



BRIGHAM AND
WOMEN'S HOSPITAL

| Heart & Vascular Center |



TRANSFORMING

CARDIOVASCULAR HEALTH AND WELLNESS

POLLIN CARDIOVASCULAR WELLNESS PROGRAM

A SIGNATURE PROGRAM OF
BRIGHAM AND WOMEN'S HOSPITAL HEART AND VASCULAR CENTER



Dear Friends,

Cardiovascular disease is the leading cause of death for American women, yet millions of women continue to underestimate their personal risk. Contrary to the old adage, what we don't know can hurt us. The Pollin Cardiovascular Wellness Program at Brigham and Women's Hospital Heart and Vascular Center tackles this challenge head-on, striving to advance women's heart health through the use of two of the most effective interventions we have against heart disease: education and lifestyle modification.

Building on our hospital's rich tradition of cardiovascular care and research, the Pollin Cardiovascular Wellness Program educates and empowers women to take charge and improve their heart health. Over the last six years, it has expanded to include sixteen innovative programs reaching women in communities in Boston as well as across America.

For me, one of the most remarkable aspects of the Pollin Cardiovascular Wellness Program is the number of women its initiatives have reached, many of them in communities with an especially high burden of disease. Today, over 29,000 women each have a story to share about how the Pollin Cardiovascular Wellness Program improved her life—a remarkable achievement.

I hope you enjoy reading about some of the Pollin Cardiovascular Wellness Program's specific accomplishments in the following pages. Thanks to this tremendous work, women across the United States can look forward to a healthier future.

With warm regards,

ELIZABETH G. NABEL, M.D.
President



BRIGHAM AND
WOMEN'S HOSPITAL

| Heart & Vascular Center |

**Life. Giving.
Breakthroughs.**

THE POLLIN CARDIOVASCULAR WELLNESS TEAM



(left to right) JoAnne Foody, MD, FACC, FAHA, Medical Director; Annette Rubin, Director; Caitlin Johnson, Communications Specialist; Aileen Sauris, MS, ANP, Nurse Practitioner; (not pictured) Yun Wang, PhD, Senior Research Scientist, Department of Biostatistics

Innovation to Achievement: The Pollin Program's first six years

The numbers of women helped by the Pollin Cardiovascular Wellness Program are truly astounding: **27,000** online, **4,500** within Brigham and Women's community, and roughly **20,000** in communities in the Greater Boston area. Since 2008 the sixteen programs of the Pollin Cardiovascular Wellness Program have evolved and grown to the point that the Program now maintains a substantial profile in the women's public health communities in Boston and nationally. Women's cardiac health research will build on the solid foundation established by the Pollin Cardiovascular Database which holds records on over **31,000** individuals. Moreover, by partnering with groups as diverse as The Dana-Farber Cancer Institute, The Boston Black Women's Health Institute, and Quest Diagnostics, the Pollin Program model is disseminated widely into the field of women's health. Thanks to the vision and generosity of Irene Pollin, there now exists a collection of exemplary women's health programs positioned to meet the needs of underserved populations. The Pollin Cardiovascular Wellness Program has given thousands of women the skills and confidence to take control of their own cardiac health.

THE NEED FOR BETTER PREVENTION | 2008-2014 REPORT

POLLIN CARDIOVASCULAR WELLNESS PROGRAM AT BRIGHAM AND WOMEN'S HOSPITAL HEART AND VASCULAR CENTER

Cardiovascular disease in American women is a public health crisis whose solution lies in plain sight. Though heart disease causes one third of deaths in American women, only twenty percent of American women understand that cardiovascular illness poses the greatest threat to their lives. Since most women don't realize how much heart disease threatens them, education is one of the strongest weapons in the public health arsenal in fighting cardiovascular disease. Additionally, public health researchers have outlined attainable lifestyle changes that dramatically reduce heart disease risk factors. Education and lifestyle changes are relatively simple measures that would help women dramatically reduce their risk of heart disease, or manage it if they are already afflicted. But despite such advances these practical solutions were not reaching the communities and working women who needed them the most. In 2008 Irene Pollin stepped into the breach with a visionary and generous gift establishing the Pollin Cardiovascular Wellness Program for Women. The Pollin Program functions in partnership with Sister to Sister – another Pollin-sponsored program – to answer an urgent need: helping women reduce their cardiovascular risk. The Pollin Cardiovascular Wellness Program's accomplishments are an expression of that partnership.

The Pollin Cardiovascular Wellness Program has given thousands of women the skills and confidence to take control of their own cardiac health.

The Pollin Program's sixteen interrelated programs have brought inventive cardiac health solutions to women in the Boston area, and nationwide. Further supporting this effort, Ms. Pollin has also funded the Linda Jay Pollin Cardiovascular Wellness Program space, a contemporary, dedicated assembly space at Brigham and Women's Hospital in which to stage the programs, and a nationwide computerized database to accelerate and refine the advances created by the Pollin programs. Irene Pollin has responded to a pervasive public health crisis by funding a wide-ranging series of programs and the requisite institutional support. In six years of its existence, The Pollin Cardiovascular Wellness Program has served almost 52,000 women, giving them knowledge and confidence to take charge of their own cardiovascular health. This report highlights the many activities that have taken place since the Program's inception, and describes how they were done in partnership with Sister to Sister.



Internet programs:

- Building Wellness One Heart at a Time
- Smart for the Heart
- Beat the Holiday Bulge

Hospital-based programs:

- Educational Seminars
- Cooking and Nutrition Demonstrations
- Employee Wellness Programming
- International Cardiologist Exchange Program

Community-based programs:

- Heart Disease Screenings
- The Sportsmen’s Wellness Program
- Love Your Heart
- Heart Healthy Living

Open Doors to Health

- Ask the Nurse
- Women’s Support Network
- The Jamaica Plain Community Program
- My Body, My Business
- ClimbCorps
- Teen Heart Program
- International Women’s Heart Day
- Screening at Neiman Marcus

International Initiative programs:

- International Support
- Global Workplace Wellness at the World Bank
- Wellness Program Space at Brigham and Women’s Hospital
- The Pollin Cardiovascular Database

The Pollin Cardiovascular Wellness Program has established a strong presence helping women in underserved communities in the Boston area over the past six years. Thanks to the generosity of Irene Pollin there is now a range of programs under the Pollin Program umbrella dedicated to fighting heart disease in women. These programs operate in the communities of Boston, at Brigham Women’s Hospital’s Heart and Vascular Center, and nationally via the internet. The programs are designed to give women the tools they need to manage their risk of heart disease and to strengthen their own cardiovascular health. Since its founding, the Pollin Program has grown considerably, informed by real-world implementation and monitoring of the individual programs. Such evolution of a multi-faceted public health initiative would not have been possible without the generous support of Irene Pollin that helped the Pollin Cardiovascular Wellness Program break new ground and refine existing approaches.

The Pollin Program’s programs were designed to help women recognize and overcome social pressures leading to behaviors that promote heart disease. Women confronting immense challenges of poverty, linguistic barriers, and cultural tradition have gained insight into behaviors that undermine their cardiac health. Subsequently, they received help with changing those behaviors

and establishing a solid foundation for their individual cardiovascular health. The Pollin Program frequently does this through creative partnerships with locally based organizations to address the specific needs of women in underserved communities. Thanks to the ongoing financial support of Irene Pollin, thousands of women who face heart disease now have achieved cardiac wellness.

MULTIPLE FACETS OF THE POLLIN CARDIOVASCULAR WELLNESS PROGRAMS: INTERNET, HOSPITAL, COMMUNITY, AND DATABASE.

Expanding the Pollin Reach using Internet-based Cardiovascular Wellness Programs

Using the best qualities of the internet, the Pollin Cardiovascular Wellness Program initiated a program designed to empower women to take charge of their own cardiac health. By offering feedback and easy self-monitoring, the internet-based programs gave women access to their personal physical data and taught them to assess and improve their own health. Moreover, implementing the programs on the internet allowed the Pollin Program to expand geographic reach beyond the Boston area. The program has traversed three distinct stages.

Building Wellness One Heart at a Time

As the Pollin Program's first website-based program, *Building Wellness One Heart at a Time* provided 12,000 women with online tools to help them reduce their risk of heart disease. In addition to receiving personalized Health Risk Assessments (HRAs), women used the website



to understand patterns in their nutrition and exercise habits. Additionally, *Building Wellness* offered workshops, blood screenings, and sessions with a health coach to further help women adjust their behavior and improve their cardiac health. The Pollin Program designed a formal research study in partnership with other health research institutions to assess the program's efficacy. Since fall of 2010, *Building Wellness One Heart at a Time* has had nearly 12,000 unique subscribers to the

program. Participants reported cardiovascular benefits such as weight loss, reduced dependence on medication, and a general increase in well-being.

Smart for the Heart

In fall 2012, *Building Wellness One Heart at a Time* was re-launched in partnership with Sister to Sister with a new name—*Smart for the Heart*. In addition to new branding, improvements were made to the design and functionality of the website. Between 2012 and 2014, *Smart for the Heart* gained 10,000 members nationwide and was promoted both nationally and internationally. Roughly half of the members completed a Health Risk Assessment (total HRA's = 5,717). The most common risk factors reported by participants were high cholesterol, high blood pressure, and stress.



The annual weight maintenance challenge—*Beat the Holiday Bulge*—remains the most popular feature of *Smart for the Heart*, based on participation rates. Since 2011, 2,000 women participated in a six-week intervention to avoid gaining weight over the holidays. In addition to being a short-term challenge, which helps keep users engaged in web-based interventions, *Beat the Holiday Bulge* utilizes the momentum behind New Year's Resolutions to attract users. Based on research presented at the 2012 American Heart Association Scientific Sessions, *Beat the Holiday Bulge* helps participants maintain their weight and participants have averaged one pound of weight loss during the holiday season.

Future Direction

In April 2014, *Smart for the Heart* was re-branded with a new logo and smartphone platform. Now transferred to Sister to Sister, *Smart for the Heart* has retained the effective features of predecessors, added a smartphone app, and is now implemented completely over the internet.

Women's Heart Health Twitter Chat

The *Women's Heart Health Twitter Chat* was a one-day internet-based event that allowed women throughout the country to ask Dr. Joanne Foody questions about cardiovascular health via Twitter, the internet social media site. Implemented on May 14, 2014, the internet gathering also helped women petition healthcare leaders to provide more cardiac health screening in OB/GYN offices, pharmacy-based clinics, urgent care facilities, and community health centers. Additionally, the program instructed women in how to advocate on Facebook for a wider distribution of cardiac health screening.

Invigorating Employee Wellness with Hospital-based Cardiovascular Wellness Programs

Utilizing Brigham and Women's Hospital's long-standing presence in the Boston community, the Pollin Program initiated programs making available the hospital's resources and staff to the broader community. The Pollin Program also utilizes the hospital's employee population to institute and refine personnel wellness programs.

Educational Seminars

The Pollin Cardiovascular Wellness Program offered a variety of free seminars at Brigham and Women’s Hospital, helping over 1,000 women take preventive steps to increase their cardiac health. Seminars were given by Brigham and Women’s Hospital physicians and held in the Linda Joy Pollin Cardiovascular Wellness Program space. Each seminar attracted between 30-50 participants. From 2011-2012, a total of 15 seminars were held featuring topics such as diabetes control, healthy eating, increasing physical activity, and lowering cholesterol. Past seminar titles include:

- Living with Heart Failure: How to Be a Proactive Self-Advocate
- Keeping our Hearts Healthy: What is Cardiovascular Disease? What is Cholesterol?
- Structural Heart Disease: New, non-surgical Approaches in a New Decade
- Women and Heart Disease: Know Your Numbers, Know Your Risk

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Along with the physical health I am now enjoying, my mental health is better than ever. Was it a lot of work? Yes, but definitely worth it.

LINDA, A BUILDING WELLNESS SUBSCRIBER

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Cooking and Nutrition Demonstrations

Since 2008, the Pollin Cardiovascular Wellness Program has sponsored the “Healthy Cooking and Tasting Demos” in partnership with Brigham and Women’s Hospital’s Nutrition Department. These monthly cooking demonstrations are open to all staff, patients, and visitors. Each demonstration is unique, showcasing preparations for the recipes of the day, information on nutritious meals, tasting samples, and recipes to take home. The monthly program has engaged over 1,000 participants.

Employee Wellness Programming

The Pollin Cardiovascular Wellness Program is dedicated to raising awareness of heart disease and improving the cardiovascular health of working women at Brigham and Women’s Hospital. Since 2008, the Pollin Program has offered health and wellness classes, exercise and weight control programs, and heart disease screenings – all tailored to fit the schedules and lifestyles of working women.

Classes include Zumba, kick boxing, yoga, and line dancing, plus stress reduction and meditation sessions. More than 2,500 employees have participated, reporting positive changes such as weight loss, increased energy, and improved productivity. *The Walking Club* and *ClimbClub* have helped over 500 participants since 2011, including team challenges. *Weight Watchers* and *Take Shape for Life* have helped over 150 employees control their weight. Through these programs over 500 employees have been screened for blood pressure, cholesterol, blood sugar, and body mass index since 2011.



International Cardiologist Exchange Program

In partnership with Sister to Sister, the Pollin Program sponsored a two-day visit of Chinese physicians from Beijing to the Brigham and Women's and other hospitals. Participants, Dr. Yundai Chen (Director of Cardiology, General Hospital of PLA, Beijing) and Dr. Meilin Liu (Deputy Director, Department of Geriatrics, First Hospital, Peking University) were selected for the fourteen day program which took place in February 2010. The program included clinic visits, hospital tours, conference scheduling, and meetings with hospital leaders.

Tailoring Cardiovascular Wellness Programs to Needs of the Communities.

Since heart disease in women is a highly preventable condition, community outreach is one of the most effective tools available. Utilizing this efficacy, the Pollin Cardiovascular Wellness Program initiated nine programs in targeted communities in the Boston area.

Heart Disease Screenings

Between 2008-2013, in partnership with Brigham and Women's Hospital, community partners, and Sister to Sister, the Pollin Program offered free screenings in the Boston area to 5,000 individuals at 30 events to help them understand their risk for heart disease. The screenings are based on the Five-Step Cardiovascular Disease Screenings model created by Sister to Sister and includes:

- Engagement – Attracting women to screenings through promotion
- Screening – Measuring cholesterol, blood pressure, blood glucose, body mass index
- Feedback – Giving immediate personalized results
- Understanding – Offering individual counseling for women at risk for cardiovascular disease
- Follow up – Adding data to the Pollin Cardiovascular Database for tracking and follow-up

In addition to the physiological measurements, the screenings included personalized risk reduction counseling. Overall, roughly 65 percent of screening participants were female and more than half had at least one risk factor for heart disease. One-third of participants had high blood pressure, high cholesterol or an unhealthy waist circumference, 60 percent had an overweight or obese body mass index, and 10 percent had high blood sugar.

Sportsmen's Wellness Program

In partnership with Sportsmen's Tennis and Enrichment Center of Boston's Roxbury neighborhood, the Pollin Cardiovascular Wellness Program has developed a program to improve the overall health of nearly 1,000 youth and adults living in Dorchester, Mattapan, and Roxbury. The program increases understanding of the connection between nutrition, physical activity, and health. Moreover, the program at Sportsmen's helps individuals assess their own specific risk factors and to change behaviors affecting their physical health.

Love Your Heart

Love Your Heart was an intensive, community-based intervention program that served 125 participants. In partnership with the Boston Black Women's Health Institute and the Body by Brandy Wellness Center, the Pollin Cardiovascular Wellness Program developed this 12-week program to offer nutritional and physical activity interventions, a personalized wellness program, and sessions exploring mind-body connectedness. During the intervention period, participants received free gym memberships, group sessions, and weight and blood pressure screenings. Also available were heart-healthy meals and a supermarket visit to model healthy food choices. Physiological measurements were monitored and the results published in the fall 2012 issue of the *Journal of Ethnicity and Disease*. Findings showed that following the 12-week intervention *Love Your Heart* participants had significantly lower rates of hypertension and obesity. Based on the findings, *Love Your Heart* was expanded and adapted based on lessons learned from experience with the pilot program. When the program terminated, the methods and techniques were incorporated into *Heart Healthy Living*, serving the same population.

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Thank you so much for offering Zumba class on Tuesday nights. The teacher has a great attitude and my cardiac health is much better.

E. KONSTANTIS

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Heart Healthy Living

Founded in 2013, *Heart Healthy Living* is an intensive 6-week program designed to improve the cardiovascular health of women at risk of heart disease. Having served 300 women thus far, *Heart Healthy Living* operates under the aegis of Brigham and Women's Hospital and includes weekly physical activity sessions as well as interactive education sessions on cardiovascular risk factors, nutrition, and a heart healthy lifestyle. Participants are monitored with weekly weigh-ins, baseline/follow-up blood pressure tests, and validated health questionnaires.

A study conducted by the Pollin Cardiovascular Wellness Program, presented at the 2013 American Heart Association Scientific Sessions showed that, while at the start of the study 55 percent of the women suffered hypertension and 68 percent were obese, the women who completed *Heart Healthy Living* showed significantly reduced hypertension, significant weight loss (averaging 2.7 lbs. over six weeks,) and improved cardiovascular health knowledge.



Similarly, Asian American women who completed *Heart Healthy Living* in a separate program showed improved cardiovascular disease knowledge after six weeks. Following the success of the pilot program, *Heart Healthy Living* was expanded in 2013 to include Mandarin and Spanish language sessions, conducted in collaboration with the Roxbury Tenants of Harvard, *Inquilinos Boricuas en Accion*, and the Southern Jamaica Plain Health Center. The Spanish language version of *Heart Healthy Living* -- "*Vivir con un Corazón Saludable*" -- was awarded the Preventive Cardiovascular Nurses Association's Healthy Living Leadership Award in March 2014.

Open Doors to Health

To address cardiac disease prevention at the neighborhood level, the Pollin Cardiovascular Health Program partnered with the Dana-Farber Cancer Institute to establish *Open Doors to Health* in Roxbury's Mission Park housing development. *Open Doors to Health* conducted prevention and early detection programs for heart disease and breast, cervical, and colon cancer by educating 2,500 residents about the effectiveness of screenings and facilitating the screening process. *Open Doors to Health* hired Community Health Educators (CHEs): residents of the housing complex who participated in 16 hours of training on heart disease and cancer prevention. CHEs each consulted with at least 5 residents. During the pilot year of *Open Doors to Health*, the CHEs developed programs such as walking programs, health-related bingo nights, a heart health block party, fitness classes, and "Ask the Nurse" sessions. Feedback from the Mission Park complex was overwhelmingly positive, leading to the addition of Roxbury's Madison Park housing complex to the program.

Ask the Nurse Community Program

Beginning in 2013, the Pollin Cardiovascular Wellness Program has offered "Ask the Nurse" sessions at community organizations in English, Spanish and Mandarin. Aileen Sauris, Nurse Practitioner, has presented these sessions to 700 women over 15 sessions. The presentations cover an array of topics such as heart disease risk factors, diabetes, and CPR training. Attendance averages around 20-30 women for each session.

Women's Support Network

In 2012 the Pollin Cardiovascular Wellness Program partnered with *WomenHeart*, The National Coalition for Women with Heart Disease, to offer monthly support sessions for women living with heart disease. Each session has an educational component led by Aileen Sauris, NP, and a discussion portion led by *WomenHeart* staff. Roughly 35 women participated in the support network and had positive feedback about the program.

Community Heart Health and Wellness Program in Jamaica Plain

The Pollin Program collaborated with Southern Jamaica Plain and Brookside satellite healthcare centers to create and implement a wellness program that has served 40 low income residents of Jamaica Plain, offered in Spanish and English. Initiated in 2013, the program includes exercise, cooking, and nutrition classes as well as educational seminars on cardiovascular disease prevention. The Community Heart Health and Wellness Program in Jamaica Plain was held during a nine-month period in 2012-2013 and was supported by a \$10,000 grant from Pfizer.

I wanted to learn how to eat better, maintain my health and incorporate exercise into my day. I definitely learned all of that and more.

RIOLLA RIOBE, HEART HEALTHY LIVING WORKSHOP PARTICIPANT

My Body, My Business

Offered in partnership with the Body by Brandy Roxbury Wellness Center, *My Body, My Business* was a ten-week group fitness and health education program for women at risk for heart disease. *My Body, My Business* reduced risk indicators of cardiovascular disease, hypertension, diabetes, and obesity by providing intervention and prevention strategies. Program offerings included fitness classes, cooking classes, weight loss support groups, and one-on-one personal training sessions. Held from 2011-2012, this program helped more than 100 women improve their health and reduce their risk for heart disease. After completing *My Body, My Business*, nearly one-third of women had significantly reduced their blood pressure and, on average, reduced their body mass index by five percent.



ClimbCorps

Pollin funds have been instrumental in providing seed money to develop the *ClimbCorps* workplace health and wellness program in collaboration with Biondolillo Associates. Launched in 2012, *ClimbCorps* has served 10,000 participants and is the nation's first service corps dedicated to preventing heart disease and improving the health and well being of the American public. Based on the simple principle that we need to be active to maintain better health, *ClimbCorps* proposes an easy way to incorporate exercise into our daily lives—by taking the stairs. By training corps leaders and positioning them in the nation's busiest buildings, *ClimbCorps* educates, empowers, and motivates people to make healthier lifestyle choices for themselves and their families.

ClimbCorps now operates climbing clubs and educational programming in 15 of Boston's largest buildings, and also brings cardiovascular education and public awareness to community organizations and schools across Greater Boston. *ClimbCorps* is self-sustaining due to corporate sponsorship and pledge fundraising. A *ClimbCorps* team in the Mattapan section of Boston found that, after 20 weeks, participants lost 5.5 lbs and their blood pressure declined by 19/9 mmHg, on average.



Teen Heart Health and Wellness Program

The Teen Heart Health and Wellness Program is a sub-program of ClimbCorps and is designed to improve the health of adolescents and enlist them in their own heart disease prevention. Obesity in teens is a major public health problem. Over the past 30 years rates of obesity have doubled in teens and children to the point that in 2010 one-third of American teens were overweight or obese. Children who are obese or overweight in their teen years are more likely to have risk factors for high cholesterol or blood pressure, and to have prediabetes. Obese teens are more likely to have bone and joint problems, sleep apnea, and social and psychological problems. The Pollin Cardiovascular Wellness Program's Teen Heart Health and Wellness Program addresses these adult diseases at their root cause in adolescence.

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I no longer have to attend the pain clinic on a weekly basis or take pain medication. I feel exceptionally good about myself to see the weight loss. It's a great start but I'm not finished.

PROGRAM PARTICIPANT

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Launched in February 2014, this free program engages high school students to promote healthier lifestyle choices related to nutrition and physical activity. Eighty students have been named as Ambassadors under the program. As Ambassadors students receive cardiovascular wellness training, including hands-only CPR, and were named as Heart Health Ambassadors upon completion of the event. The Ambassadors' responsibility is to spread the health and wellness message to their peers. ClimbCorps staff provides ongoing support to students to help them develop and implement activities and transfer what they have learned to their schools. Each school's model is individually tailored based on a curriculum developed by medical experts with input from school faculty and students. Since inception 30 high schools in the Boston area have been part of the Teen Heart Health and Wellness Program and almost 1,000 students have participated in more than 50 presentations and organized activities. Here are some highlights:

Steph, a participating high-schooler, made a presentation to 50 students at the Boston Green Academy last May. Her topics included:

- Portion Distortion
- My Plate
- Healthier Changes in Diet
- Barriers
- Physical Activity

At Patrick Lyndon middle school a total of 75 well-behaved students were extremely engaged in learning about heart health. They were taught hands-only CPR and were excited to learn this new life-saving skill.

Fenway High School hosted three days of *Teen Heart Health and Wellness* programming.

- The first day included a session on fitness, stretching, and hands-only CPR.
- Students were engaged and ClimbCorps Members found that it helped to be in a gym rather than a classroom setting.
- Two students were selected to become High School Heart Health Ambassadors.

Million Hearts

As an initiative of the US Department of Health and Human Services, and the Centers for Disease Control, *Million Hearts* is working to prevent one million heart attacks or strokes by 2017. From the program's founding in 2011, Sister to Sister partnered with *Million Hearts* to educate the public and foster collaboration among health care professionals using forward-thinking outreach methods. Without Dr. Foody's credibility and her relationship with Janet Wright, MD, the *Million Hearts* director, nor minus the involvement of the Pollin Program this collaboration would not have happened.

International Women's Heart Day Screening at Neiman Marcus

In February of 2011, Pollin Program Director Dr. JoAnne Foody addressed a gathering of female Ambassadors, their spouses, and Embassy officials about the global spread of women's heart disease and how cardiovascular screenings can reduce that risk. Presented at the Neiman Marcus store in Washington, D.C. the day-long program included presentations by Irene Pollin and an NIH official regarding the wide scope of cardiac disease in women, and Dr. Foody described how cardiac screening can dramatically reduce heart disease. The Pollin Program offered participants individual cardiac screening through the Brigham and Women's Hospital's *Building Wellness One Heart at a Time* program.

Global Workplace Wellness at the World Bank 2011

Dr. Darius Mozafarian, Brigham and Women's Hospital physician and Associate Professor at the Harvard School of Public Health, gave a presentation on nutrition and global cardiac disease prevention as part of Sister to Sister's *Global Workplace Wellness* program. Held at the World Bank in New York City, Dr. Mozafarian's address was followed by a presentation by Dr. Foody on specific, attainable measures to prevent heart disease. Dr. Foody served as nexus between Sister to Sister, Brigham and Women's, and then head of World Bank Jim Kim (former Brigham and Women's physician and former intern of Dr. Foody.)



International support

In partnership with Sister to Sister, Dr. Foody has connected the Pollin Program to The Pan-American Health Organization World Health Organization. Dr. Foody is on the executive board and program committee of the World Heart Federation and has worked to coordinate a meeting at the World Congress of Cardiology in Dubai. She also developed programs and curriculum to include Sister to Sister initiatives in women's health in World Heart Federation programming. Dr. Foody arranged for a meeting with Sister to Sister international program director to meet with these organizations on her travels to Dubai.

Partnership with Sister to Sister: The Pollin Cardiovascular Database



The Pollin Cardiovascular Database is a cumulative database maintained by the Pollin Cardiovascular Wellness Program since 2007. The Database contains a wealth of information about women's cardiovascular health including data collected from Sister to Sister screenings, Pollin Cardiovascular Wellness Program screenings, and the online wellness program.

Currently, more than 30,000 women are included in the Database, including:

- *Sister to Sister screenings: 15,000 individuals*
- *Pollin Cardiovascular Wellness Program screenings: 4,000 individuals*
- *Online Wellness Program: 12,000 individuals*

Since its inception, the Pollin Cardiovascular Database has been used for research, with the goal of advancing women's cardiovascular health. Key research projects include:

- **Women's Heart Health Registry:** a longitudinal, nationwide community-based program which aims to identify cardiovascular risk factors in women through interventions and provide personalized risk assessment and counseling, contributing to improving objectives of Healthy People 2010, a federal program to monitor and improve health nationwide. Study participants were enrolled at the Sister to Sister nationwide events in 2009 and received follow-up surveys for one-year following enrollment. BWH staff traveled to these fairs to personally collect

informed consent from fair participants and enroll participants into the longitudinal study. The Pollin Cardiovascular Wellness Program played a key role in the Registry, providing \$500,000 to Sister to Sister to support electronic data capture of screening data to allow for robust longitudinal tracking of participants. Staff from the Pollin Program also attended more than 10 Sister to Sister heart disease screenings across the country to enroll participants in the Registry.

- ***The WATCH Study***: a longitudinal, community-based screening intervention to improve cardiovascular risk factors in women. *The WATCH Study* was an extension of the parent national grassroots nonprofit organization, the Sister to Sister, Everyone Has a Heart Foundation. *The WATCH Study* was designed to assess the prevalence and awareness of cardiovascular risk factors (RFs) among women attending Sister to Sister health fairs in Boston and Baltimore. Women with high RFs were then paired with a patient navigator to help them track their RFs and to achieve their RF reduction goals during the subsequent year. The Pollin Program worked closely with Sister to Sister to conduct *The WATCH Study*, sharing research expertise and providing \$239,000 to fund data collection and analysis.
- ***Building Wellness One Heart at a Time***: evaluation of the PureWellness online wellness program in improving women's cardiovascular health. All members of *Building Wellness One Heart at a Time* were invited to join this six-month research study, during which time members had access to internet-based workshops and individualized health coaching to address cardiovascular risk factors such as high blood pressure and high cholesterol. Participants received two free blood draws at baseline and six-months, with advanced lipid testing to analyze cardiovascular biomarkers before and after the web-based intervention.

These studies, along with in-depth analyses of the Pollin Cardiovascular Database, have contributed to many research papers. Since 2008 the Pollin Cardiovascular Wellness Program has published fourteen articles in peer-reviewed journals and the Program's research team has conducted nineteen presentations at national medical conferences. Importantly, information from the Women's Heart Health Registry has been used by *Sister to Sister* to develop their robust online program, *Smart for the Heart*.

A HOME FOR THE HEART: THE LINDA JOY POLLIN CARDIOVASCULAR WELLNESS PROGRAM SPACE

In 2010, the Pollin Cardiovascular Wellness Program created a dedicated space at Brigham and Women's Hospital. Affectionately nicknamed "The Porch" the room is an airy, contemporary space which opens out into the atrium of the architecturally acclaimed Shapiro building. The room provides space for such activities as cardiac health support groups; weight control groups; and yoga, Zumba, and other exercise classes. The Pollin Program space hosts 60 events per month on average and has media equipment including a projector, electronic screen, and a sound system. The space is fulfilling the original design goals of serving the hospital community, honoring the donor, and integrating with the innovative design of the Shapiro building.

PUBLICATIONS AND PRESENTATIONS

Peer-reviewed Publications

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Presentations

Athanasopoulos LV, Johnson CE, Jarvie JL, Aslam F, Wang Y, Pollin I, Foody JM. High Prevalence of Obesity and Metabolic Syndrome in Women in Association with Insurance Status. *J Am Coll Cardiol*. March 2010.

Jarvie JL. Variance of Risk Factors Among Community Women—Sister to Sister: The Women's Heart Health Foundation. Sarnoff Cardiovascular Research Foundation 30th Annual Scientific Meeting. Washington, D.C. May 2010.

Jarvie JL, Johnson CE, Wang Y, Aslam F, Athanasopoulos LV, Pollin I, Foody JM. Geographic Variance of Risk Factors Among Women—A National Campaign of Sister to Sister: The Women's Heart Health Foundation. *Journal of Women's Health*. January 2011.

Johnson CE, Foody JM, Wang Y, Jarvie JL, Rubin A, Pollin I. 2009 Sister to Sister Heart Health Fair Screening and One Year Follow-Up: Factors Associated with Enrollment into Study. *Journal of Women's Health*, March 2011.

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Jarvie JL, Wang Y, Johnson CE, Aslam F, Foody JM. Race and Ethnicity is Associated with Significant Differences in Cardiovascular Risk Factors Among Women—Results from Sister to Sister: The Women's Heart Health Foundation. *AHA EPI/NPAM*, March 2011.

Johnson C, Rodriguez F, Wang Y, Foody J. The Utility of a National Online Weight Reduction Intervention: Experience with "Beat the Holiday Bulge." *American Heart Association Scientific Sessions*, Orlando, FL. November 2011.

Rodriguez F, Johnson CE, Wang Y, Foody JM. Community-level Cardiovascular Risk Factors Impact Geographic Variation in Cardiovascular Disease Hospitalizations for Women. *American Heart Association Scientific Sessions*, Orlando, FL. November 2011.

Rodriguez F, Johnson CE, Wang Y, Foody JM. Persistent Gender Disparities in Acute Myocardial Infarction Hospitalizations and Mortality by Age. *American Heart Association Scientific Sessions*, Orlando, FL. November 2011.

Rodriguez F, Christopher L, Johnson C, Wang Y, Foody JM. Love Your Heart: A pilot community based intervention to improve the health of African American Women. *World Congress of Cardiology*, Dubai, United Arab Emirates. April 2012.

Rodriguez F, Johnson C, Wang Y, Foody JM. Metabolic syndrome drives cardiovascular disease risk factors in young Hispanic women. *ISHIB2012: 27th Annual International Interdisciplinary Conference on Hypertension and Related Risk Factors in Ethnic Populations*. Miami, FL. July 2012.

Johnson C, Rodriguez F, Wang Y, Foody JM. Impact of National Screening Intervention on AHA's "Life's Simple Seven." *Cardiovascular Metrics American Heart Association Scientific Session*, Los Angeles, CA. November 2012.

Rodriguez F, Johnson C, Wang Y, Foody JM. National Patterns of Heart Failure Hospitalizations and Mortality by Gender and Age. *American Heart Association Scientific Session*, Los Angeles, CA. November 2012.

Rodriguez F, Johnson C, Wang Y, Foody JM. Young Age Single Largest Predictor of Variation in Acute Myocardial Infarction Hospitalizations. *Nationwide American Heart Association Scientific Session*, Los Angeles, CA. November 2012.

Johnson C, Rodriguez F, Wang Y, Foody JM. Geographic Variation of AHA's "Life's Simple Seven" in Women. *American Heart Association Scientific Session*, Los Angeles, CA. November 2012.

Rodriguez F, Naderi S, Wang Y, Johnson C, Foody JM. African Americans hospitalized for atrial fibrillation experience higher in-hospital mortality. *American College of Cardiology 62nd Annual Scientific Session*. Los Angeles, CA. March 2013.

Sauris S, Rodriguez F, Timmons PC, Wang Y, Foody JM, Heart Healthy Living: A Community-Based Intervention to Achieve AHA 2020 Goals for African American Women Reaching the AHA 2020 Goals: Strategies for Success. American Heart Association Scientific Session, Dallas, TX. November 2013.

Foody JM, Khan I; Lewis, B, Attainment of Low-Density Lipoprotein Cholesterol Goals in Patients at High Cardiovascular Risk: Results from a Managed Care Population Study. American Heart Association Scientific Session, Dallas, TX. November 2013.

Rodriguez F, Wang Y, Sauria A, Foody J, Young Hispanic Women Experience Higher In-Hospital Mortality Following an Acute Myocardial Infarction. American Heart Association Scientific Session, Dallas, TX. November 2013.

Sauris A, Timmons P, Rodriguez F, Wang Y, Foody M. Heart Healthy Living: A Community-Based, Tailored Educational Program to Improve Cardiovascular Knowledge and Health of African American Women. Brigham and Women's Hospital Research Day. 2013.

Sauris A, Timmons P, Rodriguez F, Wang Y, Foody M. Heart Healthy Living: A Community-Based, Tailored Educational Program to Improve Cardiovascular Knowledge and Health of African American Women. American Heart Association Scientific Session, Dallas, TX. November 2013.

Naderi S, Wang Y, Foody J. Gender Differences in Atrial Fibrillation Hospitalizations. American Heart Association: Epidemiology and Prevention/Nutrition, Physical Activity and Metabolism. 2014 Scientific Session. March 2014.

Sauris A, Timmons P, Rodriguez F, Wang Y, Foody M. Heart Healthy Living: A Community-Based, Tailored Educational Program to Improve Cardiovascular Knowledge and Health of African American Women. Preventive Cardiovascular Nurses Association Annual Conference. March 2014.

FELLOWSHIPS, INTERNSHIPS AND TRAINING

Sahar Naderi, MD
Fellow, Linda Joy Pollin Program

Fatima Rodriguez, MD, MPH
Fellow, Linda Joy Pollin Program

Jennifer Jarvie, MD
Fellow, Linda Joy Pollin Program

Farham Aslam, MD
Fellow, Linda Joy Pollin Program

Renee Therrien
Intern, Linda Joy Pollin Medical Psychology Program in collaboration with Masters' Program at Leslie University

Kate Greenberg, Intern
Linda Joy Pollin Medical Psychology Program in collaboration with Masters' Program at Leslie University

Mayra Class, Intern
Students Success Job Program, Brigham and Women's Hospital

LOCAL, NATIONAL AND INTERNATIONAL PARTNERSHIPS

International

World Heart Federation
World Health Organization
United Nations: NCD Summit
Pan American Health Organization
Haddassah

National

Sister to Sister
American College of Cardiology
National Heart Lung and Blood Institute
Million Hearts Campaign
National Institutes of Health
Office of Women's Health, DHHS
Centers for Disease Control

Local

Sportsmen's Tennis Club
Roxbury Tenants of Harvard
Dana Farber Cancer Institute
Brookside Community Health Center
Jamaica Plain Community Health Center
Black Women's Health Initiative
Inquilinos Boricuas en Accion
Roxbury Boys and Girls Club – The Yawkey Club
Roxbury Community College
Body By Brandy Fitness Center

AWARDS AND HONORS

2011 Partners in Excellence Award, Partners Healthcare-Pollin Cardiovascular Wellness Center

2008 Faculty Mentor Award, Department of Medicine, Brigham and Women's Hospital
JoAnne Foody, MD, FACC, FAHA

2009 Mentorship Award, Harvard medical School
JoAnne Foody, MD, FACC, FAHA

2012 Community Achievement Award, Brookside Community Policy Board
Annette Rubin

2012 Clinical Innovations Grant Award, Department of Medicine, Brigham and Women's Hospital
JoAnne Foody, MD, FACC, FAHA

2012 Excellence in Teaching Award, Harvard Medical School
JoAnne Foody, MD, FACC, FAHA

2012 Partners in Excellence Award, Partners Healthcare Pollin Cardiovascular Wellness Center

2013 Distinguished Faculty Mentor Award, Department of Medicine, Brigham and Women's Hospital
JoAnne Foody, MD, FACC, FAHA

2014 Healthy Living Leadership Award, Preventive Cardiovascular Nurses Association
Aileen Sauris, NP, Pollin Cardiovascular Wellness Center



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116 Huntington Avenue, Third Floor
Boston, MA 02116

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