

## **JHBMC's Community Health Improvement Efforts**

### **Access Programs**

*The Community Care-A-Van* is a free medical mobile unit staffed by JHBMC health care professionals. The Care-A-Van has been operating since June 1999, providing free, accessible medical care to some of the poorest of the working poor—uninsured families, mostly Latino immigrants—in southeast Baltimore. Care-A-Van providers see approximately 2,000 adults and children per year, and provide various services including primary medical care, immunizations, acute care, physical exams and patient education on various health-related topics. Services also include free lab testing for syphilis and HIV, as well as referrals to specialty care. Pregnancy testing and referrals to prenatal care and other Women, Infants and Children (WIC) services also are offered.

*The Self-pay Prenatal program (SPRNAT)* is a charity care service offered by JHBMC that provides free access to routine obstetric services for expectant mothers living in the immediate community. Beginning in the 2000s, JHBMC witnessed a dramatic growth in pregnancy care for mothers within the East Baltimore community who were not eligible for any insurance coverage and demonstrated significant difficulty in paying for healthcare services. In order to ensure appropriate care was being provided to this population during and after pregnancy, JHBMC established the SPRNAT program in 2007. The purpose of SPRNAT is to provide free access to prenatal care to pregnant women without insurance. Specifically, the program provides routine prenatal services while the mother is pregnant, along with one postpartum visit after delivery. Services are provided on-site at the JHBMC outpatient OB/GYN practice.

*The Access Partnership (TAP)* is a mission-driven charity program designed to improve access to effective, compassionate, evidence-based primary and specialty care for uninsured and underinsured patients residing in the community surrounding The Johns Hopkins Hospital (JHH) and JHBMC. TAP was implemented in 2009 and initially served residents of two zip codes around JHH. Today, TAP has expanded to ten zip codes around JHH and JHBMC. Since March 2014 (after implementation of the Affordable Care Act), more than 90% of patients enrolled in TAP are Latino immigrants. Through TAP, qualifying patients can access hospital-based services for routine primary care, diagnostic and specialty care at JHBMC or JHH. Notably, TAP offers complementary services to SPRNAT for high risk obstetrics. If an expectant mother needs specialty services not offered through SPRNAT, then the patient can enroll in TAP and be seen at JHH or JHBMC for any needed specialty service for the term of her pregnancy.

## **Behavioral Health Initiatives**

*Addiction Treatment Services (ATS)* is a long-standing program that offers counseling, and methadone maintenance. Addiction services are offered at a variety of other clinics on the Johns Hopkins Bayview campus as well.

*Center for Addiction and Pregnancy (CAP)* offers an innovative approach specifically to address the complex health problems of pregnant women who suffer from addiction and their children. CAP, an outpatient program with an available overnight housing unit for patients requiring a recovery-oriented domicile, provides a comprehensive, coordinated, multidisciplinary approach to drug-dependent mothers and their drug-affected babies.

*The Comprehensive Care Practice* serves adults 18 years or older who need primary medical care as well as specialized services for addiction, suboxone maintenance and HIV care.

*Creative Alternatives* is a capitated mental health program that provides coordinated medical and psychiatric care for people who suffer from severe mental illness. Enrollment is limited to individuals with frequent hospitalizations due to mental illness. Patients are seen by psychiatrists, psychiatric social workers, case managers and therapists. The team works together to ensure that the patient has the right medications and care. What's more, they visit the participant's residence and assist them with getting up, dressed and out of the house. They also ensure that the participants take their medications and attend therapy and job training. Creative Alternatives has not only given hope to those with severe mental illness, but also has saved the state millions of dollars in preventable hospitalizations.

*Emergency Department SBIRT* is a program for screening and identification of substance use disorders in the emergency room, with an ultimate goal of providing referrals for substance abuse treatment. Staffing in the ED includes a certified addictions counselor, peer recovery specialists and social workers. Patients are first screened by the ED nurse, and then referred to the peer recovery counselor for a brief intervention and referral. The counselors follow up within two days to ensure that patients were able to access the treatment program they selected.

*Inpatient Chemical Dependency Unit* is for patients needing medical management for withdrawal from alcohol and/or benzodiazepines. In addition to medical support, patients receive counseling and referrals to post-acute services from a certified addictions counselor. In fiscal year 2016, 1,681 patients received care on this unit.

*Inpatient Psychiatric Unit* offers specialized care for individuals suffering from either mental illness or substance abuse disorders or both. Interdisciplinary care includes counseling and support from psychiatric social workers, as well as psychiatric occupational therapists, and an entire medical team.

*MISA (Mental Illness and Substance Abuse Clinic)* is based in the Community Psychiatry Program and provides comprehensive ambulatory care for individuals with these dual diagnoses.

*Trauma Response Team* is a new initiative that aims to give immediate support to youth and families who are victims of violence or to those experiencing trauma because of witnessing a violent incident. Like many areas in Baltimore, the neighborhoods within the Johns Hopkins footprint include residents impacted by violence-induced trauma. Efforts will focus on expanding training for Johns Hopkins staff, and increased support of hospital programs, such as spiritual care, social work and psychiatry. The team also will collaborate more closely with city schools, the police department's Chaplains Program, and grief response services like those provided by Roberta's House.

### **Healthy Community Partnership (HCP)**

HCP provides a continuum of community-based care across generations. Significant community involvement has informed the design of the programs. Leaders from the community, including local faith-based congregations in southeast Baltimore, have formed a partnership with Johns Hopkins Medicine leaders based on the principles of dialogue, mutual education and respect, and incorporating the core values of diversity, inclusion, leadership and integrity. Through these programs, culturally sensitive information about chronic diseases is delivered by faculty, physicians, professional staff, house officers, and respected community leaders; health screenings are offered in familiar, easy-to-access venues and at convenient times; and guidance on navigating the complex array of medical services is provided.

*Caring for the City* is a six-week community-based educational program for local clergy, to teach them ways to support and respond to the emotional and spiritual needs within their congregations and communities. The program provides theological resources for health management, health and wellness education and ways to address social determinants of health and health disparities.

*Lay Health Advocate Program (LHA)* is an 8-week program that meets once a week and is geared toward community volunteers. Instruction is provided by Johns Hopkins Bayview professionals. LHA provides participants with the training and support that enable them to work one-on-one with individuals who need help managing chronic medical conditions. Participants learn about the basic aspects of caring for people with chronic illness, such as helping patients prepare for doctors' appointments, and updating and organizing medical information. Advocates also assist with follow-up care, help patients monitor their conditions and follow treatment recommendations.

*Lay Health Education Program* is a 10-week program that meets once a week and is geared toward leaders and members of faith-based communities. Instruction is provided by Johns Hopkins Bayview physicians, psychologists, nurses, social workers and chaplains. Participants receive training, materials, access to resources and ongoing

support that enable them to help organize meaningful programs about important health matters for their congregations and communities. No prior training or experience in health care is required.

*Mary Harvin Transformation Center* is a senior housing building developed by Southern Baptist Church that includes 61 affordable housing units for older adults. Johns Hopkins occupies 2,000 square feet of office and classroom space in the Mary Harvin Transformation Center. Working in partnership with Southern Baptist Church, this space is being used to provide health education classes and counseling, health screenings, and illness and injury prevention programs. Examples of offerings include glaucoma and vision screenings, ask-the-doctor sessions, and free blood pressure screenings and flu vaccinations. The offices and classroom also are being used by the human resources department of the Johns Hopkins Health System as a site for employment recruitment and training. These services are offered to Mary Harvin Transformation Center residents, members of Southern Baptist Church, and residents of nearby neighborhoods.

*Medical-Religious Partners* is a covenant between Johns Hopkins Bayview Medical Center and local congregations with one common goal—improving the health and well-being of the communities they serve. When a faith community becomes a “medical-religious partner,” they have access to a number of programs and services that the Medical Center offers, including volunteer education, and health and wellness programs. Johns Hopkins Bayview, in turn, relies on the clergy and faith leaders from area congregations to provide information that would encourage healthy behavior among their congregants.

*Perper Symposium* is an annual symposium, held alternately in Baltimore and New York City, that honors William Perper’s legacy of helping those less fortunate by engaging partnerships between hospitals and faith communities that have the potential to address many of today’s greatest health care challenges.

## **CENTRO SOL—PROGRAMS AND ADVOCACY FOR THE LATINO COMMUNITY**

Centro SOL brings together health professionals, community organizations, and local residents who share an interest in improving health in the Latino community by addressing health care needs of Latinos in a comprehensive way, while also developing programs to address these needs, incorporating cultural awareness education, training of health professionals and research on health disparities. Examples of Centro Sol programs:

*Centro SOL Seed Grants* – promotes research in Latino health among faculty and students. Projects focus on mental health to cardiovascular disease in Latinos.

*Children's Medical Practice at Johns Hopkins Bayview* – served nearly 12,000 Latino children in 2015 (a nearly 10 percent increase since 2014).

*Diabetes Prevention* – addresses the increasing numbers of Latinos diagnosed with type 2 diabetes. Using the Centers for Disease Control and Prevention curriculum, this program offers weekly sessions, and includes presentations in Spanish, coupled with physical activity.

*Embajadores de Salud* – provides health education and wellness activities to the Spanish speaking population. Weekly sessions host between 30 to 50 adults and children.

*Esperanza Center* – Centro SOL partners with this Catholic Charities program to help access to primary care for undocumented Latinos and improve health outcomes in diabetes and hypertension.

*Health Fair and Community Events* – Centro SOL organizes an annual Health Fair to promote disease prevention and to share various community health resources. In 2016, the event hosted 300 adults. In 2015, Centro SOL participated in 52 community events, and directly organized 16 of them, serving more than 2,200 individuals.

*HIV Services* – provides free HIV tests to more than 1,000 Latinos living in Baltimore. A linkage and retention program led by a Latino outreach worker improved HIV treatment outcomes.

*Latino Patient and Family Advisory Council* – meets monthly to make recommendations and advocate for better health care services for the community. The Advisory Council has 18 members—many of whom are parents of children who see providers at the Children's Medical Practice.

*Media* – Centro SOL staff contribute to a monthly "Ask the Doctor" column in the free Spanish-language newspaper "Latino Opinion," and they participate in a monthly health program at the CBS El Zol Radio Station, which serves Maryland, D.C. and Virginia.

*Research Consultation Services* – assists Johns Hopkins researchers in conducting high quality health research inclusive of Latino populations, especially those with limited English proficiency.

*Testimonios* – provides stress reduction support group sessions in Spanish, both in the community and in schools.

*Youth Summer Program* – provides bilingual Latino students an opportunity to participate in a 5-week internship at Johns Hopkins, where they work with School of Medicine faculty in research projects and clinical settings that serve Latino

patients with limited-English proficiency. Students are selected through a competitive application process.

## **OLDER POPULATIONS**

### ***ElderPlus***

ElderPlus at Johns Hopkins Bayview is a Program of All-Inclusive Care for Elderly (“PACE”). This is a Medicare and Medicaid program that provides comprehensive medical and social services to certain frail, community-dwelling elderly individuals, most of whom are dually eligible for Medicare and Medicaid benefits. An interdisciplinary team of health professionals provides PACE participants with coordinated care. For most participants, the comprehensive service package enables them to remain in the community rather than receive care in a nursing home. This day program reduces costly hospital and nursing home stays, keeping seniors healthy and saving money for Medicare and Medicaid. Seniors appreciate the program because it enables them to stay in their familiar surroundings.

ElderPlus operates a clinic, a pharmacy, an adult day-care center, a dining hall and a fleet of eight vans to ferry participants to and from home. Hospital care is provided by the Medical Center. A dentist, an optometrist, an optician, a psychiatrist and a podiatrist visit the program several times a month. Participants are able to receive physical or occupational therapy beyond the normal Medicare limits, as well as dentures, eyeglasses and hearing aids at no cost.

Doctors or nurse practitioners also make home visits, and home health aides may help with light housekeeping and other chores. When home inspections have uncovered safety hazards, ElderPlus has installed staircase railings, handheld showers and wheelchair ramps. It also has provided home air conditioners for people with breathing problems. The focus is less on treating ailments and more on improving quality of life.

### ***Memory and Alzheimer’s Disease***

In addition to the human suffering caused by Alzheimer’s disease and other forms of dementia, they also create an enormous strain on the health care system, families and the federal budget. Alzheimer’s is a progressive brain disorder that damages and eventually destroys brain cells, leading to a loss of memory, thinking and other brain functions. Ultimately, Alzheimer’s is fatal. Currently, it is the sixth leading cause of death in the United States and the only one of the top 10 without a means to prevent, cure or slow its progression. More than five million Americans are living with Alzheimer’s, with 200,000 under the age of 65. It is projected that by 2050, as many as 16 million Americans will be living with this disease. Johns Hopkins Bayview has introduced a number of programs to support patients and family members impacted by Alzheimer’s disease and other forms of dementia.

*Club Memory* is a monthly stigma-free social engagement group for patients with dementia and their caregivers. For those who struggle with cognitive loss,

activities are key to successful and meaningful days, and Club Memory provides new possibilities. Attendees spend their time discussing trivia, playing board games, and engaging in physically active games. Club Memory hosts a variety of guests, such as a librarian who reads to the group, stimulating memories and imagination; an improvisational actor who encourages living and laughing in the moment; and a jazz pianist, who plays favorite tunes and gets everyone singing.

*Family Resource Center* in the Memory and Alzheimer's Treatment Center (MATC) provides patients and families with a multitude of resources. Families have access to print media including brochures, flyers and pamphlets describing various memory conditions, research opportunities and local resources. Electronic resources also are offered, including web links, webinars and a list of online apps. The Center provides take-home activities so that caregivers can engage with their loved ones. Resources include puzzles, board games, art projects, videos and music.

*Journey to Hope Conference* is an annual event for people with early-stage memory loss, their caregivers and loved ones. Speakers include faculty and staff from the Memory and Alzheimer's Treatment Center, Johns Hopkins Health System and other local experts. A highlight of the conference each year is the panel, comprised of family members, sharing their stories and answering questions posed by the audience. The mood is upbeat and the focus is on making the most of each day.

### ***Meals on Wheels Initiative***

In collaboration with Meals on Wheels America and Meals on Wheels of Central Maryland, Johns Hopkins Bayview will be helping vulnerable seniors in the Baltimore area remain independent at home while reducing their need for high-cost health care services. This exploratory initiative is supported by the first Pay for Success transaction for senior services. By leveraging resources from a private third-party investor in an emerging model known as Pay for Success (also known as Social Impact Bonds), the project plans to scale Meals on Wheels of Central Maryland's existing services to hundreds of additional seniors in the Baltimore area over the next several years. A rigorous assessment of the impact on both health outcomes and health care cost savings will be conducted by an independent evaluator.

### ***Johns Hopkins Home-Based Medicine***

Many older adults have chronic medical conditions that make it difficult for them to visit a doctor's office. Through Johns Hopkins Home-Based Medicine, physicians and other health care professionals visit participants at home to ensure that the patient's restricted mobility does not result in disrupted access to medical care. Providers only perform procedures that can be safely conducted in the home environment. Services included routine medical visits in the home, urgent medical visits during business hours, usually within 24 hours (emergencies are sent to local hospitals via emergency medical services), around-the-clock prompt telephone access to a physician or nurse practitioner, and treatment from a team of providers specializing in older adults.

Program participants are 65 and older, and rarely leave the home, doing so only with significant effort of others.

## **OUTREACH, EDUCATION, AND SUPPORT**

### ***Burn Prevention Education***

As the only regional adult burn center in Maryland, the Johns Hopkins Burn Center feels a duty to provide the best education on fire safety and burn prevention, especially to school-aged children. As part of this education, the Burn Center gives a pre-test, and a post-test, and has seen these test scores improved dramatically. In 2016, we reached 10,720 students in 40 schools, and conducted 431 presentations—teaching students everything from how to call 911 to planning an escape route in case of a fire in the home. Burn prevention education also addresses juvenile fire setters. Last year we spoke with 191 juvenile fire setters, 36 of them ordered by the Maryland court system to attend a tour of the Burn Center and to listen to burn survivors speak about their experiences and the difficulty of overcoming a burn injury.

### ***Safe Babies Program***

Initiated in 1996 to prevent burn injuries among babies and young children, this program provides new parents with burn prevention education and tools. Burns are the third leading cause of injury-related hospitalizations of children 0-5 in our state. Burn injuries are extremely dangerous for babies and young children, and are one of the major causes of preventable accidents.

Each new mother receives a Safe Babies kit, including a smoke detector, baby bath thermometer, outlet covers, heat sensitive spoons, spill-proof mug and educational information. Since the beginning of the program, more than 15,000 Safe Babies kits have been distributed. Efforts to evaluate the program have been challenging. Anecdotal information indicates the kits are appreciated by parents and they intend to use the contents. Limited trauma report data and medical record number comparisons have found no infant burn admissions from parents who received a kit.

### ***EmmiCare***

EmmiCare is an online health educational tool that the Medical Center makes available to patients via loaner tablets, email or intranet. Emmi takes complex medical information and makes it easy to understand. Emmi programs, which also are available in Spanish, are created for both adults and children, and help patients with anything from preparing for a procedure to managing a chronic health condition, such as COPD, heart failure and diabetes. For example, a patient planning for a knee replacement receives an email with a link to a web address where she can watch information about preparing for her upcoming surgery. She has the opportunity to send questions to her surgeon or watch the video as many times as she needs to, as well as share it with others. Since EmmiCare was made available to patients in late 2016, the number of program views is steadily increasing, with 740 engagements in March 2017 (up 28 percent since it was implemented).

***FRESH (Food Re-education for Elementary School Health)***

FRESH is a nutrition and exercise education program designed to help children reduce their risk of developing heart disease as adults. Offered through elementary schools (3<sup>rd</sup> & 4<sup>th</sup> grades) in Baltimore City and County, FRESH provides lessons on heart health, diabetes, obesity, My Plate, food labels, physical fitness, healthy snacking and the harmful effects of tobacco use. The entire family also has an opportunity to learn about the benefits of healthy eating and regular physical activity through newsletters and handouts. There are currently 18 schools enrolled in the program, consisting of 94 classes and 2,393 students.

***HEARTS (Healthy Eating, Activity and Recreation for Today's Scout)***

HEARTS coordinates heart healthy programs with Scout patch incentives for local Girl Scout troops. These lessons are versions of the FRESH program lessons tailored to the appropriate troop age level.

***Medicine for the Greater Good***

This innovative program began in 2011 as a series of workshops that encouraged medical residents to discuss nonclinical topics, such as health policy, behavioral counseling and social determinants of health. In 2013, it expanded to include a requirement that all internal medicine residents at Johns Hopkins Bayview complete at least one project that benefits the community. Together, more than 82 trainees and students have launched and led 300 programs. They go beyond the walls of the hospital and confront issues like poverty, teach heart health habits, provide support at health fairs, and push policy changes to benefit underserved populations in our community.

***New Day Campaign***

The New Day Campaign, a Baltimore organization started by a man who lost his daughter to addiction, uses art-based programming and public engagement to challenge stigma and discrimination associated with mental illness and substance use. Johns Hopkins Medicine sponsors a series of “coffeehouses” where medical experts provide information and facilitate dialogue to help reduce the stigma of substance use, and promote healing. Audiences included mental health consumers and family members, providers, advocates, and the broader community.

***Family Fun-n-Fit Day***

Family Fun-n-Fit Day is a community outreach event at Joseph Lee Park, held in collaboration with Baltimore City Recreation and Parks, Docs in the Park (Johns Hopkins Bayview physicians) and local businesses. During this day-long event, lessons are taught on child CPR, bike safety, poison control and healthy eating—to name a few. In the fall of 2017 there were 250 attendees and 80 volunteers.

***Called to Care***

Called to Care®, helps support individuals caring for loved ones with health-related needs or limitations. The program, which began in December 2015, has reached 1,000 patients and their caregivers, partnered with nearly two dozen faith communities, and

interacted with more than 500 people through in-person and call-in workshops. Called to Care currently has relationships with 28 organizations and agencies that provide caregiving education and training, counseling and support groups, food and nutrition, home modification and housing, hospice care, legal services, long-term and respite care, and transportation.

### ***Community Chaplaincy Program***

Chaplains are involved in improving health in the community, primarily through medical-religious partnerships. Chaplains provide spiritual care services to clergy and teach them both navigation of the health system and health literacy so that they can better assist their parishioners/congregants. The chaplain team dedicates approximately 10 percent of its time to community chaplaincy work, and the director for Clinical Pastoral Education and Community Chaplaincy dedicates 50 percent of his time to the program.

## **COMMUNITY BUILDING AND WORKFORCE DEVELOPMENT**

### ***Baltimore Population Health Workforce Collaborative***

Johns Hopkins Bayview has committed to hiring 20 people for the next three years from distressed Baltimore neighborhoods. These candidates will be trained as either Peer Recovery Specialists or Community Health Workers to be deployed in hospital population health programs. There are more than 200 high-utilizing patients in the clinic who have experience social determinants that impact their health. The Community Health Worker helps these patients to reach their health goals from their homes. We anticipate that JHBMC will see a reduction in high-utilization patients in the clinic due to this collaborative.

### ***MERIT***

When he was eight, Kahlid Fowlkes stood on a Baltimore street and watched in horror as a family friend was fatally shot in the head. Just seven years later, he stood in a Hopkins operating room where he witnessed lifesaving surgery as doctors removed a tumor from a patient's brain. Fowlkes credits Hopkins' MERIT program, the Medical Education Resources Initiative for Teens, with helping him reach his potential. MERIT placed him in a neurology lab where he learned about nervous system disorders, leadership and public speaking. He now wants to be a trauma surgeon.

MERIT accepts sophomores from high schools throughout Baltimore. The MERIT scholars devote summers and school-year Saturdays to activities that prepare them for health careers. They shadow professionals, work in research labs, study health disparities, prepare for SATs and learn leadership skills. MERIT helps teens gain academic guidance and grow to become health care leaders in their communities. Each year, the program receives about 100 applications.

### ***Invest Health (Dundalk)***

Johns Hopkins Bayview is part of an important new initiative called Invest Health, a grant program funded via a collaboration between the Robert Wood Johnson

Foundation and the Reinvestment Fund. Invest Health brings together diverse leaders from 50 selected mid-sized U.S. cities to develop strategies for increasing and leveraging private and public investments to accelerate improvements in neighborhoods facing the biggest barriers to better health. Invest Health selected the Dundalk community on which to focus.

The community of Dundalk faces poverty, poor health, high student mobility, and lack of investment. At the same time, its potential for improvement is enormous given its undervalued waterfront property, parks and green spaces, fishing piers, country club, historic charm, and free family-friendly events. JHBMC has focused on developing a network of partners in community development, health care, philanthropy and local government to identify the critical components in its strategy to permanently improve health outcomes in the community.

### **Medical Best Practices**

#### ***Enhanced Recovery After Surgery (ERAS)***

ERAS is a best practice process designed to reduce patients' stress response to surgery, support their physiologic function and reduce hospital length of stay. These care pathways create a continuum as the patient moves from home through the preoperative, intraoperative, and postoperative phases of surgery and before returning home. Johns Hopkins Bayview has improved in every major outcome, including a reduction in length of stay, readmission rates and cost of care.

#### ***Care Transitions Provider***

A medical nurse practitioner was added to the busy internal medicine practice to assist with patients recently discharged from the hospital. This role is vital in order to provide timely access to these high-utilization patients. The patients are seen weekly for one month (longer if needed) until they are stable and are able to return to their usual providers. A good example of this program's impact is the case of a patient who had frequent hospitalizations due to heart failure. Following a recent hospitalization, the patient was seen in the medical clinic by the nurse practitioner on a weekly basis. After three months, the patient had not been rehospitalized.

#### ***Heart Failure Disease Management***

The heart failure disease management program has been in place since 2012 and covers care for heart failure patients. The program includes many components with the goal of reducing hospital and emergency department utilization. The program provides remote patient monitoring, access to clinic appointments and services, education on self-management, and coordinated care among the ED, inpatient unit and clinic—all which follow best practice guidelines. The 30-day all cause readmissions for patients with heart failure have decreased by 20.7 percent since 2013.

### ***COPD Management***

The disease management program has many components to support COPD patients and their families. The program includes care coordination and support under the BREATHE program (PCORI funded), access to clinic appointments and services coordinated by a COPD care coordinator, education on self-care, care focused on emergency department patients or inpatients while they are in the hospital, and support groups. The BREATHE 2 program recently has launched peer-led support groups for individuals with COPD and their caregivers.

A patient story touts the program's success: For five years, Mr. Jones had COPD caused by both cigarette smoking and working in a steel mill. He had been hospitalized three times in six months for exacerbations of his COPD. A JHBMC transitions nurse met Mr. Jones during his last hospitalization before beginning home visits. Together, they agreed on his health priorities, and the nurse provided him with education and support in managing his COPD. During a BREATHE program lunch, Mr. Jones announced that the nurse had helped to save his life, and that he had quit smoking and felt 100 percent better. Mr. Jones has not been hospitalized in six months.

The 30-day readmissions for patients with COPD have decreased by 8.5 percent compared to 2013. For BREATHE program participants, the mean number of hospitalizations per participant during three-month and six-month periods post discharge is nearly half compared to usual care (incidence rate ratio at three and six months is 0.59 and 0.58 respectively).

### ***Early Mobility (ICU) Project Emerge***

The Medical Intensive Care Unit (MICU) at Johns Hopkins Bayview was one of only three intensive care units nationwide to participate in Project Emerge, a program designed to keep patients safe and reduce patient sedation, deterioration of strength, and ICU length of stay, and to improve pulmonary ventilation. The MICU formed a Project Emerge multidisciplinary steering committee, which developed an Early Mobility Program to prevent weakness and delirium, reduce length of stay and reduce the risk of device-related infections like CLABSI and VAE. Committee efforts continued as nurses collaborated with respiratory therapists on the "Wake Up and Breathe" protocol – a measure to ensure mechanically ventilated patients were awake. Leaders taught clinicians delirium monitoring and management, emphasizing therapies like music, sleep promotion and mobility. Since October 2013, the incidence and duration of delirium have decreased by more than 10 percent. The average number of patient hours on a ventilator also decreased, and the MICU has maintained a CLABSI-free environment for more than two years.

### ***Bayview Stroke Intervention Clinic (BaSIC)***

For the past several years, Johns Hopkins Bayview has received the highest award from the American Heart Association and the American Stroke Association. To further enhance stroke care, JHBMC started a clinic specifically for stroke patients. Called BaSIC, it takes a multidisciplinary approach to follow up for stroke patients. Patients are seen in the clinic 4 to 6 weeks after discharge from the hospital. Important issues, such

as post-stroke depression and fatigue, are addressed before they become problematic and hinder recovery, and caregiver issues are discussed. Since the clinic began, more patients are following up on their care, and they report higher satisfaction.

### ***Palliative Care Program (Inpatient)***

Palliative care provides patients with advanced illness support and the ability to set care goals for their illness and lives. Since 2005, Johns Hopkins Bayview has had in place a palliative care consult team that includes physicians, social workers, pharmacists and clergy. Increasingly, patients with advanced lung or heart disease are offered a palliative care consultation. For example, patients with late state COPD often suffer with “air hunger” and anxiety. When this occurs, the natural response is for the patient or caregiver to call 911. The patient then ends up in the hospital. Palliative care physicians can prescribe medications to lessen air hunger and anxiety, as well as teach relaxation techniques. The ability to manage these situations at home helps to prevent hospitalization and aggressive treatments that may not be necessary. It is projected that routine palliative care consultation for COPD and heart failure patients can reduce hospitalization by more than 20 percent.

### ***Patient Access Line***

Nurse case managers call patients with moderate to low-risk for rehospitalization after they are discharged from the hospital to ensure that they understand their medications and how to take them. They also work with patients to make certain that they have referrals to other providers, as needed, and that they are under the care of a primary health care provider for ongoing health care needs. Nurse case managers most often find patients have confusion or are making errors in managing medications prescribed at the time of discharge. These nurses complete comprehensive medication reconciliation, provide education, and involve the prescribing physician, when needed. In the three years that the program has been in place, 17,749 people have been served. Results demonstrate that those receiving the service had a lower hospital readmission rate (11.4%) than those who were eligible for the service, but decline (15.7%), and saved Medicare an estimated \$11,725 in avoided hospitalizations.

### ***Language of Caring and Communication in Healthcare***

Patient and family advisors (PFAs) were engaged to help facilitate several Language of Caring workshops and participate in Communication in Healthcare training alongside hospital staff and physicians. The PFAs shared their respective stories/experiences as patients and family members, helped in skill-building exercises, and engaged in open and honest dialogue about caring communication practices. The PFAs play a critical role in making certain the voice of the patient is at the center of various caring communication strategy initiatives.

### ***Skilled Nursing Facility Collaborative***

Since 2013, Johns Hopkins Bayview has been a part of a skilled nursing facility collaborative with six other organizations. Each month, physician leaders, directors of nursing and administrators meet to address quality concerns, and develop and implement protocols for transitions and symptom management between hospitals and

skilled nursing facilities. Results have shown a reduction in the 30-day all cause readmission rates for patients discharged from Johns Hopkins Bayview and The Johns Hopkins Hospital from 23.2 percent to 18.9 percent. This collaborative is now serving as the impetus for a much broader collaborative that includes more Baltimore City facilities, as well as all of the Johns Hopkins Health System hospitals and their local skilled facilities.

### ***Society of Hospital Medicine iHOPE (Improving Hospital Outcomes through Patient Engagement)***

iHOPE is a partnership between patients, family members and other health care industry stakeholders brought together to collaborate and conduct research to improve hospital outcomes via patient engagement. A current Johns Hopkins Bayview Patient and Family Advisory Council (PFAC) member was selected to serve on the iHOPE committee. In her role, she helps to filter information to and from the iHOPE committee and serves as direct line for feedback from a broader network of PFACs. Through her efforts, the Medical Center's PFAC has had the opportunity to be a contributing body to the development of the tools used for iHOPE's research and program planning.

### ***Transition Guides***

Patients are offered a transition guide upon discharge from the hospital if they are going home. The transition guide nurse meets the patient prior to discharge, then calls the patient one day after discharge, visits the patient's home the first week after discharge, and as often as needed during the month following discharge. The nurse assesses the patient's health, and completes medication reconciliation. The nurse will contact the patient's physician for questions or concerns about the patient's health. Analysis reveals that the 7,470 patients who received the transition guide service had a readmission rate of 14.5% compared to transition guide-eligible patients who did not receive the service (25.1 percent readmission rate) for an estimated Medicare cost savings of \$12,195,000 in prevented hospitalizations.

### ***Transition Pharmacy Extenders***

Transition Pharmacy Extenders facilitate the filling of prescriptions before a patient is discharged from the hospital. This helps to identify duplicate medications that the patient may have at home, prescriptions that are not covered by insurance, and those not available at the pharmacy. The Transition Pharmacy Extender can alert the patient's discharging physician about any coverage issues. The pharmacy extender positions also have been used in the Emergency Department to obtain medication histories of patients being admitted from the ED. This process provides the medical team with verified medication information at the start of care and has shown to reduce medication errors at the time of discharge.

### ***Fall Prevention***

For years, Johns Hopkins Bayview team members have worked to reduce patient falls, including efforts toward the "Quest for Zero Falls" campaign, targeting some of our most vulnerable patients. In 2013, the Medical Behavioral Unit (MBU) had the highest fall rate

in the Medical Center, accounting for 36 percent of all campus falls and 43 percent of all inpatient falls.

A multidisciplinary team was formed to analyze and address all causes of patient falls. These efforts made a drastic difference. In 2013, the MBU experienced an average 24.6 falls per month. In 2015, that number dropped to an average of 11.4 falls per month—a nearly 54 percent decrease. Units throughout the Medical Center are have adopted the MBU model to reduce patient falls.