BRIGHAM AND WOMEN'S HOSPITAL

Introduction

Brigham and Women's Hospital (BWH) has a long-standing commitment to improving the health status of Boston residents, with a focus on Boston neighborhoods with disproportionately poor health and social indicators, and documented need for comprehensive health and social services. In addition to being the regional leader in preeminent women's health services, BWH is also one of the nation's leading transplant centers, performing heart, lung, kidney, and heart-lung transplant surgery, as well as, bone marrow transplantation. BWH is nationally recognized for clinical excellence in cardiology and cardiovascular disease, immunology, arthritis and rheumatic disorders, joint replacement, and cancer care through the Dana-Farber/Brigham and Women's Cancer Center.

Locally, BWH works in collaboration with many community organizations and government agencies to identify and address social determinants of health and to mobilize community resources to improve health status. BWH and its licensed and affiliated health centers provide primary and specialty ambulatory services to culturally diverse groups of people. Through the BWH Center for Community Health and Health Equity, BWH and its health center partners provide a broad array of community service and community health programs, which are designed to have a measurable, positive effect on the health status of underserved populations.

Mission Statement

The BWH Board of Trustees approved the following community benefit mission statement:

> ***Brigham and Women's Hospital (BWH) is committed to serving the health care needs of persons from diverse communities. The hospital, however, makes a unique commitment to the neighboring residents of Jamaica Plain and Mission Hill, who have some of the most pressing health problems in the state. The hospital, along with its two licensed community health centers, is committed to developing integrated care networks to provide and assure appropriate access to high quality, cost-effective primary care to members of these communities regardless of their insurance status. The hospital also commits to meeting the needs of low-income pregnant women and their families from the communities of Roxbury and Dorchester.***
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> ***In order to address the health needs of its target communities, the hospital must look beyond its walls and seek guidance from the community to implement programs that recognize and address the relationships between health and social problems, including economic and educational issues. The hospital is committed to collaborating with community groups and organizations to develop comprehensive programs that***

respond to the needs of the communities, as identified by the communities themselves, and as suggested by public health and other data. The hospital seeks to improve the health status of residents of the communities by offering health services, continuing and expanding innovative community and school-based programs, and by serving as a resource to the community as a liaison to health careers education and as a possible employer of community residents.

Internal Structure of Community Benefit Programs

The Center for Community Health and Health Equity (CCHHE) at Brigham and Women's Hospital serves as the coordinating department for community health programs and acts as a liaison for community-based organizations and the hospital. The mission of the CCHHE is to advance systems of care and community health strategies to eliminate health disparities and elevate the health status of the communities served by BWH. The CCHHE collaborates with hospital departments, including clinical and research areas, and works in partnership with external organizations and community-based groups in addressing the social determinants of individual and community health, including efforts to increase access to equitable health care for all patients throughout the Brigham and Women's/Faulkner Hospitals (BW/F) regardless of ability to pay, and to create an institutional environment that is inclusive and reflects the racial and ethnic identities of communities served.

BWH community health programs focus on improving health equity by addressing the social factors that influence health, such as:

- Fostering social and family support systems
- Enhancing educational and career opportunities
- Improving knowledge of healthy behaviors
- Working with individuals who are victims of domestic violence
- Addressing health care disparities in infant mortality, cardiovascular disease, cancer, and other chronic diseases
- Providing comprehensive care for women
- Mitigating asthma triggers in schools and in homes
- Though the BWH Division of Social Medicine and Health Inequalities, improving outcomes for underserved individuals with HIV

The hospital, its health centers, and the CCHHE are dedicated to working with community residents and organizations to meet the needs of racially and ethnically diverse and underserved populations, through programs intended to break down barriers to accessing quality, affordable health care and social services. To ensure progress in meeting established goals, the CCHHE develops evaluation plans and regularly collects data on its community health programs. Those data are used to determine program effectiveness and to inform program planning and decision-making. They enable the CCHHE to make accurate assessments of strengths and accomplishments, and to identify opportunities to enhance existing services. Financial

support for the CCHHE and its programs comes from many sources, including BWH and Partners, foundation grants, individual donors, and government agencies.

Health Equity Programs

The CCHHE Health Equity programs promote the Brigham and Women's Hospital mission to deliver high quality and equitable care while addressing the social determinants of individual and community health. These programs are the result of collaboration with BWH leadership and are designed to develop targeted strategies for improving care and health outcomes for diverse patient populations.

The Brigham and Women's/Faulkner Hospitals use the framework of the Balanced Scorecard to measure organizational effectiveness. The CCHHE assists in monitoring Balanced Scorecard measures to develop performance improvement efforts to eliminate observed disparities. The CCHHE works in collaboration with community-based organizations, community health centers, and government agencies to identify and address barriers to access and to mobilize community resources to improve health status. The CCHHE is committed to advancing an evidenced-based approach to improving individual and community health status.

The goals of the Health Equity programs are:

- To provide BW/F patients, especially those at risk for disparities, access to the highest quality care regardless of ability to pay
- To provide equitable health care to all patients throughout the BW/F system regardless of ability to pay
- To create an institutional environment that is inclusive and reflects the racial and ethnic identities of the communities served
- To promote the elimination of health disparities through integrated clinical and community-based practices as a key priority of the BW/F clinical care, teaching, and research mission

City and Statewide Programs

Efforts to Improve the Health of Women

BWH is the state's largest birthing hospital, and plays a unique role in developing and implementing innovative women's health programs. Women's health is viewed as more than a service of primary, obstetric, and chronic care for women's reproductive and other problems. It is also seen as a way to ensure healthy families and thus healthy communities.

Women from low-income neighborhoods who are disadvantaged by their educational status, language, employment, economic status, immigrant status, race, or other

personal characteristics face significant barriers to maintaining their health and that of their families. Promoting programs that improve the health of women across the lifespan through health, social support, educational opportunities, and employment reduces these barriers and helps women to care for themselves and their families.

The overall vision for BWH's community health initiatives is driven by a desire to equalize health status and opportunity among underserved populations including women and their families. Concerned about alarming disparities in health among Boston's core urban population, the Center for Community Health and Health Equity's community health initiatives have focused on these populations. Higher infant mortality and low birthweight rates for Black infants, lower rates of adequate prenatal care for Black and Latina women, higher rates of breast and cervical cancer mortality among Black women, higher rates of colorectal cancer mortality for diverse populations, and the impact these health concerns have on the health of families and children, are among the health disparities driving the CCHHE's community benefit focus.

Perinatal Case Manager Program

Established in 1991 as a response to the high infant mortality and low birth weight rates in certain Boston neighborhoods, the Perinatal Case Manager Program (PCMP) seeks to prevent infant deaths and poor birth outcomes by addressing the social and medical needs of pregnant women. The CCHHE provides technical assistance and training for case managers at each of six of the hospital's licensed or affiliated health centers: Brookside Community Health Center, Martha Eliot Health Center, Mattapan Community Health Center, Southern Jamaica Plain Health Center, South End Community Health Center, and Whittier Street Health Center.

Program Components. The case managers provide a variety of services to pregnant women, including:

- Assessment of patients' needs
- Supportive referrals to appropriate social services
- Coordination of patient care with other health center and hospital providers
- Assistance in overcoming barriers to accessing health care and social services
- Education about the need for preventive care and healthy behaviors
- Financial assistance to help patients pay for essential items such as rent, utilities, groceries, layettes, and cribs

To address the impact the lack of transportation can have on the ability of pregnant patients to access adequate prenatal care, in 2008, the CCHHE developed the Perinatal Transportation Assistance Program (P-TAP). P-TAP provides cost-effective and reliable transportation to pregnant and postpartum women to assist them in getting to and from their perinatal appointments by providing access to MBTA Charlie Cards and/or taxi vouchers for eligible patients. In addition to the six health centers served by the

PCMP, four additional health centers affiliated with Brigham and Women's Hospital, Codman Square Health Center, Dorchester House Multi-Service Center, Neponset Health Center, and Upham's Corner Health Centers, have access to this resource. During FY2009, there were 125 clients served through the distribution of Charlie Cards and taxi vouchers. Women utilizing the transportation assistance program received an average of three vouchers per client. We intend to expand this program during the current fiscal year by providing improved assessment of client needs regarding transportation.

In FY2009, the Center received funding to provide resources to address the needs of families who were homeless or at risk for homelessness. The fund is designed to provide families living under a high degree of stress and instability with modest funds to support the comfort and safety for their newly born infant. These resources include layettes, portable play yards, and grocery store gift cards.

Patient Demographics. During FY2009, the PCMP program had over 1,900 client contacts with patients at the six participating health centers. Fifty-six percent of the patients had more than one visit with the case managers. The average number of case manager visits per patient was 2.5. Sixty-nine percent of the patients were newly referred to the PCMP. The majority of interactions, 70 percent, were with the case manager within the health center. The majority, 80 percent,, of patients were Latina, with 12 percent African American, four percent White, one percent Haitian, and two percent other. The majority of patients of had MassHealth as their insurance, while the remaining insurers for clients were Neighborhood Health Plan and Healthy Start.

Infant Car Seat Program. The Perinatal Case Manager Program offers an Infant Car Seat program to ensure that any woman who delivers at Brigham and Women's Hospital and who is unable to afford an infant car seat will receive one. Eligible patients must attend a one-hour group training session on car seat safety prior to receiving a car seat. Patients are asked to pay a nominal fee for the seat; however, this fee is waived if patients are unable to pay. During FY2009, the Center provided trainings in car seat safety and provided low-cost infant car seats to 68 families.

To ensure the highest standard of care, the PCMP case managers attend workshops throughout the year to stay informed about issues affecting pregnant women. In FY2009, the case managers attended the Massachusetts Law Reform Institute Basic Benefits Training Series, March of Dimes Prematurity Summit, and the Partners in Perinatal Health Annual Conference.

Connecting Hope, Assistance, and Treatment (CHAT) Program

The Connecting Hope, Assistance, and Treatment (CHAT) program helps women with breast cancer that have insufficient income or insurance coverage pay for necessary services related to their breast cancer diagnosis. Eligible women may receive up to

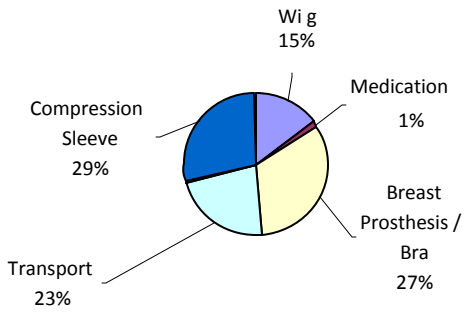
$1,200 per calendar year to help defray the cost of medication, breast prostheses, bras, wigs, compression sleeves, transportation to treatment, childcare during treatment, denture replacement (if due to bone loss resulting from chemotherapy), dressing changes in a hospice, counseling, and other breast cancer-related expenses. Women who are residents of Massachusetts and who have individual annual income of $25,000 or less or total family annual income of $42,000 or less are eligible for assistance.

In the absence of the CHAT program, many participating women would have make the difficult choice between paying for items related to their breast cancer treatment and paying for rent, utilities, food, and other basic necessities. As many of the women in the program travel long distances for treatment and are unable to drive after surgery or chemotherapy treatment, CHAT provides transportation assistance to patients through cab vouchers. Many women have limited private health insurance, which may not cover, or may cover only partially, the cost of counseling. CHAT resources provide additional coverage for these services. Although the CHAT program targets low-income women, many do not qualify for MassHealth. Medications such as Tamoxifen are expensive and are often not the only medication women are taking for treatment. Additionally, some insurance companies do not cover the cost of other similar medications such as Femara or Arimidex. The CHAT program works with women to identify other sources of payment.

CHAT works closely with vendors such as Lady Grace, the Dana-Farber Friends Boutique, Brooks Pharmacy, New England Medical Fitting, and Women's Health Solutions. As a result of these collaborations, the program is able to refer women to vendors for services. In return, vendors distribute information about the program through newsletters and by displaying applications and a program description at their sites. CHAT also works with providers such as social workers, cancer program patient navigators, resource specialists, and nurses.

Since inception, the CHAT program has provided assistance to 645 women who reside in 135 cities and towns within Massachusetts. In FY2009, the CHAT program provided assistance to 99 women and over $24,000 was disbursed to qualified applicants. The majority of requests were for transportation and breast prostheses/bras. Requests were also received for compression sleeves, medication, wigs, and childcare during treatment, psychological counseling, and other items or services related to breast cancer treatment such as acupuncture, bandaging supplies, homecare services, and lymph drainage. Fifty percent of participating women submitted more than one request for assistance.

CHAT Client Requests by Type



The average age of CHAT participants is 57. The average annual individual income of applicants was $10,664 and the average annual family income was $18,462, which demonstrates that CHAT is serving patients with very high need.

In FY2009, referrals to the program came from 17 sites across the state including hospitals, health centers, medical practices, social service organizations, and vendors providing cancer and mastectomy related services. Relationships have been formed with several support groups serving low income minority women with breast cancer in order to provide them with breast cancer related resources. CHAT Program staff works in collaboration with the Massachusetts Affiliate of Susan G. Komen for the Cure to raise awareness about the CHAT Program and participates regularly with CHAT Program participants at special events such as the Susan G. Komen Race for the Cure.

The message below provides an example of the impact the program has on patients:

> *"I wanted to take a moment to thank you so much for all your help in getting me the bras and insert that I so badly needed. I realize how VERY costly these items are and given my financial situation, I would otherwise not be able to afford them. Your organization is wonderful and there are really no words to describe how much it means to me that your group exists!!!! I can walk with my head up knowing that my breasts now look even with the insert in place. I can now wear a bathing suit and go for a swim without feeling self conscious about my appearance or that the toilet paper that I used to use to compensate for the lopsidedness will fall out. You guys are Angels.*
>
> *Many thanks again." -Jackie*

Women in Action Taking Charge of Their Health (WATCH) Program

The WATCH program provides culturally and linguistically appropriate workshops on breast cancer education for immigrant women from a variety of countries. Bilingual

peer health educators facilitate the one-hour workshops, which are held at churches and other community-based organizations. The educators receive a breast cancer peer health education manual compiled by CCHHE that details their role, breast health, and workshop materials they can use with participants. The manual and workshop exercises are designed for both non-English speaking and English speaking women with limited literacy skills.

During FY2009, workshops were conducted in English, Spanish, Haitian Creole, and Somali. The WATCH Program began collaboration with the Boston Mammography Van to provide needed breast cancer awareness and education workshops to the communities served by the van. WATCH peer health educators also provide initial screening for eligible workshop participants on the Boston Mammography Van.

Centering Pregnancy® Pilot Program

In 2009, Women's Health Program staff applied for and received funding from the MA Chapter of March of Dimes to implement a model of group prenatal care, *Centering Pregnancy®*.

Centering Pregnancy® is a multifaceted group model of care that integrates health assessment, education, and support, into a unified program within a group setting**.** Prenatal care provides a unique window of opportunity for health promotion and risk reduction. The benefits to *Centering Pregnancy®*, is it allows a provider to bundle prenatal care to provide integrated services to manage the complex needs of pregnant women.

Working with the BWH Midwifery Service and the Perinatal Case Management Program, women receiving care at three BWH obstetric sites will be offered *Centering Pregnancy®* as an option for prenatal care. The program will be piloted in the Adolescent Reproductive Health Service at Brigham and Women's Hospital, Southern Jamaica Plain Health Center, and Codman Square Health Center in Dorchester. Planning and implementation for the groups has begun and groups are scheduled to begin in early 2010.

The incorporation of this intervention will have long-term benefits for high-risk and underserved women seen by midwives and support staff. The Centering model takes into account the special health, social, and cultural needs of young parents and provides them with better and more efficient care. This model has been well documented to suit this population and have a positive impact on birth outcomes. By providing an enhanced model of care to pregnant young women we hope to:

- Increase contact with providers and enhance the patient-provider relationship
- Improve the birth outcomes of young women and their babies from better prenatal care
- Empower young women through a process of education and prenatal knowledge

- Create a network of social support for women, especially among adolescents
- Promote the adoption of healthy behaviors during and after pregnancy

The strength of this project is not just the enhanced model of care, but also the integration of services for young women, their well-being and concerns during pregnancy which creates a common ground on which patient and providers can discuss the mother's health, well-being, and promote long-term maternal infant health.

Birth Equity Initiative

The *Birth Equity Initiative* (BEI) is a comprehensive new effort to address persistent disparities in infant mortality and low birthweight, particularly among infants born to Black women, through the engagement and empowerment of women, their families, and their communities. The BEI includes prevention and intervention efforts spanning the spectrum from research to community-based application. The BEI is an urgently needed public health approach, since infant mortality, defined as the death of an infant before age one, is a widely accepted marker of the overall health of a community and this disparity has remained persistently high in Boston.

The concept of birth equity is grounded in the belief that a lifetime of health equity begins at birth. In Boston in 2006, Black infants died at nearly four times the rate of White infants and there were 50 percent more low birthweight births among Black women compared to White women. Low birthweight and preterm births are strong predictors of infant death and clear and compelling evidence demonstrates the adverse and lifelong impact of low birthweight on the ability to thrive intellectually, physically, mentally, and socially. Therefore, the goal to eliminate the disparity in infant mortality primarily focuses on reducing low birthweight and preterm births, recognizing the proximal role of these outcomes as key risk factors for infant death. By ensuring healthy birth outcomes among women in Boston's most underserved neighborhoods, we aim to address not only the immediate disparities in infant mortality and low birthweight, but also a broad range of other health disparities across the lifespan that find their roots in the earliest stages of life. To build a strong and sustainable foundation to address both the clinical and social determinants of these complex outcomes, the BEI also focuses on building multi-sector and multi-disciplinary community support and collaboration, the cornerstone of a successful approach to ensuring healthy birth outcomes.

The guiding framework for the BEI is the lifecourse approach, which extends across the preconception, postnatal, and inter-conception periods and is essential in order to help women achieve health before, during, and between pregnancies. This model links to and supports primary and pediatric care, safety in the home and community, nutritional assistance, and later risks to health such as teen pregnancy, interpersonal violence, and school drop-out in a dynamic and full-circle intervention.

This initial phase of the BEI includes clinical interventions addressing high-risk pregnancies, a comprehensive community-engagement strategy grounded in collaboration with the Boston Public Health Commission and other community partners, and the implementation and expansion of programs designed to enhance preconception, prenatal, and inter-conception health.

Dana Farber/Brigham and Women's Cancer Center Patient Navigation Program

The Patient Navigator program is part a strategic initiative to reduce health care disparities among diverse populations. The program was established to address the needs of a target population of women, at risk for, or diagnosed with, breast or cervical cancers, who enter the care system through either the Dana Farber or Brigham and Women's Hospital. The goal of the program is to provide access and identify resources for women from diverse backgrounds, whose socio-economic status, limited English proficiency, disability status, or insurance status may be a potential barrier to care. The program, which began in May 2005, offers two patient navigators, bilingual in Spanish, who assist this patient population by identifying and accessing resources for them, providing education about the importance of follow-up care, and offering support through a continuum of health care.

Since the program's inception, the patient navigators have worked with over 270 patients. The patients referred to the program are thought to be at high risk for not remaining within the health care system for a variety of reasons. The patient navigators provide culturally competent support to their patients, educational information, and assist with identifying resources in order to promote the patient's continued access and connection to the health care system.

Colorectal Cancer Screening Program

The CCHHE is currently working with the Dana Farber/Brigham and Women's Cancer Center (DF/BWCC) to improve rates of colorectal cancer (CRC) screening among patients served through the two BWH licensed community health centers (Southern Jamaica Plain and Brookside). Colorectal cancer is the 3rd leading cause of cancer deaths in Massachusetts and the 4th leading cause of cancer deaths in Boston. Statistics reveal significant racial and ethnic disparities in both CRC morbidity and mortality in Boston. The need to improve CRC screening is underscored by the fact that over 33 percent of cases could be prevented if everyone over age 50 were screened.

The DF/BWCC Open Doors to Health (ODH) Cancer Screening Initiative is designed to bring together community based peer leaders/health educators and a patient navigator to:

- Increase awareness of the need for screening among patients who receive care at two community health centers

- Increase physician recommendations for screening among patients aged 50 and older seeking care at BWH licensed and affiliated community health centers
- Decrease no-show rates for screening colonoscopy
- Increase adequate test preparation and address barriers to screening through patient navigators and peer leaders.

Through this program, Dana-Farber/Brigham and Women's Cancer Center is supporting local underserved and at-risk communities in the development of a sustainable cancer prevention program. Furthermore, through efforts to address the individual, institutional, and community-level barriers associated with CRC screening, this initiative aims to address universal barriers to care contributing to disparities across other health outcomes.

Prevention and Access to Care and Treatment (PACT) Project

The Prevention and Access to Care and Treatment (PACT) Project was co-founded in 1997 by Drs. Paul Farmer and Heidi Behforouz as a community-based HIV/AIDS prevention and patient advocacy program aimed at disadvantaged minority residents of Roxbury. Dr. Heidi Behforouz, Executive Director of PACT, a graduate of Harvard Medical School, began her career in 1994 as a resident at Brigham and Women's Hospital, where her interest was in social medicine, HIV/AIDS, and care of medically underserved residents of Boston.

In the twelve years The PACT Project has been operating, it has established itself as an organization offering home and street-based HIV prevention, health promotion, and directly observed therapy (DOT) services to poor and marginalized residents of Boston's inner city. Based on the "accompagnateur" model developed by Paul Farmer's team in Haiti, PACT health promoters are trained to educate, counsel, and accompany individuals who are HIV-positive or at risk for HIV as they negotiate life and seek to improve their health. PACT is a complementary community-based health care delivery model that assists high-risk individuals in managing their disease and risks for disease more effectively. Dr. Heidi Behforouz heads a staff of 26 employees and is spearheading new initiatives to expand the application of community health worker interventions to new settings and to more generally address chronic diseases which disproportionately affect the poor.

Community-Based Program Components

PACT's three direct service programs are: health promotion, directly observed therapy, and prevention. These programs are summarized as follows:

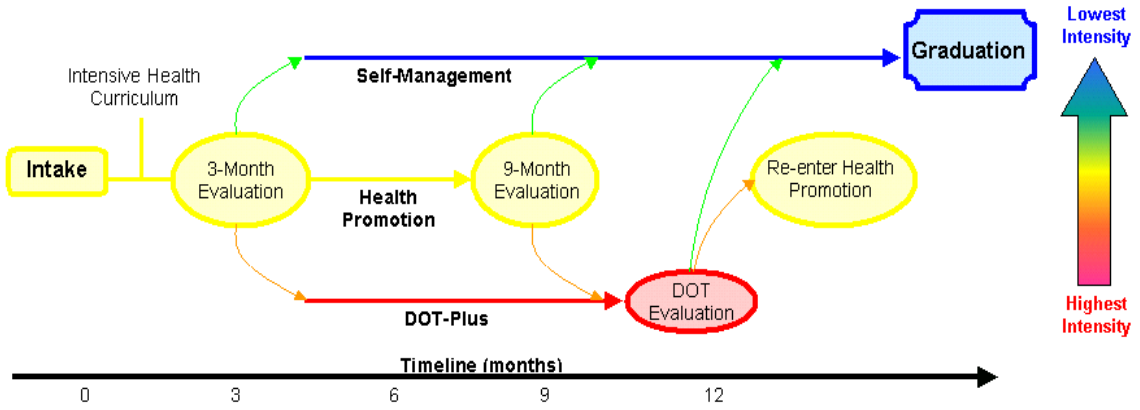
Health Promotion. People living with HIV/AIDS who live in the inner city struggle to access and utilize necessary health care and social services because of societal and systems problems, as well as, their personal struggles with poverty, social isolation, and

societal disenfranchisement. PACT health promoters build personal relationships with marginalized HIV/AIDS patients to help them navigate this disjointed system and achieve better physical health and mental wellbeing. Health promoters visit patients weekly and accompany them to medical and social service appointments. Over the course of six months, the health promoters administer an educational and counseling curriculum that addresses such topics as psychological adjustment to life with HIV, medication side effect management, effective communication with providers, and pharmacy management. They also provide patients and their families with social support and collaborate with other agencies to make sure patients have adequate food, housing, mental health care, and substance use counseling. They particularly focus on helping patients adhere to their life-saving medication and treatment recommendations, thus reducing rates of opportunistic illness, costly hospitalizations, and death. Health promoters are a critical link between patients and the resources they need to be healthy and contributing members of society.

Directly Observed Therapy. Some patients are chronically non-adherent to HIV medication due to overwhelming personal and social obstacles and extreme HIV/AIDS-related illness. PACT is the only program in the country to offer these individuals its unique brand of home-based directly observed therapy (DOT) of HIV medications. Patients who receive DOT continue working with their health promoter but are also assigned a DOT specialist who visits their home each day to observe and support them during their pill-taking routine, a complex regimen requiring timeliness and precision. DOT specialists provide guidance and instruction to prepare patients to eventually self-administer their medicine.

Through a unique and dynamic multi-tiered service delivery model (see below), PACT health promotion clients move between three arms: monthly health promotion, weekly health promotion, and DOT as their adherence to medication, health status, and social and psychological circumstances changes. The ultimate goal of the PACT program is to empower patients to self-manage their disease without PACT's assistance and teach them the skills and knowledge needed to continue their therapeutic alliance with their health care and social service providers in maintaining good physical and mental health.

The PACT Delivery Model



Prevention. Unfortunately Fuerza Latina, PACT's primary prevention project was forced to close in 2009 because of lack of funding. In the future we may be able to resurrect these programs, with adequate funding and, for that reason, background on Prevention Projects is included here.

PACT's Prevention Program (*Fuerza Latina*) provided peer-based street outreach services to chronic users of illicit and injectable drugs in the inner city of Boston, recruiting and engaging drug users and their networks into drug treatment, HIV/Hepatitis prevention and treatment, and the reduction of drug-related harm. The Prevention Program enrolled male and female community members and trained them through a six-month Core Curriculum to become harm reduction community health educators. Graduates of the Core Curriculum were then eligible to conduct outreach with PACT as Peer Prevention Leaders. These leaders targeted "hotspots" where drug users, sex workers, homeless persons, and others at high risk for HIV, hepatitis, and other drug-related harm congregate. The leaders would then engage clients, provide harm reduction supplies and education, and conduct referrals and accompaniments to detox, HIV screening, and other services. The prevention program also provided harm-reduction workshops at area agencies, including drug treatment programs, health centers, and prisons.

Research and Evaluation

PACT programs aim to improve participants' health and quality of life, while reducing high-risk behavior, medical costs, and adherence barriers associated with illness and poor health care. Both qualitative and quantitative data is collected through structured progress notes, blood work review, claims data review, and questionnaires, assessing access to care barriers, mental health, risk behaviors, self-efficacy, and overall program satisfaction. The data are used to evaluate the Community Health Worker (CHW) intervention on the domains of improved clinical outcomes (CD4 count, HIV viral load,

and opportunistic infections), reduced hospitalization rates, and cost-effectiveness. The qualitative data are used to instruct the design and implementation of responsive and effective intervention, as well as, shed light on the access barriers experienced by the poor and marginalized population.

PACT has been successful in completing two National Institute of Mental Health funded grants; one demonstrating the ability to sustain the accrued benefits of a DOT intervention and another pilot community-based participatory research project to develop a HIV knowledge curriculum and assessment plan. Future research efforts are focused on stronger control groups, more thorough cost-effectiveness analysis, standardization of the PACT CHW model, internal continuous quality improvement, and replication of the model to new conditions and sites.

PACT Outcomes

Over the course of the year, six Health Promoters and three Directly Observed Therapy Specialists cared for a range of 90-100 patients. PACT enrolled a total of 39 new patients into the Health Promotion program in 2009 and discharged 38 from care. As of December 2009, 69 patients were receiving standard health promotion services, while 18 were receiving directly observed therapy in addition to standard health promotion services.

Patients continued to demonstrate significant improvements in their management of HIV, as demonstrated by decreases in viral load and increases in CD4 counts. After 12 months of participation, patients experienced an increase in median CD4 count from 154 cells/microliter to 255 cells/microliter (CD4 count is a measure of immune system strength: CD4 count <200 cells defines AIDS. Healthy CD4 counts range from 600-1,500 cells) and 51 percent of patients achieved an undetectable viral load (which quantifies the amount of HIV in the bloodstream).

Dissemination and Replication of the PACT Model of Care

PACT's successes have gained widespread recognition and have increased interest in the application of Community Health Workers as cost-effective, culturally competent, and effective health care professionals. In response, PACT has capacitated itself to provide training in its CHW model of intervention to other cities and organizations in the USA. It currently provides training to sites in New York City, Miami, and New Mexico (Navajo Nation). The New York City Department of Health and Mental Hygiene relied heavily upon PACT training and technical assistance in its development of a new care coordination and adherence CHW intervention for patients with HIV that will be rolled out to 20 health centers and hospitals in 2010. PACT is still in discussion about its ongoing role with this project. PACT has also partnered with Codman Square Health Center in Dorchester to extend its model to the care of people with diabetes.

Furthermore, PACT anticipates expansion of its services to patients with two or more co-morbid chronic illnesses through a Medicaid managed care organization (MCO) in four Medicaid regions of Massachusetts in 2010. The PACT HIV curriculum materials are also anticipated to be used by the City of Baltimore in 2010.

Jamaica Plain

Boston Asthma Initiative (BAI)

In 1997, the Jamaica Plain community identified asthma and related environmental issues as problems in their community. To address these problems, residents of Jamaica Plain, representatives from community-based organizations, and representatives from Brigham and Women's Hospital, Children's Hospital, and Faulkner Hospital collaborated to develop the Boston Asthma Initiative (BAI).

From the inception of the program, the BAI has sought to address asthma in the schools and in homes, while examining access to and quality of health care for children and adults living with asthma. In recent years, the program has expanded its services to other Boston communities neighboring Jamaica Plain, including Dorchester, Mattapan, and Roxbury. The BAI is a program of Ensuring Stability through Action in Our Community (ESAC), a non-profit organization that serves low- and moderate-income homeowners and promotes stable, integrated neighborhoods. Brigham and Women's Hospital's Center for Community Health and Health Equity provides financial support to the ESAC for the asthma program.

The goals of the BAI are to:
- Identify school children and other household members with asthma and increase their understanding of asthma management
- Identify and address environmental issues contributing to asthma in schools and households
- Increase access to quality health care for asthma treatment and management
- Increase awareness of asthma as a community health problem

The BAI targets:
- Boston elementary school children
- Household members of children with asthma
- Parents, teachers, and school administrators in Boston elementary schools
- Asthma care providers
- Communities impacted by asthma

The Boston Asthma Initiative provides bilingual asthma education services to children and families living with asthma. Services include: home visits; classroom education; assistance to schools in identifying and addressing environmental concerns; public

health education; resource guides; and referrals to housing, environmental, and legal agencies.

All of these services are provided free of charge in a culturally competent manner to people living in Jamaica Plain and in the surrounding communities of Dorchester, Mattapan, and Roxbury. These neighborhoods have been identified as having the highest rates of asthma in Boston, disproportionately affecting minorities and children living in these urban environments. The BAI maintains strong ties with community partners (such as the Boston Public Health Commission, Massachusetts Coalition for Occupational Safety and Health (MassCOSH), health centers, and the Boston Public Schools to sustain a comprehensive health network for children and families living with asthma.

The BAI works across all sectors of a child's life, including the school, home, health center, and community to link services to improve asthma management for all of the families it serves. With a strong emphasis on preventive care, BAI provides families with the knowledge and skills to better manage their child's asthma and to avoid unnecessary and costly trips to the emergency room. BAI does this by increasing families' knowledge of asthma and by empowering them with tools for advocacy and health care decision making.

Home Visiting

The BAI conducts home visits during which clients learn how to reduce or eliminate asthma triggers. Topics covered during home visits include asthma physiology and treatment and medication management. An environmental assessment of the home is also conducted, and information is provided on the role of dust, pets, carpeting, pests, mold and mildew, cigarette smoking, overcrowding, overheating, strong odors, and poor housing in contributing to asthma. During FY2009, the BAI saw 199 new cases and had 44 re-referrals.

Boston Asthma Swim Program

In collaboration with the Boston Public Health Commission (BPHC), the BAI provides the Boston Asthma Swim program. Boston Asthma Swim is a curriculum developed by the BPHC that combines swimming with asthma education. During FY2009, 22 participants were registered in the swim program, the highest number since the program was established.

School Programs

The school program focused on the William Munroe Trotter Elementary school in Dorchester (Grades K2 through 5). The school nurse, who is the asthma leader at this school, was overwhelmed with the number of students diagnosed with asthma. There

are approximately 370 students enrolled in the school and 28 percent of the student body was diagnosed with asthma. BAI worked with the school to develop a detailed plan on how to address the high incidence of asthma among students at this school.

Beyond Boston

Brigham and Women's/Mass General Health Care Center (BW/MG HCC)

The BW/MG HCC, based in Foxborough, opened in February 2009 as a satellite of the Brigham and Women's Hospital. The Center provides high quality, comprehensive care that is consistent with offerings on the downtown main campus convenient to residents southwest of Boston. The Center has full imaging services, medical and surgical specialties, primary care, day surgery, clinical lab services, and a pharmacy for our patients (non-retail).

Since its establishment, BW/MG HCC has been very active in supporting and developing collaborative relationships with community groups and residents in surrounding communities. In FY2009, support was provided to Hockomock YMCA, HESSCO Elder Services, the domestic violence prevention group 'Help Us Get Safe' (HUGS) - Foxborough, and FACES, a Foxborough-based education group. The Center has established a relationship with several area agencies on aging and will continue to expand its outreach to the various Councils on Aging servicing the area.

The Center's health education and promotion outreach efforts have been very extensive. Since the fall of 2008 through November 2009 the Center has featured its primary care physicians, medical specialists, surgical specialists, and radiologists in 37 free public educational events. The events have been held primarily at the Center, but a few have also been co-hosted with and/or held at locations in the catchment area. These 37 diverse events have been well-received by the community, drawing over 1,450 attendees to participate in free education workshops and health screenings on a wide variety of health topics including heart health, women's health, fall and injury prevention orthopedics, and breast health.

Center staff members are also active in the local Chambers of Commerce including the Neponset Valley Chamber of Commerce and the Tri-Town Chamber of Commerce. Over the past year, the Center's Director has become an active member of the Neponset Valley Chamber of Commerce's Elder Alliance, the Tri-Town Chamber of Commerce's Community Relations Committee, and will join the Tri-Town Chamber of Commerce Board of Directors in January 2010.

Indian Health Service

The BWH Physicians' Council, through its Brigham and Women's Outreach Programs (BWOP) is committed to supporting BWH physicians in contributing their skills and time

through volunteerism. The goals of the Outreach Program include the development of a program that enables BWH physicians to directly support and enhance patient care delivered at a selected program site, while providing a sustainable, ongoing contribution to supporting an underserved community.

In April of 2008, the BWH Physicians' Council selected the Indian Health Service (IHS) as the site for its outreach program. The significant needs of the IHS underserved community, its location within the United States, and its existing strong ties with BWH all support the goals of developing a successful and sustainable program. Selection of this site followed a competitive application process that included over ten impressive organizations around the world. Dr. Phyllis Jen, a senior physician at BWH, along with Dr. Howard Hiatt and Amy Judd from the Division of Social Medicine led the efforts to identify and develop this program.

The program focuses on creating volunteer opportunities for BWH physicians at the IHS hospitals in Gallup and Shiprock, New Mexico. While both sites serve American Indian communities in remote locations, the Gallup medical center is an urban setting and the IHS hospital there offers a wide range of specialized care. The hospital in Shiprock is physically located on the Navajo reservation. Both the 55-bed facility at Shiprock and the 99-bed hospital at Gallup have adequate equipment, medication and supplies, but they are challenged by a shortage of staffing. The Indian Health Service reports a nearly 15 percent vacancy rate in essential clinical positions, including access to specialty services and consultations. The Brigham and Women's Outreach Program physician volunteers are working to address this challenge. BWH physicians have the opportunity to work at these facilities, providing both teaching and clinical care with the aim of sharing clinical expertise with the IHS. Dr. Thomas Sequist, a physician at BWH, is the Director of the Brigham and Women's Outreach Program with the IHS.

Mission Hill Community Activities

Mission Hill Main Streets (MHMS)

BWH serves as the "corporate buddy" for Mission Hill Main Streets (MHMS). BWH holds a seat on the board of directors of MHMS and in FY2009, contributed $10,000 with a total of $110,000 in support to the organization since FY2000. This commitment to has made BWH is the largest non-profit contributor to any of the city's 16 Main Streets organizations. In addition to this financial support, the partnership also assists MHMS by providing technical assistance, contributions to support a range of community projects, and promotional support for the organization's activities, as well as, meeting any other responsibilities of being a "corporate buddy".

Mission Hill/Fenway Food Project

As a founding member of this collaboration in 1984, BWH sponsors biannual canned food drives that benefit the emergency food pantry at the Parker Hill/Fenway ABCD office. In FY2009, BWH made a contribution of $4,000 to allow the food pantry to purchase food items that are not readily available from the Boston Food Bank.

Mission Hill Youth Collaborative

Mission Hill Youth Collaborative brings together a group of organizations and community groups located in and serving young people in Mission Hill. BWH, as an original member of this group, is committed to working with this collaborative to plan and develop job training opportunities for the youth of Mission Hill in addition to establishing a seamless network of shared information and programs among those agencies serving youth. BWH has made monetary contributions totaling approximately $65,000 to this organization for the past six years. In FY2009, BWH donated $5,000 to help pay for training programs of youth workers from various Mission Hill organizations who serve the youth of the community.

Mission Hill Health Movement

In FY 2009, CCHHE staff worked with members of the volunteer run Mission Hill Health Movement (MHHM) to develop the MHHM health education program. The education program offer monthly health education presentations and discussions for residents in the Mission Hill community. In fall 2009, the MHHM was notified it had been successful in receiving a grant from the Harvard Catalyst for Community Based Participatory Research Grant that had been developed through the course of discussions with CCHHE staff.

Other Mission Hill Support

BWH continues to support programs for the youth and seniors of the Mission Hill neighborhood. The hospital provides annual contributions to support the Mission Hill Little League. It also supports City Councilor Mike Ross's annual softball league, which draws participants who range in age from 16 to 21 years old. In addition to providing recreation and exercise, the softball games provide an opportunity to offer information on job assistance and health care services.

For the past 20 years, BWH has maintained a discount meals program for Mission Hill seniors. This program allows neighborhood seniors a full meal one Sunday a month in the hospital cafeteria. Additionally, BWH provides a free flu vaccine program for Mission Park residents. This program has been offered for the last 20 years.

BWH provides contributions, both financial and in-kind, to many other Mission Hill groups, including Mission Main Tenants Task Force, Roxbury Tenants of Harvard, Mission Main Crime Committee, the Alice Taylor Tenants Task Force, and the Community Alliance of Mission Hill. BWH also pays the bus transportation costs for all of the Mission Grammar School field trips throughout the academic year. In 2009, BWH helped sponsor the fifth annual Mission Hill Road Race, which is hosted by Mission Hill Neighborhood Housing Services and for the fourteenth year in a row, BWH, working with the Mayor's Office of Neighborhood Services, supported the annual Mission Hill Christmas tree lighting ceremony.

Also, in 2008, BWH Neurosurgery Dept. made a major contribution to the Parker Hill/Fenway ABCD office by donating $4000 to help the center obtain toys and other Christmas gifts for needy families in the Mission Hill area. In addition, BWH was also able to provide full dinners for 50 Mission Hill families. In addition, the BWH Physician's Organization donated $5,000 to the Tobin Community Center in Mission Hill.

In 2009, for the fifth year in a row, BWH contributed $10,000 to the Parker Hill/Fenway ABCD for their annual Summer Works program. These funds allow ABCD to hire ten additional neighborhood youth for summer employment. In addition, BWH provides ten summer job positions to both Roxbury Tenants of Harvard and to Parker Hill/Fenway ABCD, (five to each organization). Young people work in a range of positions throughout the hospital to gain valuable job experience. In FY2009, BWH made a contribution of $5,000 to the summer program run by Mission SAFE, a neighborhood organization which works with local youth to deal with the issue of youth violence in Mission Hill.

Youth Programs and School Partnerships

Citywide

Student Success Jobs Program

BWH entered its ninth year of the Student Success Jobs Program (SSJP), an intensive year-round employment and mentoring program for students of Boston high schools. The program introduces high school students in the 10th through 12th grades from the city's lowest income communities to careers in health care, science, and medicine by offering 50 paid after school and summer internships within the hospital, and by providing the guidance of health care professionals who serve as role models and mentors. SSJP creates pathways into science, health, or medicine careers for those who have traditionally been underrepresented in the field with 94 percent of students self-identified as people of color.

The goals of SSJP are to enable participating students to:

- Address the need for proficient and traditionally under-represented populations in health, science and medical careers
- Enhance high school students' interest in health careers through mentorship by health care professionals
- Support academic progress and post secondary education of participating Boston public school students
- Foster networking opportunities for emerging and under-represented health care professionals with peers and the hospital community

This program is possible through a long standing and highly successful partnership with the Boston Public Schools. BWH teams with seven area high schools partners, as well as, with the local workforce development board, the Boston Private Industry Council (PIC), a public-private partnership that connects the youth and adults of Boston to education and employment opportunities. The seven school partners are Madison Park Technical and Vocational High School, Boston Latin Academy, Edward M. Kennedy Academy for Health Careers (formerly Health Careers Academy), John D. O'Bryant School of Math and Science, New Mission High School, Parkway Academy of Technology, and Health and the Community Academy of Science and Health.

There is strong and ever growing demand for the SSJP program with BWH receiving 106 applications in FY2009 for 29 available slots in SSJP. The criteria for selection include:

- Presently enrolled in a partnering high school
- Interested in pursuing a health-related career after graduation from high school
- Capable of maintaining a grade point average of 2.5 or better
- Demonstration of responsibility, maturity, and strong communication skills while in high school
- Commitment to working ten hours per week during the academic year (summer internships are an optional 25-hour per week commitment)

SSJP is distinctive as it works on three levels to improve community health; by contributing to educational achievement for young people, enabling employment opportunity in communities of greatest need, as well as, increasing the diversity of the health care workforce as SSJP students proceed forward in their career. To maximize students' experience, they are placed in departments that provide exposure to medical terminology, patient care, science skills, and a variety of professions within health care. Departments that students are placed in include the operating room, thoracic surgery, clinical and research labs, post partum floors, radiology, and the pharmacy. In addition to paid year-round medical and science internships at BWH and mentoring from health care professionals, there are multiple components of SSJP that make this a comprehensive, holistic program:

- **Tutoring**. Participating students who struggle to meet the SSJP required minimum of B- in science and math subjects receive regular tutoring sessions, which include: algebra, geometry, pre-calculus, calculus, chemistry, biology, and physics. Students

continue with tutors until they show documented proof of improvement with a minimum grade of B- or higher.

- **Job Shadowing.** While students are assigned to one department for the duration of their annual internships, they are provided opportunities to shadow each other for a day to increase their exposure to other departments of interest. They also spend a day shadowing a BWH physician to observe a surgery, or observe rounds on a patient floor or in the emergency department.
- **College Preparation Workshop Series.** SSJP seniors are offered educational counseling and college coaching. As the goals and expectations of SSJP students have consistently risen since the program's inception, we identified the need for specialized support for seniors, and have contracted with an expert in the field to design and deliver a program to strengthen their competitiveness and preparation for college.
- **SSJP College Scholarship**. SSJP high school seniors may apply for a one-year scholarship funded by BWH to assist with college tuition or books. Over $100,000 has been awarded over the past four years to 49 students.
- **Monthly seminars and annual retreat.** Regular seminars focus on personal and professional development and health and included topics such as financial responsibility workshop provided by Bank of America, contraception and sexually transmitted diseases presented by Planned Parenthood, and a nutrition session led by BWH nutritionists. In October, SSJP students participated in an overnight retreat at Crossroads for Kids in Duxbury, about 40 miles south of Boston. This invaluable experience helps our diverse group of students, many of whom have never been outside of an urban environment, form friendships and learn teamwork while participating in physically challenging, individually suited, and interactive outward bound activities.
- **Newsletter.** Students assist in producing a quarterly newsletter, the *SSJP Visionary*, which features articles written by the students and is distributed to over 300 BWH staff, SSJP families, and SSJP partner organizations. The newsletter provides students with an opportunity to improve their writing skills and becomes part of their college application portfolio.

SSJP evaluation results for FY2009 show that students reported that they learned valuable skills in science, hospital procedures, professionalism, social, and life skills. Students in labs learned how to properly sterilize equipment, process blood samples, transfer bacteria with DNA, and make solutions. Students also learned various hospital procedures such as preparing anesthesia and surgical carts for the operating room, maintaining monthly spreadsheets, and organizing patient charts. While participating in SSJP, students have reported learning important life and professional skills such as writing professional emails and becoming stronger communicators. They also indicated participation in SSJP enabled them to have a better understand of themselves and a more in depth focus of their education and career plans.

SSJP Summer Internships for College Students

In FY2009, the CCHHE provided full-time, ten-week summer internships for 13 SSJP alumni currently enrolled in college. All students are majoring in science and health fields. The students worked in the following hospital departments: Blood Control Lab, Center for Fetal Medicine, Rehab Services, OB/GYN Clinic, Center for Women and Newborns, Thoracic Surgery, Center for Reproductive Medicine, Division of Immunology and Allergy, Neo-Natal Intensive Care Unit, and Neurology.

Alumni Survey Results

In the spring of 2009, a survey was sent to SSJP graduates from the past eight years and received a response rate of 84 percent of graduates. Key findings of the survey included:

- SSJP enhances educational opportunity of young people who participate
- 98 percent of SSJP alumni attend college after participation in SSJP
- 72 percent of alumni attending collect major in health, science, or medical disciplines

SSJP alumni who have completed their education have been successful in being employed in the health care field:

- 31 percent of responding alumni have held health related positions in the greater Boston area since graduating from SSJP
- 63 percent of these alumni who have held health related positions in the greater Boston area are now employed at Brigham and Women's Hospital

The large majority of participants identified SSJP to have assisted them in preparation for college and for employment in their desired field.

- 92 percent of respondents felt their experience in SSJP helped prepare them for college
- 87 percent of respondents felt their experience in SSJP helped prepare them for work in their desired field

Sample SSJP Alumni Comments

> *"Through SSJP, I was exposed to the healthcare environment, met peers who shared similar interests/goals, learned tools that enabled me to apply/get a job. Through my connections with SSJP, I was able to get a permanent position as a Unit Coordinator throughout my four years of college and because of my position as a BWH employee, I believe it helped me a get a position at the Brigham as a nurse." Sasha, 23*

"The tissue culturing experience that I obtained while taking part in SSJP is at the core of the work that I am currently doing at MGH, and I do not believe that I would have gotten hired without it." Laury, 23

2009 American Hospital Association NOVA Award

BWH's SSJP program received a 2009 American Hospital Association NOVA award that recognizes hospitals and health systems that make a distinctive contribution to improving community health. This was one of five NOVA awards given nationally. The SSJP program was also honored in 2009 as a recipient of the MetLife Foundation's National Afterschool Innovator award, one of only six afterschool programs nationwide to be named an Afterschool Innovator.

Project TEACH

In 2009, BWH piloted a new summer program for twenty rising 10th grade students attending Boston Latin Academy, Community Academy of Science and Health, and Edward M. Kennedy Academy for Health Careers. BWH has a strong and established relationship with these local schools through their participation in the SSJP program. Recent research has shown participation in summer programs where students engage in individualized learning opportunities is associated with improved performance in the subsequent school year. The program, Project TEACH (Teen Education About Careers in Health) was designed to stimulate interest in health, science, and medical careers and fills an important need in local communities where the extended learning opportunities for younger high school students are limited.

Project TEACH provided the students a paid summer employment experience at BWH, guidance on a research paper, seminars for students to learn about a variety of health professions, and presentations on the range of pipeline health career programs for high school students.

The goals of Project TEACH are to:

- Expose rising 10th grade students to a variety of professions in the health and science field
- Provide students with work experience in a hospital setting with highly skilled supervisors
- Introduce rising 10th grade students to the pipeline programs for Boston high school students
- Prepare rising 10th grade students for high school math and science courses; and
- Involve parents in their child's interest and pursuit of a career in the health field

Employment

Students began work in their departments in July and worked 24 hours per week for six weeks. Each Thursday afternoon, students checked in with their supervisor about the events of the week and sought feedback about their work performance. Each week, supervisors completed a brief form summarizing what the student did and if they were satisfied with the student's work performance. Students were placed in several different departments including the Operating Room, Radiology, on Postpartum floors, as well as, Materials Management, Central Transport, and Receiving and Distribution.

Academic Component

To strengthen students' skills for their forthcoming high school math and science courses, Project TEACH provided summer science enrichment for students both in the field, as well as, through self-directed research. Students' field experience included science exploration at major research institutes including the Broad Institute where the students toured a lab, and the MIT museum where they worked with DNA models. In addition, each week students were provided research time in a computer lab at Simmons College to prepare a research paper on a science topic of their choice. The research experience was designed to improve the students' ability to think critically about validity and bias in scientific research, access and interpret scientific data, write effectively, and present data. At the end of the program, students presented their paper to their peers, supervisors, and parents during a ceremony dinner at BWH.

Life Skills Seminars and Pipeline Program Presentations

Project TEACH students participated in weekly seminars focused on topics such as self-esteem, high school preparation, and healthy relationships. The interactive seminars were designed to strengthen the collaborative work skills of participants, a vital skill for working in a health care setting. Students also attended presentations on the range health and science programs available to Boston public school students. These sessions educated and informed Project TEACH students of the many of internship opportunities available to young people.

Evaluation Results

Project TEACH participants were given pre- and post-questionnaires. Key findings of the evaluation include:

- 78 percent of students expressed that their experience in their department was excellent, and 22 percent said their experience was good
- 84 percent of students expressed that their relationship with their supervisor was excellent or good
- 94 percent of students plan to pursue a career in health or science
- 67 percent of students learned about new health professions

In addition, students reported that they learned a variety of valuable skills from their supervisors including working with different types of patients, learning to interact with people of different ethnicities and working diligently at a task. Students also reported that they gained public speaking, communication, time management, and teamwork skills.

With the success of the Project TEACH pilot, the CCHHE is committed to offering this summer science enrichment program in 2010.

Jamaica Plain

Team Mita: Working for the Health of the Community

Team Mita develops youth leadership skills through peer-led community health improvement initiatives providing interactive, youth-led health education workshops, while also engaging in youth-led anti-violence organizing. The Team Mita peer leaders, who are between the ages of 14 and 18, and reside in the South Street Housing Development, receive extensive training on a number of topics such as sexual health, emotional wellness, nutrition, asthma, job readiness, resume writing, communication, mediation and other violence prevention techniques, environmental justice, health equity, and community organizing.

The peer leaders are expected to do outreach to a minimum of 12 youth groups annually. The peer leaders have developed workshops on gender roles, STD prevention, teen pregnancy and contraceptive methods, sexual harassment, healthy and unhealthy relationships, and health equity. Since December 2003, a total of 28 young people have been Team Mita peer leaders. In FY2009, 149 young people attended 16 trainings conducted by the peer leaders. Since it began, Team Mita has reached over 473 young people and conducted 76 trainings.

Team Mita empowers the peer leaders to make healthy choices for themselves, while they educate others their age on how to make healthy choices. By the end of FY2009, the peer leaders reported that they:

- Engaged in healthy behaviors because of their increased understanding of health topics
- Promoted and supported the healthy choices of others as measured by their ability to lead health education workshops for their peers
- Were able to resolve conflicts as measured by their participation in Youth Unscripted training
- Used community organizing skills as measured by their participation in community-wide initiatives

- Learned about cultural competency as measured by their participation in ongoing diversity trainings

The peer leaders' skills are evaluated using the Massachusetts Work-Based Learning Plan (MWBLP), and the teens must progress from a rating of "needs improvement" to a rating of "competent" or "proficient" in at least five skill areas. Along with the program coordinator, the peer leaders evaluate themselves twice a year and have developed a number of their own evaluation criteria specific to the health education goals of the program. All of the FY2009 peer leaders made progress on the MWBLP evaluations.

Artist in Residence

Beginning in FY2005, Team Mita sponsored an "Artist In Residence" who works with the teens to develop a media project. In FY2009, the teens worked with Michael Cermack, a Boston College PhD candidate. They developed an interactive website that shows youth investigating and explaining the local food system in Jamaica Plain and the connection between community violence and the environment. This website can be used to educate the community and for future classroom use. This fiscal year the peers are working with Alex Gomez, a Colombian filmmaker. They are developing a mixed genre documentary on health equity and public school education in Boston.

Health Careers Ambassadors Program (H-CAP)

Team Mita continues to collaborate with the Hyde Square Task Force (HSTF) and their Health Careers Ambassadors Program (H-CAP) that was piloted at the Southern Jamaica Plain Health Center (SJPHC) in FY2004 to provide job shadowing and health careers education. All six of the peers are introduced to the different departments at SJPHC and learned about a variety of health careers. As participants in H-CAP, they received college preparatory and evening tutoring support through the HSTF and meet one day a week with other H-CAP interns to learn about health topics and to work on a service project.

Youth Unscripted

The peer leaders continue to work with Urban Improv in the Youth Unscripted Program. In FY2009, Youth Unscripted met at English High School with over 45 participants. Ten youth were hired by Urban Improv over the summer as a youth theater troupe and performed for summer camps and other youth groups.

The South Street Youth Center

The mission of the South Street Youth Center (SSYC) is to provide a safe, educational, and engaging space during out of school time for young residents of South Street

Development. Through its broad-based programs participants learn a happy, healthy, resilient attitude toward life that will help sustain them through adulthood.

Staffing

The SSYC is staffed by a full-time Director, a part time Program Coordinator, an average of three to four volunteers a week, and six middle school peer leaders who call themselves the Colossal Peace Crew (CPCs).

Programming and Collaborations

SSYC offers after-school programming Monday through Thursday for first through eighth grades and every other Friday for middle school youth. The Youth Center's programming focuses on providing choices for its young participants. There are a wide range of enrichment activities available, as well as, educational opportunities. Normal rotation of planned activities includes art, cooking, experiments, and outdoor games. Daily, the youth have choice time when they can explore the resources at the SSYC— books, games, computer time, foosball, individual art projects, and interacting with the adults present.

Due to new collaborations the programming has increased for both the after school and middle school programs. The SSYC collaborated with several organizations this fiscal year including: Boston Police's E-13 office, Representative Liz Malia's office, Team Mita, Northeastern University, Curtis Hall, the Cooperative Artist Institute, Spontaneous Celebrations, and Hyde Square Task Force. These collaborations have provided workshops, as well as, greater access to resources for SSYC.

Attendance

Another area of success in FY2009 is the overall increase in youth participation at the center. The youth center averages 24 youth participants a day, an increase from 22 last year.

Academics

The youth center specifically targets younger youth in first through fourth grades for homework assistance and strongly encourages reading with the youth who speak a language other than English at home. As outlined below, only 15 percent of our youth report attending other after-school programs, most of whom report attending an athletic activity. As a result, the SSYC becomes one of the primary supports for youth to complete homework and work towards greater success in school.

Mission Hill

Summer Science Academy

BWH Summer Science Academy is a six week summer program designed to stimulate interest in science, health, and medical careers, targeted to rising 9th grade students attending BWH partnering middle schools in the Mission Hill neighborhood. It was piloted in the summer of 2009 with 12 students and included science education at Brigham and Women's Hospital, seminars for students to learn about various health professions, and educational field trips related to science education and health careers. Students received a weekly stipend for their participation.

The goals of the Summer Science Academy are to:

- Engage rising ninth graders from Mission Hill schools in health and science topics through an interdisciplinary curriculum, scientific literature review, and scientific writing
- Expose rising ninth grade students to professions in the health and science field

The program included a weekly three hour neuroscience class held at Brigham and Women's Hospital taught by Dr. Todd Rose from Harvard University. The curriculum included: Human Brain Overview, Limbic System, Learning and Memory, Personality, and Senses and Perception. While the curriculum was focused on neuroscience, it also included many components to help the students further their academic career in high school, as well as deepen their own self understanding. Students learned about different styles of learning, as well as, an understanding of how the brain works. They gained knowledge about themselves and others and what learning approaches assist them to succeed. Students completed and presented a research paper on the neuroscience topic of their choice with guidance from Dr. Rose.

Weekly presentations and hospital department tours were be given by BWH staff. Departments that students toured were: the emergency department, STRATUS, and NICU. They heard presentations from students involved in BWH's SSJP program and from a pediatrician from Children's Hospital. Field trips to places that related to either neuroscience class or health career presentations took place weekly. Trips included: Project Adventure (teambuilding day), Museum of Science, MIT, the Museum of Fine Arts (for visual perception), and the Broad Institute.

Health and Science Clubs

Since 2006, Brigham and Women's Hospital Health and Science Clubs (H &SC) have provided science learning opportunities to almost 300 students in the 4th through 7th grades at three schools and one community center in Mission Hill. Without the H &SC, the students at the Maurice J. Tobin School and Mission Grammar School would have very limited exposure to science learning. The CCHHE coordinated Health and Science

Clubs. A total of 95 students participated in FY2009, which was a 42 percent increase from the previous year.

The Clubs provided an informal learning environment where students worked on science experiments with one another in small groups led by hospital employees and listened to presentations by guest speakers. The relaxed yet structured atmosphere of the Clubs promoted teamwork and produced cooperative learning experiences that increased science knowledge. The Clubs also familiarized students with new health careers and showed them what types of education and training are necessary to pursue specific health career paths. A total of 21 Brigham and Women's Hospital employees were recruited to serve as classroom volunteers and as guest speakers for the Health and Science Clubs.

The employee volunteers were recruited from 14 BWH departments and were trained to use the Youth Explorations in Science (Y.E.S.) curriculum, which aligns to the national science frameworks, Boston Public Schools' science curriculum, and to the science Massachusetts Comprehensive Assessment System (MCAS). Y.E.S. enhances and reinforces the Science and Technology for Children and the Full Option Science System curricula (other BPS curricula), as well as, addresses educational standards for engineering and technology. Alignment to the above curricula and testing is an important feature of the program. The Health and Science Club strives to engage students in new and innovative science learning, while linking their experiences to practical application in the classroom and tests.

The 61 participating fourth grade students from the Tobin School worked on five Health and Science Club projects: the food chain, periscopes, electronic circuits, paper chromatography, and laws of motion. Four guest speakers presented to the students on nutrition, radiology, exercise, and what it is like to be a nurse.

In addition to the projects above, the 34 participating fourth and fifth grade students at the Mission Grammar School worked on three additional projects: flotation and density, properties of matter, and sound waves. Five guest speakers visited the school to talk to the students about nutrition, neurology, radiology, exercise and nursing. CCHHE also arranged for the students to go to the Museum of Science for an all-day field trip.

Before and after the program, students take a pre- and post-test to assess how much they learned from the projects. The test questions were formulated in collaboration with the participating science teachers. The following table shows the impressive increase in pre- and post-test scores.

Health and Science Clubs
FY2009 Average Percentage Increase in Pre- and Post-Test Scores

School and Grade	Average % Increase of Test Scores
Tobin Grade 4	30% increase
Mission Grammar Grade 4	29% increase
Mission Grammar Grade 5	17% increase

When the participating science teachers were asked to rate the benefits of the Health and Science Club teachers rated it as "Excellent", while 98 percent of the participating students wanted to do more science projects.

When students were asked to comment on what they learned at the Clubs they identified important skills including:

"How to help a teammate and work as a team."

"I learned how electricity works and how to make cars go and other things."

"There are different ways to make cool experiments."

Building Students Literacy Skills

Pen Pal Program

In 2007, the CCHHE established a Pen Pal Program linking elementary school students in Mission Hill with BWH employees. The program has grown significantly and in FY2009, 104 second and third grade students at Mission Grammar School and the Tobin School participated. Students were matched with 103 hospital employees. The pen pals wrote and exchanged six letters, as well as, an introductory "Meet Me" form. In addition, the Pen Pal Program is securely embedded in the grade two literacy curriculums at both schools. Teachers use the Pen Pal Program to teach students about letter writing, including lessons on greetings, format, and paragraph structure. Teachers also use the program to expose students to new vocabulary and encourage students to try new words.

Each participating BWH employee was given a manual with the guidelines of the program, providing information on second and third grade reading levels, explaining the letter sending schedule and protocols, and describing the subjects selected to write about. The BWH Pen Pal Program continued to be incorporated into the grade two and

three literacy curriculum with much enthusiasm and success. Teachers noted that the BWH Pen Pal Program facilitated teaching reading and writing and cited the students' excitement and enthusiasm when reading and writing letters.

In February 2009, the pen pals met for the first time in the students' classrooms. Adult pen pals got tours of the classroom, read books, worked on a project and got their picture taken with their student pen pal in a photo booth. All pen pals received copies of the photos, and the students were given grab bags filled with stationery kits and pencils to encourage their continued interest in writing. In June 2009, the pen pals were able to meet again in person at Brigham and Women's Hospital. During the breakfast gathering, the pen pals enjoyed a science demonstration by Mad Science, and had their photos taken together in a pen pal photo booth. All pen pals were given copies of the photos and students received "Healthy Summer" grab bags filled with safe and active summer activities and nutritional information for them and their families. The events were a great success with lots of affection and smiles from adults and children alike, which clearly demonstrated that the pen pals were very excited to meet face to face.

The program was successful in facilitating reading and writing skills among students. Participants (students and teachers) at schools reflected positively on their experience in the program. When asked how much fun it was to get a letter from a BWH pen pal, 92 percent of students described it as "very fun." Further, when asked how much fun was it to write to a BWH pen pal 85 percent of students reported that it was "very fun." Also among student respondents 83 percent said they wanted to receive/read more letters and 81 percent said they wanted to write more letters.

Brigham Book Buddy Program

The Brigham Book Buddy Program, since inception in 1994, has been implemented in partnership with the Maurice J. Tobin School in Mission Hill. The Tobin School is a kindergarten to eighth grade school, with 83 percent of the students coming from families qualified for free or reduced lunch. The Massachusetts Department of Education places the Tobin School in the "Needs Improvement" category in English Language Arts (ELA). In addition, a high percentage of students in the lower grades received a warning or a failing grade on the ELA portion on the state MCAS test. The program has been well received by Tobin students and staff and in 2009, additional volunteers were recruited and the Brigham Book Buddy Program was expanded to four classrooms at the Mission Grammar School. Mission Grammar School has a similar student population as the Tobin School.

Each month, hospital employees volunteer their time to the Brigham Book Buddy program by visiting Tobin School and Mission Grammar School kindergarten through fifth grade classrooms and reading aloud to students. The Brigham Book Buddies read books selected by the classroom teachers and at the conclusion of each reading session, they present the books to the students for their classroom libraries. The goals of the program are to improve students' reading and listening skills, connect the students with health care professionals who serve as role models, and promote the literacy objectives of the school. During the 2008-2009 school year, the Book Buddy volunteers read to 260 students in 13 classrooms and BWH donated 104 books to the school.

The program was successful in facilitating reading and listening skills among students in K0 (three to four year old children) to fifth grade students at the Tobin and Mission Grammar Schools. Participants (students and teachers) at schools reflected positively on their experience in the program. All teachers who completed an end of the year program evaluation survey said they have seen an improvement in their students' enthusiasm in reading and listening as a result of the program. Further, all teachers gave an "excellent" rating to the benefits of the Brigham Book Buddy program to their students and school.

Brigham and Women's Hospital - Maurice J. Tobin School Partnership

For 19 years, Brigham and Women's Hospital and the Maurice J. Tobin School in Mission Hill have been working in a unique relationship between an academic medical center and an urban public elementary and middle school. The overall goal of the partnership is to support the academic mission of the school by increasing parent, family, community, and hospital involvement in students' learning. With the established link between educational attainment and health status, this partnership was created to support the hospital's mission of improving the health status of the Mission Hill community. Family involvement has been shown to be a critical element in student achievement, therefore, the joint programming aims to reach out to families and assist them in becoming active participants in their children's education. Other elements of the program are designed to engage hospital employees in students' education.

The Tobin-Brigham Family Support Program

Three parenting partners and the Tobin Family Support Center coordinator staff the Tobin-Brigham Family Support program. The parenting partners are employed by BWH and work at the school under the supervision of the Tobin Family Support Center coordinator. With guidance from the coordinator, the parenting partners implement literacy initiatives to involve families in their children's education and build relationships between students and adults. The components of the Family Support program include the Family Support Center, Full-Service School Model, Parent Council, Brigham Book Buddy Program, and Brown Bag Food Distribution/Adopt-a-Family Program.

The Family Support Center

The Family Support Center provides a central and visible place in the school where parents know they are welcome, where they can receive information about the school and about community resources, and where they can make connections with other parents. Two of the parenting partners, one of whom is bilingual, have office space in the Family Support Center. A second bilingual parenting partner is based in the school's main office, where she is available to families entering or calling the school. Spanish language capacity is very important, since a majority of Tobin students are Latino, and Spanish is the primary language spoken in their homes. In September 2009, the parenting partners were assigned to work with specific grades, oriented to the curriculum being used with the specific role of facilitating communication between the teachers and parents around student education and expectations of the classroom.

Full-Service School Model

In January 2005, the Tobin School and Brigham and Women's Hospital began to explore the feasibility of developing a full-service school model, which would enable the Tobin School to offer a broader, more coordinated network of before-school and after-school programs for children and parents. As a result of these initial discussions, a task force was convened in FY2006 to undertake a more thorough planning process.

The task force was comprised of the Principal, three teachers, the Student Support Services coordinator, the school psychologist, the Tobin Family Support Center coordinator, a parenting partner, two representatives from the CCHHE, and two representatives from after-school programs. After a series of meetings, the task force assembled a comprehensive proposal for the implementation of an extended school model, which focused on the following major areas:

- Community Resource Assessment
- Health Services
- Learning Assessment and Evaluation
- Mental Health Services
- Out-of-School Time
- Family and Community Engagement

The Tobin Family Support Center staff is responsible for carrying out the family and community engagement segment of this proposal. In FY2007, they selected a curriculum, ordered materials, and conducted outreach in preparation for English as a Second Language (ESL) classes to be offered at the Tobin School. The classes continued in FY2009 with 12 parents attending classes, double the enrollment of the previous year. They held fall and spring Open Houses to introduce new parents to the school. 155 parents attended the fall Open House in September 2008, and 100 parents attended the

spring Open House in March 2000. The parenting partners also organized Family Nights, Camp Wing Family Day, a Family Apple Picking Trip, and movie nights for children and parents.

Parent Council

The fall of 2009, the Tobin School Parent Council was organized, and elections were held for Parent Council officers. A total of six Parent Council meetings were held over the course of the year, and an average of five parents attended the meetings, which were coordinated by the Tobin Family Support Center staff who created of the agendas, outreached to parents, secured childcare during meetings, and facilitated the meetings. The Parent Council is an important way that parents can be consistently involved in the school, make their voices heard, and influence school policy.

Brown Bag Food Distribution/Adopt-a-Family Program

The Greater Boston Food Bank provides food through the Massachusetts Emergency Food Assistance Program (MEFAP), which supplies nutritionally adequate meals to low-income families. The parenting partners distribute these meals twice a month to families at the Tobin School. In FY2009, there were 15 days during which food was distributed to needy families, and 664 bags of food were distributed. Additionally, through the Adopt-a-Family program, seven families received donated gifts from five Brigham and Women's Hospital departments. Employees donate gifts during the holiday season to some of the school's neediest families.

Longwood Medical Area (LMA)

Partnership with Health Careers Academy

In FY2009, the CCHHE provided grant support to the Health Careers Engagement project at Edward M. Kennedy Academy for Health Careers (formerly Health Careers Academy), a Horace Mann Charter School that prepares students in the ninth through twelfth grades for careers in the health sciences. The goals of the Health Careers Engagement project are to promote student knowledge of health care professions and work sites, increase the number of HCa students who enter college programs designed to prepare them for health careers, and expand the number and variety of internships and other workplace learning experiences that are available to HCa students.

During the 2008-2009 school year, the Health Careers Engagement Project organized a guest speaker series for ninth and tenth grade students at the school. Fifteen health care professionals presented to the students about the following fields: dentistry, emergency medicine, health care administration, health law, internal medicine, molecular research, nursing, obstetrics/gynecology, pharmacy, physical therapy, psychology, public health, radiology technology, social work, and surgical technology.

Additionally, the ninth and tenth grade students made ten site visits to health work sites across Boston to include: Children's Hospital, Harvard School of Public Health, and Tufts Dental School.

Of the HCa students who graduated in 2009, 30 students (68 percent) intend to pursue careers in health care and to major in health or science fields. In addition to those graduated students who intend to pursue nursing (30 percent), others will be pursuing pre-medicine, biology, public health, psychology, biotechnology, pharmacy, and chemical engineering.

The Gateway Program: A Partnership with the John D. O'Bryant School of Mathematics and Science

The O'Bryant Gateway to the LMA is an educational partnership between the John D. O'Bryant School of Mathematics and Science in Roxbury and multiple institutions in the Longwood Medical and Academic Area (LMA), including BWH. The O'Bryant School is one of Boston's three examination-based public high schools, and it is unique among the exam schools in its mission to prepare Boston students to succeed in careers in science and technology.

At the O'Bryant School, the O'Bryant Gateway program provides a four-year high school pathway that focuses on career opportunities in medicine, biomedical science, and the health professions. To prepare students to enter these highly competitive fields, the program fosters high academic achievement by providing the students with a supportive learning community, out-of-school time academic supports, and year-round enrichment opportunities.

In June, 2009, the O'Bryant Gateway to the LMA completed its second year of classes, and 48 of the students in the program advanced to the tenth grade. In addition, fifty new ninth grade students joined the program, bringing the cohort of students enrolled in the program to 148 in September 2009. The sophomore students look forward to a rigorous science-based academic school year that will include an action research project, hospital rounds, a speaker series, a career networking event and a college access event. While the junior students who enter into a more assimilated role among the larger school population will experience along with their strenuous academic schedule a host of new health care and science centered internships, trainings, and college preparation. The program continues to maintain strong support and commitment from the LMA institutions that include Brigham and Women's Hospital, Beth Israel Deaconess Medical Center, Children's Hospital, Dana Farber Cancer Center, Emmanuel College, Harvard Medical School, MASCO, Simmons College, and Wentworth College.

Violence Screening, Treatment and Prevention Programs

Passageway at Brigham and Women's/Faulkner Hospitals and the Health Center Domestic Violence Initiative

Comprehensive Advocacy Services and Consultation

Passageway provides free, voluntary, and confidential services to patients, employees, and community members who are experiencing domestic violence. Services include risk assessment and safety planning, crisis intervention, individual counseling, support groups, referrals, intervention with complex systems (e.g., health care, courts, employers), as well as, assistance in accessing resources and education to enable victims/survivors to understand their rights and options. Passageway advocates offer consultation to health care providers and hospital staff regarding screening practices, safety planning, culturally appropriate interventions, and other issues impacting patient and employee health and safety.

While women's shelters and domestic violence hotlines continue to provide critical emergency services for victims, placing domestic violence advocacy services within the health care setting offers additional avenues for help and for earlier intervention and prevention. In June of 2008, Massachusetts issued a Public Health Advisory to health care providers on domestic violence based on the drastic increase of domestic violence related homicides in Massachusetts. They cited a study which found that 74 percent of murdered women and 88 percent of attempted homicide victims had been seen in hospital emergency departments at some point in the year before the incident. Furthermore, 66 percent of the victims had been evaluated in the ED, hospital in-patient or ambulatory settings for injuries related to domestic violence. (Sharps, et al, "Health Care Providers Missed Opportunities for Preventing Femicide" *Prev. Med.* 2001; 33:373-380). Statistics show that 25 percent of women will be the victim of domestic violence at some point in their lifetime. (Mitchell and Anglin, "Intimate Partner Violence: A Health-Based Perspective" 2009: 31). A recent literature review found that violence survivors have greater use of health care, hospitals, and mental health services, although many are unlikely to identify as victims at the time they are seeking care. (Macy, et al, "Partner Violence and Survivors' Chronic Health Problems: Informing Social Work Practice" *Social Work* 2009; 54:38)

Victims who may not be ready to access shelters or hotlines may still seek health care. As health care professionals become skilled in routinely screening for and identifying domestic violence, victims may benefit in numerous ways. First, the act of domestic violence screening is itself an intervention and informs patients that health care providers care about their safety and well-being. Second, the screening process and availability of an on-site domestic violence program offer victims access to services in a private setting. If a patient discloses abuse, their health care provider can refer them

immediately to Passageway for safety planning and ongoing support. Third, employees can find easy access to assistance within their workplace.

Passageway provides a multidisciplinary response that includes domestic violence advocates, nurses, physicians, social workers, mental health providers, security, and other health care providers. The team provides individualized interventions based on the needs of the patient or employee. Passageway's advocates come from diverse backgrounds reflecting the populations served. Advocates offer services in English and Spanish and use hospital interpreters for all other languages. Passageway advocates are on-site at the BWH campus, Faulkner Hospital (FH), and Southern Jamaica Plain Health Center (SJPHC).

Services Provided in FY2009

During FY2009, Passageway responded to a total of 992 individuals experiencing domestic violence and provided 13,102 service contacts on behalf of all individuals assisted at BWH, FH and SJPHC. Services included advocacy and counseling (26 percent), outreach and follow-up on cases (23 percent), and provider consultations (51 percent). This year's data represents a three percent increase in individuals served as compared to FY2008. Ninety-six percent of the clients were women, three percent were men, and one percent unreported. The demographics of our clients are as follows:

- **Race**: 2 percent Asian, 25 percent Black, 23 percent White, 37 percent Latino, 0 percent Native American, 1 percent other, 12 percent unknown
- **Language**: 73 percent English, 22 percent Spanish, 2 percent other, 3 percent unknown
- **Age**: 5 percent teens, 26 percent twenties, 23 percent thirties, 18 percent forties, 10 percent fifties, 6 percent sixty and above, 12 percent unknown

Health Center Domestic Violence Initiative

Established in 1999, the Health Center Domestic Violence Initiative is a collaboration between Passageway and Brookside, Whittier Street, and Martha Eliot health centers. Each health center has a domestic violence advocate supported by community benefits funding and administered through Passageway. Currently, advocates from the health centers and Passageway meet quarterly to improve communication and continuity of care for patients and to participate in resource sharing and trainings.

In FY2009, advocates at Brookside, Whittier Street, and Martha Eliot health centers assisted 236 clients who were coping with domestic violence. That is a nine percent increase in clients served from FY2008. The demographics of the clients served are as follows:

- **Race**: 84 percent Latina, 11 percent Black, 4 percent White, 1 percent other
- **Age:** 2 percent 0-19, 61 percent 20-39, 31 percent 40-59, 2 percent 60+, 4 percent unknown

Southern Jamaica Plain Health Center

The Passageway advocate at SJPHC assisted 160 patients and provided 2,851 services contacts on behalf of these patients. The advocate provided training and education to 35 participants at the health center. The advocate is a member of the Jamaica Plain Trauma Response Team, the Boston Police Department Advocate Working Group, the Association of Haitian Women of Boston monthly domestic violence roundtable, and the Department of Children and Families Domestic Violence Working Group.

Faulkner Hospital

Our advocate at FH provided 2,120 service contacts on behalf of 107 FH patients. The advocate has provided training to 145 FH staff, and 128 community members on domestic violence. The advocate is the Stop Abuse, Gain Empowerment (SAGE) - Boston co-chair, and has implemented and provided a comprehensive training for law enforcement as part of a DOJ initiative on abuse later in life, which was conducted at the Family Justice Center in Boston. The advocate participated in the FH Safety Fair, and conducted outreach in the hospital for Domestic Violence Awareness Month in October of 2008.

The Passageway Health-Law Collaborative

The **Passageway Health-Law Collaborative** (PHLC) is a unique legal services program within a health care domestic violence program**.** Legal issues are often one of the biggest challenges faced by people in abusive relationships. Many do not have the resources to hire private counsel, and many private attorneys do not understand the myriad of issues faced by abuse victims. By conducting a full legal assessment for victims, Passageway helps victims to move beyond legal crises and identifies ways that lawyers can be proactive in their assistance with critical issues such as health care proxies, disabilities, insurance, housing problems, financial issues, guardianship, and permanency planning for children. In collaboration with WilmerHale Legal Services Center of Harvard Law School, one full-time attorney is available to assist Passageway clients. In FY2009, the project worked on 137 client matters for 82 victims of domestic violence. Work on these matters included full legal representation, brief legal assistance and consultation services.

A new preventative aspect of the PHLC was launched this year, and was recognized as a "Promising Practice" by the Family Violence Prevention Fund. The workshop 'Healthy Legal Choices for Women in Relationships: Dispelling Myths' provided patients and providers with an opportunity to learn about their legal rights options before a crisis

occurs in the relationship. The workshop is conducted at various sites across the hospitals and health centers, and offered in English and Spanish.

Training/Education for Health Professionals through Passageway

Passageway has become a leader in integrating domestic violence advocacy services and training for health professionals into the health care system.

Passageway provided extensive training to 745 participants in FY2009 throughout the BWH/FH system. We continue to provide on-going training in high-referral practices and to providers in Obstetrics and Social Work. At Faulkner Hospital, nursing providers were targeted in the Emergency Department, Operating Room, Breast Center, and Medical/Surgical services. Providers throughout Southern Jamaica Plain Health Center, including Mental Health Clinicians and Medical Residents, participated in training sessions. Training sessions included content on defining domestic violence, as well as, screening, identifying, and providing culturally competent domestic violence interventions to patients and employees. Passageway staff continued to provide orientation training to providers in social work, nursing, new residents, and mental health.

Community Collaboration at Passageway

In addition to working within the hospital community, Passageway collaborates with numerous community agencies to address domestic violence. We co-sponsored a community based support group for survivors with Renewal House in Roxbury. Passageway has continued to provide leadership in a number of community collaborations, including the Domestic Violence Council of the Conference of Boston Teaching Hospitals, Executive Director DV/SA Working Group of Greater Boston, SAGE Boston, which works to end abuse among older women and elders, and the National Association of Social Work Committee on Domestic Violence and Sexual Assault. Each of these groups meet monthly with active participation with other area hospitals and over 30 community agencies represented. This year, Passageway's SAGE representative participated in a Department of Justice (DOJ) grant-funded training team providing training on Abuse in Later Life to Boston detectives of the Family Justice Center, Boston.

Health Centers

Southern Jamaica Plain Health Center

Background

One of the health centers operating through the license of BWH, Southern Jamaica Plain Health Center (SJPHC), has been serving the community for 37 years. Starting as a well-child clinic in Jamaica Plain's Curtis Hall area and then moving to a Centre Street

storefront, SJPHC moved to a beautiful modern facility at its current Centre Street location in 1998. The health center now serves over 10,000 patients with its comprehensive services of adult medicine, pediatrics, women's health, mental health/substance abuse services, cardiology, dermatology, nutrition, and podiatry. SJPHC's mission is to provide personal, high quality health care with compassion and respect to a diverse community. Health center providers include nine internists, five pediatricians, an obstetrician/gynecologist, midwives and nurse practitioners in women's health, a podiatrist and cardiologist, dermatologists who are part of the BWH Dermatology staff, and social workers, psychologists and psychiatrists in the mental health/substance abuse department. A bilingual staff of five nurses provide and coordinate services to patients. Patients made more than 45,000 sick and health maintenance visits last year, taking advantage of the health center's accessible schedule and 24-hour on-call service.

The health center augments its medical and mental health services with health education, case management, screening programs (blood pressure, diabetes, mammography, cholesterol), a Mind/Body Center that includes T'ai Chi and yoga, and a child literacy program. In addition, the health center has a long history of providing substance abuse treatment services to patients, families, and the community. Health center staff also work collaboratively with residents of the local South Street public housing development to promote the health of public housing residents.

The patient population of the health center is quite diverse, both ethnically and economically, reflecting the community in which it is situated. Approximately 52 percent of the patient population is Latino, 15 percent Black, and 33 percent White. The health center attracts many patients who have recently emigrated from the African continent, Asia, and the Caribbean Islands. Seventy-five percent of the health center staff is bilingual in Spanish to serve the patient population.

All of SJPHC's physicians are on staff at Brigham and Women's Hospital and are faculty of Harvard Medical School. All SJPHC providers are credentialed with the major managed care companies; financial assistance is available in the form of MassHealth, Children's Medical Security, and Free Care/Sliding Fee.

FY2009 Accomplishments

- SJPHC remains a major resource for access to care for the populations most at need in Jamaica Plain and surrounding communities: immigrant, Spanish-speaking, and low-income residents. The patient population has grown from 4,600 patients to over 10,000 patients since the move to the new facility in December 1998.
- Collaborating with JP Tree of Life and residents of the South Street public housing development, the eleventh year of a community-building project was successfully completed, and funding was obtained for the next year of the project, with BWH/Partners HealthCare Community Benefit support as the lead funder. SJPHC is

providing supervision to the Teen Peer Leadership Program. During the past year, the teen program continued to develop. The teens worked collaboratively to address violence within the community and to promote sexuality education. An afterschool program for younger children proves homework help and educational activities. A middle school component was added to the afterschool program to address the needs of sixth to eighth graders for positive activities after school. Through the health center's participation in the JP Trauma Response Team, staff responded to needs of family, friends, and the whole community when a young man from South Street was murdered.

- The Pediatric Department continued its participation in the Reach Out and Read program and was very successful in securing over 1,000 books for SJPHC's pediatric patients. Young patients receive a book each time they come for their well-child visits.
- SJPHC participated in major community activities such as the Jamaica Plain World's Fair and the Wake Up the Earth Festival.
- The health center provided prenatal care to 160 women, and continues to be a major source of care in the community, particularly for Latinas.
- The SJPHC Community Advisory Board, made up of ten members, continued to provide input from patients and community members about SJPHC's services and programs.
- The health center participated in citywide Emergency Preparedness activities through the Massachusetts League of Community Health Centers, establishing and clarifying roles of health center and staff in the event of an area-wide emergency.
- SJPHC was one of the core members of a community-wide effort to address youth violence. A Jamaica Plain Trauma Response Team was organized in 2008 and provided community responses to episodes of violence throughout the community, primarily homicides. The Team added three staff during 2009 and greatly increased its capacity, in addition to adding a focus on prevention and early intervention.
- SJPHC provides families whose children are cared for at the center with assistance in enrolling their children in summer camp and enrichment programs. This is particularly geared toward families who would not otherwise have the resources or knowledge to enroll their children in these programs. The SJPHC Community Advisory Board and the Friends of Brigham and Women's Hospital provided funds to assist families with application fees and partial tuition where needed. Over 150 families took advantage of the program.
- SJPHC initiated a Youth Health Equity Collaborative, serving as lead agency of nine Jamaica Plain health, housing and youth-serving organizations. The project, funded by the Boston Public Health Commission, worked to establish a common framework among agencies from different sectors as to how social factors affect health, especially the long-term health of our youth. A series of meetings, with strong participation from youth, looked at each social issue such as housing, education, and others, and assessed the health impact on JP youth. The project will continue for two more years.

- SJPHC obtained funding to take over an empty yoga studio adjacent to the health center, in order to open a Health Promotion Center. The Center is expected to open in spring 2010 and to have a major impact on programming offered to patients, local youth, and community residents.

Brookside Community Health Center

Background

Brookside Community Health Center was originally established as the Brookside Park Family Life Center in 1970, a "grass roots" program with a five year funding grant through the Model Cities Program. This grant was made in response to a proposal drafted and developed by a group of community residents, organized to address the health care needs of Jamaica Plain. The proposal clearly expressed a defined set of needs, identified in a community needs assessment, for accessible affordable health care that addressed the social and medical needs of families.

The group of local residents established itself as the center's Consumer Policy Board functioning under a set of by-laws drafted to govern the Board and its actions. The Board outlined the health center plan and hired the first staff members. The Board continues to function as an engaged set of consumers and advisors who work directly with the health center's Executive Director and staff. The 16-seat board requires that 12 of the seats be filled by consumers who are elected annually by health center clients.

In 1974, the Brookside Community Policy Board signed an affiliation agreement with the Peter Bent Brigham Hospital and became part of the Ambulatory and Community Services Department, operating under the Hospital's License. The hospital, now the Brigham and Women's Hospital (BWH), and a founding member of Partners HealthCare, has continued to work closely with the health center staff and Board to provide high quality services that meet the needs of the community.

Throughout its 39-year history, the health center has evolved and grown in order to meet the needs of its patients and improve the health status of the community. In 1970, after initially opening for business in a school classroom, the health center moved to four house trailers and then into a renovated parish hall basement. By 1975, the health center had settled into its current location, originally a manufacturing building leased by BWH in 1974 for 20 years from the City of Boston. The building, a one story, 27,700 sq. ft. space, was renovated in 1975 with funding from a federal government program to meet the health center needs. The building is fully handicapped accessible and on public transportation routes. The health center shared space in the building with N.I.C.E, a community-run day care program, until the summer of 1999. At that time, the Day Care relocated to a new building of its own, allowing it to increase its capacity and offer services in an updated and fully refurbished space.

In December of 2000, BWH purchased the property from the City of Boston. Long-planned, and much needed, renovations, including a complete overhaul of the building's infrastructure systems, were completed in May of 2003. The increase in space supported improved working conditions for staff and the delivery of high-quality care to clients. In 2006, BWH purchased two adjacent vacant lots that are to be incorporated into the health center's driveway to address the problem of substantially limited parking. As the demand for services continues to grow, a review of the clinical areas is needed in order to prepare the growing service demand and continue to ensure access. This challenge is one that continues into the coming year.

Despite the changing needs and demands, Brookside's board and staff remain committed to its mission:

> *To provide high quality, family-oriented, comprehensive health care, with a focus on serving the low income population of our community, regardless of ability to pay.*

In order to meet this mission, services are provided through four direct care departments: Medical, Dental, Family Services, and WIC/Nutrition. Each of these departments is made up of a multidisciplinary team of staff. The Medical Department provides primary care in pediatrics and adult medicine, OB/GYN care, family planning, and Pulmonary services for both adults and pediatric patients. The Dental Department provides comprehensive preventive and restorative services, as well as, endodontic, periodontic, and orthodontic services to adult and pediatric patients. The Family Services Department provides behavioral health/mental health, social services, Substance Abuse Counseling, Domestic Violence Advocacy Support, HIV health education/ prevention, and Parenting Education and support. The WIC/Nutrition Department provides nutritional assessment and counseling to adults and pediatric patients, lactation support, as well as, a supplemental food support program. An on-site laboratory, managed by Brigham and Women's Hospital's Laboratory Administration, provides services to all departments. All services provided have been developed and expanded in direct response to the presenting needs of the health center's populations. Across all departments, there are a total of 114 staff, making up 94.1 full time equivalents (FTEs) positions, including physician staff.

Each clinical department conducts an active teaching program, approved annually by the Community Policy Board. The intent of these programs is to provide an opportunity for future clinicians to experience a learning environment that is culturally appropriate and responsive to the needs of the community it serves. Each department organizes its program in a manner meant to support the primary focus of its practice while protecting against any interference with patients' access to their primary care providers.

Given the health center's focus on the patient and their family, the health center staff has organized various cross-departmental teams for case reviews and family support planning. The goal is to ensure a holistic approach to patient/family centered care.

The health center is open Monday, Tuesday, and Thursday 8:00 - 7:00; Wednesday 9:30 - 7:00; Friday 8:00 - 5:00, and Saturday 8:30 - 12:00. To ensure access for patients, each clinical department offers same day appointments for all services. Each department in the health center is open on several statewide holidays, offering routine appointments and urgent care access in all clinical areas. As an extension of this commitment to access, a physician backed on-call system for pediatric and adult medicine is in place 24 hours a day, 365 days a year. Dentists, midwives, and mental health staff are also available for phone consultation whenever the health center is closed.

Brookside services are available to all residents and workers of Jamaica Plain, as well as, residents of surrounding Boston neighborhoods. Over the past several years, due to the increasing housing costs facing many of our patients, a growing number of patients now reside in the greater Boston metro areas, but continue to receive their care at Brookside. The center is easily accessible by public transportation and the building is fully accessible to the handicapped.

All services are offered bilingually in English and Spanish. In addition, staff members are available as translators in Haitian, Creole, German, Russian, and Polish.

FY2009 Accomplishments

FY2009 was Brookside's 39th year of service to the community, a remarkable achievement and a testament of the high regard in which the health center is held by patients, the community, and funders. It is also a reflection of the changing health care environment within our state that is now committed to expanding access to high quality, affordable health care for all, something Brookside has been dedicated to since it opened its doors. In that environment, throughout the year, the health center responded to the needs of those who sought assistance and adapted services and programs to ensure that needs were met and successful outcomes were achieved. This dedication is a reflection of Brookside's outstanding staff, a rare group of highly skilled and deeply committed people. There were a great number of achievements, all of which are long-lasting and important. These achievements are the direct result of staff efforts and our equally dedicated supporters. These include the health center's Community Policy Board, the Leadership and Friends of Brigham and Women's Hospital, Partners HealthCare, and our community partners.

Highlights of accomplishments include:

- Due to the outstanding commitment and hard work of every member of the health center staff, completed a record setting year of service, providing 72,622 patient

visits, registered 1,253 new clients, and reached a total of 11,317 unduplicated users, ensuring high quality patient care with a continued focus on coordination and collaboration to achieve successful patient outcomes.

- Despite the national shortage of Primary Care Providers, successfully recruited and filled budgeted Primary Care Physician vacancies in pediatrics and internal medicine.
- Dental Department successfully recruited a Periodontist and support staff to ensure patient access.
- Brookside's Jamaica Plain WIC Program continued to be recognized as the highest ranked WIC Program in the state for it outstandingly high quality of care, including highest rates of Breastfeeding and immunizations of its recipients.
- Financial Counselors met with 8,294 clients, an increase of over 2,000 from FY2008, to provide information on health care access and entitlement programs. They successfully completed close application submissions to the state for enrollment of families in Mass Health, Commonwealth Care, and other state supported programs.
- In collaboration with Dana-Faber and the American Cancer Society, conducted three on-site Mammography Screenings days at Brookside, becoming the health center with the highest rate of screenings offered.
- WIC Program Assistants issued over $1 million in WIC Checks to participants, ensuring their access to healthy and nutritious foods.
- Significantly reduced Claims Denials and Free Care claims due to efforts of Financial Counselors and Practice Secretaries to ensure accuracy of health care coverage information.
- Expanded existing staff resources by converting Medical Record Clerk positions to Practice Secretary and Financial Counselor to increase support to clinical departments and patients.
- Despite the loss of the Urban Youth Sports Coordinator, with the assistance of a Health Corps intern, continued to provide on-site support to children and families regarding healthy lifestyles and physical activities.
- Maintained highly successful teaching programs in a broad array of clinical disciplines in Medicine, Nursing, Dental, and Behavioral Health departments. Also participated in several administrative internship programs, including the Americorps-sponsored Health Corps Internship and the Health Career Connection Programs.
- Continued a partnership with Children's Hospital's Neighborhood Partnership Program as we focus on the mental health needs of children in our community.
- Increased external grant funding to $1,179,630, an increase of $68, 000 or six percent
- Took active role in the CHEERS program, as a member of the Board as well as participation in several task forces and exploring initiatives and community-based research projects.
- Continued to work with Jamaica Plain Health Centers, community agencies and residents, to refine the Rapid Response team to support the community in the face of violent incidents.

- Continued participation in BWH/Faulkner and Partners Psychiatry Department's Substance Abuse Team to identify initiatives to enhance patient outcomes and develop programs to meet their needs.
- Continued to take leadership role in health planning projects such as:
  - City-wide Alliance for Health
  - Boston Conference of Community Health Centers
  - Governmental Affairs Committee of Mass League
  - Boston Alliance/Boston CHNA initiative
  - J.P. Tree of Life
  - JP Health Planning Committee
  - Neighborhood Health Plan (NHP) Advisory Board
- Maintained extended service hours in all clinical departments, increasing utilization and diversifying patient base by offering increased access to the working families of the community.
- Took active role in the CHEERS program, as a member of the Board as well as participation in several task forces and exploring initiatives and community-based research projects.
- Continued important projects to support the work and mission of the health center. These include: Partners In Asthma Care Program, which offers the services of an on-site RN Case Manager to support the needs of asthmatic patients; and Reach Out and Read Program, providing free, age-appropriate books for all children seen for well-child visits.

Access to Care

BWH is one of the largest providers of Health Safety Net care to people without means to pay for health care in the Commonwealth. In FY2009, more than $43 million worth of care was provided to more than 3,000 patients. More than one-third of these patients came from the communities of Dorchester, Mattapan, Jamaica Plain, and Roxbury. At the same time, the hospital treated nearly 3,300 patients insured under Commonwealth Care.

BWH is also a major provider of health care for patients on Medicaid, providing nearly $170 million worth of care to approximately 28,000 patients in FY2009. More than one-third of those patients were from Jamaica Plain, Dorchester, and Roxbury.

Measuring the Commitment

One way to measure BWH's commitment to the community is by the amount spent on health care services and programs. The following table calculates this in two different ways: first, according to the guidelines promulgated by the Attorney General's office and second, according to a broader definition, which considers additional components of spending or revenue loss.

Components of FY2009 Community Commitment
(in $ Millions)
Compiled According to the Attorney General Guidelines

Community Benefit Programs		
Direct Expenses		
	Program Expenses	4.6
	Health Center Subsidies (Net of HSN Care)	12.1
	Grants for Community Health Centers	2.2
Associated Expenses		N/A
DoN Expenses		0.6
Employee Volunteerism		N/A
Other Leveraged Resources		
	Grants Obtained	2.2
	Doctors Free Care	5.0
Hospital Health Safety Net (HSN) Care		16.9
Corporate Sponsorships		0.8
Total per AG Guidelines		44.4

Components of FY2009 Community Commitment
(in $ Millions)
Compiled According to a Broader Definition

Community Benefit Programs		
Direct Expenses		
	Program Expenses	4.6
	Health Center Subsidies (net of HSN and Payer Losses)	2.2
	Grants for Community Health Centers	2.2
Associated Expenses		N/A
DoN Expenses		0.6
Employee Volunteerism		N/A
Other Leveraged Resources		
	Grants Obtained	2.2
	Doctors Free Care	5.0
Hospital Health Safety Net (HSN) Care		23.5
Bad Debt (at Cost)		
	Hospitals	6.0
	Doctors	9.9
Medicaid Loss (at Cost)		
	Hospitals	30.1
	Doctors	15.4
Medicare Loss (at Cost)		
	Hospitals	95.8
	Doctors	46.8
Unreimbursed Expenses for Graduate Medical Education		1.3
Corporate Sponsorships		0.8
Linkage/In Lieu/Tax Payments		2.0
Total Broader Definition		248.4

Note: Where N/A is reported, it should be noted that although amounts are not available for reporting, Partners hospitals, health centers, and physicians provide substantial contributions.

Depending upon the definition used, BWH contributed between more than three and nearly 14 percent of patient care-related expenses to the community in FY2009.

Contact Information

For questions about this report, or for more information about BWH's community benefit activities, please contact:

Wanda McClain
Executive Director
Center for Community Health and Health Equity
Brigham and Women's Hospital
One Brigham Circle, 1620 Tremont Street
Boston, MA 02120
617-732-5759
Email: wmcclain@partners.org