percent among older adults and medical costs reached \$1.1 billion by 2011. But there is promising evidence that exercise programs and medication management can reduce falls, hospitalizations and emergency department visits while improving outcomes and lowering cost. The Senior Falls Prevention Initiative evaluates patients for physical strength, vision, blood pressure and balance using the evidence-based Stopping Elderly Accidents Death and Injury (STEADI) assessment tool developed by the Centers for Disease Control. Those at high risk are referred to free exercise classes at the Worcester Senior Center. Community health workers also evaluate their homes for fall hazards. In its initial phase, the program screened 58 patients and 31 home assessments were conducted.

Timothy A. Emhoff, MD, chief of trauma and surgical critical care at the Medical Center, commented: "Since 2002, falls have been our most frequent cause of trauma activations in Central Massachusetts, surpassing motor vehicle injury. Falls account for 40 to 50 percent of all injuries seen by the trauma service, or approximately 80 patients seen for serious injuries per month. The great majority of these are among the elderly, age 65 and older.

"What is striking about elderly falls is that they rarely result in 'simple' injury, but routinely in life-changing injuries; the fall being the event that changes a living situation from one of independence to total dependence. Coupled with the fact that the elderly commonly have other medical burdens, a simple fall can easily result in life-threatening injury from which they have little capacity to recover.

"Clearly the answer cannot lie in better tertiary care, as the elderly, with failing organs and a frail musculoskeletal system, have limited ability to mount a robust anabolic response to injury and healing, no matter how good aggressive care can be. Rather, prevention must be pursued to keep injury at bay and the elderly at home with their families, where they have resources to live out their lives comfortably, injury free.

"This is why the prevention initiative is so important and represents the best answer to a growing problem. Prevention strategies with targeted interventions will not only save money and resources from being spent in tertiary care where little can be gained, but will also insure the elderly have the best quality of life."

Falls Statistics, Nationwide



Nonfatal fall injuries were treated in emergency departments (2014)



Patients (age 60 years and over) were hospitalized (2014)

More Innovation

The Medical Center Pediatric Pulmonology Department launched an inpatient intervention that identifies and links pediatric asthma patients admitted to the hospital to the Community Health Worker/ Home Visiting Intervention (see pages 10 - 11) as a way of improving health outcomes, reducing utilization and lowering costs. The innovative program was made possible by establishing communication with medical residents and identifying a provider champion within the emergency room. This linkage triggers a CHW home visit when a patient is discharged.

In addition, the pediatric pulmonology nurse practitioner (NP) plays a critical role in the school-based medication adherence program. The NP provides medical advice and coordinates control medications given by school nurses to high-risk patients, and ensures referral into the home visit component for children not already connected to the intervention. Pediatric pulmonology also works closely with the Worcester Public Schools and Head Start, providing training programs to school nurses and clinical providers at each clinical site, as well as parents, guardians and students. In 2015, 83 children participated in the program.



From Our Affiliates



UMass Memorial – Clinton Hospital

Clinton Hospital implemented the evidence-based Mi Vida, Mi Salud, (My Life, My Health) Chronic Disease Self Management program. Developed to benefit people with chronic physical or emotional health conditions, and their caregivers, the program creates an ideal learning experience for Spanish speakers. Topics include congestive heart failure, arthritis, emphysema, diabetes, obesity, mental health issues, high blood pressure and a host of other illnesses. Fifteen participants attended the series of 150-minute workshops for six consecutive weeks, photo below. They discovered ways to deal with pain and fatigue, explored nutrition and exercise options, and learned how to become a stronger advocate though effective communication with health care professionals. Goal setting and action plans were accomplished within the supportive hospital environment.



UMass Memorial – Marlborough Hospital

Marlborough Hospital promotes healthy living among middle school-age students by challenging them, along with their classmates, to "Take the Pledge" for healthy choices, photo left. The program teaches fifth- to eighth-grade students at the Whitcomb Middle School about how to be healthy and makes wellness services and resources available to them within their local community. Students choose from a variety of healthy behaviors (such as avoiding smoking, exercising, watching less TV and drinking more water) and pledge to demonstrate this behavior. Approximately 200 students participated.



UMass Memorial – HealthAlliance Hospital

The HealthAlliance Summer Internship **Program** offers high school graduates, and students currently enrolled in a college degree program, the opportunity to gain professional, hands-on learning experience in a health care setting, photo above. Twenty-eight interns completed the nine-week program through placements in various departments throughout the hospital: Executive offices, quality management, human resources, food and nutrition, physical therapy, HealthAlliance Fitchburg Family Practice, and women, infants and children. The hospital also works closely with area high schools and colleges to provide on-site training and mentoring for students.

Health and Wellness

UMass Memorial - HealthAlliance
Hospital **Smoking Cessation Series** offers
support and tobacco cessation education
to individuals and their family members
in an encouraging and supportive
group environment. The respiratory
team provides education to community
residents on the dangers of smoking.
Guest speakers were provided by the
hospital for topics including: medications,
stress management, mindful eating, yoga
and breathing techniques. Twenty-five
people participated.

UMass Memorial - Marlborough Hospital led its **Walking School Bus** program at Richer Elementary School. Hospital staff supervised 180 students in spring and fall to make walking to school safer while promoting health, wellness and physical activity, photo below.



Food Insecurity SNAP Enrollment

To improve health care and food access for the uninsured/low income population, UMass Memorial Medical Center and its affiliates — HealthAlliance, Clinton and Marlborough hospitals — provided enrollment assistance for health insurance, food stamps and Women, Infants & Children (WIC) nutrition vouchers for 10,061 people.

Awards

UMass Memorial Medical Center Community Outreach Liaison Ana Rodriguez, photo below, received the 2015 Caffrey Memorial Award, presented by the Caffrey Family and Worcester Mayor Joseph Petty at an event held at Worcester City Hall, for her 15 years of service as a Community Outreach Liaison in the Bell Hill neighborhood. Ms. Rodriguez was also recognized at a City Council meeting where she received a certificate and flag that flew over Union Station in honor of the award.



UMass Memorial Medical Center received the prestigious **Gage Award** for population health from America's Essential Hospitals for its comprehensive program to reduce school absenteeism, hospitalizations and emergency department use among children with poorly controlled asthma. Involved in this effort are the departments of community relations, pediatric primary care, pediatric pulmonology, Plumley Village Health Services and office of clinical integration.

UMass Memorial - Clinton Hospital received a **Good Neighbor Award** from the United Way of Central Massachusetts for its partnership with Morrison Health Care Food Services and WHEAT Community Services, an organization that helps people to secure essential needs such as food, housing and workforce assistance. Hospital employees volunteer monthly to serve free, hot and nutritious meals to 60 to 80 people at the WHEAT Café.

Youth

Healthy Options for Prevention and Education (HOPE) Coalition is a youth-adult partnership created to reduce youth violence, substance use and promote adolescent mental health, photo below. HOPE peer leaders co-chair the Youth Substance Abuse Prevention Task Force with the Worcester Division of Public Health to reduce alcohol, tobacco and other drugs (ATOD) use among young people. Previously, their work resulted in the establishment of an ordinance banning tobacco sales from all health care institutions, including pharmacies. HOPE also organizes "Kick-Butt" campaigns and lobbying efforts to reduce tobacco use. In 2015 the coalition worked to increase the legal age to 21 for tobacco purchases and conducted its "I'm About This Life" social marketing campaign to reduce ATOD use and promote the idea that most young people are involved in healthy activities and want to lead a positive life. 750 people were reached by the campaign at youth organizations, YouthNet, and through social media and shoulder tapping.



A Youth Mental Health Model, developed by HOPE Coalition peer leaders as a means of removing the stigma and barriers often associated with accessing mental health services, served 834 youth. Through a partnership with the Massachusetts Society for the Prevention of Cruelty to Children (MSPCC), the program model integrates mental health counselors into the staff at youth organizations such as the Boys & Girls Club, Worcester Youth Center and YouthNet.



Youth receive one-on-one counseling, therapeutic groups and crisis intervention. A return-on-investment report for this model, conducted by Clark University, showed that for every \$1 invested, \$2.24 will be gained through reductions in publicly financed mental health service provision.

The UMass Memorial Medical Center **Building Brighter Futures With Youth** (BBFWY) initiative provides summer employment for youth ages 16 to 24, photo below. Founded in 2005 by the Medical Center through a collaborative effort with the City of Worcester, Worcester Community Action Council and other organizations, BBFWY matches placements to selected participants and offers them valuable on-the-job experience by hospital staff from departments throughout the Medical Center. The program helps to leverage additional state funding for the city. UMass Memorial Medical Center employs 30 to 50 youth as part of the city's summer job employment effort. Five inner city youth were placed in positions at the Grant Square community garden in the Bell Hill neighborhood through this program (see page 9).



Supporting Community Initiatives

Our system supports a range of community initiatives, including:

Access to Care

Elder medical services at Worcester Housing
Authority and Centro Las Americas
Health insurance enrollment
Hector Reyes House Residential Substance
Abuse Treatment Program for Latino men
Hotspotting planning project
Primary care at community health centers
Outreach educational programs
Plumley Village Health Services
Southeast Asian Coalition
UMass Memorial Ronald McDonald Care Mobile

Bell Hill Healthy Community Outreach and Revitalization

Crime Watch and Bell Hill Task Force meetings Increased availability of fresh produce Educational/health workshops at Belmont Street Community School

Chronic Disease/Injury Prevention

Pediatric Asthma home visiting program Senior Falls Prevention

Obesity and Healthy Weight

5-4-3-2-1 Go!® Healthy Eating campaign
Backyard gardens
Belmont Street Community School
exercise programs
Community gardens; Worcester and Clinton
Community nutrition, education, outreach
and screenings
Elementary school health fairs
Marlborough Walking School Bus
Plumley Village Health Services Community
and Wellness programs

Regional Environmental Council mini-farmers market and Veggie Mobile

Share Our Strength® Cooking Matters,
healthy cooking and shopping classes
SNAP food stamp enrollment
Recreation Worcester
Worcester Food Policy Council
YWCA Swimming Program for children
YWCA Childcare Center Program
5-2-1-0 Let's Go!

Other Contributions

American Heart Association Heart Walk

Programs Enhancing Community Health

Center for Academic Health Practice/ Clark University

City of Worcester Public Health Infrastructure Injury Prevention programs and Goods for Guns

Youth At-Risk

Building Brighter Futures With Youth/
workforce development
HOPE Coalition
Mental health services at community sites
Worcester Youth Training Institute

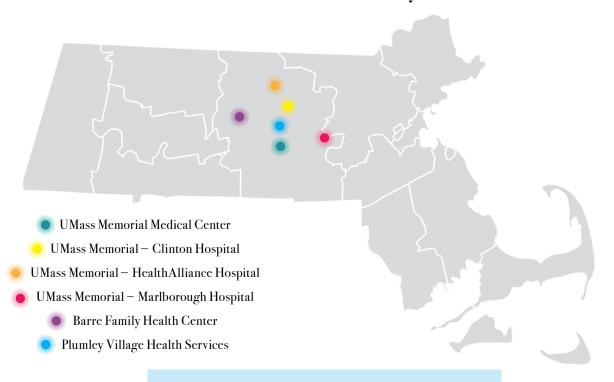
Coalition-Building Efforts

Healthy Greater Worcester Coalition
Worcester Free Clinics Coalition
Central Massachusetts Oral Health Initiative
North County Minority Collaboration for
Community Development & Health Equity
Prevention and Wellness Trust Fund

Pediatric Asthma Task Force
Falls Prevention Task Force
Hoarding ClearPath Task Force



2015 UMass Memorial Health Care System Statistics



Active Medical Staff System Total 1,667 Hospital
Discharges
(excluding newborns
System Total
49,930

Ronald McDonald Care Mobile Patient Visits 6,276

Licensed Beds
System Total
1,021

Outpatient Visits
System Total
1.423,289

Life Flights
471

Emergency
Department Visits
System Total
241,230

About the System

- Largest not-for-profit health care system in Central New England
- Largest provider to the uninsured outside Boston
- Only Safety Net Provider in Central New England and the fourth largest in the Commonwealth
- Supports a dedicated financial benefits program that connects the medically underserved and uninsured populations to health insurance and other services

Community Benefits Partners

- · Advocacy groups
- Medically underserved populations
 - $\bullet \ Neighborhood \, groups \\$
 - Local health department
 - $\bullet\,$ The City of Worcester
 - Community health centers
- · Schools and community-based organizations

Photo Credits

Unless otherwise noted, all photos were provided by UMass Memorial Medical Center Community Benefits; Kim Reckert.

Front cover, page 4, 6, 7, 11, 16, 17 (lower right), 19 (middle left) 20:

Dany Pelletier, photographer

Page 1: UMass Memorial Health Care

Page 3: Courtesy of Rob Zeleniak

Page 8, 9: Courtesy of Regional Environmental Council

Page 10, back cover: Courtesy of Massachusetts Department Public Health

Page 12 (top): Courtesy of Scott Dowling

Page 12 (bottom): Courtesy of Laurie Ross, YWTI

Page 13: Dreamstime.com

Page 14 (left): Courtesy of Greater Worcester Community Foundation;

Dan Vaillancourt, photographer

Page 14 (right): Courtesy of Anh Vu Sawyer

Page 17 (top left, right): UMass Memorial – Marlborough Hospital

Page 18 (lower left): UMass Memorial - Clinton Hospital

Page 18 (middle): UMass Memorial – HealthAlliance Hospital

Page 19 (right): UMass Memorial Health Care



As part of an innovative pediatric asthma home-visiting intervention, Lily Collazzo, a UMass Memorial Medical Center community health worker, helps Worcester Public School children and their families to understand the importance of adhering to a medication plan and to identify asthma triggers in the home. The program aims to reduce school absenteeism, hospitalizations and emergency department use.

UMass Memorial Health Care is a not-for-profit health care system in Central New England with nearly 1,600 physicians and more than 12,000 employees.

Our member hospitals, all fully accredited, are:

UMass Memorial - Clinton Hospital · UMass Memorial - HealthAlliance Hospital UMass Memorial - Marlborough Hospital · UMass Memorial Medical Center



UMass Memorial Health Care, Biotech One, 365 Plantation Street, Worcester, MA 01605
Tel: 508-334-1000 www.umassmemorial.org





