FLORIDA STATE UNIVERSITY

ELIMINATING HEALTH DISPARTIES AMONG AFRICAN-AMERICAN WOMEN WITH BREAST CANCER:

AN ANALYSIS OF OPTIONS

AN ACTION REPORT SUBMITTED TO THE FACULTY OF THE COLLEGE OF SOCIAL SCIENCES IN CANDIDACY FOR THE DEGREE OF MASTER OF PUBLIC ADMINISTRATION

RUEBIN O’D. ASKEW SCHOOL OF PUBLIC ADMINISTRATION AND POLICY

BY

JOSETTE R. SYKES

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Melvin L. Herring, Jr. Director
Equal Opportunity for Minority Health
2555 Shumard Oak Blvd., 300K
Tallahassee, FL 32399

Dear Mr. Herring:

Please allow me to submit for your review and consideration, *Eliminating Health Disparities Among African-American Women with Breast Cancer: An Analysis of Options*. The report was created with the intent of providing some realistic suggestions on how to reduce existing health disparities.

After examining several options, my recommendation is to implement a State comprehensive community based prevention program. This choice was based on the use of three evaluative criteria: economic feasibility, potential effectiveness, and administrative feasibility. The comprehensive community based prevention program ranked highest against economic and administrative feasibility and effectiveness. This option could save money for the state by reducing the number of incidences of breast cancer among African-American women and save lives through prevention. This type of program would provide access to care and information to targeted population every county of the State. This option does well overall because it is an integrated approach to increasing access to information and treatment.

An executive summary of the report is included, along with details of policy recommendations for reducing and eliminating health disparities among African-American women with breast cancer in Florida.

Respectfully,

Josette R. Sykes
MPA Candidate
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1. Summary of Alternatives and Evaluative Criteria
Executive Summary

Breast cancer is the second leading cause of cancer death for women in the U.S; approximately 40,000 women in die from the disease each year. Before the 1990's, breast cancer mortality rates for all women combined had been about the same for nearly four decades. White women have higher incidences of breast cancer than African American women, but the mortality rates are higher for African- American women. This trend indicates poorer survival experiences for African- American women. The National Cancer Institute (2003) reports a five-year breast cancer survival rates adjusted for race and age specific all cause mortality. However over the past 35 years mortality for black women has remained constant with a small decline in mortality appearing after 1995.

Information for this report was collected using three methods. First, library databases, journals, state and federal publications were analyzed to provide background information into the statistical data of health disparities, recognition of breast cancer awareness, and national and state legislative activity targeting breast cancer. Second, an analysis of previous and existing programs and efforts from federal and state agencies and private foundation studies and reports examining the disparate treatment of African-American women diagnosed with breast cancer. Third, health care providers with experience in the public and private sector were interviewed and provided differing perspectives for the options under consideration.

This analysis examines three policy alternatives in an effort to reduce the number of incidences and mortality rate of breast cancer among African -America women: maintain the current program, create a state comprehensive community based breast cancer prevention program, and design a comprehensive low literacy education
program. The evaluative criteria are economic feasibility, reduction of disparity, and administrative feasibility.

In consideration of these alternatives, using the three evaluative criteria indicates that a State comprehensive breast cancer prevention and intervention program would help to reduce the number of incidences and mortality rate of breast cancer among African-American women. This option would provide breast cancer prevention program in all counties with State support and technical assistance. The other two policy options remain feasible alternatives but they must be restructured to effectively eliminate the existing disparity and better meet the needs of the African–American women diagnosed with breast cancer.
I. Problem Statement

African-American women appear to be at greater risk of developing more aggressive forms of breast cancer and die more from this disease than are white victims. The reasons will most likely prove to be multifactorial. Regular mammography screening every 1-2 years have shown in clinical trials to reduce breast cancer mortality among women 50-74 years of age through early detection and treatment. Previous studies show that the use of mammography is positively associated with income, education, having health insurance coverage, having a usual source of care, and urban residence (Shavers et al., 2002).

Research shows that using multiple interventions is more effective than any single approach (Makuc, 1999). Barriers to mammography use are prevalent among women of color. Minority women and women of low socioeconomic status lack access to regular health care or rely on emergency room primary care. Lack of knowledge and physician recommendation are important contributing factors for not obtaining regular mammography screening. Physician - based intervention can be successful at increasing mammography screening, however it can only be effective for women who have access to and utilize regular health care (Stockdale, 2000). A number of factors have been implicated as the cause of poorer survival for black women, including clinical and pathologic features of the disease that are indicative of poor prognosis; economic resources inequities, and differences in treatment access and efficacy.

In 2000, there were approximately 184,200 new cases of breast cancer diagnosed and more than 40,000 deaths will be attributed to the disease. White women have higher incidences of breast cancer than African-American women, but the
mortality rates are higher for African-American women. This trend indicates poorer survival experiences for African-American women. The Closing the Gap Act created an initiative that works to eliminate racial and ethnic health disparities in Florida. It provides grants to local counties and organizations with the intent to increase community-based health promotion and disease prevention activities. Primary benefits to the state from the Act includes meaningful improvements in the lives of Floridians who now suffer disproportionately from disease and disability and the development of tools and strategies that will enable Florida to eliminate these disparities. The purpose of this Action Report is to examine the effectiveness of the Closing the Gap Act and breast cancer prevention program in the State and make policy recommendations for improvements to reduce the incidence of breast cancer among African-Americans women.

II. Background and Literature Review

Background

This section discusses three topics: (1) disparities between black and white women in rate of mortality and diagnosis, (2) national recognition of breast cancer and (3) state legislative activity targeting breast cancer.

First, disparities in the burden of death and illness experienced by African-Americans, as compared with the U.S. population as a whole, have existed since the government began tracking such statistics as early as 1950. These disparities persist, and in some areas continue to grow. Health disparities are differences in the incidence, prevalence, mortality, and burden of diseases and other adverse health conditions that
exist among specific population groups in the United States. Breast cancer is a common malignancy among females, with almost 200,000 new cases diagnosed in the United States each year. The breast cancer mortality rate for African-American women is higher than for White and Latino women. In any one-year, 31 out of every 100,000 African-American women die of breast cancer, in comparison, 27 out of every 100,000 White women (ACS, 2003). Despite gains in the treatment of breast cancer over the past 25 years, African-American women continue to lag behind White women in measures of health outcomes. They experience lower breast cancer incidence rates than White American women, but higher mortality rates. African-American women present with stage IV cancers at a rate of 6.5%, while White American women present at a rate of 3.6%. (NCI, 2003). According to statistics released by the Institute, during the years 1973 to 1995 mortality from breast cancer decreased 7.1 percent among white women of all ages in the United States. However, it increased 19.4 percent among African-American women. Florida has the third-highest rate of new breast cancer patients in the U.S.

A number of studies have found that African-American women are more likely to be diagnosed at later stages of the disease, making the cancer more difficult to treat and often resulting in a worse prognosis (Dignam, 2000). Furthermore, African-American women are still not adequately represented in clinical trials, despite recent federal guidelines requiring demographic parity along ethnic and racial lines. It was found that only 55 percent of African-American women have had a mammogram and a clinical breast exam within the past two years (ACS, 2003). This is particularly alarming because adequate screening is considered crucial to catching the disease early and
treated and treated it successfully. Mammography rates for African-American women are lower than White and Latino women, but are increasing steadily (NWHN, 2003). Several barriers to getting mammograms exist for African-Americans such as office visit and screening procedure costs, physicians’ failure to discuss mammography with women, misconceptions that screening is unnecessary, and/or lack of health insurance (NWHN, 2003). The biggest unmet need for African-American women is early recognition of the disease.

Second, in January 2000, the Department of Health and Human Services (HHS) launched Healthy People 2010, a comprehensive, nationwide health promotion and disease prevention agenda. Healthy People 2010 contains 467 objectives designed to serve as a road map for improving the health of all people in the United States during the first decade of the 21st century (Department of Health and Human Services, 2003). As part of HHS’ Initiative to Eliminate Racial and Ethnic Disparities in Health, the agency is focusing on six major areas in which racial and ethnic minorities experience serious disparities in health access and outcomes—diabetes, heart disease and stroke, cancer, infant mortality, child and adult immunization, and HIV/AIDS. Eliminating health disparities is also a major goal of Healthy People 2010, the nation’s prevention agenda.

Healthy People 2010 is designed to achieve two overarching goals. The first goal is to help persons of all ages increase life expectancy and improve their quality of life. The second goal is to eliminate health disparities among segments of the population, including differences that occur by gender, race or ethnicity, education or income, disability, geographic location, or sexual orientation.
The Healthy People 2010 initiative continues in this tradition as a tool to improve health for the first decade of the 21st century (Department of Health and Human Services, 2003). “Healthy People 2000: National Health Promotion and Disease Prevention Objectives” (1990), identified health improvement goals and objectives to be reached by the year 2000. Healthy People 2010 builds on initiatives pursued over the past two decades. In 1979, Healthy People: The Surgeon General’s Report on Health Promotion and Disease Prevention provided national goals for reducing premature deaths and preserving independence for older adults. In 1980, another report, Promoting Health/Preventing Disease: Objectives for the Nation, set forth 226 targeted health objectives for the Nation to achieve over the next 10 years (Department of Health and Human Services, 2003).

The Clinton-Gore Administration developed and implemented a number of strategies to improve the health of minority populations and help close unacceptable health gaps. These strategies include a coordinated effort to eliminate racial and ethnic health gaps in six areas by the year 2010, enhanced resources for fighting HIV/AIDS in racial and ethnic minority communities, and the formation of a number of special work groups to review health status, determine research needs, and develop strategies that help improve minority health.

Third, on June 8, 2000, Governor Bush signed House Bill (HB) 2339, the Patient Protection Act into law. The 1999-2000 legislature appropriated $5 million to the Florida Department of Health (FDOH) to implement and administer the “Reducing Racial and Ethnic Health Disparities: Closing the Gap” grant program. The program targets six priority health areas: Cardiovascular Disease, Cancer, Diabetes, HIV/AIDS, Adult and
Child Immunizations and Maternal and Infant Mortality in which racial and ethnic groups currently experience serious disparities in access to care and health outcomes (Florida Department of Health, 1999).

In fiscal year 2000-2001, the department developed a grant application process and received 185 proposals from 114 organizations. The proposals were from community-based organizations, county health departments and advocacy/civic/health care organizations. Closing the Gap funded 69 projects in 37 counties. These projects help stimulate broad-based participation and the support of both public and private entities by:

- Fostering partnerships between local governments, community groups and private sector health care organizations;
- Helping communities address their most pressing health needs through targeted health screenings, education and awareness programs;
- Helping communities better understand the nature of health disparities among ethnic and racial groups; and
- Allowing state epidemiologists to evaluate the effectiveness of the interventions so that identified "best practices" can be shared with other high-risk Florida communities.

In summary, the background provides information on statistical data of disparities between black and white women in rate of mortality and diagnosis, history of national recognition of breast cancer awareness and history state of legislative activity targeting breast cancer. Determining the root causes for this disparity is critical in order to improve breast cancer survival in African-American women.
Literature Review

The literature on this topic examines four factors: (1) lower socioeconomic status (SES) and cultural beliefs, (2) lack of access to appropriate medical services, (3) lack of private health insurance and (4) pathologic features.

The first topic addressed is socioeconomic status. African-American women with breast cancer are 67 percent more likely to die from the disease than white women. Joslyn (2000) attributed the disparity to a number of cultural and socioeconomic factors, including less access to mammography screening opportunities as well as being provided with less aggressive treatment options. In addition, they said African-American women were less likely to report concerns or symptoms of breast cancer to their doctors. Interestingly, they also noted differences in tumor characteristics between the races. They found that African-American women were more likely to be diagnosed with estrogen and progesterone receptor-negative tumors, which tend toward a poorer prognosis compared with hormone receptor-positive tumors (Joslyn, 2000).

Another study suggested that cultural and socioeconomic circumstances may predispose African-Americans to higher mortality rates due to limited access to screening, early detection and treatment of breast cancer (Brach, 2000). African-American women under-utilize breast cancer screening services. Research reveals that they are not as likely as White women to seek mammograms and more likely to delay reporting signs and symptoms of breast cancer to their doctors.

Higher levels of socioeconomic status have a direct correlation with lower levels of disease (morbidity) and death (mortality). This correlation has been identified using various measures, including occupation, education, and household income. The
differences in morbidity and mortality among socioeconomic groups are not explained
by the differences in health behaviors, such as smoking, alcohol use or diet. Nor are
they explained by whether the population studied had access to medical care (Lewis,
2000).

Cultural beliefs and fear of radiation were also associated with preventing some
African-American women from seeking cancer screening. They are more likely to miss
health care appointments after diagnosis. Culture plays an important role in determining
health related beliefs and practices. In a study of African-American health attitudes,
beliefs, and behaviors, 30% believed that their health was dependent upon fate or
destiny and only about 50% felt health was a high priority in their life. Participants in
this study also stated that they believed health talks and other health information were
helpful in preventing disease (Lewis 2000).

A second topic identified is that the lack of access to health care contributes to a
decrease in the availability and use of mammography, and an increase in diagnosis at
later stages of breast cancer. Both are associated with increased breast cancer
mortality rates. It found that even among women in a managed care population who had
access to health care, there remained ethnic differences in the stage of breast cancer at
diagnosis, with African-American women's cancer being more advanced than among
cancer of White women (Yood, 1999). When there were statistical adjustments for
stage difference, income, age, and marital status, the differences between the two races
of women were not smaller, yet African-American women had significantly higher
mortality rates than their White counterparts. Similarly, Wojcik, Spinks, and Optenberg
(1998) examined White and African-American women treated in U.S. military health
care facilities with equal access to health care and treatment options. They found that access to health care and treatment options decreased the mortality rate for African-American women military beneficiaries (24.77%) when compared to other African-American women (34.2%). However, equal access to health care and treatment options did not remove significant differences in mortality rates between African-American (24.77%) and White (18.08%) female military beneficiaries (Optenberg et al., 1998).

The third topic addressed in the literature examined the lack of health insurance. This dramatically increased the chance of being diagnosed with cancer at a later stage concluded by researchers at the University of Florida. Roetzheim and colleagues reviewed the records of more than 28,000 patients with breast, colorectal, prostate cancer and melanoma. They found that patients who were uninsured or who were insured by Medicaid were more likely to be diagnosed with late-stage cancer than patients covered by private insurance plans (Roetzheim, 2000). Excluding economic factors, race played a significant role in late diagnosis. African-Americans were more likely to be diagnosed with late-stage breast and prostate cancers—and these disparities seemed to hold true regardless of insurance coverage.

A study concluded that African-American breast cancer patients had similar outcomes to white patients when their treatment and follow-up care were equal and appropriate for their disease conditions (Dignam, 1999). According Dr. James Dignam (1999), the reason for the increased mortality rates for African-American breast cancer patients compared to their white counterparts must therefore lie beyond simple biological differences between the races. The cause for the disparity was the fact that cancer was discovered late was a prime factor in less favorable outcomes. Dignam
showed that African-American women often first seen by doctors with larger tumors, greater nodal involvement and estrogen receptor negative tumors. Dignam further noted that studies in some urban hospitals, which are likely to treat a disproportionate share of African-American breast cancer patients, have a greater rate of late-stage diagnosis as well as a higher degree of non-standard care. This included less frequent radiation therapy after surgery, fewer diagnostic tests to determine the best therapy, and lower use of more aggressive chemotherapy and/or tamoxifen. In addition, Dignam cited studies in which African-American women were much more likely to have received total mastectomy rather than lumpectomy with radiation therapy in cases where either procedure would have been acceptable.

The fourth topic examined the pathologic features of breast cancer in African-American women. A recent study found that the actual tumor cells in African-American women grow more rapidly, leading to more aggressive cancers at an earlier age. The differences seen in this study also led to breast cancer that was less responsive to hormone treatment. (NWHN,2002). Aggressive histopathologic patterns have been described among African-American women with breast cancer when compared with white women (Middleton, 2001).

In summary the literature discussed several important factors relating to the racial differences in diagnosis and treatment of breast cancer. The literature revealed detailed scientific information and analysis about biological differences of breast cancer between black and women. Yet improving access to health care services alone will not eliminate health disparities in the U.S. There are also other factors that impact health disparities, such lack of prevention messages that are developed for, and targeted to
specific populations, biases of the health care system towards women of color, and inadequate use of self-care principles and health promoting services by vulnerable populations. This action report will craft alternatives for improvement to reduce the incidences of breast cancer among African-America women.

III. Methodology & Evaluation Criteria

Methodology

Information for provided in this analysis will be collected using the following methods:


- Review and analysis of previous and existing programs and efforts from federal and state agencies and private foundations namely the Department of Health and Human Services, Florida Department of Health, Center for Disease Control, National Cancer Institute,

- Email correspondence, face to face, and telephone interviews (n=six) approximately 10-25 minutes consisting of unstructured, open-ended qualitative questions with staff members from the Florida Department of Health and “Closing the Gap” grantees.

Popular media, books and journals provided historical information on the disparate treatment of African-American women diagnosed with breast cancer. A review of publications and studies provided the background information for the historical legislation created to eliminate and reduce ethnic/minority disparities in health. The literature presented several topics that contributed to identifying disparate and
differences in treatment between African-American and white women diagnosed with breast cancer.

There were several limitations of this report. One is the lack of statistical information on programs that are legislatively funded pertaining to breast cancer. Another limitation is the lack of information on the programs that were funded in the counties by the Florida Closing the Gap grant program. The lacking of reporting may misrepresent the effectiveness of the Closing the Gap grant program.

**Evaluation Criteria**

The evaluation criteria are coupled with desired outcomes to reduce barriers to services and increase prevention and intervention statewide.

- Economic feasibility evaluates the alternative according to the fiscal burden implementation will exert on the Department, and if the Department has the necessary economic resources. The economic impacts are reviewed through agency literature and reports.

- Reduction of disparity measures the ability of the alternative to reduce the health disparity among African – American women with breast cancer by the number of women screened, the number of hours donated to cancer prevention, education, screening, diagnosis, treatment, reduce psychosocial and physical barriers, and rehabilitation activities to reducing the disparity. The data sources include academic literature and research.

- Administrative feasibility identifies whether existing agency can administer the alternatives in an efficient and functional manner. Data sources include personal interviews, academic literature and state documents.

**IV. Management Policy Options**

In this section the three viable alternatives examine: the current program, a comprehensive community-based prevention program, and a comprehensive low literacy education program. One option not discussed is the combined use of mass
media campaigns and provider education (with personal reminder letters to women within the targeted population) due to the lack of relevant research (Williams, 2001). The alternatives are evaluated by three criteria: economic feasibility, effectiveness, and administrative feasibility.

**Option One: Maintain the current program**

This alternative is to leave the program “as is” and continue administering the CTG grant program. Applicants may submit an application addressing one, no more than two, of the health priority areas of those identified for funding (HIV, cardiovascular disease, diabetes, cancer, adult and childhood immunizations or maternal and infant mortality).

**Economic Feasibility:** Option one rates high in economic feasibility because the funds were legislatively appropriated, which gives legal authorization to make expenditures for specific purposes within the amounts authorized in the appropriations act. For fiscal year 2003-2004, the Florida Department of Health (DOH) expects to provide approximately $4,000,000 - $5,000,000 to fund grants up to $150,000 for each health priority area addressed. Currently the cost of the program is addressed in the grant application. Budgets up to $150,000 to provide services in one health disparity area and may cover cost of: personnel, consultants, grant related travel, grant related expenses, supplies, indirect cost, screening and diagnostic test, other grant related costs (DOH, 2003). The program does not call for an increase in Department personnel, materials or equipment to maintain to administer the program. The Department does not incur any cost to implement the current program.
Reduction of disparity: The Act created an initiative that works to eliminate racial and ethnic health disparities in Florida. It provides grants to local counties and organizations with the intent to increase community-based health promotion and disease prevention activities (FDOH, 2003). The Department has developed a program to deal with health disparity issues, and they are providing access health services based on community needs to underserved populations. With the current program each applicant has the option of addressing two out of six health priority target areas. This year CTG awarded three grants that address breast cancer (FDOH, 2003). There are few findings on how this program has reduced the cancer burden of African-American women statewide. Therefore, this option receives a low ranking because the option does not show how the program measures reductions in disparity.

Administrative Feasibility: Option one rates low on administrative feasibility. Statutorily, the Department must provide technical assistance and training to grant recipients and coordinate with existing community-based programs and other related programs to avoid duplication of effort and promote consistency, thus, not requiring the Department to hire additional staff. There are no findings or comprehensive administrative evaluations of the CTG grant program to determine if there needs to be an increase in personnel to administer the program.

In summary, Option one ranked high against economic and low against administrative feasibility and reduction of disparity. Maintaining the current program will ensure the State reaches the goals and objectives of the Healthy People 2010 initiative; however, it is not the most effective program to combat the apparent health disparity.
**Option Two: State comprehensive community-based breast cancer prevention and program**

This alternative proposes changes to the current structure of the “Closing the Gap” program. Currently, the DOH administers the grant through a competitive application process. Applicants may submit an application addressing one, but no more than two, of the health priority areas of those identified for funding (HIV, cardiovascular disease, diabetes, cancer, adult and childhood immunizations or maternal and infant mortality). A coordinated approach to reducing the impact on African America women with breast cancer includes services, education, and evaluation in all 67 counties. Services can be provided at the local facility or in mobile/portable units provided by the facility. This will increase physical access to screening by bringing the service to the community’s doorstep. Mobile unit staff consists of a physician, technician, health educator or nurse. The mobile/portable unit provides the service in a comfortable, non-medical setting (anonymous personal communication, June 3, 2003).

The education provided through this program will consist of materials created and donated by organization such as the CDC, American Cancer Society, or pharmaceutical companies. The educational material will help to increase knowledge and awareness among African-American women and health care professionals to assure the quality of services delivered, detection and appropriate follow-up for abnormal tests (National Women’s Health Network, 2003).

**Economic Feasibility:** This option suggests using a portion of the legislative appropriation and collaborations with the private and non-profit to fund it. The goal of elimination health disparities involves many aspects data collection and reporting and
delivery of services. In 2002, cancers cost this country over $170 billion overall, which includes more than $110 billion for lost productivity and over $60 billion for direct medical costs, and breast cancer treatment costs nearly $7 billion (CDC, 2003). The medical costs of treating early-stage breast cancer range between $14,000 and $25,000 per patient. Delaying treatment until later-stage cancer increases costs to $84,000 or more (CDC, 2003).

Breast cancer prevention reduces the cost of cancer and, most importantly, saves lives. Even small increases in screening rates will reduce cancer costs, illness, and deaths. Health economists agree that if an intervention can save one year of life for less than $50,000, then it is cost-effective. So in economic terms, prevention for breast cancer is cost-effective, with costs falling far below the $50,000 threshold (CDC, 2003). The cost for materials, services, personnel and equipment would be absorbed on the community level. This program would supplement the local health agencies, by providing funds to address breast cancer and health disparities. Therefore this option receives a high ranking for economic feasibility. This option could save the State millions of dollars annually that could go towards other programs.

**Reduction of disparity:** Community-based programs address particular areas and populations impacted by health disparities. They are successful because they know the population they serve and they understand their health beliefs and recognize strategies for approaching and engaging them in health services (Massachusetts Department of Public Health, 2001). The lack of local services and reimbursement options for services hinder professionals' abilities to provide needed cancer services. Another service barrier is local community organizations' limited expertise or work force to develop competitive
grant proposals, thereby hampering their ability to secure either public or private funding for cancer services.

Detection and treatment at an early stage can reduce mortality and costs. Mammography screening done every 1 to 2 years, followed by appropriate treatment for women, can decrease breast mortality by up to 30% (Rimer, 1994). The program will be evaluated by the number of hours donated to healthcare services, educational material, screening, and diagnosis. All the providers will be evaluated on their ability to effectively and efficiently provide services to clients of the program. The program data are used to ascertain or measure the effectiveness and timeliness of the services. The overall effectiveness relies on how many women are successfully detected early and treated. Therefore this option receives a high ranking for reduction of disparity because community-based prevention programs have a better chance of reaching the targeted population than non community-based programs.

Administrative Feasibility: The administrative feasibility of a prevention program ranks high, because statutorily the Department must provide technical assistance and training to grant recipients and coordinate with community-based programs to avoid duplication of effort (Florida Statute §381.7353, 2003). This option would provide a first-rate breast cancer prevention program in all counties with State support and technical assistance. The Department’s Office of Equal Opportunity and Minority Health is staffed to administer and monitor the dollars to the providers for all counties. An interview with a healthcare provider indicated that if such a statewide program were instituted, it would be administered similar to the other programs on the county level (anonymous personal communication, June 5, 2003). This option would not require an increase in staff
because the programs would be administered through the community-based organization.

In summary, Option two ranked highest against economic and administrative feasibility and reduction of disparity. This option could save money for the state by reducing the number of incidences of breast cancer among African-American women and save lives through prevention. This type of program would provide access to care and information to targeted population every county of the State.

**Option Three: An integrated low literacy breast cancer education program.**

Health literacy is defined in the as "the capacity of an individual to obtain, interpret, and understand basic health information and services and the competence to use such information and services in ways which are health-enhancing" (Harvard School of Public Health, 2003). Often people with the greatest health burdens have the least access to information, communication technologies, health care, and supporting social services. Even the most carefully designed programs will have limited impact if underserved communities lack access to crucial health professionals, services, and communication channels project. Patients' literacy directly influences access to crucial information about their rights and their health care, whether it involves following instructions for care, taking medicine, comprehending disease-related information, or learning about disease prevention and health promotion. The Healthy People 2010 Objectives also recognized the importance of this topic by including an objective to "improve the health literacy of persons with inadequate or marginal literacy skills" (HHS, 2000). Public health campaigns are designed to influence a population to maintain or improve its health.
This option will create educational materials to include picture books, audiotapes, computer-based programs, videotapes and media campaigns to improve awareness and comprehension of information for the targeted population. The program would use multiple materials and distribution channels to increase the relevance of the message to the target populations. The materials would be distributed to community-based, hospitals, clinics, and other healthcare provider organizations. The program would use public and private partnerships to leverage additional resources.

**Economic Feasibility:** This option suggests using a portion of the legislative appropriation to fund this program. For fiscal year 2003-2004, the Florida Department of Health (DOH) expects to provide approximately $4,000,000 - $5,000,000 to fund grants that address health disparities. Low literacy levels contribute to higher utilization of urgent medical services. A study found that healthcare expenditures due to low health literacy were about $73 billion dollars in 1998 (Harvard School of Public Health, 2003). Creating educational materials in a way that could be understood and acted upon could offset this spending. The Avon Breast Care Fund awarded more than $6 million in grants to 135 organizations in all 50 states and the District of Columbia (CDC, 2003). Through the fund, financial support is made available to community-based programs providing education and outreach to medically underserved women, including low-income, older, and minority women.

A collaborative effort with community-based organizations would be economically beneficial for the Department because the cost for production of material, personnel, services, and equipment would be absorbed by private and nonprofit organizations. Although financial information is scarce, it is evident that this option would be
economical because of the Department would not incur cost outside the appropriated budget. Therefore this option receives a moderate ranking for economic feasibility. This option could potentially bring additional financial resources to Department and save the State from spending millions of dollars annually on healthcare.

**Reduction of disparity:** The overall effectiveness is determined by the impacts of the education materials on targeted population. Programs should foster positive attitudes and beliefs toward prevention, impart appropriate risk reduction skills, reduce psychosocial and physical barriers, and emphasize the benefits of long-term adherence to prevention strategies. People are drawn to easily access, understandable information.

However, a significant segment of society faces literacy challenges and bear a disproportionate burden of health care costs and suffering (Baker, 1996). The overall reduction of disparity rates moderate because the materials would not be easily accessed or understood by the individuals with extremely low or limited literacy levels, only slightly contributing to the health disparity reduction. Research indicates that even after targeted health communication interventions, low-education and low-income groups remain less knowledgeable and less likely to change behavior than higher education and income groups, which creates a gap and leaving them chronically uninformed (Jepson, 1991).

**Administrative Feasibility:** The administration of an integrated low literacy breast cancer education program rates high on feasibility because it is low maintenance. There are numerous agencies and entities such as the CDC or the American Cancer Society can partner with to create, produce, and maintain educational materials and training for
healthcare providers. The health care provider indicated that collaboration between the federal, state, local governments and private industry will create less of an economic burden on the Department personnel to maintain such a program long term, because without partners the State would absorb the cost of additional staff and material costs (anonymous personal communication, June 3, 2003).

In summary, Option three ranked high on economic and administrative feasibility and moderate against reduction of disparity. The option can provide the targeted population with easy to understand material concerning breast cancer health. The program would help increase the understanding, knowledge and access to prevention and treatment of breast cancer among African-American women. This option could save lives and healthcare dollars for the State. One potential obstacle in creating the materials is determining how to address specific cultural health beliefs to change health behaviors.

V. CONCLUSION

This analysis presented three alternative options of improvement to reduce the incidences of breast cancer among African America women in Florida: comprehensive community based breast cancer prevention and intervention program, low literacy education program and maintain the current program. The options were ranked on scale of High, Moderate or Low based on the evaluation of how each met the three established criteria. The three criteria were (1) economic feasibility; (2) reduction of
health disparity; and (3) administrative feasibility. The following table summarizes the analysis.

Table 1 – Summary of Alternatives and Evaluations Criteria

<table>
<thead>
<tr>
<th>Alternatives</th>
<th>Criteria</th>
<th>Economic feasibility</th>
<th>Reduction of disparity</th>
<th>Administrative feasibility</th>
<th>Average</th>
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<td>Maintain the current program</td>
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<td>3</td>
<td>3</td>
<td>3</td>
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<tr>
<td>Option 3:</td>
<td>Comprehensive low literacy education program</td>
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<td>2</td>
<td>2</td>
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</tbody>
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Scale: High= 3, Moderate = 2, Low = 1

Option one ranked high on one of the three criteria. It ranked high on economic feasibility. As in options one and two, the funds are legislatively appropriated. This option ranked low on reduction of health disparity because there are no reports on how the current program’s effectiveness and ability to reduce the incidences and mortality rate of breast cancer among African-American women. It ranked low on administrative feasibility because the State meets the statutory requirements by providing technical assistance and training with the existing community based grant recipients.

Option two ranked high on all three criteria. It scored high on economic feasibility because the funds are legislatively appropriated to DOH. This gives the department legal authority to make expenditures for a specific purpose and amount for programs. It ranked high on reduction of disparity, because all 67 counties will have the access to
the prevention and intervention program and increase access for the targeted population. It ranked high on administrative feasibility because the program will function on a community based structure with State support and technical assistance. This option will ensure that every county in the State had the ability and access to reduce the number of incidences and mortality rate of breast cancer among African-American women.

Option three ranked high on economic, and moderate on reduction of disparity and administrative feasibility. The option ranked high on economic feasibility because, again the funds are legislatively appropriated. It ranked moderate on reduction of disparity because there is potential for the program materials not reaching the targeted community or population for various reasons. The option ranked moderate on administrative feasibility because the materials and training can be created and maintained by a collaborative effort of public and private stakeholders. This option allows the State to share the burden of cost and maintenance with the stakeholders.

Assessment of the these evaluative criteria indicated that option one, a State comprehensive community based breast cancer prevention program (Option 2), would be the most viable option for the Florida Department of Health to consider as a program to reduce and eliminate health disparities among African-American women. A comprehensive prevention program can be modeled as long-term approach dealing with disparate populations as it relates to health. By implementing this option, DOH would meet and exceed the goals and objectives of Healthy People 2010, HHS’ nationwide health promotion and disease prevention agenda.
References


About the Author

Josette Sykes (B.S., Public Management, Florida A & M University; MPA, Florida State University) is currently a contract manager for the Governor's Office of Urban Opportunity. Her areas of interest are health policy and administration and in the future she plans to obtain a Juris Doctorate.