



COMMUNITY PROFILE REPORT

Susan G. Komen for the Cure®
Vermont-New Hampshire Affiliate

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2009

Acknowledgements

We would like to extend a profound thank you to the organizations and community members who assisted with this effort.

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Executive Summary

Introduction

Now the world's leading non-profit dedicated to breast cancer research and activism, Susan G. Komen for the Cure[®] was founded in 1982 to fulfill the dying wish of a 36-year old woman. As Susan G. Komen lay dying, her sister Nancy Brinker promised her that something would be done to prevent other women from suffering the same fate. Since that time, the Susan G. Komen for the Cure[®] organization has raised over \$1.3 billion dollars and has developed a global network of survivors, activists, and supporters who tirelessly work to raise money and awareness, to push for increased research and policy, and to build communities to combat the disease. The Susan G. Komen for the Cure[®] organization recognizes that using one approach is not the most effective way to combat such a pervasive problem, thus it works hard to fund local networks and community efforts specific to an area and to fund innovative projects and research in the areas of breast cancer clinical research, education, screening, and treatment.

The Susan G. Komen for the Cure[®] organization relies on over 100,000 volunteers working in a network of 125 U.S. and international affiliates. The Vermont-New Hampshire affiliate is based out of Manchester, Vermont and operates in both states to raise awareness and gather data about the unique aspects of the region in order to continue to fund community-based breast health education and breast cancer screening and treatment programs.

The Community Profile Report is a biennial effort designed to provide affiliates with local data to establish priorities, focus energies, and understand possible gaps in breast cancer detection or treatment in that area. This process creates a current, local evidence base of breast cancer incidence and mortality, distribution of programs and services, and areas that need increased attention to improve the quality of detection and care in the entire affiliate region. This report serves as a community profile of the service area that can be used to focus the passion and energy of the Susan G. Komen for the Cure[®] volunteer network to ensure that their hard work is being efficiently utilized.

Overview Demographic and Breast Cancer Statistics Key Findings

Methodology

State level demographics were obtained from the Vermont Department of Health and the New Hampshire Department of Health and Human Services. In order to optimize the reliability of the data available, analysis was conducted on the county level. Additional information on early detection rates was obtained from the New Hampshire Mammography Network and the Vermont Mammography Registry.

Key Findings

New Hampshire is a rural state with a population of approximately 1.3 million residents. New Hampshire has a breast cancer incidence rate of 130.9/100,000 and a breast cancer mortality rate of 23.2/100,000 people, according to the National Cancer Institute (NCI). Vermont is approximately the same geographic size as New Hampshire, but has about half the population (~600,000). Vermont has a breast cancer incidence rate of 130.7/100,000, and a breast cancer mortality rate of 24.3/100,000 people according to the NCI. According to recent BRFSS data, approximately 77% of women in Vermont and 79% of women in New Hampshire over the age of 40 have had a mammography in the last two years.

New Hampshire

Hillsborough County

Hillsborough County has the largest population in New Hampshire, with a total population of approximately 401,000 (50% female), and it is the most diverse county in the state (94% Caucasian, 1.7% African-American, and 4.1% Hispanic (of any race)). While the incidence of breast cancer in the county (128/100,000) is slightly below the state level (NH 130.9/100,000), the mortality rate (25.5/100,000) is slightly above the state level (NH 23.2/100,000). Hillsborough has the largest immigrant population and is likely to have a large number of undocumented and uninsured women living in the area. According to the Department of Health and Human Services, 6.3% of individuals in the county live below the poverty line (includes only documented individuals), and 8.2% of the population is uninsured.

Carroll County

Carroll County, with a population of approximately 47,000 (51% female), has the lowest incidence rate and highest mortality rate in the state. An incidence of 117.5/100,000 people and a mortality rate of 36.9/100,000 indicate that fewer cancers are being detected but more women are dying from their cancers than in other places in the state. 7.3% of individuals are living below the poverty line and 8.3% of the population is uninsured. In addition, there is

limited diversity in the county, with 98.3% Caucasian, 0.3% African-American, and 0.8% Hispanic.

Grafton County

Grafton County, with a total population of approximately 85,000 (51% female), has 7.2% of residents living below the poverty line and 9.3% are uninsured. Grafton County is 95.9% Caucasian, 0.7% African-American, and 1.3% Hispanic. Grafton County has both a higher incidence rate (131.5/100,000) and mortality rate (25.7/100,000) than the state averages.

Vermont

Chittenden County

Chittenden County has a total population of approximately 150,000 people (51% female), and is home to Burlington, the largest city in the state. Chittenden County is the most ethnically diverse county in the state, with 95.1% Caucasian, 1.0% African-American, and 1.2% Hispanic. In the county, 7.6% of individuals are living below the poverty line and 6.8% are uninsured. Chittenden County has an elevated incidence rate of 138.3/100,000 (VT 130.7/100,00) and an elevated mortality rate of 25.9/100,000 (VT 24.3/100,000) compared to the state.

Caledonia County

Caledonia County has a total population of approximately 30,000 (51% female), with 11.3% of individuals living below the poverty line and 11.0% uninsured. It is a relatively homogeneous county, with 97.8% Caucasian, 0.4% African-American, and 0.8% Hispanic. While the breast cancer incidence in the county (127.3/100,000) is below the state level, the mortality rate (30.2/100,000) is elevated.

Windham County

Windham County has a total population of approximately 44,000 people (51% female), and is home to Brattleboro, the second most diverse city in the state. The county is 97.0% Caucasian, 0.7% African-American, and 1.2% Hispanic. In the county, 9.7% of individuals live below the poverty line and 9.2% are uninsured. Windham County has a breast cancer incidence of 126.7/100,000 people, which is below the state average, but a breast cancer mortality rate of 25.2/100,000, which is above the state average

Overview of Programs and Services Key Findings

Methodology

The Vermont and New Hampshire programs and services assessment included the collection and mapping of key organizations and programs. Information on the screening centers throughout the states of Vermont and New Hampshire was obtained from the Vermont Mammography Registry, the New Hampshire Mammography Network, and the Food and Drug Administration's (FDA) list of certified mammography sites in the region. In addition, information was collected on the Breast and Cervical Cancer Early Detection Program (BCCEDP) for each state. In New Hampshire, the program is called 'Let No Woman Be Overlooked', and in Vermont, 'Ladies First'.

Spatial analysis of the screening centers was completed using the web-based program Google Earth. Analysis of statistics related to programs and services included mammography rates, access to screening centers, uninsured rates, and community socioeconomic status on the county level. Socioeconomic determinants were examined in the programs and services section as these factors typically impede access to or use of screening centers.

Key Findings

Analysis of the programs and services in Vermont and New Hampshire revealed an adequate number of facilities offering breast cancer services, but an uneven distribution that may be resulting in underutilization. In rural areas, this may be an issue of geographic distance and lack of transportation, whereas in urban areas, affordability and accessibility may prevent more utilization.

Our affiliate currently has grant partnerships with twenty different organizations, eighteen of which are in Vermont, but only one in New Hampshire. In the future, we will aim to expand the number of partnerships with New Hampshire organizations in order to better reach vulnerable women in New Hampshire target areas. In addition, we hope to establish relationships with local and state level government officials to help raise awareness of the breast cancer burden in these states.

Both states have excellent Breast and Cervical Cancer Early Detection Programs (BCCEDP) that provide free or low-cost screening options for low-income women. Each program has collaborated with physicians, hospitals and health clinics in all areas of the state in order to reach as many women as possible. Further, Exeter Hospital has developed a model program in their Mobile Mammography Van. If it continues to be successful, it is important to

emulate this program in other locations, as they are able to expand services for many women in New Hampshire.

Overview of Exploratory Data Key Findings

Methodology

Exploratory data on local area service providers in each selected target area was collected through interviews conducted by affiliate board members. In each case, interviewees were asked to fill out an online or paper provider survey, as designed by the Susan G. Komen for the Cure[®]. Survey results were then pooled and analyzed for common trends and responses. We were unable to complete patient interviews, but were able to use the provider's perspective based on patient experiences in the area.

Key Findings

Exploratory research highlighted the lack of awareness among providers of the potential role of the Susan G. Komen for the Cure[®] in the efforts to reduce the breast cancer burden in our affiliate area. In many cases, providers, hospitals and health clinics were unaware of the funding and collaboration opportunities with the affiliate. Further, many providers felt that there was minimal communication between various organizations making for a system that lacks continuity. These interviews highlighted the need to better promote communication and collaboration among the entire breast health community.

Exploratory data findings also supported the idea that the current systems do not adequately reach low-income and minority women, particularly those in urban areas. While many providers acknowledged the presence and effectiveness of the BCCEDP programs, they felt that many women were still not looking for or accessing breast health services.

Narrative of Affiliate Priorities

Efforts were made to involve all necessary key players in the development and selection process of key priorities for the Vermont-New Hampshire Affiliate area. The following represents the top ranking priorities for the region. The community profile team then formulated goals and objectives to help address these priorities.

Priority 1: To increase the number of providers and health care centers that apply for Susan G. Komen for the Cure[®] funding and utilize Susan G. Komen for the Cure[®] resources to improve early detection practices.

Priority 2: To increase access to early detection and treatment programs among minority women in urban areas.

Priority 3: To increase awareness of the number of screening facilities in several target regions and to improve access.

Affiliate Action Plan

Priority 1

Increase the number of providers and health care centers that apply for Susan G. Komen for the Cure[®] funding and utilize Susan G. Komen for the Cure[®] resources to improve early detection practices.

Objective 1: By 2011 or earlier, hold at least one grant-writing workshops in each target area of VT and NH aimed at primary care providers and mammography facilities.

Objective 2: By 2011 or earlier, develop online network of physicians, mammography centers and resource centers to help communication and foster collaboration.

Objective 3: By 2010 or earlier, create a monthly newsletter or press release highlighting funding opportunities from Susan G. Komen for the Cure[®] and 'best practices' at different facilities.

Objective 4: By 2010 or earlier, increase board membership of Vermont-New Hampshire affiliate (particularly with NH residents) in order to expand scope and area of influence.

Priority 2

Increase access to early detection and treatment programs among minority women in urban areas.

Objective 1: In FY 2010, establish relationships with community-based groups dedicated to addressing the needs of minority populations in VT and NH with continuity in mind.

Objective 2: In FY 2010, hold focus groups with undocumented and minority women at easily accessible local facilities to begin to explore ways to improve ease of access.

Priority 3

Increase awareness of the number of screening facilities in target areas and to improve access to these facilities.

Objective 1: In FY 2010, meet with executives from Exeter Hospital to learn more about mobile mammography unit and inquire about collaboration.

Objective 2: Promote mobile mammography units in other regions if collaboration is not possible, and provide fundraising opportunities to help lessen the financial burden.

Objective 3: In FY 2010, work with established mammography clinics to help improve awareness and accessibility through broader media campaigns in multiple languages, expanded hours, short-term child care services, etc.

Introduction

Susan G. Komen for the Cure[^] History

Now the world's leading non-profit dedicated to breast cancer research and activism, Susan G. Komen for the Cure[^] was founded in 1982 to fulfill the dying wish of a 36-year old woman. As Susan G. Komen lay dying, her sister Nancy Brinker promised her that something would be done to prevent other women from suffering the same fate. Since that time, the Susan G. Komen for the Cure[^] organization has raised over \$1.3 billion dollars and has developed a global network of survivors, activists, and supporters who tirelessly work to raise money and awareness, to push for increased research and policy, and to build communities to combat the disease. The Susan G. Komen for the Cure[^] organization recognizes that using one approach is not the most effective way to combat such a pervasive problem, thus it works hard to fund local networks and community efforts specific to an area and to fund innovative projects and research in the areas of breast cancer clinical research, education, screening, and treatment.

The Susan G. Komen for the Cure[^] organization relies on over 100,000 volunteers working in a network of 125 U.S. and international affiliates. The Vermont-New Hampshire affiliate headquarters is located in Manchester, Vermont and operates in both states to raise awareness and gather data about the unique aspects of the region in order to continue to fund community-based breast health education and breast cancer screening and treatment programs.

Organizational Structure

An eleven person Board of Directors governs the Vermont-New Hampshire affiliate. The Race Chair serves as an ex-officio member of the board, linking the governing body to its major fundraising event (Race for the Cure). The affiliate employs one part-time administrator who reports to the Board President and a Race Director who reports to the Race Chair.

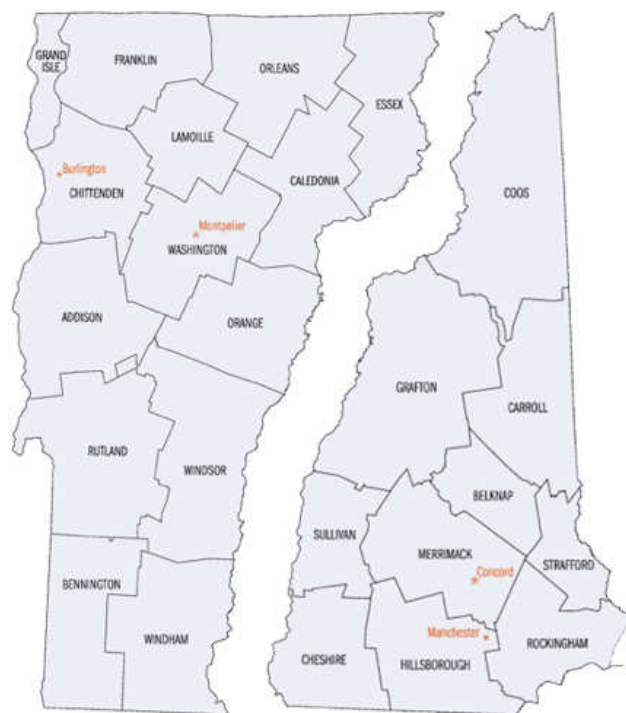
Description of Service Area

The northern New England states of Vermont and New Hampshire are veritable sister states, similar in size, shape, demographic statistics, and geographic features. New Hampshire has a population of approximately

1,300,000 people, with 7.7% of individuals living below the poverty line. The land area of 8,968 sq. mi. is divided into 10 counties, with the three largest cities being Manchester, Nashua, and Concord. New Hampshire's population is 95% white, 1.0% black, and 2.4% Hispanic or Latino (of any race)¹².

Vermont has a population of approximately 621,000 people, with 10.7% of individuals living below poverty. The total land area is approximately 9,250 square miles. Vermont is politically divided into 14 counties, with the three largest cities being Burlington, Rutland, and South Burlington. Vermont's population is 96.2% white, 0.7% black, and 1.3% Hispanic¹².

Figure 1: Maps of Vermont and New Hampshire.



Source: <http://www.fedstats.gov/> (Accessed 2009)

Purpose of Report

The community profile report is a biennial effort designed to provide affiliates with local data in order to establish priorities, focus energies, and understand possible gaps in breast cancer detection or treatment in that region. This process creates a current, localized evidence base of breast cancer incidence and mortality, distribution of programs and services, and areas that need increased attention. This report is designed to improve the quality of detection and care in the entire affiliate region. This report serves as a community profile of the service area that can be used to focus the passion

and energy of the Susan G. Komen for the Cure^l volunteer network, which ensures that their hard work is being efficiently utilized. A quality community profile ensures that the work of the volunteers is non-duplicative, and allows the affiliate to:

- Drive inclusion efforts in their community
- Establish focused granting priorities
- Establish focused education needs
- Strengthen sponsorship efforts- “Tell the Story”
- Drive public policy efforts
- Establish directions of marketing and outreach
- Align their strategic and operational plans

The community profile report includes regional breast cancer incidence and mortality statistics, spatial analysis of the regional programs and services, and qualitative exploratory data to gain an in-depth understanding of the gaps and needs of the service area. With the inclusion of statistical, spatial, and qualitative community data, the Vermont-New Hampshire community profile should provide a comprehensive report of the status of breast cancer education, screening, and treatment in this service area.

Demographic and Breast Cancer Statistics

Data Source and Methodology Overview

In order to conduct a complete analysis of the current data in Vermont and New Hampshire, multiple sources were used. The initial district level demographic data was collected from Healthcare Business of Thomson Reuters© 2007⁹, US Census (2009)¹², and the US Department of Health and Human Services (2009)¹. Additional data was collected from the National Cancer Institute's Surveillance, Epidemiology and End Results (SEER) program (2009)¹¹, the Vermont Department of Health (2009)^{13,16}, the Vermont Cancer Registry (2009)¹³, the New Hampshire Department of Health and Human Services (2009)⁵, and the New Hampshire Cancer Registry (2009)⁷. Sources for screening and treatment information is described below in the Programs and Services section.

Data analysis was based on the county level for both states. Analysis was based on the county level because data in more detail (for example, on the zip code level) was limited and unavailable for some areas due to the need to protect the confidentiality of patients in less populated regions. Also, zip code data provided by Healthcare Business of Thomson Reuters© 2007 was extrapolated based on population characteristics, and therefore was not as reliable as data collected in Vermont and New Hampshire.

Breast cancer incidence and mortality were the major metrics measured in this analysis. Mammography rates, phase at diagnosis, population size, diversity, access to screening centers, percent of the population that is uninsured, and the community socioeconomic status were also collected and used to contextualize the breast cancer metrics within each county. Mammography rates and information about screening centers will be described in detail in a following section of this report.

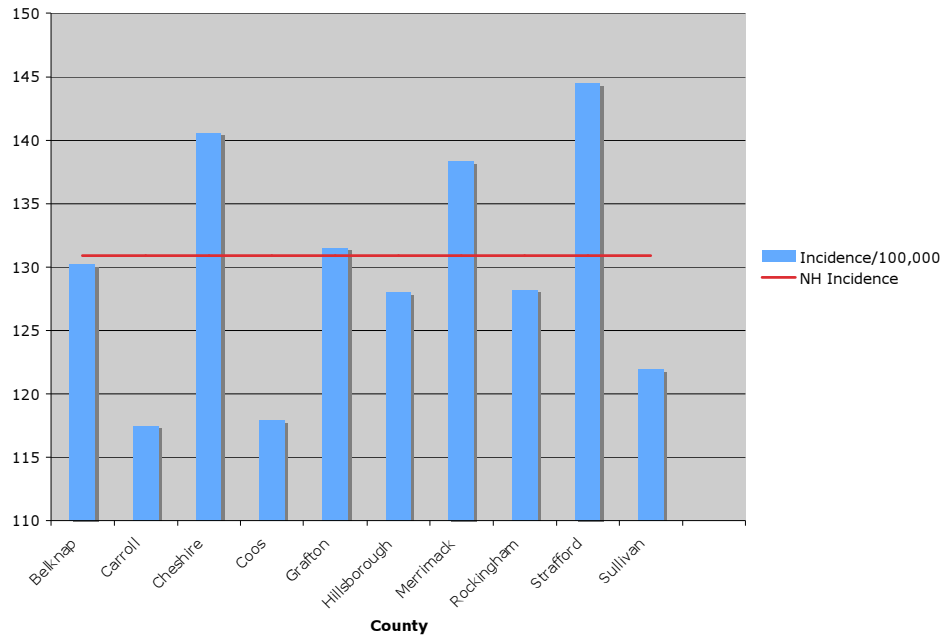
Overview of Key Demographic & Breast Cancer Statistics at State and County Level

The basic breast cancer statistics of the Vermont-New Hampshire affiliate region are important to investigate on both the state and county level for each state.

New Hampshire (NH) is a mostly rural state with a population of approximately 1.3 million people (51% female). NH has minimal diversity, with

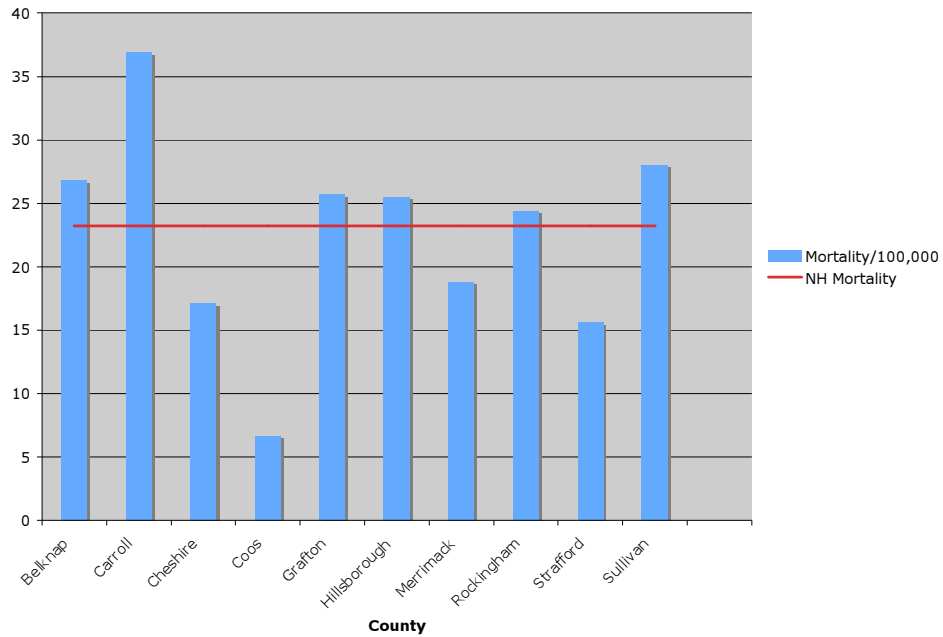
its population 95% Caucasian, 1.0% African-American, and 2.4% of people of Hispanic or Latino descent (of any race). It has a 4.8% unemployment rate, with 4.9% of families and 7.7% of individuals living below the poverty line, and a mean family income of \$75,588.¹² New Hampshire has a breast cancer incidence rate of 130.9/100,000 and a breast cancer mortality rate of 23.2/100,000 people, according to the National Cancer Institute (NCI)¹⁰. There are 46 FDA Certified Mammography Facilities in New Hampshire², and there are 9.3 breast cancers detected per 1,000 mammograms performed, according to the New Hampshire Mammography Network⁶. The breast cancer incidence and mortality rates for each county in New Hampshire are displayed below.

Figure 2. Breast cancer incidence in New Hampshire by county.



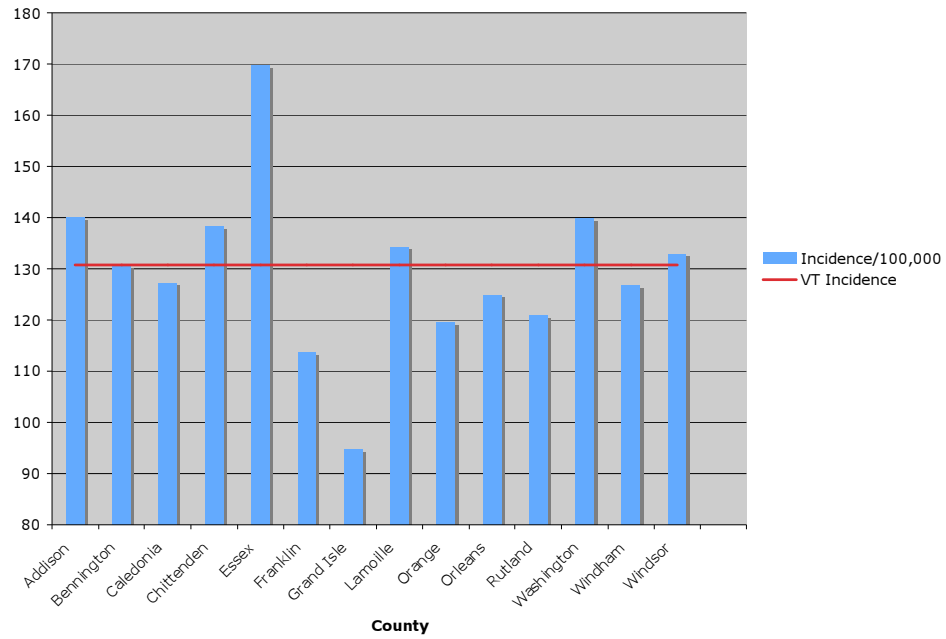
Source: New Hampshire Department of Health and Human Services Cancer Data. (2009)

Figure 3. Breast cancer mortality in New Hampshire by county.



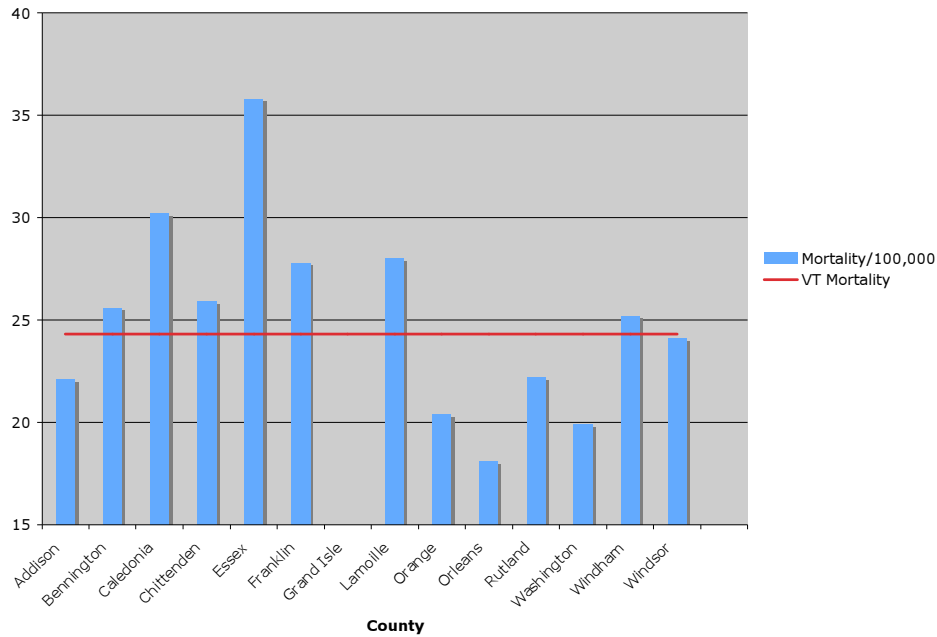
Source: New Hampshire Department of Health and Human Services Cancer Data. (2009) Vermont (VT), with a population of roughly 620,000 people (51% female), is also a rural state, with 96.2% of residents classified as Caucasian, 0.7% African-American, and 1.3% Hispanic or Latino (of any race). With a 3.6% unemployment rate, 6.9% of families and 10.7% of individuals live below the poverty line. VT has a mean family income of \$62,925.¹² Vermont has a breast cancer incidence rate of 130.7/100,000, and a breast cancer mortality rate of 24.3/100,000 people according to the NCI¹⁰. There are 17 FDA Certified Mammography Facilities in the state², and there are 9.4 breast cancers detected per 1,000 mammograms according Vermont Mammography Registry¹⁶. The breast cancer incidence and mortality rates for each county in Vermont are displayed in the figures below. These graphs were used, in conjunction with other data, to determine specific areas in the state that should be targeted with additional attention and energy.

Figure 4. Breast cancer incidence in Vermont by county.



Source: Vermont Department of Health: Vermont Cancer Registry. (2009)

Figure 5. Breast cancer mortality in Vermont by county.



Source: Vermont Department of Health: Vermont Cancer Registry. (2009)

Counties of Interest: What the Data Shows

For each state in the affiliate region, three target areas were identified based on a variety of statistical and socioeconomic factors. County level data for breast cancer incidence and mortality were used as a basis for this report. It was important to also determine at what stage the cases in both states were identified, and it was found that in both states the vast majority of cases are being diagnosed at the localized stage. Further, no particular county stood out for having a higher percentage of cases being diagnosed at a later stage.

The target areas identified in New Hampshire were Hillsborough County, Carroll County, and Grafton County.

Hillsborough County has the largest population in New Hampshire, with a total population of approximately 401,000 (50% female), and it is the most diverse county in the state (94% Caucasian, 1.7% African-American, and 4.1% Hispanic (of any race))¹. While the incidence of breast cancer in the county (128/100,000) is slightly below the state level (NH 130.9/100,000), the mortality rate (25.5/100,000) is slightly above the state level (NH 23.2/100,000)¹⁰. Hillsborough has the largest immigrant population and is likely to have

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Figure 6. Hillsborough County, NH

undocumented and uninsured women living in the area who may avoid screening services and only use acute medical services when their disease is in a later, symptomatic stage. According to the Department of Health and Human Services, 6.3% of individuals in the county live below the poverty line (includes only documented individuals), and 8.2% of the population is uninsured¹. As a larger population center in the state, there is greater availability of medical services in the area. While the NH Mammography Network reports that 39% of women over 40 have had a mammogram in the past two years, most of the mammography centers in the county do not provide information to the Network, so these figures may be an inaccurate representation of the screening rates in the area⁶. However, this data may suggest that there is a potential challenge with access to screening or lack of education regarding the importance of screening in this county among low-income and minority women. The statistical data, indicating a low incidence and elevated mortality, may further support an underutilization of screening services.

Carroll County, with a population of approximately 47,000 (51% female), has the lowest incidence rate and highest mortality rate in the state. An incidence of 117.5/100,000 people and a mortality rate of 36.9/100,000 indicate that fewer cancers are being detected but more women are dying from their cancers than in other places in the state¹⁰. This seems to suggest that screening is currently underutilized and by increasing screening, more of these cancers could be found before they become fatal. Carroll County has two certified mammography facilities for a female population of approximately 24,000 women and the NH Mammography Network reports that 70% of women over 40 have had a mammography in the past two years⁶. Access and affordability of these services may also influence the rate, as 7.3% of individuals are living

Figure 7. Carroll County, NH, has the lowest incidence rate and highest mortality rate in the state. An incidence of 117.5/100,000 people and a mortality rate of 36.9/100,000 indicate that fewer cancers are being detected but more women are dying from their cancers than in other places in the state¹⁰. This seems to suggest that screening is currently underutilized and by increasing screening, more of these cancers could be found before they become fatal. Carroll County has two certified mammography facilities for a female population of approximately 24,000 women and the NH Mammography Network reports that 70% of women over 40 have had a mammography in the past two years⁶. Access and affordability of these services may also influence the rate, as 7.3% of individuals are living below the poverty line and 8.3% of the population is uninsured. In addition, there is minimal diversity in the county, with 98.3% Caucasian, 0.3% African-American, and 0.8% Hispanic.¹

Grafton County, with a total population of approximately 85,000 (51% female), has 7.2% of residents living below the poverty line and 9.3% are uninsured. Grafton County is 95.9% Caucasian, 0.7% African-American, and 1.3% Hispanic.¹ Grafton County has both a higher incidence rate (131.5/100,000) and mortality rate (25.7/100,000) than the state averages¹⁰. These statistics seem to indicate that while more cancers are being detected in the

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Figure 8. Grafton County, NH

area, more women are also dying from the disease. According to the NH Mammography Network, 63% of women over 40 have had a mammogram in the past two years. Grafton County is the largest county geographically in the state, and while the county has five mammography facilities, these sites cover a large geographic area.⁶

The target areas in Vermont were Chittenden County, Caledonia County, and Windham County.

Chittenden County has a total population of approximately 150,000 people (51% female), and is home to Burlington, the largest city in the state. Chittenden County is the most ethnically diverse county in the state, with 95.1% Caucasian, 1.0% African-American, and 1.2% Hispanic. In the county, 7.6% of individuals are living below the poverty line and 6.8% are uninsured.¹ Chittenden County has an elevated incidence rate of 138.3/100,000 (VT 130.7/100,000) and an elevated mortality rate of 25.9/100,000 (VT 24.3/100,000) compared to the state¹⁰. While the Vermont Department of Health reports that 77% of women over 40 have had a mammogram in the past two years¹³, it is possible that many women in the immigrant community do not use screening services and are more likely to not be documented in the system.

Caledonia County has a total population of approximately 30,000 (51% female), with 11.3% of individuals living below the poverty line and 11.0% uninsured. It is a relatively homogeneous county, with 97.8% Caucasian, 0.4% African-American, and 0.8% Hispanic.¹ While the breast cancer incidence in the county (127.3/100,000) is below the state level, the mortality rate (30.2/100,000) is elevated¹⁰. The Vermont Department of Health reports that 73% of women 40 years and older have had a mammogram in the past 2 years, which is below the state average of 77%¹³. Located in the northern part of the state, Caledonia is a rural county located next to the most impoverished county in the state (Essex County), and also struggles with limited resources and a large geographic area.

Figure 9. Chittenden County, VT

Figure 10. Caledonia County, VT

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Windham County, has a total population of approximately 44,000 people (51% female), and is home to Brattleboro, the second most diverse city in the state. The county is 97.0% Caucasian, 0.7% African-American, and 1.2% Hispanic. In the county, 9.7% of individuals live below the poverty line and 9.2% are uninsured.¹ Windham County has a breast cancer incidence of 126.7/100,000 people, which is below the state average, but a breast cancer mortality rate of 25.2/100,000¹⁰, which is above the state average, suggesting there may be underutilization of screening services. This is further supported by the Vermont Department of Health, which reports that Windham County has the lowest rate of screening in the state, with 68% of women over 40 reporting a mammography in the past two years¹³.

Demographic and Breast Cancer Findings

Three target counties were chosen for New Hampshire and three areas were chosen for Vermont. Many of these regions had below average incidence rates but above average mortality rates, indicating that fewer cases are being found but more women are still dying from their disease. These statistics suggest that there may be underutilization of screening services in each of these target areas. Many of the counties identified were also areas of greater ethnic diversity, often with immigrant populations, or counties with limited resources and a large impoverished population.

Programs and Services



Data Source and Methodology Overview

Information on the screening centers throughout the states of Vermont and New Hampshire was obtained from the Vermont Mammography Registry (2009)¹⁶, the New Hampshire Mammography Network (2009)⁶, and the Food and Drug Administration's (FDA) list of certified mammography sites in the region (2009)². In addition, each state supports a Breast and Cervical Cancer Early Detection Program (BCCEDP)³ for women of lower socioeconomic status. In New Hampshire, the program is called "Let No Woman Be Overlooked,"⁴ and in Vermont, "Ladies First"¹⁵.

Mammography rates were examined using the metric of percentage of women over 40 who have had a mammography within the past two years, which is the frequency recommended by the US Preventive Services Task Force. It is important to note that the collection methods for mammography data were different in each state. In New Hampshire, the NH Mammography Network collected data, based on the actual number of screening mammography exams, from participating mammography facilities in each county. In Vermont, rates were determined using self-reported data from the Vermont BRFSS (Behavioral Risk Factor Surveillance System)¹⁴, and it should be noted that previous research (Poplack *et al.*, 2000⁸) has found that self-reported mammography data has been shown to be an overestimate of the actual rates. Spatial analysis of the screening centers was completed using the

web-based program Google Earth. Statistics related to programs and services included mammography rates, access to screening centers, uninsured rates, and community socioeconomic status on the county level. Socioeconomic determinants were considered in the programs and services section as these factors typically impede access to or use of screening centers.

Programs and Services Overview

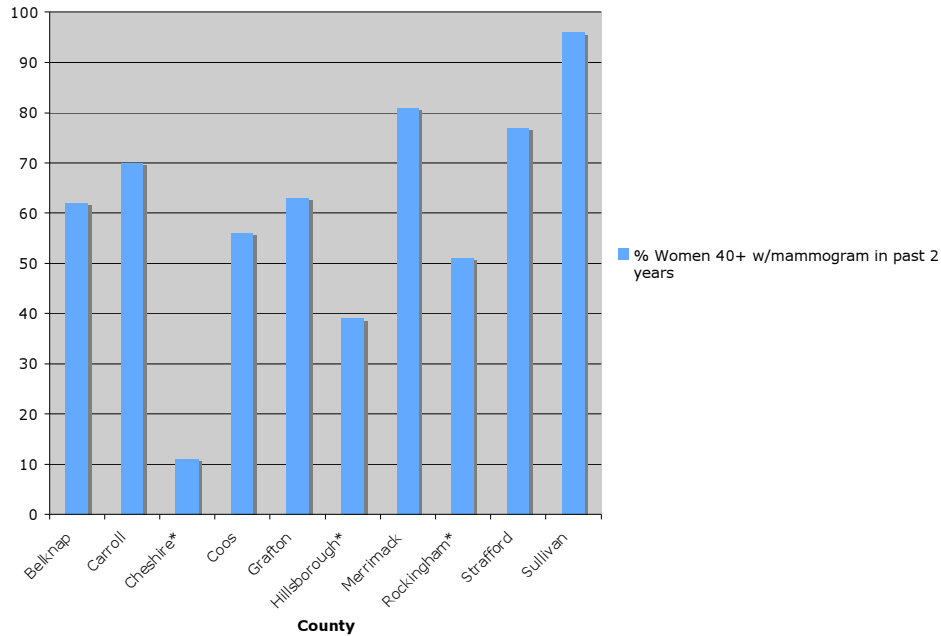
New Hampshire has 46 FDA Certified Mammography Facilities and of these, 32 participate in 'Let No Woman Be Overlooked,' the state-funded screening program that provides screening for women of lower socioeconomic status. Many of the facilities are located in the southern regions of New Hampshire (**Figure 12**), which are the more densely populated areas of the state. There is great variety in the mammography rates between counties, as displayed in the **Figure 13** below. The following section analyzes the programs and services in each of the target regions in Vermont and New Hampshire.

Figure 12. Map of 46 FDA Certified Mammography Facilities in New Hampshire.

QuickTime™ and a
decompressor
are needed to see this picture.

Source: Mammography Quality Standards Act and Program (2009). FDA U.S. Food and Drug Administration, U.S. Department of Health and Human Services. Map created with Google Earth©.

Figure 13. Percent of women over 40 who have had a mammography in the past 2 years in New Hampshire, by county.



Source: New Hampshire Mammography Network. (2009)

In Hillsborough County, the New Hampshire Mammography Network reported that 39% of women 40 or over had a screening mammography in the past two years, yet these numbers may be underestimated due to the fact that only one of the ten certified facilities in the county participates in the network. Hillsborough County has a lower incidence rate and higher mortality rate than the state averages, and while many factors may be affecting these numbers, it is possible that the mammography facilities in this densely populated county are overwhelmed.

Figure 14. Hillsborough County, with 10 FDA Certified Mammography Facilities.

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decompressor
are needed to see this picture.

Source: Mammography Quality Standards Act and Program (2009). FDA U.S. Food and Drug Administration, U.S. Department of Health and Human Services. Map created with Google Earth©.

In Carroll County, 70% of women over 40 have had a screening mammography in the last two years, yet this county has the lowest incidence rate and the highest mortality rate in New Hampshire. The county also has the highest uninsured rate in the state. There are two mammography facilities in the county (**Figure 15**) for a female population of approximately 24,000 women.

Figure 15. Carroll County, with 2 FDA Certified Mammography Facilities.

QuickTime™ and a
decompressor
are needed to see this picture.

Source: Mammography Quality Standards Act and Program (2009). FDA U.S. Food and Drug Administration, U.S. Department of Health and Human Services. Map created with Google Earth©.

Grafton County, the largest county by geographic area, has five facilities in the region and 63% of women over 40 reported to have had a screening mammography in the past two years. This county has a higher incidence rate and higher mortality rate than the state average.

Figure 16. Grafton County, with 5 FDA Certified Mammography Facilities.

QuickTime™ and a
decompressor
are needed to see this picture.

Source: Mammography Quality Standards Act and Program (2009). FDA U.S. Food and Drug Administration, U.S. Department of Health and Human Services. Map created with Google Earth©.

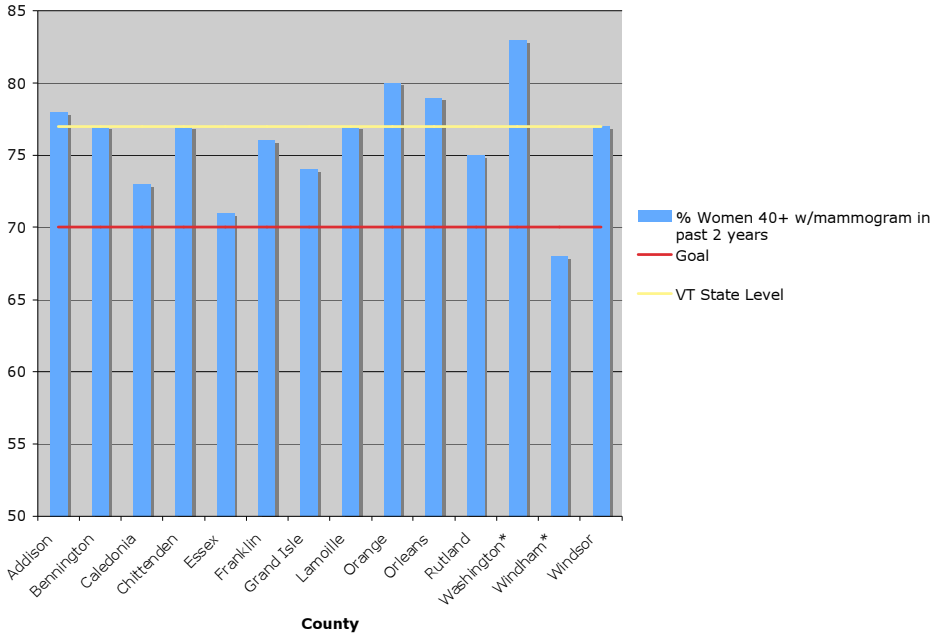
The state of Vermont, smaller by New Hampshire in population, has 17 FDA Certified Mammography Facilities (**Figure 17**). Many of the facilities are evenly distributed within the geographic space, but with more clustered around Burlington, the largest city in Vermont. Many of the counties have a screening mammography rate above the state goal of 70% (**Figure 18**), but it will be important to look at this data in the context of many other factors on the county level.

Figure 17. Map of 17 FDA Certified Mammography Facilities in Vermont.

QuickTime™ and a
decompressor
are needed to see this picture.

Source: Mammography Quality Standards Act and Program (2009). FDA U.S. Food and Drug Administration, U.S. Department of Health and Human Services. Map created with Google Earth©.

Figure 18. Percent of women over 40 who have had a mammography in the past 2 years in Vermont, by county.



Source: Vermont Department of Health: Behavioral Risk Factor Surveillance System (BRFSS) Data. (2008). Agency of Human Services.

In Chittenden County, there are four FDA Certified Mammography Facilities, and a reported 77% of the women in the county over 40 have had a screening mammography in the past two years. Both incidence and mortality rates in the county are higher than the state average. It is difficult to determine how representative these numbers are, because of the large immigrant population in the county who may go largely undocumented within the system.

Figure 19. Chittenden County, with 4 FDA Certified Mammography Facilities.

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decompressor
are needed to see this picture.

Source: Mammography Quality Standards Act and Program (2009). FDA U.S. Food and Drug Administration, U.S. Department of Health and Human Services. Map created with Google Earth©.

Caledonia County, with one mammography facility and 73% of women over 40 with a screening mammography in the past two years, has a high proportion of women who are of a low socioeconomic status and are uninsured. This county has one facility for approximately 16,000 women. The incidence rate in this county is lower than the state average and the mortality rate is the second highest in the state, a relationship that could indicate that many cases are never diagnosed or diagnosed very late.

Figure 20. Caledonia County, with 1 FDA Certified Mammography Facility.

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decompressor
are needed to see this picture.

Source: Mammography Quality Standards Act and Program (2009). FDA U.S. Food and Drug Administration, U.S. Department of Health and Human Services. Map created with Google Earth©.

Windham County, in the south of Vermont on the border of Massachusetts, has the lowest screening mammography rate in the state at 68%, and has an uninsured rate above the state average. The breast cancer incidence in the county is lower than the state average, and the mortality rate is higher than the state average, a combination that could once again indicate low screening utilization. Windham County has one FDA Certified Mammography Facility for a population of approximately 22,000 women.

Figure 21. Windham County, with 1 FDA Certified Mammography Facility.

QuickTime™ and a
decompressor
are needed to see this picture.

Source: Mammography Quality Standards Act and Program (2009). FDA U.S. Food and Drug Administration, U.S. Department of Health and Human Services. Map created with Google Earth©.

The target areas in both states include high-population urban centers and rural counties with few facilities for larger geographic regions. Many of the target regions also were regions where the breast cancer incidence was lower than the state average and where the breast cancer mortality was higher than the state average, a combination of statistics that could indicate underutilization of screening services. Many of the programs and services across both states serve populations of lower socioeconomic status, where residents often have difficulty accessing and affording the available services. Also, in larger rural regions it can be difficult for many women to prioritize preventive care visits and screening when access is difficult because of distance or lack of transportation options.

Partnerships and Grant Opportunities

In the past year, the affiliate has distributed \$422,000 in grant funding to non-duplicative, community-based breast health education and breast cancer screening and treatment projects for the medically underserved in Vermont and New Hampshire. These funds have been divided between 20 grantees in the two states. Eighteen of these programs are in Vermont, including Brattleboro Memorial Hospital, The Cancer Patient Support Program at Fletcher Allen Health Care, The Vermont State Breast Cancer Emergency Fund, Casting for Recovery, The Breast Care Program at Central Vermont

Medical Center, Renewing the Spirit at Forest Moon, The Breast Cancer Outreach Project at North Country Hospital, The Breast Cancer Education Program at Park Street Healthshare, The Breast Cancer Screening Project at Porter Hospital, Rutland Regional Medical Center, Southwestern Vermont Medical Center, The Integrative Therapies Department at Southwestern Vermont Regional Cancer Center, The Stowe Area Foundation Endowment, The Spicer Center at Northshire Women's Cancer Support Group, The Vermont Cancer Center, The Vermont Department of Health, and Rutland Regional Medical Center. In New Hampshire, Dartmouth-Hitchcock Medical Center is the only grantee. In addition, one grant was given to 'To Life!' in New York.

The overwhelming majority of Susan G. Komen for the Cure^l grantees are located in Vermont, which points to a clear need to develop more relationships and collaborations in New Hampshire. In addition, there is no established tracking system with current grantees to follow how grants are being used. This would be a useful system to implement in the future to help monitor progress and ensure that each dollar is being spent effectively.

Promising Practices and Evidence-Based Programs

One of the most promising projects in this affiliate area is the Mobile Mammography Van that is operated by Exeter Hospital in Exeter, NH. Outside of the more populated urban areas, women may have to travel far distances to reach the nearest screening mammography facility. In many cases, these are sparsely populated regions that would not benefit from a permanent facility, but women would still benefit from improved access to regular screening. With this in mind, Exeter Hospital has created a Mobile Mammography Van that travels to surrounding areas and decreases the distance women may need to travel for screening services. The increased convenience will ideally lead to more women seeking regular screening services. The unit currently serves the Exeter, NH, as well as the surrounding communities of Newmarket, Raymond and Hampton. The images recorded in the bus are downloaded directly to the Exeter Hospital network and then read by a radiologist the next day.

Currently, Exeter Hospital is the only organization in the affiliate area that operates a mobile mammography clinic. The unit is still relatively new, so it is difficult to draw conclusions about its success, but early evaluations appear to show that it has a positive effect in improving access for many women. If this continues to be true, funding similar units in other target areas would be a valuable investment.

Public Policy Perspectives

Government Leadership

The Vermont-New Hampshire affiliate faces an additional challenge of encompassing two states, each with its own leadership and government-sponsored programs. As a result, the affiliate must modify programs to work within the systems of each state, and independently develop and foster relationships with the leadership in each state.

The governor of Vermont is Jim Douglas (R-VT) and the two senators are Patrick Leahy (D-VT) and Bernie Sanders (I-VT). Senator Leahy is not on any health related committees or subcommittees, but has long been an advocate for health care reform and increased access. Senator Sanders sits on the Committee on Health, Education, Labor and Pensions.

The governor of New Hampshire is John Lynch (D-NH) and the senators are Jeanne Shaheen (D-NH) and Judd Gregg (R-NH). Senator Shaheen does not sit on any health related committees or subcommittees, but is a strong supporter of women's rights. Senator Gregg is on the subcommittee on Labor, Health and Human Services, Education, and Related Agencies.

Presently, the Susan G. Komen for the Cure¹ has no active relationship with any of these representatives. Developing bonds with both governments should be an important priority in the coming years. By raising the awareness of the local impact of breast cancer, it is more likely that publicly elected officials would champion the cause and promote policy reform to make early detection resources and advanced care more easily available.

Public Policy Efforts

Each state operates an independent Breast and Cervical Cancer Early Detection Program (BCCEDP). In Vermont, 'Ladies First' is a health-screening program that works to remove financial barriers that often prevent women from being screened for breast and cervical cancer and heart disease. Through federal funding, 'Ladies First' pays for annual mammograms, clinical breast exams, pelvic exams, cervical Pap tests, instruction in breast self-exam and cardiovascular disease risk factor screening. Further, the program is designed to allow women to access these services locally and from their own provider.

In New Hampshire, 'Let No Woman Be Overlooked' has the mission to "plan, promote and implement programs of education and screening to reduce the mortality rates, through early detection, of breast and cervical cancer among

New Hampshire women.” This is accomplished through screening, public education, coalition building, quality assurance, case management, professional education and surveillance. Women are eligible after meeting certain requirements and screening is offered at 32 facilities throughout the state.

In each state, these services have made significant progress in increasing screening access for low-income women. These programs present obvious choices for future collaborations and partnerships with the Susan G. Komen for the Cure[®]. The satellite hospitals and health clinics that collaborate with the BCCEDP programs have access to a unique, and particularly vulnerable, patient population. These organizations could be ideal locations to expand outreach efforts to reach a larger proportion of this vulnerable population.

Programs and Service Findings

Analysis of the programs and services in Vermont and New Hampshire revealed an adequate number of facilities offering breast cancer services, but an uneven geographic distribution that may result in underutilization. In rural areas, this may be an issue of geographic distance and lack of transportation, whereas in urban areas, affordability and accessibility may prevent more utilization.

The Vermont-New Hampshire affiliate currently has grant partnerships with twenty different organizations, eighteen of which are in Vermont, and only one in New Hampshire. In the future, the aim will be to expand the number of partnerships with New Hampshire organizations in order to better reach vulnerable women in New Hampshire target areas. In addition, there is a goal to establish relationships with local and state level government officials to help raise awareness of and interest in the breast cancer burden in these states.

Both states have excellent Breast and Cervical Cancer Early Detection Programs (BCCEDP) that provide free or low-cost screening options for low-income women. Each program has collaborated with physicians, hospitals and health clinics in all areas of the state in order to reach as many women as possible.

Exploratory Data



Data Sources and Methodology Overview

Exploratory data on local area service providers in each selected target area was collected through interviews conducted by affiliate board members. In each case, interviewees were asked to fill out an online or paper survey, which was designed by the Susan G. Komen for the Cure¹. Survey results were then pooled and analyzed for common trends and responses. Due to time constraints, patient interviews were not conducted, but the provider's perspectives based on patient experiences in the area were collected.

Exploratory Data Overview

Providers

Provider interviews were conducted in an effort to better understand the reasons behind an increased breast cancer burden in the target areas of Vermont and New Hampshire. A total of sixteen interviews were completed with hospitals, breast cancer centers, primary care clinics and public health agencies.

The results of the provider surveys reveal that while primary care providers do a good job of discussing breast health with relevant populations, there is too much fragmentation of the system that prevents more women from receiving care. There appears to be little communication between primary care providers and screening centers, making continuity of care more difficult to achieve. In addition, there is little continuity between the materials distributed to patients, resulting in “mixed messages,” as stated by one respondent. Many respondents addressed the need for increased collaboration in order to ensure that women do not fall through the cracks.

Another common theme among survey respondents was the lack of awareness of the role the Susan G. Komen for the Cure[®] could play in their organization. The Vermont-New Hampshire affiliate has extensive grant opportunities available for local providers and organizations, but many respondents were surprised to learn that they were eligible. While not all of these groups were interested in immediately pursuing grant opportunities, they were pleased to know that grants were available. In addition, the majority of providers surveyed had very limited knowledge of the Susan G. Komen for the Cure’s[®] overall goals, purposes and resources, which helps explain the limited collaboration between Susan G. Komen for the Cure[®] and many local groups.

Finally, an issue that was raised by many respondents was the discouraging pattern of fewer low-income and minority women seeking breast health care from their organizations. This issue was raised predominantly in urban areas in New Hampshire (Manchester and Nashua) with greater ethnic diversity. In each case, community health centers felt these women were not seeking breast health information, and when they did, the resource centers did not have the resources to communicate effectively with these populations. The result is the perception that these women are “falling through the cracks”. While the providers acknowledged that federal programs are in place to help these women, they do not appear to be reaching the low-income women who need them most. As one respondent said, they “are forced to be reactive instead of proactive”, because women come to them once screening is no longer an effective option. Another possibility is that these programs are successful in reaching these target women, but these efforts are not fully known by the sampled provider population.

Exploratory Data Findings

The exploratory data highlighted the lack of awareness among providers of the potential role of the Susan G. Komen for the Cure[®] in the efforts to reduce the breast cancer burden in our affiliate area. In many cases, providers,

hospitals and health clinics were unaware of the funding and collaboration opportunities with the affiliate. Furthermore, many providers felt that there was minimal communication between various organizations, which had led to a system that lacks continuity. These interviews highlighted the need to better promote communication and collaboration among the entire breast health community.

Exploratory data findings also demonstrated that there is a perception that the current systems do not adequately reach low-income and minority women, particularly those in urban areas. While many providers acknowledged the presence and effectiveness of the BCCEDP programs, they felt that many women were still not looking for or accessing breast health services that are available.

Conclusions

Putting the Data Together

Target areas were identified following an analysis of state and county level statistics. Specifically, counties were identified that had an above average breast cancer burden. Further data collection was then completed in order to gain a better understanding of the root causes behind elevated breast cancer statistics in the targeted areas. This primarily consisted of personal interviews with providers and other health care professionals at breast cancer screening centers. The goal was to better understand the factors that may be leading to increased breast cancer mortality in a given region. Understanding the current screening practices, as well as the recruitment methods needed to increase access for all women, was essential in order to learn how the Susan G. Komen for the Cure[®] could improve early detection rates.

These conversations and interviews highlighted a number of factors that may be leading to poor outcomes in our target regions. The statistical and qualitative findings are discussed in more detail in the following section.

Target Area Findings

Our preliminary data analysis highlighted three target areas in New Hampshire (Hillsborough, Grafton and Carroll counties) and three target areas in Vermont (Chittenden, Windham and Caledonia counties). Each of these counties was selected for specific reasons including large population size, diverse demographics, large low-income population, above average mortality rates, and evidence of underutilization of screening resources. In selecting these target counties, the attempt was to identify areas that would benefit the most from additional resources, either by targeting populations that had limited access or targeting large populations where the most women would benefit from each dollar spent.

In an analysis of the local programs and services in each of the target areas, it was found that while there appears to be an adequate number of early detection facilities, barriers to access might be preventing optimal utilization of the resources. In some of the more rural counties (i.e., Carroll, Windham and Caledonia), barriers tended to be based on geography (i.e., the lack of physical proximity). While proximity is less of a problem in urban areas, lack of transportation still could be a limiting factor. However, in all target areas,

lack of awareness of the available resources appeared to be the most inhibiting factor.

Each state operates a Breast and Cervical Cancer Early Detection Program (BCCEDP). In New Hampshire, 'Let No Woman Be Overlooked' has seven sites in Hillsborough County, six sites in Grafton County and three sites in Carroll County. In Vermont, 'Ladies First,' works with a network of participating physicians throughout the state.

In examining each targeted county, the available breast cancer resources were identified and many opportunities for collaboration were discovered. Furthermore, interviews with representatives from these organizations provided valuable direction and highlighted three themes that are important to address.

First, a common response from providers in the urban areas (Manchester, Nashua, Burlington) was that it seemed that the early detection resources were not addressing the needs of low-income, minority and undocumented women. These women were identified as high-risk, yet providers felt they did not have an effective means of reaching them due to language or cultural barriers. As a result, many of the providers' services end up being reactive, instead of proactive. This seems to indicate a need for more culturally appropriate campaigns to target the diverse immigrant populations in these urban areas.

Second, the providers that were interviewed had very little knowledge of the possibilities resulting from a relationship with the local Susan G. Komen for the Cure[®] affiliate. Specifically, they were unaware of the grant possibilities and did not understand the role that the Susan G. Komen for the Cure[®] is trying to establish in easing the breast cancer burden in this region. This gap highlights an important need to establish stronger relationships with local providers and resource centers, which would lead to increased knowledge of the resources available through Susan G. Komen for the Cure[®].

Third, fragmentation and a lack of continuity within the women's health system was a common refrain among providers. Each organization attempts to solve the problems independently, rather than utilizing complementary resources as a part of a larger team. This applies mainly to the relationship between providers and resource centers, but also marks a logical place where the Susan G. Komen for the Cure[®] affiliate could facilitate better continuity and collaboration.

Selecting Affiliate Priorities

The Vermont-New Hampshire affiliate board members selected affiliate priorities. Initially, as a team, a list of problem/need statements was developed in a meeting of the board of directors, based on target area findings and exploratory data review. From this list, three problem/need statements stood out as issues that affected a large number of women, particularly low-income and minority women, in the target areas. In a separate meeting the community profile team then developed a list of objectives, priorities and goals that addressed these problems and needs.

Vermont-New Hampshire Priorities

Priority 1: To increase the number of providers and health care centers that apply for Susan G. Komen for the Cure[®] funding and utilize Susan G. Komen for the Cure[®] resources to improve early detection practices.

Priority 2: To increase access to early detection and treatment programs among minority women in urban areas.

Priority 3: To increase awareness of the number of screening facilities in several target regions and to improve access to these facilities.

Affiliate Action Plan

Priority 1

Increase the number of providers and health care centers that apply for Susan G. Komen for the Cure[®] funding and utilize Susan G. Komen for the Cure[®] resources to improve early detection practices.

Objective 1: By 2011 or earlier, hold at least one grant-writing workshop in each target area of VT and NH aimed at primary care providers and mammography facilities.

Objective 2: By 2011 or earlier, develop online network of physicians, mammography centers and resource centers to help communication and to foster collaboration.

Objective 3: By 2010 or earlier, create a monthly newsletter or press release highlighting funding opportunities from Susan G. Komen for the Cure¹ and 'best practices' at different facilities.

Objective 4: By 2010 or earlier, increase board membership of Vermont-New Hampshire affiliate (particularly with NH residents) in order to expand scope and area of influence.

Priority 2

Increase access to early detection and treatment programs among minority women in urban areas.

Objective 1: By 2011, establish relationships with community-based groups dedicated to addressing the needs of minority populations in VT and NH with continuity in mind.

Objective 2: By 2011, hold focus groups with undocumented and minority women at easily accessible local facilities to begin to explore ways to improve ease of access.

Priority 3

Increase awareness of the number of screening facilities in target areas and to improve access to these facilities.

Objective 1: By 2011, meet with executives from Exeter Hospital to learn more about mobile mammography unit and inquire about collaboration.

Objective 2: Promote mobile mammography units in other regions if collaboration is not possible, and provide affiliate-wide fundraising opportunities to help lessen the financial burden.

Objective 3: By 2011, work with established mammography clinics to help improve awareness and accessibility through broader media campaigns in multiple languages, expanded hours, short-term childcare services, etc.

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