Published in final edited form as:

J Cancer Educ. 2018 August ; 33(4): 782–787. doi:10.1007/s13187-016-1152-9.

A Community-Based Outreach Navigator Approach to Establishing Partnerships for a Safety Net Mammography Screening Center

Sherrie Wallington¹, Bridget Oppong¹, Chiranjeev Dash¹, Tesha Coleman¹, Holly Greenwald¹, Tanya Torres¹, Marquita Iddirisu¹, and Lucile Lauren Adams-Campbell¹

¹Georgetown Lombardi Comprehensive Cancer Center, Washington, DC, USA

Abstract

Washington, DC, has one of the highest incidence and mortality rates for breast cancer in the USA. Patient navigation coupled with informational and community resources are important strategies that assist patients' access and help them understand the complex world of cancer care. The Georgetown Lombardi Comprehensive Cancer Center's Capital Breast Care Center (CBCC) is a safety net mammography screening center that utilizes a community-based navigation program. In addition to providing assistance with coordination of clinical services, navigators at CBCC are integral in establishing intra-community partnerships to educate members of the community about breast cancer screening. The aim of this study was to detail the role of patient navigation at the CBCC, with an emphasis on community engagement and community-based partnerships. We describe the process by which CBCC established partnerships with multiple community organizations between 2004 and 2015 and analyzed data of women screened in relationship to the evolution of the patient navigation services. Application of the CBCC navigation model that integrates individual patient outreach with community engagement has yielded viable and lasting community partnerships that have resulted in an increase in mammography uptake, especially among medically under-served minority women.

Keywords

Patient navigation; Mammography screening; Community partnership; Blacks; Latinas

Introduction

Patient navigation, established by Dr. Harold Freeman [1], is a well-known strategy designed to reduce delays in access to services from screening through diagnosis and treatment. Dr. Freeman's pioneering work in 1990 [1] to eliminate barriers to timely screening, diagnosis, treatment, and supportive care with cancer patients in Harlem established the infrastructure of patient navigation in the USA [2,3], Freeman suggested that patient navigation is a

Correspondence to: Lucile Lauren Adams-Campbell.

Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no conflict of interest.

Disclosure Statement No financial disclosures were reported by the authors of this paper.

process in which an individual—a patient navigator—guides patients with a suspicious finding (i.e., a test showing that they may have cancer) through and around barriers in the complex cancer care system in order to help ensure timely diagnosis and treatment [2]. Barriers to quality care fall into a number of categories—including financial and economic, language and culture, communication, health care system, transportation, and bias—based on culture, race, or age [3]. Since Dr. Freeman’s pioneering work, patient navigation has expanded in popularity and penetration with the launch of several national programs and initiatives with substantial commitments from advocacy, foundational, and governmental agencies [4–6]. In 2010, the USA established legislation to assist the patient. These commitments have further helped to create a systematic infrastructure and more rigorous science around patient navigation. One such example is the National Cancer Institute’s Center to Reduce Cancer Health Disparities, which, with support from the American Cancer Society’s multisite Patient Navigation Research Program, examines the impact of navigation at reducing delays along the continuum of care [7,8]. Data emerging from one of the multi-centers suggest that navigation services targeted to those with persistent delays in breast cancer diagnosis, regardless of socio-demographics, can improve the quality of care delivery that is necessary to ensure equity in breast cancer survival [7].

Moreover, navigation in the cancer field has expanded considerably to focus on cancer prevention and control, which includes early detection via community-based organizations and community outreach. The community-based navigators’ outreach efforts address cancer education, screening guidelines, screening barriers, fears, distrust, and myths. The role of community-based patient navigators in community outreach efforts is essential in reducing cancer disparities and addressing the growing interest in and implementation of various forms of patient advocacy. It is the role of patient navigation to reduce disparities in cancer outcomes among medically underserved communities [9].

Community-based navigators, in collaboration with academic institutions, create viable community-level patient navigation programs. It is critical that community partnerships evolve based on mission, goals, and trust. When partnerships are in place, the community benefits, and there is added tangible value to participants, which increases the probability of desired outcomes [10, 11].

The Georgetown Lombardi Comprehensive Cancer Center (LCCC) has a community outreach arm to the Cancer Prevention and Control Program that comprises a community-based navigation program: the Capital Breast Care Center (CBCC). CBCC provides screening services to medically underserved populations. Washington, DC, has several areas designated as medically underserved areas (MUAs) that CBCC serves. As of 2010, DC had a total of nine MUAs encompassing 86 census tracts, and approximately 45% of the population of DC resided in an MUA [12]—an area or population designated by the Health Resources and Service Administration (HRSA) as having too few primary care providers, high infant mortality, high poverty, or a high elderly population [13].

In the present study, we examined the process of establishing a community-based navigation program and building viable community-based partnerships for a safety net mammography screening center (i.e., Capital Breast Care Center).

Approach/Process

Founded in 2004, CBCC is a community-based accredited mammography facility located in a medically underserved area in Washington, DC. Table 1 lists a timeline of important activities since CBCC's establishment with MedStar Health as the clinical partner. CBCC provides culturally sensitive breast cancer screening services, patient navigation, and health and wellness education guided by evidence-based practices to all women in the Washington, DC area, regardless of ability to pay. CBCC has been able to establish a patient navigation system that incorporates and facilitates outreach, advocacy, education, and clinical services.

Community-Based Outreach Navigation

The community-based outreach navigation program is designed to establish a community-level infrastructure for breast health education and mammography screening. The trained outreach navigators are responsible for identifying and building viable partnerships, educating members of the community about the importance of mammograms, increasing mammography screening among underserved women, and providing transportation for women to the screening center. The outreach navigators are well integrated in the community, resulting in them being members of local breast health consortiums and navigation networks that provide continuing education and offer targeted resources to enhance navigation skills. The navigators have established rotating outreach programs that provide breast health education on site at partnering organizations. After the on-site health education, arrangements are made to have scheduled van pickups for mammograms (Tables 2 and 3).

Partnerships

The success of a safety net mammography screening center is based on community partnerships. CBCC outreach navigators have established community partners that cater to the health needs of women who can benefit from mammography screening. A selected list of partnership organizations shown in Table 2 includes transitional housing facilities, health service providers, neighborhood associations, churches, senior centers, and neighborhood recreation centers. These social networks are a key component in identifying partnerships in existing community relationships and understanding community needs. Partners inform CBCC of new or closed organizations within a neighborhood. These partnerships enable CBCC to reach women in the community through an established and seamless referral system.

Mammography Screening Uptake

CBCC began mammogram screenings in 2004, prior to having established viable community partnerships. Until the establishment of the community-based outreach navigation program, the annual number of women screened was relatively small—fewer than 500 women were screened annually. Figure 1 illustrates the number of women screened between 2004 and 2014, while Fig. 2 shows the ethnic breakdown of the patients served from 2010 to 2014. In 2004, only 158 patients were seen, while in 2006, with the initiation

of the patient navigation program, 1415 patients were screened. The patient navigation provided for health education and community outreach to increase screening. Annual reminder letters and calls are practices established to maintain contact with patients screened through the program. Figures 1 and 2 also show that CBCC has provided over 12,000 breast cancer screenings and evaluations since 2004 in the Washington, DC metropolitan area to a diverse group of low-income and underserved women comprised of African Americans (44%), Latinas (42%), and Caucasians (4%).

There is an obvious need to track and monitor patient navigation outcomes, and data collection has steadily improved in the patient navigation program since its inception. Complete data are not available on the staging of cancer cases from 2004 to 2005. After the start of the PN program, the majority of patients diagnosed through the program were early stage (0–II) in 86%. From a recent publication of CBCC data, Oppong et al. showed that the time from an abnormal finding to a diagnostic resolution for patients screened through this PN program fall within the guidelines set by the CDC-funded National Breast and Cervical Cancer Early Detection Program. In addition, among the women who were recommended to have a core needle biopsy after the diagnostic screening, 132 (81.5%) underwent biopsy within a median of 21 days (interquartile range: 0–221 days) [14].

Discussion

Health care utilization disparities are multifaceted and are not always simple to identify [15]. Building and sustaining community partnerships allows health care programs for many medically underserved women to be optimized even as the landscape of health care evolves. This paper describes a community-based outreach navigation program that resulted in increased mammographic utilization, was successful in establishing lasting partnerships with multiple community-based organizations to improve health, and increased research participation of underserved minority populations in the Washington, DC metropolitan area.

Mammograms for breast cancer screening are mandated by the Affordable Care Act (ACA) [16]. As the group of insured adults becomes more diverse, it is important to understand the extent to which these diverse populations may face disparities in access to and use of care even after ACA implementation. Many factors beyond coverage influence individuals' access to and use of care, such as linguistic and cultural barriers as well as broad social and environmental factors [17, 18]. No matter how successful health care reform proves to be, there will still be uninsured and underinsured persons who need access to medical care, and the staff at CBCC has found this to be true with their patients.

Through its culturally diverse staff, partnership networks, and patient navigation strategies, the CBCC model provides a safety net to address these issues. CBCC is committed to the community and uniquely positioned through its community resources, partnerships, and patient navigation strategies to assist with delivering better quality and increased levels of care in an efficient manner that ensures that everyone has access to care. Several studies [9, 19–22] have also examined community-based navigation to screening and primarily have focused on helping patients get access to care, outreach to community members, and time reduction between cancer diagnosis and treatment. CBCC is different from these programs

in that it emphasizes preventative care and education of the community in order to collaboratively promote and share the responsibility for prevention and cancer warning signs awareness.

CBCC also addresses the actual structural barriers by providing services beyond screening (e.g., reminders for systematic follow-up procedures coupled with providing transportation and providing education and training in the communities in which the patients live). The other programs mentioned focus less on other determinants to screening. More research is needed to evaluate the impact of community partnerships on utilization of routine screening mammograms and decreased breast cancer mortality rates.

Given our experience since the PN program's inception, it is important to also note lessons learned. First, the need to develop and sustain partnerships to expand and build community capacity for patient navigation is critical. Again, Table 2 shows selected partnering organization, and we learned early on that developing partner relationships requires a huge investment in time and effort. We developed an outreach program that helped to create new partnerships but also built established activities and programs within existing community organizations and held meetings with key stakeholders to ensure proper buy-in and cooperation since many organizations already hold meetings and events that capture the targeted audience in a trusted environment. Building and adding to these programs—for example, game activities (i.e., Bingo) and/or required learning activities within transitional housing programs—has proven successful.

Second, high staff turnover within other community organizations has also presented challenges and opportunities for lessons learned. Establishing a referral system or recurring calendar helps to alleviate gaps in continuity of programs. It is also important to have the approval and involvement of more than one staff person to eliminate the need to re-orient new staff. This allows for a seamless process and eliminates staff time needed to run the program.

Finally, we learned that patient navigation programs are not one size fits all and should reflect the socio-cultural and geographical needs of the targeted patient populations and communities being served. Our previous work [23] has noted that huge investments have to be made in terms of institutional commitment, space, human capital, and time and effort in order to build community capacity and relationships with diverse stakeholders within communities.

Acknowledgments

This study was supported in part by an Avon Foundation for Women Grant (No.-05-2015-013) and Susan G. Komen Grant (No. NCR15CBCC).

References

- 1Freeman HP, Muth BJ, Kerner JF. Expanding access to cancer screening and clinical follow-up among the medically underserved. *Cancer Pract.* 1994; 3(1):19–30.
- 2Freeman Foundation Our model <http://www.hpfreemanpni.org/our-model/#sthash.gosin8dg.dpuf>

- 3Freeman HP, Chu KC. Determinants of cancer disparities: barriers to cancer screening, diagnosis, and treatment. *Surg Oncol Clin N Am*. 2005; 14(4):655–669. [PubMed: 16226685]
- 4Ramachandran A, Snyder FR, Katz ML, Darnell JS, Dudley DJ, Patiemo SR, Sanders MR, et al. Barriers to health care contribute to delays in follow-up among women with abnormal cancer screening: data from the Patient Navigation Research Program. *Cancer*. 2015; 121(22):4016–4024. [PubMed: 26385420]
- 5Freund KM, Battaglia TA, Calhoun E, Darnell JS, Dudley DJ, Fiscella K, Hare ML, et al. Impact of patient navigation on timely cancer care: the Patient Navigation Research Program. *J Natl Cancer Inst*. 2014; 106(6):dju115. [PubMed: 24938303]
- 6Krok-Schoen JL, Oliveri JM, Paskett ED. Cancer care delivery and women's health: the role of patient navigation. *Frontiers in Oncology*. 2016; 6(2)doi: 10.3389/fonc.2016.00002
- 7Battaglia TA, Darnell JS, Ko N, Snyder F, Paskett ED, Wells KJ, Whitley EM, et al. The impact of patient navigation on the delivery of diagnostic breast cancer care in the National Patient Navigation Research Program: a prospective meta-analysis. *Breast Cancer Res Treat*. 2016; 158(3):523–534. DOI: 10.1007/s10549-016-3887-8 [PubMed: 27432417]
- 8Freund KM, Battaglia TA, Calhoun E, Dudley DJ, Fiscella K, Paskett E, Raich PC, Roetzheim RG. National cancer institute patient navigation research program. *Cancer*. 2008; 113(12):3391–3399. DOI: 10.1002/cncr.23960 [PubMed: 18951521]
- 9Natale-Pereira A, Enard KR, Nevarez L, Jones LA. The role of patient navigators in eliminating health disparities. *Cancer*. 2011; 117(S15):3541–3550. DOI: 10.1002/cncr.26264
- 10Paskett ED, Harrop J, Wells KJ. Patient navigation: an update on the state of the science. *CA Cancer J Clin*. 2011; 61(4):237–249. DOI: 10.3322/caac.20111 [PubMed: 21659419]
- 11Ragas DM, Nonzee NJ, Tom LS, Phisuthikul AM, Luu TH, Dong XQ, Simon MA. What women want: patient recommendations for improving access to breast and cervical cancer screening and follow-up. *Womens Health Issues*. 2014; 24(5):511–518. DOI: 10.1016/j.whi.2014.06.011 [PubMed: 25213744]
- 12Medically underserved areas—populations <http://doh.dc.gov/service/medically-underserved-areas-populations>
- 13MUA find. <http://datawarehouse.hrsa.gov/tools/analyzers/muafind.aspx>
- 14Oppong BA, Dash C, Coleman T, Torres T, Adams-Campbell LL. Time to diagnostic evaluation after mammographic screening in an urban setting. *J Women's Health*. 2016; doi: 10.1089/jwh.2015.5661
- 15Artiga S, , Young K, , Garfield R, , Majerol M. Racial and ethnic disparities in access to and utilization of care among insured adults DC: Kaiser Family Foundation, Washington; 2015 <http://kff.org/disparities-policy/issue-brief/racial-and-ethnic-disparities-in-access-toand-utilization-of-care-among-insured-adults/>
- 16Public Health Law 111–148 <http://www.gpo.gov/fdsys/pkg/PLAW-111publ148/pdf/PLAW-111publ148.pdf>
- 17Raymond AG. Massachusetts health reform: a five-year progress report. Blue Cross Blue Shield Foundation of Massachusetts, Boston 2011 <http://bluecrossfoundation.org/sites/default/files/Lessons%20from%20the%20Implementation%20of%20MA%20Health%20Reform.pdf>
- 18Samaras AT, Murphy K, Nonzee NJ, Endress R, Taylor S, Hajjar N, Bularzik R, Frankovich C, Dong XQ, Simon MA. Community-campus partnership in action: lessons learned from the DuPage County Patient Navigation Collaborative. *Progress in Community Health Partnerships: Research, Education, and Action*. 2014; 8(1):75.doi: 10.1353/cpr.2014.0005
- 19Earp JA, Eng E, O'Malley MS, Altpeter M, Rauscher G, Mayne L, Mathews HF, Lynch KS, Qaqish B. Increasing use of mammography among older, rural African American women: results from a community trial. *Am J Public Health*. 2002; 92(4):646–654. [PubMed: 11919066]
- 20Rimer BK, Resch N, King E, Ross E, Lerman C, Boyce A, Kessler H, Engstrom PF. Multistrategy health education program to increase mammography use among women ages 65 and older. *Public Health Rep*. 1992; 107(4):369. [PubMed: 1641432]
- 21Pasick RJ, Hiatt RA, Paskett ED. Lessons learned from community-based cancer screening intervention research. *Cancer*. 2004; 101(S5):1146–1164. DOI: 10.1002/cncr.20508 [PubMed: 15316912]

- 22Paskett ED, Tatum CM, D'Agostino R, Rushing J, Velez R, Michielutte R, Dignan M. Community-based interventions to improve breast and cervical cancer screening: results of the Forsyth County Cancer Screening (FoCaS) Project. *Cancer Epidemiol Biomark Prev.* 1999; 8(5):453–459.
- 23Wallington SF, Dash C, Sheppard VB, Goode TD, Oppong BA, Dodson EE, Hamilton RN, Adams-Campbell LL. Enrolling minority and underserved populations in cancer clinical research. *Am J Prev Med.* 2016; 50(1):111–117. [PubMed: 26470805]

Note: 2010–2014 reflect data from Electronic Medical Record Sys

Fig. 1.

Number of patients screened by year, 2004–2014. Note: 2010–2014 reflect data from electronic medical record sys

Fig. 2.
Patients by Ethnicity, 2010–2014

Table 1

Timeline of capital breast care center achievements

Year	Activities
2004	CBCC Founded
2006	Begin seeing Maryland and Virginia patients Receive NCI grant: Patient Navigation Research Program (sub-award through GW Cancer Institute) Host First Annual Gift of Life Breakfast
2007	Receive Medical Achievement Award by Avon Foundation
2008	Receive Komen Grant—One by One—Breast Cancer Screening: Reaching Women in DC Public Housing Facilities (2008–2010)
2009	See increase in screening and partnerships Add van transportation Begin digital mammography
2010	Add electronic medical records
2011	Receive Komen Grant—Expansion of One by One—Public Education to Prevent Breast Cancer Using Patient Navigator to Reach Latino Women in Prince Georges County Maryland (2011–2012)
2012	Present ICC Poster Presentation—Mammography Screening in the Nation's Capital
2013	Present AACR Poster Presentation—The Importance of Patient Navigation in High Risk Screening Programs: The Capital Breast Care Center Experience Present AACR Poster Presentation—Temporal Changes in Characteristics of Women Receiving Screening Mammograms at a Community-Based Breast Cancer Screening
2014	Present AACR Poster Presentation—CBCC as a Resource for Enrolling Minority Participants in Research Studies
2015	Relocate to MedStar PromptCare (urgent care facility)

Table 2

Selected partnership organizations

Organization	Meeting category	Facility type	Ward/county
Arthur Capper Senior Housing	Education and VPU	Senior housing	6
Benning Park Apartments	Education	Housing facility	7
Brookland Manor Apartments	Education and VPU	Housing facility	5
Calvary Womens's Services	Education and VPU	Transitional home	8
Carver Tenace	Education	Housing facility	5
CASA de Maryland	Education and VPU	Latina resource center	PG
Community Clinic Inc.	VPU	Community clinic	PG
Community of Hope	VPU	Community clinic	6
Congress Park Community Center	Education	Housing facility	8
Jubilee Housing	Education	Housing facility	1
N. Street Village	Education and VPU	Transitional home	2
Park Naylor Apartments	Education	Housing facility	7
The Pentacle	Education and VPU	Housing facility	6
Thrive DC	Education and VPU	Community center	1

Table 3

Summary of visits from January–December 2015

Jan–Dec 2015	Total no. of visits/sessions	No. sites with 1 visit	No. sites with 2–4 visits	No. sites with >5 visits
Group health education sessions	30	16	5	
Health fairs	13	13		
Van pickups	31	4	1	3