

INCREASING ACCESS TO BREAST CANCER SCREENING IN WARD 7, WASHINGTON, DC

*A STRATEGIC INTERVENTION TO INCREASE AFRICAN AMERICAN FEMALE BREAST
CANCER SCREENING*

RIANA DANYEL BUFORD

SCHOOL OF BUSINESS AND GRADUATE STUDIES

TRINITY WASHINGTON UNIVERSITY

*Submitted to Dr. Kelley Wood on behalf of the faculty of the School of Business and
Graduate Studies in partial fulfillment of the degree requirements for the Master of Science
Administration in Public and Community Health and Nonprofit Management*

Spring 2018

Executive Summary

Washington, D.C. has the highest age-adjusted female breast cancer mortality rates in the United States. As of the end of 2015, the mortality rate in the United States was 22.6 deaths per 100,000 and Washington, D.C. had a mortality rate of 29.3 per 100,000; the rate for the National Capital Region (D.C., Maryland, and Virginia) is 23.5 per 100,000. There are four Washington, D.C. wards that have a higher death rate for female breast cancer than the national rate and the rate for the National Capital Region. Ward 2 has the highest mortality rate in the city for age-adjusted female breast cancer at a rate of 35.7 per 100,000. Ward 5 has a mortality rate of 33.9 per 100,000, Ward 7 has a mortality rate of 30.1, and Ward 8 has a mortality rate of 30.9 per 100,000. There are many factors that may lead to the disparity seen in the District of Columbia. The most obvious disparities are race and economics. Some of the highest rates of female breast cancer mortality rates in Washington, D.C. are from Ward 7. The Susan G. Komen Foundation has identified Ward 7 as a high priority area and has recommended targeted outreach in this community. Ward 7 has historically been a predominately African American ward, with high unemployment rates, thus higher rates of individuals who are uninsured or underinsured. The goal of this program is to increase screening for female breast cancer in Ward 7 by 5%. This goal will be met using three objectives:

The Karen D. Price Foundation will

- Partner with local mobile mammography units to provide low- to no- cost mammography screenings to 300 women who reside in Ward 7 from June 2018- December 2018
- Link 1000 clients to transportation services via Metro Access
- Partner with local hospital and clinics to link 300 clients into screenings from June 2018- December 2018

It is estimated that the budget for this program is \$100,000 over a 1-year timeframe with the option of applying for more grant money at the end of the term. The budget breakdown will cover 10% of the Program Director's time, 75% of the Program Coordinator's time, and a \$3,000 stipend for a 6-month student intern. The project will be overseen by the Program Director, Program Coordinator, and an intern.

Keywords: District of Columbia, National Capital Region, African American, Ward, age-adjusted mortality rate, mammography, breast cancer screening.

I, Riana Buford, acknowledge I completed this assignment in the spirit of the Trinity Washington University policy regarding academic honesty and plagiarism.

Dedication

This paper is dedicated in honor of those whom I have lost: Willie B. Buford, Helen Price, Deondrae Buford, and LeTisha Jimenez. The work that I do is forever in the memory of the most important woman in my life, my mother, Karen Denise Price. Her legacy pushes me every day, in everything that I do.

This paper is also for my 14 nieces and nephews and my Godchildren. I pray that this work is an example of what hard work and dedication can do. I pray that you see me as an example of what you can do when you put your mind to something. At my core, I am just a girl from Flint, Michigan, attempting to change the world and I pray that you all are proud of me.

Table of Contents

	Page
Introduction _____	7
Population and Needs Assessment	7
Statement of the Problem	8
Program Design _____	9
Goal	10
Objectives	10
Methods	Error! Bookmark not defined.
Outcomes.....	11
Short-term:.....	11
Long-term:.....	11
Theoretical Perspectives _____	11
Health Belief Model.....	11
Transtheoretical Model.....	12
<i>Theoretical Model</i>	14
Program Plan and Implementation	15
Organizational Resources.....	18
Communication Plan.....	19
Budget _____	19
Budget Justification.....	20
Assessment and Evaluation	21
Sustainability	22
Summary _____	23
References _____	24
Appendices _____	27
Appendix A: Executive Board	27
Appendix B: Table: Female Breast Cancer Incidence and Death Rates, District of Columbia	27
Appendix C: Table: Population Characteristics- Socioeconomics, District of Columbia	28

Table of Figures

	Page
Figure 1. Female breast Cancer incidence and death rates, District of Columbia.....	9
Figure 3. TTM stages of change	13
Figure 4. The theoretical model of increasing breast cancer screening and access to treatment for African American women in Ward 7, Washington, DC.....	15
Figure 5. Project tasks and timelines.	18

Terms and Acronyms

CDC- Centers for Disease Control and Prevention

In Situ- Ductal carcinoma in situ (DCIS) is a non-invasive breast cancer. In DCIS, the abnormal cells are contained in the milk ducts (canals that carry milk from the lobules to the nipple openings during breastfeeding). It's called "in situ" (which means "in place") because the cells have not left the milk ducts to invade nearby breast tissue. (Mammography Screening What You Should Know, 2018)

eCW (eClinical Works)- a medical database which stores clients information safely and allows doctors, hospitals, and healthcare workers to share pertinent client health care information. This information can be shared after a client has signed an informed consent.

Mammogram/Mammography Screening- the use of x-ray technology to find breast cancer tumors. Mammography screening can find tumors at the earliest stages and are the best way to diagnose breast cancer.

Mammovan- the George Washington Mammovan is a mobile mammography screening service.

National Capital Region- Susan G. Komen distinguishes geographical areas. The DC, Maryland (Prince George's and Montgomery County), and Northern Virginia region is known as the National Capital Region.

Stage- For most types of cancer, doctors use staging information to help plan treatment and to predict a person's outlook (prognosis). Although each person's situation is different, cancers with the same stage tend to have similar outlooks and are often treated the same way. The cancer stage is also a way for doctors to describe the extent of the cancer when they talk with each other about a person's cancer. (Cancer Staging, 2018)

Ward- Washington, DC is broken into 8 political and geographical wards. Ward 7 is located east of the Anacostia River and borders Ward 8.

Introduction

The Centers for Disease Control and Prevention (CDC) requires that all states and United States territories keep proper surveillance on all public health epidemics. This surveillance information is reported to the Centers for Disease Control and Prevention to track key information such as incidence and mortality rates. Each year, the Cancer Registry publishes a report on the burden of cancer in the nation's capital and this information is broken down by ward. Along with the incidence and mortality rates for cancer, there is also ward specific data such as population size, socioeconomic status, education level, and race and ethnicity information.

Population and Needs Assessment

Breast cancer tumors are more treatable in the early stages or in situ. In Washington, DC, “69.8% of breast cancer tumors are diagnosed at local or regional stages; however, African American women are more likely than Caucasian women to be diagnosed in the regional or distant stages.” (American Cancer Society, 2011) A diagnosis at the regional or distant stage means that the cancer has spread from beyond the original tumor to lymph nodes and other organs. Diagnosing breast cancer within the in situ or local stage is vital to surviving breast cancer, but cancer screening is not accessible to many women in the nation's capital. Washington, DC is home to four cancer centers; however all of the centers are located in the northwest quadrant of the city. Cancer centers are vital to the prevention of cancer as they often provide low/no cost cancer screenings. “For those dependent on public transportation, especially those weakened with cancer, it can be difficult and exhausting to reach a hospital in another part of the city” (Medina et. al. 2014, 8). The District of Columbia is home to eleven hospitals and only two of those facilities are located outside of the northwest quadrant. Providence Hospital is located in Ward 5 in Northeast and United Medical Center, located in ward 8 in southeast, is the only hospital located east of the Anacostia River. The four cancer centers in the District of Columbia are linked to major hospital systems—George Washington University Hospital, Howard University Hospital, Washington Hospital Center, and Georgetown University Medical Center. Difficulty accessing these hospitals for residents east of the Anacostia River (Wards 7 and 8) can serve as a barrier to receiving timely care.

Employment status plays a large role in breast cancer diagnoses. If a woman is not employed, her chance of having comprehensive medical insurance decreases greatly. Health insurance allows women to receive the necessary well woman exams in order to diagnose cancers in the earlier stages. There is a clear disparity of insurance rates based on race; “compared to Caucasian patients, African American patients were more likely to be uninsured and live in zip-codes where a larger percentage of

the population lacked a high school diploma” (Desantis and Jemal, 2010, 1446). According to the DC Department of Employment Services, Wards 7 and 8 had the highest rates of unemployment amongst its residents; the rates for 2010 were 20.0 and 21.6 respectively. Women in wards east of the Anacostia River historically report incomes that are lower than the poverty level. “Over a quarter of the population (26.0%) in Ward 7 is below the 100% poverty level “Ward 3 had the lowest unemployment rate at 3.7%. (Department of Employment Services, 2016) DC faces a disparity when it comes to education level and income based on an individual’s ward. Ward 3 has the highest education level and also ranks the highest in income. “Average per capita income is highest in Ward 3 (\$68,477) and lowest in Ward 8 (\$14,137) and the highest number of people with college degrees is reported in Ward 3 (79%), and the lowest in Ward 8 (8%)” (Medina, et. al. 2014, 11). Add a sentence stating the Ward 7 statistics for income and college degrees.

Statement of the Problem

The National Capital Region (NCR) has one of the highest rates for breast cancer incidence and mortality in the nation. The District of Columbia, specifically, has the highest incidence and mortality rates for breast cancer in the United States, with incidence rates nearly 15% higher than the national average, and mortality rates more than 30% higher than the national average (Susan G. Komen, 2015, 4). Between 2000 and 2011, breast cancer was the most commonly diagnosed cancer and the second leading cause of death among women in the United States. (U.S. Cancer Statistics Working Group 2017)

The District of Columbia experiences breast cancer differently than many states across the nation. According the District of Columbia Cancer Report, 2011, Washington, DC ranks first in age-adjusted female breast cancer mortality rates in the United States (Vargas, Rogers, and Pearson-Fields, 2012, 11) at a rate of 29.3 per 100,000, compared to the national average of 22.6 per 100,000. (US Cancer Statistics Working Group, 2017) The DC Cancer Registry categorizes each ward according to mortality rates. However, in order to keep patient information confidential, if the number of deaths is lower than 16 cases in the ward, a specific number is not reported on any table or graph. Nevertheless, the DC Cancer Registry has ranked the wards from highest to lowest in terms of mortality rates. Ward 7 has one of the highest mortality rates in the city for female breast cancer at a rate of 30.1 per 100,000. Data indicate that the District of Columbia as a whole will not quickly achieve the Healthy People 2020 targets for breast cancer death rate and late-stage incidence rate. However, the data also reveal distinct differences in the needs within the District across the Wards, leading to the selection of Wards 2, 5, 7 and 8 as target communities. All four of these Wards have age-adjusted death rates that exceed the national rate (22.6 per 100,000), the rate within the combined NCR

Service Area (23.5 per 100,000), and the overall District of Columbia rate (29.3 per 100,000). (Susan G. Komen, 2015, 8). This project will aim to decrease the female breast cancer mortality rate in Ward 7 Washington, DC by increasing the access to screening for women who reside in Ward 7. This program will seek to prove that increased access to mammography services for residents east of the Anacostia River decreases the mortality rate for African American women who reside in Washington, D.C.’s Ward 7 community.

Table 2.2. Female breast cancer incidence and death rates, District of Columbia

Population Group	Incidence		Deaths	
	# of New Cases (Annual Average)	Age-adjusted Rate/ 100,000	# of Deaths (Annual Average)	Age-adjusted Rate/ 100,000
US	198,602	122.1	40,736	22.6
Komen National Capital Region Service Area	2,939	126.0	550	23.5
District of Columbia - DC	432	137.2	96	29.3
White	141	168.4	22	24.7
Black/African-American	266	127.0	71	33.1
Ward 1 – DC	38	110.8	7	21.8
Ward 2 – DC	38	124.9	11	35.7
Ward 3 – DC	74	154.1	13	23.4
Ward 4 – DC	69	125.9	15	27.4
Ward 5 – DC	61	124.9	17	33.9
Ward 6 – DC	50	135.1	10	26.2
Ward 7 – DC	49	109.5	14	30.1
Ward 8 – DC	43	146.0	8	30.9

Data are for years 2005-2009, except for the US and Komen National Capital Region Service Area which are for 2006-2010. Rates are in cases or deaths per 100,000. Age-adjusted rates are adjusted to the 2000 US standard population. Source of incidence data for US and Komen National Capital Region Service Area: NAACCR – CINA Deluxe Analytic File. Source of death data for US and Komen National Capital Region Service Area: CDC – NCHS mortality data in SEER*Stat. District of Columbia data contained in this table were provided by the District of Columbia Cancer Registry, District of Columbia Department of Health, program funded by NPCR – CDC.

Figure 1. Female breast Cancer incidence and death rates, District of Columbia.

Program Design

The Karen D. Price Foundation is creating a program for residents of Ward 7, Washington, DC to make it easier to access lifesaving mammography services. With this program, The Karen D. Price Foundation will partner with local community based organizations and hospitals to bring mobile mammography East of the Anacostia River where there is the most need. Beginning in June, outreach will begin at local churches. At the health events, clients will be able to access mammography services on the George Washington Mammovan. If clients are not able to access mammography services on that date, outreach volunteers will link clients to Breast Care for Washington for low-to-no cost mammography services. Clients will also be referred to Metro Access for transportation to

mammography appointments. Client information will be kept in their electronic medical record and this information can be sent to their medical provider in the case of a cancer diagnosis. Outreach events will take place from June 1- November 30. Outreach events will also provide education for local residents which will include information about breast-self Exams.

Goal

The overarching goal of this plan is to increase screening for female breast cancer in Ward 7 by 5%. Increasing screening rates in Ward 7 by 5% will affect more than 1500 women in this ward and allows for significant reduction in breast cancer mortality rates in community that is most affected by the disease.

Objectives

To achieve this goal, there are three main objectives:

- Partner with local mobile mammography units to provide low- to no- cost mammography screenings to 300 women who reside in Ward 7 from June 2018- December 2018
- Link 1000 clients to transportation services via Metro Access
- Partner with local hospital and clinics to link 300 clients into screenings from June 2018- December 2018

Activities

- Partner with local mobile mammography units to provide low- to no- cost mammography screenings to 300 women who reside in Ward 7 from June 2018- December 2018
 - The George Washington University Mammovan has the capacity to screen 25 women per outing. The contract made with George Washington University requires that the van goes out into the field twice a month for a 6 month period. If the van reaches its capacity on each outreach event (including the Breast Cancer Awareness Month Health Fair) the van has the potential of serving 300 ward 7 residents within a 6 month time frame.
- Link 1000 clients to transportation services via Metro Access
 - Clients at outreach events held at local churches and community centers that are unable or unwilling to be screened will be linked to Metro Access to receive transportation vouchers to mammography screenings at local hospitals and Breast Care for Washington

- Partner with local hospital and clinics to link 300 clients into screenings from June 2018-December 2018
 - Clients at outreach events held at local churches and community centers that are unable or unwilling to be screened will be given referrals to Breast Care for Washington to receive low- to no- cost mammograms

Outcomes

The primary outcome of this program is to reduce the female breast cancer mortality rate among African American women who reside in Ward 7, Washington, DC.

Short-term: 1) Provide low-to-no cost mammography services to women residing in Ward 7 through a partnership with the George Washington mammovan and local churches and hospitals. 2) Screen or refer 25 women per outreach event to mammography services.

Long-term: Develop a partnership between The Karen D. Price Foundation, Breast Care for Washington, and George Washington University to provide mammography services for low income women in Washington, DC.

Theories for Change

Health Belief Model

Breast cancer screening has been shown to decrease the mortality rates in populations that are traditionally underserved and at the highest risk for death from breast cancer. Many researchers have found that the Health Belief Model (HBM) has worked well in predicting the behaviors of women most affected by the disease because women are able to describe the perceived risks and benefits of engaging in lifestyle changes that will preserve their health and wellness. The HBM “emerged in the field of public health in the 1950s when researchers started to emphasize primary rather than tertiary prevention” (Smith and Brown 2010, 96). The HBM focuses on individual’s perceived risks, benefits, barriers, and susceptibility to a disease. It also takes into account how individuals are affected by cues to action such as seeing breast self-exam shower cards and thus performing necessary self-exams and scheduling mammography services. Although the HBM is a good indicator of a person’s likelihood of engaging in healthier behaviors, “conclusions from empirical research employing the Health Belief Model to investigate breast and cervical cancers and women’s preventative health behaviors have been inconsistent and sometimes addressed contradictory, leading scholars to question utility of the model” (Smith and Brown 2010, 95). Research has found that “health behavior models often lack

theoretically based cultural concepts, thus limiting the prediction of mammography screening” (Russell et. al. 2006, 105). For this reason, many researchers have coupled the HBM model with theoretical frameworks that take into consideration the stages of change an individual goes through before they change their behavior.

The HBM is used here because engaging in health promoting behaviors is usually dictated by how a person perceives the susceptibility and severity of being diagnosed with breast cancer. If a woman does not think her chances of being diagnosed with breast cancer are high, she may not feel it necessary to perform annual screenings. This is also true about severity. Many women may see breast cancer as something that can be treated and does not mean death. These ideals may prevent a woman from having annual mammograms. Many women are driven to perform health promoting activities by environmental cues. These cues can be billboards, commercials, pamphlets, and recommendations from family, friends, or medical providers.

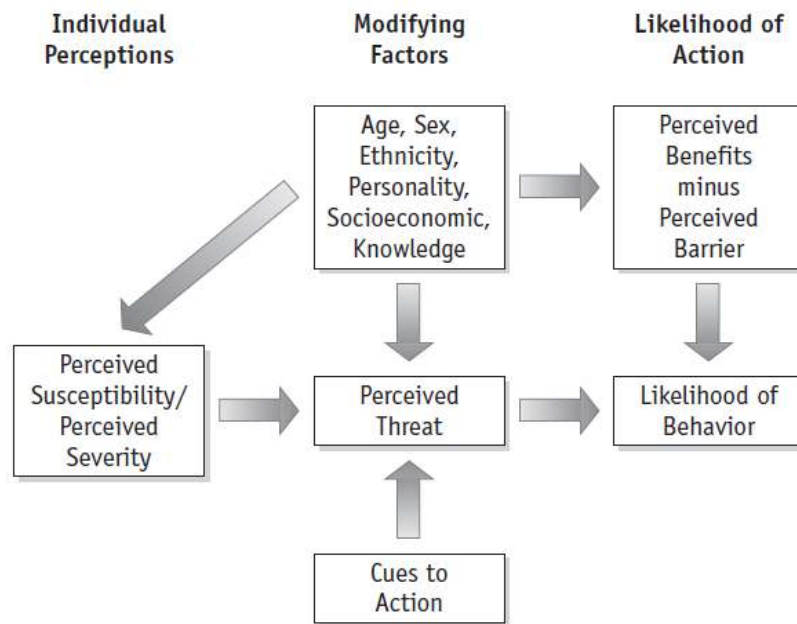


Figure 2. The Health Belief Model (Stretcher and Rosenstock, 1997).

Transtheoretical Model

Originally applied as a model for smoking cessation, Procahska and DiClemente developed the Transtheoretical (TTM) model which is now used for a variety of health-related behaviors. TTM has been used in research to understand what motivates individuals to change their behavior from not engaging in healthier behaviors to taking action to improve their health outcomes (Citation). “The fundamental concept of the transtheoretical model (TTM) is that behavior change is most successful when specific behavioral strategies, called processes-of-change, are applied at the right time or during

appropriate stage of change” (Spencer et. al., 2011, 36). TTM illustrates how a woman can go through many stages before actually decided whether to take part in healthier behaviors such as mammography services.

An integral concept of the model is that the adoption of good practices involves movement through a series of stages: precontemplation [not even thinking about the new behavior], contemplation [currently not practicing the behavior but considering its adoption], action [adopting the behavior], maintenance [sustain the behavior over time], and relapse [practicing the behavior but not consistently] (Fouad et. al., 2010, 2527).

The TTM will be used in this program; it shows how a person can enter into a healthcare continuum as it relates to breast cancer screening. The first step in the TTM is *precontemplation*. This stage is when a person has not had a mammogram in the last two years and has no plans on getting one within the next two years. A person moves from precontemplation to *contemplation*. In this stage, an individual may have received some breast health education from their doctor and has not had a previous mammogram within the last two years, but is thinking about scheduling a mammogram within the next year or two. Next, a person moves into the *action* phase where they have consulted with their physician and has a mammography appointment scheduled. After an individual has a mammogram, they move into the *maintenance* phase. In this phase, the individual has two or more yearly mammograms and has scheduled their next annual mammogram. Lastly, a person can be *inconsistent/relapse*. In this phase a client has had a previous mammogram, but is inconsistent with follow up and will not schedule a mammogram unless their provider recommends one.

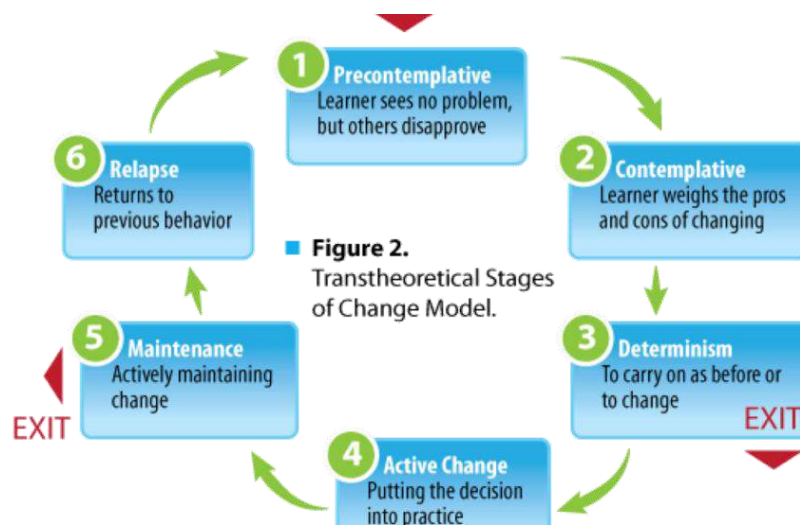


Figure 2. Transtheoretical model (TTM) stages of change (Cinelli, 2016).

Theoretical Model

To better describe the influence of intervening with breast cancer screening and providing transportation to the African American women of Ward 7, there is a need to merge both the transtheoretical and the health belief models, both of the models will inform the program's theoretical model. In the model shown below in Figure 4, a client moves from the precontemplation stage of not knowing about mammography services, therefore not having breast cancer screening scheduled within the next 2 years through a cycle which includes action and maintenance. In *precontemplation*, the client may not have a perceived threat of a breast cancer diagnosis (client may not have a family history of the disease) so they may not understand the importance of routine breast cancer screening. Next, the client will move to the *contemplation* phase where they may have had a recommendation from their primary care physician and is thinking of scheduling an appointment. Then the client receives some additional *cues to action* such as attending outreach events and obtaining educational materials about breast cancer screening. After the client decides whether or not to receive mammography screening, she may face *barriers* to accessing screening such as insurance. Once the client addresses her barriers, then she can move into the *maintenance* phase where she attends her mammography appointment and schedules yearly screening appointments and also realizes the benefits of routine mammography services. Lastly, a woman may fall into the *inconsistent* phase where she does not attend her follow up appointments for various reasons and therefore must start the cycle over from the beginning.

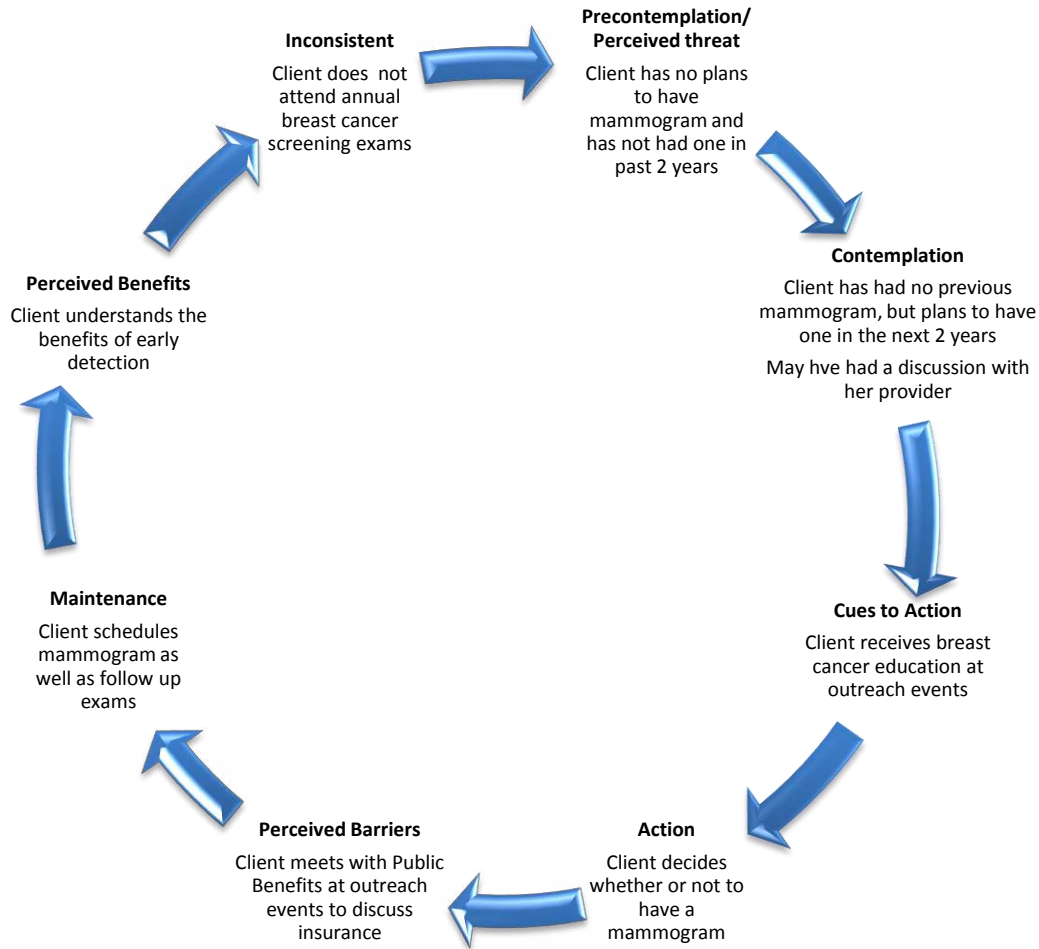


Figure 3. The theoretical model of increasing breast cancer screening and access to treatment for African American women in Ward 7, Washington, DC

Program Plan and Implementation

The planning process for this program will take place over a 3 month period beginning in March. In the initial months, there will be a series of focus groups and information sessions for women and community partners located in Ward 7. The group will review best practices and plans to reach women who do not normally present for care or present late. This group will meet monthly over the first three months with tentative dates scheduled so that the program can be tweaked if necessary. Simultaneously, there will be meetings amongst representatives of George Washington University, Unity Health Center, Howard University Hospital, Breast Care for Washington, and insurance providers, primarily Medicaid and Medicare because of the likelihood of uninsured and underinsured women who live in Ward 7. This meeting will include information about how the mammogram services will be paid for and what the next steps will be to link clients into care as soon as possible. Routine well woman exams are included in Medicaid and Medicare policies so women should be able to receive

mammograms through their insurance policy for no more than the insurance copay. As noted earlier, Ward 7 has the highest unemployment rate in Washington, D.C. For this reason, there is money in the budget under the line item “client services” that will cover the costs of insurance copays. Unity Health Care provides medical services to individuals regardless of their ability to pay and the center has locations throughout the city. During the final month of the planning process, there will be a 3 night volunteer training to ensure that all volunteers are properly educated in order to reach the target demographic. The volunteer training will be ongoing throughout the year to account for new volunteers.

Community outreach will begin June 1, 2018 and will be conducted on a weekly basis through December in order to reach as many women as possible. The outreach events will be staffed by volunteers from local hospitals, representatives from Medicaid and Medicare, representatives from Breast Care for Washington, and the Public Benefits team from Unity Health Care so that women can begin the process of insurance enrollment.

Beginning June 1, George Washington University’s mammovan will begin outreach in ward 7 to perform recommended mammography screenings. Outreach events will be held twice a month through December to include a Breast Cancer Awareness Month Health Fair in October. The mammovan will be able use eClinical Works electronic medical records to send all results back to the client’s medical provider as well as bill their insurance for services. The mobile mammography unit also works with clients that are uninsured and underinsured to make sure that the client’s out of pocket expenses are kept to a minimum because it is well documented that the ability to pay is a major barrier to accessing care. If the client does not have a regular PCP, they will be linked to the oncology department at a local hospital or Unity Health Care to receive follow-up care. If the mammovan has reached capacity for the day, or women are unable/ unwilling to receive screening on that day, there will be representatives from Breast Care for Washington on hand to provide referrals for mammography services in their clinic.

Outreach will be conducted during the week at local community centers and on the weekend at local churches. Churches serve as an important local partnership as “partnering with churches to provide mobile mammography offers the potential to increase screening adherence for traditionally underserved women.” (Derose, Duan, & Fox, 2002, 2011, p 199) Health insurance is a barrier many women face and mobile mammography units play a significant role in screening rates for underserved women. This grant will provide mini grants to local churches and community centers that are willing to sign on as community partners in order to host health fairs. The health fairs will include materials that are paid for through the grant so that all materials can have congruent messaging that targets the population.

Along with the mammogram unit, there will also be outreach volunteers in place that are able to answer questions about breast cancer and screening guidelines. The volunteers will have appropriate literature for the community and be able to inform those women who are not receiving services of the next steps that they can take and local resources. Volunteers are also needed to demonstrate Breast Self-Exams through guided practice with model breasts. These educational materials will also work well with younger women who are not at the age when mammogram services are recommended. Along with the guided practice, outreach volunteers will also hand out educational materials such as BSE shower cards so that women can take them home and be able to perform BSE at the recommended times.

The next step in the plan will be to work the women who received services on the mobile mammogram unit so that they can receive the best care in the most effective way. Because transportation is a barrier for many women accessing medical care after a cancer diagnosis, this strategic plan includes a partnership with Metro Access that will give free rides (via a voucher system) to and from client doctor visits. Direct service organizations will also be able to contact the client about any needs they have in regards to a breast cancer diagnosis and work with that patient around those issues. If the client is diagnosed, they will be paired with a patient navigator. Patient navigators assist clients in making medical appointments, understanding diagnoses, and getting into treatment quickly. Patient navigators are also charged with linking clients to public insurance so that the inability to pay is not a barrier for women who have been diagnosed. As noted by Hoffman, et. al.,

Navigation significantly reduced the odds of having diagnostic delays for both uninsured and privately insured women, with a similar non-significant trend seen for women with government insurance. Navigation was most effective in reducing diagnostic times within the first 60 days following abnormal screening (2011, page).

Linking clients to medical teams that include a patient navigator upon diagnosis is the best way to ensure the client is receiving care and remaining adherent to treatment which allows for the best possible health outcomes.

The final step in the plan is to keep a record of client outcomes so that the information can be compared to the larger population. With this information, community statistics can be inferred and more practices and direct service measures can be put in place. According to Healthy People 2020, “the measurable goal is to decrease the mortality rate by 10% from 23.0 female breast cancer deaths per 100,000 females to 20.7 per 100,000 females.” The goal of the strategic plan is to move more women into breast cancer screening and treatment, thus decreasing the mortality rate because of early detection. Maintaining client records will allow medical providers to share important health

information about the client, making medical adherence, treatment, and screening barriers preventable for underserved women who need help accessing care.

Task Name	Start	End	Duration (days)
Needs Assessment	12/1/2017	2/28/2018	89
Community focus group meetings	3/1/2018	4/1/2018	31
Medicaid meeting	3/15/2018	4/15/2018	31
George Washington/Unity Health Care meetings	4/1/2018	5/1/2018	30
Volunteer training	5/15/2018	5/18/2018	3
Additional training	5/18/2018	11/1/2018	167
GW outreach	6/1/2018	12/1/2018	183
Local health fairs	6/1/2018	12/1/2018	183
Breast Cancer Awareness Month	10/1/2018	10/31/2018	30
Evaluation	12/1/2018	2/28/2019	89

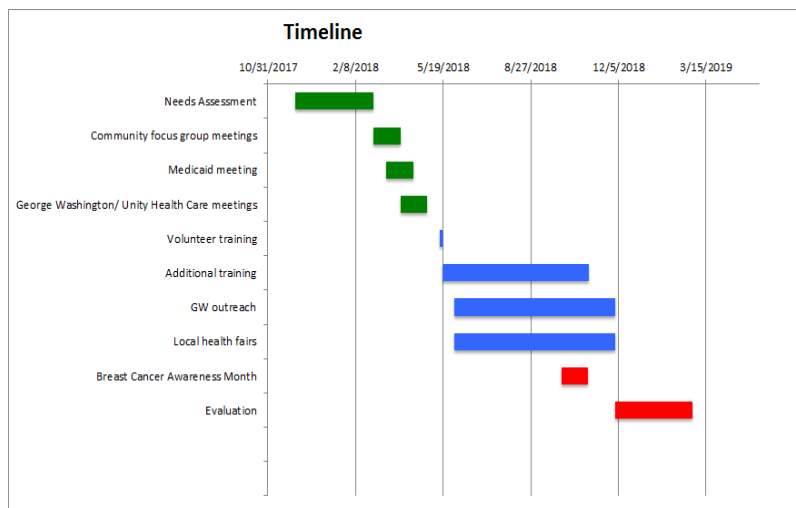


Figure 4. Project tasks and timelines.

Organizational Resources

The following administrative positions represent the organization’s human resources.

Program Director- responsible for overseeing the entire project. The Project Director will monitor the money spent on the program and continue fostering partnerships with other organizations. The Program Director will continue to report all grant deliverables to the proper person.

Program Coordinator- responsible for leading the project. The Coordinator will monitor all eCW data entry and will serve as trainer for those organizations that need hands on training with the assessment tool. The coordinator also links all clients to mammography screenings and tracks that information in eCW. The coordinator tracks all transportation and referral vouchers.

Student Intern- responsible for creating the database in which all client information will be securely housed. The intern is responsible for collecting monthly assessments from all sites and compiling that information into the database

Volunteers- Responsible for outreach and education efforts at the health events. Lead volunteers will also be responsible for collecting information at events about clients who need transportation and referral vouchers. Volunteers will undergo intensive 3 day training. The training will be offered on a monthly basis in the event that new volunteers are on boarded.

Communication Plan

The Program Coordinator will facilitate communication between partner organizations including local churches, Breast Care for Washington, Unity Healthcare, local hospitals, and Metro Access. The Program Coordinator will have monthly meetings with each site to perform chart reviews for data entered through eCW. At this time, the coordinator will offer ongoing trainings for new staff or staff that may need extra training on data entry. The health fairs will be announced via social media platforms, the Karen D. Price website, and the websites of the local community partners. Ads and marketing materials will also be placed in publications around the city which offer free promotion for DC health organizations and cater to the different wards in the District. Clients at health fairs will provide the volunteers with phone numbers/ email addresses in order to schedule mammography screenings.

- Social Media- Facebook, Twitter, Instagram
- Website
- Email
- East of the River Newspaper
- The Hillrag Newspaper
- Telephone
- Educational materials- brochures, pamphlets, breast-self exams cards

Budget

Staff Time	
Riana Buford, Program Director	\$7,000
LeTisha Jimenez, Program Coordinator	\$30,000
Francie Jenkins, Student Intern	\$3,000
Subtotal	\$40,000
Mini Grants	\$5,000
Subtotal	\$5,000
Materials	
Breast Self-Examination shower cards	
Referral cards to Breast Care for Washington	
Breast simulation models	\$2,340
Breast cancer facts brochures	

Subtotal	\$2,340
Transportation Services	
Metro Access vouchers	\$15 per voucher x 1500
1500 vouchers	\$22,500
Subtotal	\$22,500
Client Services	\$10,000
Subtotal	\$10,000
Training/ Meeting Supplies	\$2,500
Subtotal	\$2,500
Mammovan Yearly Contract	\$15,000
Subtotal	\$15,000
Other than Personnel/ Supplies List	
Occupancy	\$1,248
Telephone/Internet	\$212
Office Supplies	\$100
Data Collecting Equipment	\$1,000
Staff Transportation	\$100
Subtotal	\$2,660
Total	\$100,000

Budget Justification

The Program Director, Riana Buford, has 10 years of experience in breast cancer health promotion within communities of color. She serves as the lead for this program, using 10% of her time to monitor the program. The Program Coordinator, LeTisha Jimenez, has worked with The Karen D. Price Foundation for 3 years and the majority of her time (75%) will be spent on this program. She will serve as the lead of outreach and assessments, working with community partners to successfully link clients to mammography clients. She will also be in charge of monthly reports for evaluation purposes. The student intern, Francie Jenkins, is currently enrolled in Howard University as a Health Care Administration major. In her role, she will monitor the electronic medical records for reporting purposes and the linkages through Breast Care for Washington, Unity Health Care, local hospitals, and Metro Access. The reports will be sent to the intern for analysis and assessment monthly.

The Karen D. Price Foundation will partner with local churches throughout the city, specifically in Ward 7 to bring health fairs to the community. The Karen D. Price Foundation will also partner with

churches outside of Ward 7, but report having a high population of Ward 7 residents. The mini grants will cover building costs and staffing for the health fairs and logistical situations that may occur. On weekends, many churches have to hire outside staff such as security guards and parking attendants in addition to the volunteers who will work on behalf of the church during the events. These grants will cover those costs for the church.

Materials for the grant will include 10,000 breast self-examination cards that will be distributed at the outreach events. This grant will also cover the purchase of breast models which will allow for much needed education around finding breast lumps for clients that are not used to practicing self-examinations at home. The grant will also cover the cost of printing 10,000 breast cancer facts brochures, which will have pertinent messaging on the way breast cancer affects the lives of women in D.C. and more specifically, Ward 7.

Metro Access vouchers cover the costs of bringing clients to and from doctor's office visits and will be tracked via the electronic medical record and the student intern. The cost of each voucher is \$15 and this grant covers 1,500 vouchers.

Underinsured and uninsured clients will be covered by this grant. If a client is unable to cover the costs of her copay, this grant will cover that completely or on a sliding scale.

The costs of training and training supplies, to include handouts, pamphlets, and speakers from local organizations will be covered using funds from the grant. There will be ongoing meetings and trainings throughout the year and these funds will be used for those purposes.

The yearly contract for the GWU mammovan includes 1 outing per month for a total of 12 outings per year. Because this program will use the van for the same amount of outings, the yearly contract was signed.

Assessment and Evaluation

The program director will monitor how many clients are seen each month and if new diagnoses are found. Using the electronic medical records, the program director will be able to track client appointments and whether clients have been linked to care and transportation services. The program director will also keep a count of how many transportation vouchers were used. Breast Care for Washington will also be given access to eClinical Works in order to input patient data on clients that were linked to them through outreach events. Volunteers at outreach events as well as transportation services staff will also give assessments to clients to monitor whether the program was successful. Metro Access will send a monthly report to the Program Director on the number of new linkages received via the mobile mammography services.

At each encounter, clients will be given baseline assessments that serve as pre and post tests for the intervention. The information collected here will be basic demographic info such as name, zip code, and most importantly, ward number. There will also be questions regarding previous mammograms and clinical breast exams. The volunteers at each outreach event will collect information regarding how many vouchers were given out to clients that seek care at the partner facilities. There will also be referral cards given out that will be tracked to count the number of clients that access care through Breast Care for Washington. Clients will be asked to fill out a registration form at the time of linkage and mammography screenings.

Data will be collected on a monthly basis by the student intern and program coordinator. The monthly evaluations will help to ensure that the intervention is on track to meet the deliverables. Beginning December 2018, the three-month evaluation period will begin. All of the client information can be tracked using the electronic medical record. The electronic medical record that will be used is eCW. All clients will sign a consent form so that their information can be entered into the system. Electronic medical data is HIPAA compliant and can only be shared if the client consents. A copy of all consent forms will be kept in the client record. All the evaluation information can be coded and pulled by student intern, Francie Jenkins, who is receiving her Master of Science in Health Informatics and will be able to gather and analyze the data for the grant.

The information from the DC Department of Health Cancer Registry will be used to make comparisons. Each year, the DC DOH tracks the number of female breast cancer diagnoses as well as the number of women who have been screened for breast cancer. This information also includes the stage at which a woman is diagnosed with breast cancer and is broken down into age, race, ethnicity, and insurance coverage.

Success will be defined by two measures. The first measure is the number of women in Ward 7 who are screened for breast cancer through this program. The goal of this program is to increase screening for female breast cancer in Ward 7 by 5%. Ward 7 has the highest mortality rate in the city for female breast cancer at a rate of 37.9 per 100,000. Second, increasing screening rates in Ward 7 by 5% will include more than 1500 women in this ward and will reflect in a significant reduction in breast cancer mortality rates in community that is most affected by the disease.

Sustainability

The Karen D. Price Foundation has received funding from the Susan G. Komen and Avon Foundations on similar projects. We plan on applying to are similar Requests for Proposals for breast cancer screening grants. These grants would cover this work for 5 years in communities of color. The DC DOH Cancer Registry also funds programs with a history of work in marginalized populations for up

to five years. At the end of this project, we hope to apply for sustainability grants from the DCDOH. At the completion of this year's screening drive, our program will seek to partner with the larger organizations to provide outreach and education while the costs of the mammogram and clients services will be covered by the hospitals and insurers.

The Karen D. Price Foundation offers trainings across the country where we charge a fee. Trainings include, but are not limited to, cultural competency training and Cancer 101. These trainings are designed for use within under resourced communities. The cultural competency training is aimed at medical providers and front line staff to become aware of the health disparities that marginalized communities face. Some of the topics covered by these the cultural competency training include health disparities in communities of color and the LGBT community. The Cancer 101 training is designed for residents and providers in under resourced communities. At these trainings, the basics of cancer are discussed and the various ways people can access services. These trainings can be used to cover the costs of programming.

Summary

There is a clear disparity in the way that Ward 7 residents access care in the medical setting. This plan will bring necessary medical care into an underserved community and allow individuals to access care that is not easily accessible. The mobile mammography unit will serve as a clinic for diagnostic purposes and women will be linked to follow-up care if necessary. Working with local health providers such as George Washington University and Unity Health Care will provide necessary health partnerships for women east of the Anacostia River. Linking clients into care and providing timely well woman exams will significantly reduce the number of regional or distant stage breast tumors that are found and will significantly reduce the mortality rate in women in Ward 7 thus in the District of Columbia. Partnering with local community based organizations will allow marginalized and under resourced women to access vital health care that they otherwise may not be able to. "Mobile mammography is a cost effective and convenient way to help overcome the barriers that many women of lower socioeconomic status face in getting regular mammograms, thereby improving their chances of survival through early detection" (Derose, Duan, & Fox, 2002, 200).

References

- American Cancer Society. 2011. Cancer Incidence and Mortality Facts. Accessed from <https://www.cancer.org/research/cancer-facts-statistics/all-cancer-facts-figures/cancer-facts-figures-2011.html>
- American Cancer Society. 2015. Cancer Staging. Understanding Your Diagnosis. Accessed from, <https://www.cancer.org/treatment/understanding-your-diagnosis/staging.html>
- Champion, Victoria L., Jeffrey K. Springston, Terry W. Zollinger, Robert M. Saywell, Patrick O. Monahan, Qianqian Zhao, and Kathleen M. Russell. 2006. "Comparison of Three Interventions to Increase Mammography Screening in Low Income African American Women." *Cancer Detection and Prevention* 30 (6): 535. [doi:http://dx.doi.org.proxytr.wrlc.org/10.1016/j.cdp.2006.10.003](http://dx.doi.org.proxytr.wrlc.org/10.1016/j.cdp.2006.10.003). <https://search-proquest-com.proxytr.wrlc.org/docview/1418663601?accountid=14407>.
- Cinelli, Mark. 2016, September 17. Exercise is a Behavior. *Boston Herald*. Accessed March 02, 2018 from http://www.bostonherald.com/lifestyle/health/mr_fit/2016/06/exercise_is_a_behavior
- Department of Employment Services. 2017. District of Columbia Labor Force, Employment, and Unemployment Rate by Ward Annual Averages 2002-2013. DC.Gov. Accessed November 2, 2016 from https://does.dc.gov/sites/default/files/dc/sites/does/page_content/attachments/2002-2016%20Unemployment%20Rate%20by%20Ward%20Annual%20Averages.pdf.
- Derose, K. P., Duan, N., & Fox, S. A.. (2002). Women's Receptivity to Church-Based Mobile Mammography. *Journal of Health Care for the Poor and Underserved*, 13(2), 199-213
- Desantis, C., Jemal, A., & Ward, E. (2010). Disparities in breast cancer prognostic factors by race, insurance status, and education. *Cancer Causes & Control*, 21(9), 1445-50. [doi:http://dx.doi.org.proxytr.wrlc.org/10.1007/s10552-010-9572-z](http://dx.doi.org.proxytr.wrlc.org/10.1007/s10552-010-9572-z)
- Fouad, Mona N,M.D., M.P.H., Edward Partridge M.D., Mark Dignan PhD., Cheryl Holt PhD., Rhoda Johnson PhD., Chris Nagy PhD., Sharina Person PhD., Theresa Wynn PhD., and Isabel Scarinci PhD. 2010. "Targeted Intervention Strategies to Increase and Maintain Mammography Utilization among African American Women." *American Journal of Public Health* 100 (12): 2526-31. <https://search-proquest-com.proxytr.wrlc.org/docview/804293826?accountid=14407>.

- Frankenfield, Kirsten M., "Health Belief Model of Breast Cancer Screening for Female College Students" (2009). Master's Theses and Doctoral Dissertations. Paper 258.
- Hoffman, Heather J., Nancy L. Laverda, Paul H. Levine, Heather A. Young, Lisa M. Alexander, and Steven R. Patierno. 2011. "Abstract B90: Patient navigation significantly reduces delays in breast cancer diagnosis in the District of Columbia." *Cancer Epidemiology Biomarkers & Prevention* 20(10) Supplement. doi:10.1158/1055-9965.disp-11-b90.
- Medina, R., Vargas, A., Rogers, K., & Pearson-Fields, A. (2014) Burden of Cancer in the District of Columbia. Washington, DC; District of Columbia Department of Health (DOH), Community Health Administration, Bureau of Cancer and Chronic Disease. District of Columbia (DC) Division of Cancer Data, DC Cancer Registry, a program funded by Centers for Disease Control and Prevention (CDC).
- Prochaska, Janice M, Prochaska, James O, Levesque, Deborah A. 2001. A Transtheoretical Approach to Changing Organizations. *Administration and Policy in Mental Health* 28(4), 247-261.
- Russell, Kathleen M., Susan M. Perkins, Terrell W. Zollinger, and Victoria L. Champion. 2006. "Sociocultural Context of Mammography Screening use." *Oncology Nursing Forum* 33(1):105-12. <https://search-proquest-com.proxytr.wrlc.org/docview/223107220?accountid=14407>.
- Spencer, Leslie, Francie Pagell, and Troy Adams. 2005. "Applying the Transtheoretical Model to Cancer Screening Behavior." *American Journal of Health Behavior* 29 (1): 36-56. <https://search-proquest-com.proxytr.wrlc.org/docview/211846740?accountid=14407>.
- Stretcher, V. and Rosenstock, I.M. (1997). The Health Belief Model. In Glanz, K., Lewis, F.M. and Rimer, B.K., (Eds.). *Health Behavior and Health Education: Theory, Research and Practice*. San Francisco, CA: Jossey-Bass.
- Susan G. Komen. 2017. Mammography- What you Should Know." Accessed from <https://ww5.komen.org/BreastCancer/Mammography.html>
- Susan G. Komen 2015. National Capital Region 2015 Community Profile Report. Accessed from <https://ww5.komen.org/uploadedFiles/Komen/Content/What We Do/In the Community/Assisting Community Health Needs/US%20Community%20Profile%20Report%20v5.pdf>
- U.S. Cancer Statistics Working Group. 2017. United States Cancer Statistics: 1999–2013 Incidence and Mortality Web-based Report. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute; Available at: www.cdc.gov/uscs.

U.S. Department of Health and Human Services 2017. Healthy People 2020. Office of Disease Prevention and Health Promotion: Washington, DC. Accessed September 27, 2017 from: <https://www.healthypeople.gov/2020/topics-objectives/national-snapshot/female-breast-cancer-deaths-2001%E2%80%932011>

Vargas A., Rogers, K., Pearson –Fields AS. 2012. District of Columbia Cancer Report, 2011. Washington, DC: District of Columbia Department of Health; Community Health Administration, Bureau of Cancer and Chronic Disease,

Appendices

Appendix A: Executive Board

Koyin Aladesuru	Howard University Hospital
Riana Buford	Program Director
Kameryn Brooks	Ward 7 resident
Julia Keegan	Breast Care for Washington
Khadijah Keita	Metro Access
Amie Krautwurst	George Washington University
Juan Carlos Loubriel	Unity Health Care
D Magrini	DC DOH
Janice Patterson	Department of Recreation
Naseema Shafi	Medicaid/ Medicare
Robin Thomas	Coalition of Interfaith Pastors

Appendix B: Female Breast Cancer Incidence and Death Rates, District of Columbia

Table 2.2. Female breast cancer incidence and death rates, District of Columbia

Population Group	Incidence		Deaths	
	# of New Cases (Annual Average)	Age-adjusted Rate/ 100,000	# of Deaths (Annual Average)	Age-adjusted Rate/ 100,000
US	198,602	122.1	40,736	22.6
Komen National Capital Region Service Area	2,939	126.0	550	23.5
District of Columbia - DC	432	137.2	96	29.3
White	141	168.4	22	24.7
Black/African-American	266	127.0	71	33.1
Ward 1 – DC	38	110.8	7	21.8
Ward 2 – DC	38	124.9	11	35.7
Ward 3 – DC	74	154.1	13	23.4
Ward 4 – DC	69	125.9	15	27.4
Ward 5 – DC	61	124.9	17	33.9
Ward 6 – DC	50	135.1	10	26.2
Ward 7 – DC	49	109.5	14	30.1
Ward 8 – DC	43	146.0	8	30.9

Data are for years 2005-2009, except for the US and Komen National Capital Region Service Area which are for 2006-2010. Rates are in cases or deaths per 100,000. Age-adjusted rates are adjusted to the 2000 US standard population. Source of incidence data for US and Komen National Capital Region Service Area: NAACCR – CINA Deluxe Analytic File. Source of death data for US and Komen National Capital Region Service Area: CDC – NCHS mortality data in SEER*Stat. District of Columbia data contained in this table were provided by the District of Columbia Cancer Registry, District of Columbia Department of Health, program funded by NPCR – CDC.

Appendix C: Population Characteristics- Socioeconomics, District of Columbia

Table 2.8. Population characteristics – socioeconomics, District of Columbia

Population Group	Less than HS Education	Income Below 100% Poverty	Income Below 250% Poverty (Age: 40-64)	Un-employed	Foreign Born	Linguistic-ally Isolated	In Rural Areas	In Medically Under-served Areas	No Health Insurance (Age: 40-64)
District of Columbia	12.9 %	18.2 %	34.2 %	10.0 %	13.3 %	2.6 %	0.0 %	27.7 %	7.9 %
Ward 1	15.9%	15.0%	NA	8.7%	20.0%	NA	0.0%	NA	22.7%
Ward 2	7.3%	15.0%	NA	5.0%	19.5%	NA	0.0%	NA	9.7%
Ward 3	2.9%	7.9%	NA	2.6%	18.1%	NA	0.0%	NA	7.4%
Ward 4	15.9%	12.0%	NA	8.3%	20.3%	NA	0.0%	NA	18.7%
Ward 5	18.3%	20.0%	NA	13.7%	9.7%	NA	0.0%	NA	12.2%
Ward 6	10.0%	16.0%	NA	10.2%	9.4%	NA	0.0%	NA	5.4%
Ward 7	16.6%	26.0%	NA	16.8%	2.8%	NA	0.0%	NA	18.1%
Ward 8	19.4%	36.0%	NA	24.9%	2.7%	NA	0.0%	NA	5.7%

NA- Not available

Data are in the percentage of people (men and women) in the population.

Source of Ward level education level, poverty and foreign born data: Census Bureau- American Community Survey (ACS) for 2007-2011

Source of Ward level unemployment rate: Office of Labor Market Research and information estimates for 2012

Source of Ward level rural population data: US Census Bureau – Census 2010.

Source of Ward level health insurance data: Urban Institute tabulations on the 2009 DC Health Insurance Survey (DC-HIS)