



COMMUNITY PROFILE REPORT

©2011 Northern Nevada Affiliate of Susan G. Komen for the Cure®



2011

Disclaimer:

The information in this Community Profile Report is based on the work of the Northern Nevada Affiliate of Susan G. Komen for the Cure® in conjunction with key community partners. The findings of the report are based on a needs assessment public health model but are not necessarily scientific and are provided "as is" for general information only and without warranties of any kind. Susan G. Komen for the Cure and its Affiliates do not recommend, endorse or make any warranties or representations of any kind with regard to the accuracy, completeness, timeliness, quality, efficacy or non-infringement of any of the programs, projects, materials, products or other information included or the companies or organizations referred to in the report.

Acknowledgements

Authors:

Amanda J. Prina, MSW

The Community Profile Team

Lucy McGuire,

President, Komen Northern Nevada Affiliate Board of Directors

Amanda Prina, MSW

Mission Coordinator, Northern Nevada Affiliate of Susan G. Komen for the Cure

Derah Anderson,

Affiliate Coordinator, Northern Nevada Affiliate of Susan G. Komen for the Cure

Terry Ditton,

Grants Co-Chair, Northern Nevada Affiliate Board of Directors

Kim Young,

Volunteer for Urban Focus Group

Sally de Lipkau,

Community Volunteer

Stephanie Rogerson, MPH

Consultant Statistician, Phocus Consulting Group

Raine Howe

Consultant, Phocus Consulting Group

Expert Partners

Laura Kennedy, Saint Mary's Regional Medical Center

Mike Johnson, Saint Mary's Regional Medical Center

Cari Rovig, Saint Mary's Regional Medical Center

Vicki Ritchey, American Cancer Society

Sharon Nipp, Health Access Washoe County (HAWC)

Roni Galas, Carson City Health and Human Services

Peg Farrar, Saint Mary's Regional Medical Center, Center for Cancer

Chris Spencer, Tahoe Forest Hospital

Bobbi Gillis, RN, Renown Institute for Cancer

Mary Henson, APN, Rural Community Health Clinic, Lyon County, Fernley

Rose Lorentzen, RN, Rural Community Health Clinic, Churchill County

Sharon Shirley, Education Director, Fallon Paiute-Shoshone Tribe

Connie Torres, RN, Rural Community Health Clinic, Lyon County

Tracy Gust, RN Women's Health, William Bee Riria Hospital, Ely

Laurie Schmith, Pershing General Hospital and Nursing Home, Pershing County

Sources of Qualitative Data

America's Health Rankings 2010

American Cancer Society

Carson City Health and Human Services
Fallon Paiute-Shoshone Tribe
Health Access Washoe County (HAWC)
Nevada Department of Health and Human Services
Pershing General Hospital and Nursing Home
Renown Institute for Cancer
Rural Community Health Clinic, Churchill County
Rural Community Health Clinic, Lyon County
Saint Mary's Regional Medical Center
Saint Mary's Regional Medical Center, Center for Cancer
Tahoe Forest Hospital
The National Cancer Institute
Thomson Reuters © 2010
US Census Bureau 2010
Women's Health, William Bee Riria Hospital

Table of Contents

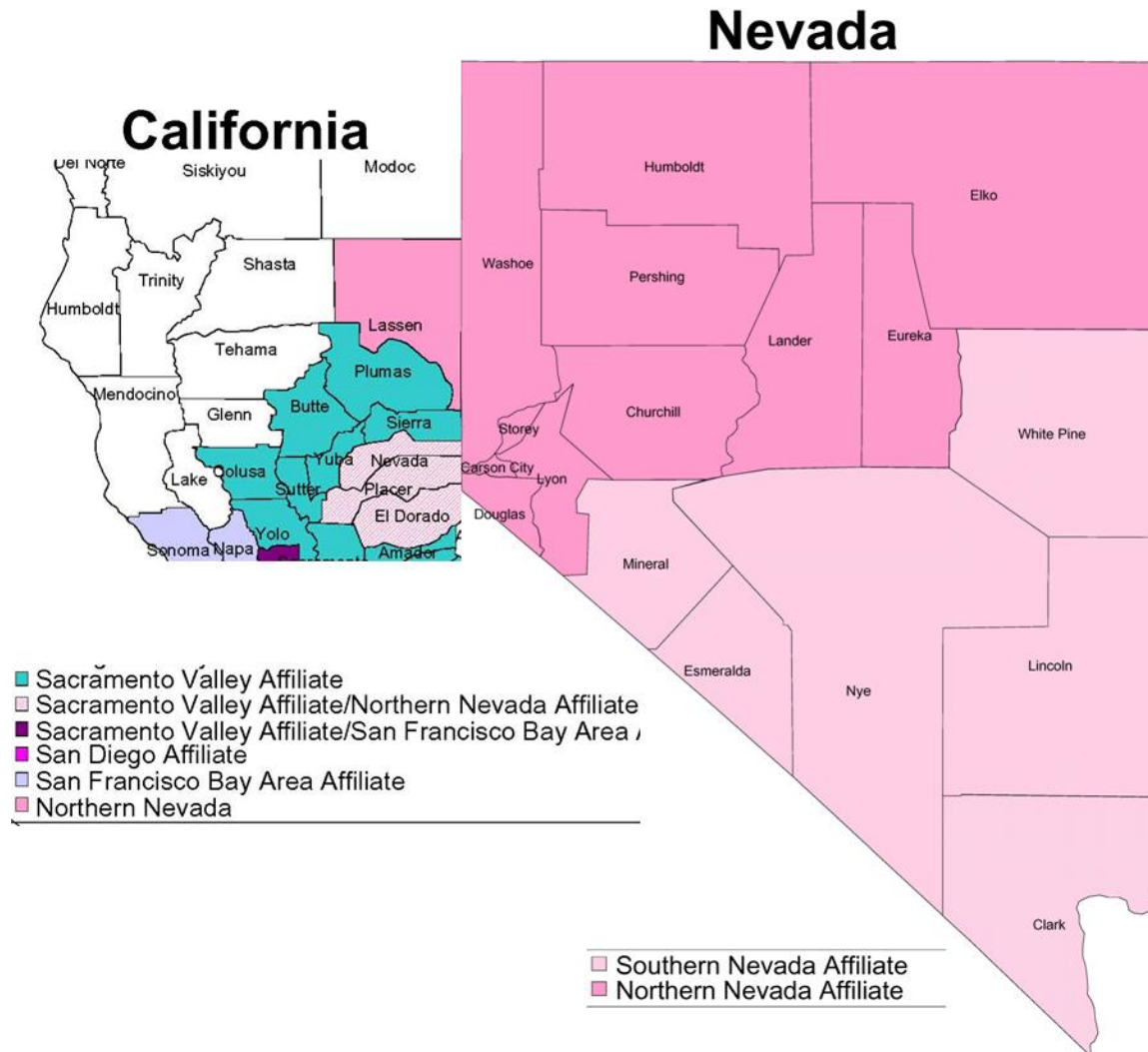
Executive Summary	6
Introduction	6
Statistics and Demographic Review	7
Health Systems Analysis.....	9
Qualitative Data Overview	10
Conclusions	11
Introduction	13
Affiliate History	13
Organizational Structure	13
Description of Service Area.....	13
Purpose of the Report.....	15
Breast Cancer Impact in Affiliate Service Area	16
Methodology.....	16
Overview of the Affiliate Service Area	17
Communities of Interest	20
Conclusions	20
Health Systems Analysis of Target Communities	21
Overview of Continuum of Care	21
Methodology.....	22
Overview of Community Assets	22
Legislative Issues in Target Communities	26
Key Informant Findings	26
Conclusions	27
Breast Cancer Perspectives in the Target.....	27
Methodology.....	27
Review of Qualitative Findings	28
Conclusions	28
Conclusions: What We Learned, What We Will Do	29
Review of the Findings	29
Conclusions	30
Action Plan	30

Executive Summary

Introduction

Breast cancer is the most common cancer in females in both the United States and Nevada, affecting 1 in every 8 women during her lifetime (American Cancer Society, 2010). Susan G. Komen for the Cure is the largest non-profit organization in the world dedicated to ending breast cancer forever. The organization has invested more than \$1.9 billion in the fight to end breast cancer since its inception in 1982. Susan G. Komen for the Cure aims to work collaboratively with local affiliates to save lives, empower people and ensure quality care for all.

The Northern Nevada Affiliate of Susan G. Komen for the Cure was founded in 1999 by a group of women dedicated to providing access to breast cancer screening and treatment programs in northern Nevada, while raising awareness of how early detection can prevent breast cancer deaths.



The Northern Nevada Affiliate of Susan G. Komen for the Cure's 2009 Community Profile demonstrated great need in the rural areas of northern Nevada so in 2010, the Komen Northern Nevada Affiliate expanded coverage into Elko, Humboldt, Lander and Eureka Counties as well as Susanville, California so that the affiliate now services the entire northern Nevada region. Including the new acquisition, the affiliate serves a total of 10 counties in Nevada: Churchill, Douglas, Lyon, Pershing, Storey, Washoe, Humboldt, Elko, Lander, Eureka and Carson City (defined as a Consolidated Municipality and not part of any county). The Komen Northern Nevada Affiliate service area also expands into northern California to include Lassen County and small portions of 3 counties in the Sierra Nevada Mountains that border Lake Tahoe: Nevada County, Placer County and El Dorado County.

Thanks to the generosity of the local community and the success of the Komen Northern Nevada Race for the Cure®, the Affiliate has invested almost \$3.2 million in life-saving breast health programs in northern Nevada and the Sierra since its inception in 1999. The Northern Nevada Affiliate of Susan G. Komen for the Cure funded a total of \$375,000 in grants to 11 northern Nevada non-profit providers of breast cancer education, screening and treatment services during FY 2012.

The purpose of the Community Profile (CP) is to:

- a) conduct an updated needs assessment of breast health services and incidence in the northern Nevada service area;
- b) demonstrate a comprehensive overview of demographics and statistics related to breast health in our service area while sharing qualitative data gathered from medical providers in our service area and;
- c) serve as a framework for the Komen Northern Nevada Affiliate to enhance and improve targeted grant dollars towards education, screening and treatment services for those in need.

Statistics and Demographic Review

The Community Profile team used findings from statistical data to identify needs in our service area. The statistical data related to breast cancer in our service area was acquired from Thompson Reuters (2010), The American Cancer Society (2011), The National Cancer Institute (2007), The American Association for Cancer Research (2009), The Office of Rural Health Policy (2008) The Kaiser Family Foundation (2009) The American Hospital Directory (2010) and The Nevada State Health Division (2006). We also utilized information from The State of Nevada Comprehensive Cancer Plan (2005) which is the most recent report available from the Nevada Cancer Council. The Program Manager for the Nevada Central Cancer Registry reported to our team that the new Comprehensive Cancer Plan will not be available until fall of 2011. We eagerly await data from the new Comprehensive Plan. Both incidence and mortality rates were indicated in terms of breast cancer cases or deaths per 100,000. Population data and socioeconomic status were gathered from United States Census Bureau (2010), The U.S. Bureau of Labor and Statistics (2011) and The United States Department of Agriculture (2009).

The Komen Northern Nevada Affiliate serves approximately 721,275 people of which 338,188 are female (U.S. Census Bureau, 2010). The service area is largely rural with one large metropolitan area composed of three cities, Reno, Sparks, Carson City and their respective suburbs with a total population of 424,571 (U.S. Census Bureau, 2010). While the majority of the population in Nevada is White non-Hispanic (66.2 %), the Hispanic population in Nevada continues to increase. Census data from 2000, indicated that 19% of the population in the state was of Hispanic descent, while the new 2010 data indicates that 26% of the population identifies as Hispanic.

This increase is significant because breast cancer is the most commonly diagnosed cancer and the leading cause of cancer death among Hispanic American/Latina women. Research suggests that breast cancer may be harder to treat in Hispanic women because they wait longer to receive care, often because they do not have health insurance and thus, cannot afford treatment (American Association for Cancer Research, 2009).

All counties in the northern Nevada service area have poverty levels above 10%, with the highest at 18.4% in Pershing County (United States Department of Agriculture, 2009). Nevada continues to have the highest rate of unemployment in the nation at 12.4% (U.S. Bureau of Labor and Statistics, 2011). High unemployment rates in the state result in an increase in the number of people in our service area who are uninsured. As a result, there is a need to provide access to mammography services for women who do not have insurance and are not able to pay for screening.

Rates of low socioeconomic (SES) status and unemployment in the service area are relevant because persons with lower SES have disproportionately higher cancer death rates than those with higher SES, regardless of demographic factors such as race/ethnicity (American Cancer Society, 2011). Although breast health providers in our service area do their best to connect women to financial resources, there are instances when women are uninsured and do not qualify for financial health subsidies. In addition, our team has identified a need for breast cancer providers in our service area to work collaboratively to share information about the services they provide in order to fill gaps in existing services.

In our service area, the highest mortality rates (per 100,000 women) were seen in Nevada (30.33) Humboldt, (27.87) and Eureka (27.76) counties. Mortality rates in these counties are above the national average (24.0) (The National Cancer Institute, 2007). The highest percentage of women over the age of 40 who did not receive a mammogram in 2009 were in the rural counties of Eureka (40.4%), Lassen (39.1%), Pershing (38.6%) Lyon (38.1%) Elko (37.1%) and Churchill (37.0%) (Thompson Reuters, 2010). Data indicates that the highest percentage of uninsured women between the ages of 18-64 are in Lyon, Lassen, Pershing, Storey and Lander counties (average 25% uninsured), while Eureka county shows the highest uninsured rate at 34%. The counties with the greatest percentage of the population living under the poverty level are Lassen and Pershing counties. The above statistical data indicates that rural counties in our service area are in need of greater access to breast health services and financial support.

Based on statistical data gathered, the community profile team determined that efforts should be targeted towards rural service areas, specifically newly annexed counties. Findings from statistical data also indicate that a large portion of our service area is in need of financial assistance. Nevada continues to be ranked with the highest unemployment rate in the country and many in our service area do not have health insurance, specifically in rural communities. Based on these indicators, targeted counties are as follows: Eureka, Lyon, Storey, Lander, Pershing, Humboldt, Elko, Lassen and our service area in Nevada County. In addition, data indicates that our affiliate should target Hispanic women in our service area as research demonstrates that they are at risk for late stage detection and financial barriers to treatment.

Health Systems Analysis

Health systems were analyzed by conducting a review of the breast health care services available in our area and the gaps that exist in the breast health continuum of care. The team conducted key informant phone interviews with six rural clinic and hospital providers.

One of the most significant gaps in our service area is the low number of grantees in rural counties. Data indicates that there are high rates of uninsured women in rural service areas. Key informant interviews from rural service areas also identify that the largest barrier to seeking breast health care is being uninsured. Thus, as part of our analysis we compiled a list of rural clinics and hospitals that service uninsured women in our service area so that we can notify rural health agencies of grant opportunities and workshops. During the 2011/2012 grant cycle, we received only one grant application and granted only one agency from rural Nevada, Pershing County General Hospital. We also granted the mobile mammography van which services all of our rural areas, but their services are limited to education and 25 screenings per day which does not encompass the continuum of care. In order to effectively serve northern Nevada, we must increase marketing efforts to rural and newly annexed service areas so that communities are aware of the breast health support and services provided by the Komen Northern Nevada Affiliate. In addition, our affiliate must increase education services and grant workshops to rural service areas so that women in rural communities have increased access to the continuum of breast health care.

Key informant interviews identified that the Hispanic community relies on word-of-mouth from Hispanic community leaders to receive breast health information. The community profile team recommended that the Komen Northern Nevada Affiliate collaborate with Nevada Hispanic Services in order to recruit volunteers from the local Hispanic community to sit on the education board and relay breast health information back to Hispanic community members in our service area.

The health system analysis indicated that increased outreach, education and access to rural communities are necessary to close gaps in care. Targeted rural communities include the newly annexed Elko, Humboldt, Lander and Eureka and Lassen counties as well as Douglas, Churchill, Lyon and Storey counties. Due to the large geographic distance between our affiliate office and some of the rural counties (e.g. distance to Elko, NV = 289 miles) we hope to coordinate at least

one volunteer from each rural community to serve as a liaison between the rural community and the Komen Northern Nevada Affiliate. The health systems analysis also identified that the Komen Northern Nevada Affiliate must work with Hispanic community leaders and recruit key volunteers from the Hispanic community to provide word of mouth breast health education back to the community.

Qualitative Data Overview

The Community Profile team assessed current breast health programs and services to allow for a greater understanding of the resources available in our service area. The team conducted a key informant focus group which consisted of ten urban health care providers and one rural health provider. The team also distributed survivor surveys to women in the Komen Northern Nevada Affiliate region. The survey data focused on demographic information, stage of diagnosis and health insurance status. As previously stated, the team also conducted key informant phone interviews with health care providers from six rural clinics and hospitals. Thirty-nine surveys were completed and returned. Qualitative data results identified five areas of need:

1. Increase access to mammography services for women who are uninsured and do not meet requirements for county, state, federal or tribal health subsidies.
2. Expand funding support for agencies that provide screening, diagnostics, treatment and support for uninsured women in rural areas.
3. Increase access to breast health education and mammography for those living in rural service areas.
4. Increase affiliate communication with the Hispanic community through working with Hispanic community leaders and recruiting Hispanic volunteers to serve as education liaisons.
5. Increase communication and collaboration among breast health care agencies in our service area so that patients can smoothly transition through the continuum of care.
6. Increase marketing efforts to the entire northern Nevada service area so that communities are aware of the breast health support services provided by the Komen Northern Nevada Affiliate.

Our team identified that a continued barrier to early breast cancer detection is lack of access to screening for those in our service area who are uninsured or underinsured combined with the lack of awareness of the financial resources available to those in need, specifically in rural areas. This factor was unanimously stated by both rural and urban providers.

The geographic distribution of services throughout the Komen Northern Nevada Affiliate service area indicates that populations in urban areas have better access to breast health services than those in rural areas. The community profile team recognizes that every woman should have equal access to breast health services regardless of geographic location. In addition, we are dedicated to the value that no one should lose their life to breast cancer due to lack of education, screening, treatment or access to services. As Ambassador Brinker has stated "Where you live shouldn't determine if you live."

Conclusion

Results gathered from statistical data, surveys, focus groups and key informant interviews indicate that efforts should be targeted towards increasing services to medically underserved women in our service area. In order to reach this target, the affiliate will outline key priorities and objectives that aim to be accomplished in the next two years.

The Northern Nevada Affiliate of Susan G. Komen for the Cure is charged with addressing the needs of the counties we serve through our mission, education and grant programs. By working collaboratively with communities and local breast health agencies, we aim to reduce the strain of breast cancer on the northern Nevada community.

Affiliate Priorities

Priority 1: Increase education efforts in our service area that target breast health, breast cancer screening and resources available to uninsured and underinsured women:

Objective 1: Attend at least one large event in each county in FY 2011 and FY 2012. Distribute education materiel at each event and solicit volunteer contacts.

Objective 2: By FY 2012 aim to grant at least 3 new breast health agencies in rural service areas.

Objective 3: By end of FY 2011, contact Nevada Hispanic Services (NHS). Coordinate with the director of NHS to determine the most effective way to educate the Hispanic community in northern Nevada about breast health.

Objective 4: RFAs for FY 2012 will include a requirement that grantees must collaborate with at least one breast health agency in our service area during their grant term.

Priority 2: Reduce barriers to education, screening and treatment in rural service areas:

Objective 1: By end of FY 2011, call all clinics in rural service counties and notify them of the support and grant funding workshops available from the Komen Northern Nevada Affiliate.

Objective 2: Hold two grant writing workshops, one in FY 2011 and one in FY 2012. Make workshops available via teleconference for rural providers and target grant applications that address barriers to education, screening and treatment in rural and newly annexed service areas.

Objective 3: By the end of FY 2012 recruit a lead volunteer from each rural county to serve as a liaison between the rural community and the Komen Northern Nevada Affiliate.

Objective 4: Work with mobile mammography to ensure that rural areas are adequately serviced.

Priority 3: Increase marketing efforts throughout service area so that women and health care providers are aware that the Komen Northern Nevada Affiliate is a source of breast health support.

Objective 1: By the end of FY 2011, make a radio public service announcement that will notify the community of the breast health support that is provided by the Komen Northern Nevada Affiliate. The announcement will be played on radio stations (including Spanish speaking stations) throughout service area.

Objective 2: By the end of FY 2012, make a video that will communicate the efforts of the Komen Northern Nevada Affiliate to the local community. The video will be played at Komen Northern Nevada education presentations and events.

Objective 3: Work collaboratively with news and paper media throughout service area. Ensure that media are invited or notified of Komen sponsored events in service area when appropriate.

Introduction

Affiliate History

Breast cancer is the most common cancer in females in the United States affecting 1 in every 8 women during her lifetime (American Cancer Society, 2010). Susan G. Komen for the Cure was established in 1982 by Nancy Brinker whose sister, Susan G. Komen, died of breast cancer at age 36. Susan G. Komen for the Cure reflects a promise made between two sisters and is the largest non-profit organization in the world dedicated to ending breast cancer forever. The organization has invested more than \$1.9 billion to the fight against breast cancer since its inception in 1982. Susan G. Komen for the Cure aims to work collaboratively with local affiliates to save lives, empower people and ensure quality care for all.

The Northern Nevada Affiliate of Susan G. Komen for the Cure is an independent, tax-exempt 501 ©(3). The affiliate was founded in 1999 by a group of women dedicated to providing access to breast cancer screening and treatment programs in northern Nevada, while raising awareness of how early detection can prevent breast cancer deaths. Thanks to the generosity of the local community and the success of the Northern Nevada Susan G. Komen Race for the Cure®, the Affiliate has invested nearly \$3.2 million in life-saving breast health programs in northern Nevada and the Sierra since its founding in 1999.

The Susan G. Komen for the Cure Northern Nevada Race for the Cure® is our signature annual fundraising event, netting over \$285,000 in 2010 to fund grants and support our mission. In addition to the race, there are many fundraising opportunities each year including third party events and private donations. The Northern Nevada Affiliate of Susan G. Komen for the Cure funded a total of \$375,000 in grants to 11 northern Nevada non-profit providers of breast cancer education, screening and treatment services during FY 2012. Seventy-five percent of net proceeds generated by the Komen Northern Nevada Affiliate are granted to lifesaving local breast cancer programs. The remaining 25 percent goes to Komen-funded groundbreaking research to find the cure

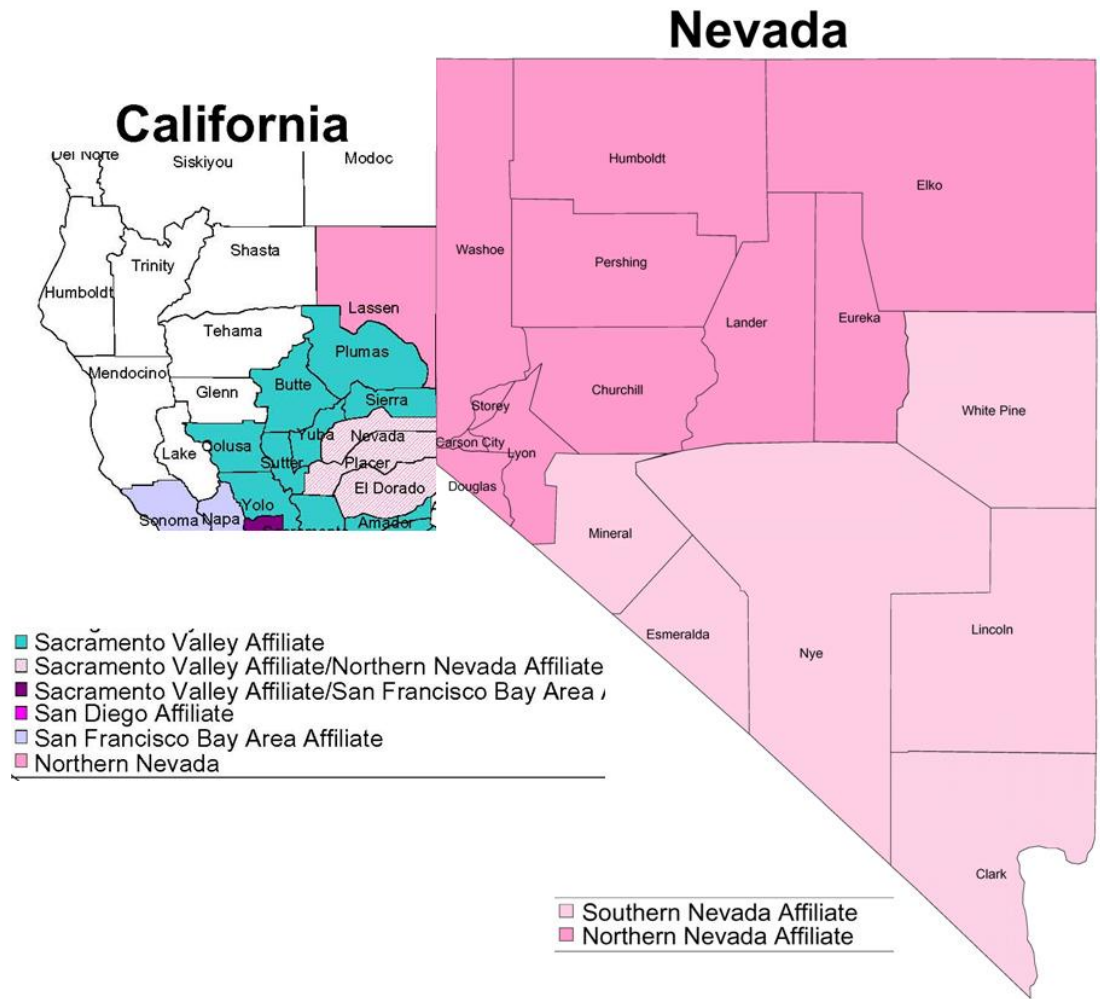
Organizational Structure

The Komen Northern Nevada Affiliate is a non-profit organization that is coordinated by a Board of Directors. As of 2011, the working board consists of a group of 9 dedicated individuals who give their time and talent to promote the Komen mission to the communities in our service area. In addition to the Board, there are multiple active committees comprised of knowledgeable professionals who work to further the Komen mission. The Komen Northern Nevada Affiliate currently has a staff of two part time paid employees: The Affiliate Coordinator and The Mission Coordinator.

Description of Service Area

Our 2009 Community Profile demonstrated great need in the rural areas of northern Nevada so in FY 2010, the Komen Northern Nevada Affiliate expanded our coverage area into Elko, Humboldt, Lander and Eureka Counties as well as Susanville, California so that the affiliate now services the entire northern Nevada region. Including the new acquisition, the affiliate serves a

total of 10 counties in Nevada: Churchill, Douglas, Lyon, Pershing, Storey, Washoe, Humboldt, Elko, Lander, Eureka and Carson City (defined as a Consolidated Municipality and not part of any county).



The Komen Northern Nevada Affiliate service area also expands into northern California to include Lassen County and small portions of 3 counties in the Sierra Nevada Mountains that border Lake Tahoe: Nevada County, Placer County and El Dorado County. 2011 is the first year that the entire state of Nevada has been serviced by the Northern and Southern Komen Affiliates.

Approximately 71 percent of Nevada’s total population resides in southern Nevada (Las Vegas metropolitan area), 18 percent live in northern Nevada (Reno and Carson City) and the remaining 11 percent live in rural areas. Much of northern Nevada is rural, encompassing large areas of land that is scarcely populated. The northern Nevada service area covers a total of 55,392 square miles, plus a small region in the Sierra Nevada mountain range bordering Lake Tahoe, CA (U.S Census, 2010).

The Komen Northern Nevada Affiliate serves approximately 721,275 people of which 338,188 are female (U.S. Census Bureau, 2010). The service area is largely rural with one large

metropolitan area composed of three cities, Reno, Sparks, Carson City and their respective suburbs with a total population of 424,571 (U.S. Census Bureau, 2010). While the majority of the population in Nevada is White non-Hispanic (66.2 %), the Hispanic population in Nevada continues to increase. Census data from 2000, indicated that 19% of the population in the state was of Hispanic descent, while the new 2010 data indicates that 26% of the population identifies as Hispanic. Table 1 illustrates ethnic populations in the counties we serve based on 2009 estimates.

% Population by Ethnicity and County										
Area: Northern Nevada Affiliate										
Ranked by 2009 Total Population (Desc)										
FIPS County Code	County	State	2009 Total Population	% White	% Black	% American Indian	% Asian Pacific Islander	% All Other	% Hispanic	
32031	Washoe	NV	418,782	87.4%	2.1%	1.5%	5.2%	2.5%	21.3%	
8081	Placer	CA	348,250	77.3%	1.7%	0.7%	5.5%	3.0%	11.8%	
8017	El Dorado	CA	180,303	80.0%	1.2%	0.8%	3.8%	2.7%	11.7%	
8057	Nevada	CA	95,939	85.8%	0.8%	0.8%	1.3%	2.8%	8.1%	
32510	Carson City	NV	69,771	72.5%	1.7%	1.9%	2.3%	1.8%	19.9%	
32019	Lyon	NV	51,079	77.4%	1.5%	1.8%	1.7%	2.5%	15.1%	
32005	Douglas	NV	48,351	84.0%	0.8%	1.5%	2.1%	2.1%	9.8%	
32007	Elko	NV	48,332	85.8%	1.1%	4.5%	0.9%	1.9%	22.0%	
8035	Lassen	CA	38,979	87.1%	10.0%	3.0%	1.4%	2.8%	15.8%	
32001	Churchill	NV	25,367	77.8%	1.5%	4.8%	3.3%	2.7%	10.1%	
32013	Humboldt	NV	18,913	70.5%	0.7%	4.0%	0.8%	2.3%	21.7%	
32027	Pershing	NV	5,314	85.9%	2.8%	3.7%	0.9%	2.4%	20.2%	
32015	Lander	NV	5,217	72.1%	0.3%	4.9%	0.4%	2.7%	18.5%	
32011	Eureka	NV	1,470	82.4%	0.3%	1.3%	1.1%	3.3%	10.8%	
32029	Storey	NV	1,450	85.4%	0.8%	1.3%	1.7%	2.5%	8.3%	
			1,343,807	74.8%	1.8%	1.4%	4.0%	2.8%	15.5%	

Table 1. © 2009, Claritas Inc., © 2010 Thomson Reuters. All Rights Reserved

All counties in the northern Nevada service area have poverty levels above 10%, with the highest at 18.4% in Pershing County (United States Department of Agriculture, 2009). Nevada continues to have the highest rate of unemployment in the nation at 12.4% (U.S. Bureau of Labor and Statistics, 2011). Data indicates that the highest percentage of uninsured women between the ages of 18-64 are in Lyon, Lassen, Pershing, Storey and Lander counties (average 25% uninsured), while Eureka county shows the highest uninsured rate at 34%. The counties with the greatest percentage of the population living under the poverty level are Lassen and Pershing counties. The above statistical data indicates that rural counties in our service area are in need of greater access to breast health services and financial support. High unemployment rates in the state result in an increase in the number of people in our service area who are uninsured. As a result, there is a need to provide access to mammography services for women who do not have insurance and are not able to pay for screening.

Purpose of the Report

Nancy G. Brinker promised her dying sister, Susan G. Komen, she would do everything in her power to end breast cancer forever. In 1982, that promise became Susan G. Komen for the Cure, the global leader in the effort to save lives, empower people and end breast cancer forever.

The 2011 Community Profile is a needs assessment which aims to identify breast health care disparities in the northern Nevada region. The purpose of the Community Profile is to provide comprehensive overview of breast health demographics and statistics in our service area while demonstrating meaningful insight from breast cancer survivors and medical practitioners. Results from data analyzed provide an understanding of the areas that are underserved, programs that are most effective and helps clearly define barriers to breast health services in northern Nevada. Utilizing the aforementioned information, the Community Profile will be used as a framework for the Komen Northern Nevada Affiliate to guide the following activities:

- Serve as a tool for setting grant priorities.
- Inform targeted educational outreach.
- Strengthen our mission to the community.
- Guide marketing efforts.
- Promote and guide inclusion efforts in our breast health service area.
- Serve as a guideline for Affiliate staff, The Board of Directors and local community health agencies.
- Identify communities in need of increased access to breast health services.

Breast Cancer Impact in Affiliate Service Area

Methodology

The Community Profile team used findings gathered from statistical data to identify needs in our service area. The statistical data related to breast health and breast cancer in our service area were acquired from Thompson Reuters (2010), The American Cancer Society (2010), The National Cancer Institute (2007), The American Association for Cancer Research (2009) and The Office of Rural Health Policy (2008). Both incidence and mortality rates are indicated in terms of breast cancer cases or deaths per 100,000. Population data and socioeconomic status were gathered from United States Census Bureau (2010), The U.S. Bureau of Labor and Statistics (2011), The United States Department of Agriculture (2009), The Kaiser Family Foundation (2009), The American Hospital Directory (2010) and The Nevada State Health Division (2006). We also utilized information from The State of Nevada Comprehensive Cancer Plan (2005) which is the most recent report available from the Nevada Cancer Council. The Program Manager for the Nevada Central Cancer Registry reported to our team that the new Comprehensive Cancer Plan will not be available until fall of 2011. We eagerly await data from the new Comprehensive Plan. The Community Profile team analyzed data related to breast health in each county including: racial demographics, mortality, screening and mammography rates, incidence, socioeconomic status and health insurance coverage.

Overview of Affiliate Service Area

Demographics/Ethnicity

The Komen Northern Nevada Affiliate serves approximately 721,275 people of which 338,188 are female (U.S. Census Bureau, 2010). The service area is largely rural with one large metropolitan area composed of three cities, Reno, Sparks, Carson City and their respective suburbs with a total population of 424,571 (U.S. Census Bureau, 2010). While the majority of the population in Nevada is White non-Hispanic (66.2 %), the Hispanic population in Nevada continues to increase. Census data from 2000 indicated that 19% of the population in the state was of Hispanic descent, while the new 2010 data indicates that 26% of the population identifies as Hispanic.

This increase is significant because breast cancer is the most commonly diagnosed cancer and the leading cause of cancer death among Hispanic American/Latina women (Kaiser Family Foundation, 2009). Research suggests that breast cancer may be harder to treat in Hispanic women because they wait longer to receive care, often because they do not have health insurance and thus, cannot afford treatment (American Association for Cancer Research, 2009). The Nevada Cancer Counsel (2005) identified that only 38% of Hispanic women, age 40 and older, have regular screening mammograms before symptoms develop. In addition, research suggests that level of educational attainment is associated with economic level and health status (Levin, H., Belfield, C., Muennig, P. & Rouse, C. 2007). The Kaiser Family Foundation (2009) examined disparities in health and access to care between Latina women and white non-Hispanic women and found that Latina women are less likely to have a high school diploma, have health insurance, or have a primary care physician than white women.

% Population by Ethnicity and County									
Area: Northern Nevada Affiliate									
Ranked by 2009 Total Population (Desc)									
County	State	2009 Total Population	% White	% Black	% American Indian	% Asian Pacific Islander	% All Other	% Hispanic	
Washoe	NV	418,782	67.4%	2.1%	1.5%	5.2%	2.5%	21.3%	
Placer	CA	346,250	77.3%	1.7%	0.7%	5.5%	3.0%	11.8%	
El Dorado	CA	180,393	80.0%	1.2%	0.8%	3.6%	2.7%	11.7%	
Nevada	CA	95,939	86.6%	0.6%	0.8%	1.3%	2.6%	8.1%	
Carson City	NV	59,771	72.5%	1.7%	1.9%	2.3%	1.6%	19.9%	
Lyon	NV	51,079	77.4%	1.5%	1.8%	1.7%	2.5%	15.1%	
Douglas	NV	48,351	84.0%	0.8%	1.5%	2.1%	2.1%	9.6%	
Elko	NV	48,332	69.6%	1.1%	4.5%	0.9%	1.9%	22.0%	
Lassen	CA	36,979	67.1%	10.0%	3.0%	1.4%	2.8%	15.8%	
Churchill	NV	25,367	77.8%	1.5%	4.6%	3.3%	2.7%	10.1%	
Humboldt	NV	18,913	70.5%	0.7%	4.0%	0.8%	2.3%	21.7%	
Pershing	NV	5,314	65.9%	6.8%	3.7%	0.9%	2.4%	20.2%	
Lander	NV	5,217	73.1%	0.3%	4.9%	0.4%	2.7%	18.5%	
Eureka	NV	1,470	83.4%	0.3%	1.3%	1.1%	3.3%	10.6%	
Storey	NV	1,450	85.4%	0.8%	1.3%	1.7%	2.5%	8.3%	

Table 2. © 2009, Claritas Inc., © 2010 Thomson Reuters. All Rights Reserved

Socioeconomic Status/Health Insurance

All counties in the northern Nevada service area have poverty levels above 10%, with the highest at 18.4% in Pershing County (United States Department of Agriculture, 2009). Nevada continues to have the highest rate of unemployment in the nation at 12.4% (U.S. Bureau of Labor and Statistics, 2011). High unemployment rates in the state result in an increase in the number of people in our service area who are uninsured. Data indicates that the highest percentage of uninsured women between the ages of 18-64 are in Lyon, Lassen, Pershing, Storey and Lander counties (average 25% uninsured), while Eureka county shows the highest uninsured rate at 34%. The counties with the greatest percentage of the population living under the poverty level are Lassen and Pershing counties. The above statistical data indicates that rural counties in our service area are in need of greater access to breast health services and financial support. As a result, there is a need to provide access to mammography services for women who do not have insurance and are not able to pay for screening.

Rates of low socioeconomic (SES) status and unemployment in the service area are relevant because persons with lower SES have disproportionately higher cancer death rates than those with higher SES, regardless of demographic factors such as race/ethnicity (American Cancer Society, 2011). Although breast health providers in our service area do their best to connect women to financial resources, there are instances when women are uninsured and do not qualify for financial health subsidies. In addition, our team has identified a need for breast cancer providers in our service area to work collaboratively to share information about the services they provide in order to fill gaps in existing services.

Females 40+ without a Mammography								
Area: Northern Nevada Affiliate								
Ranked on 2009 Female Population 40+(Desc)								
County	State	2009 Female Population 40+	% No Mammo Last 12 Months	% Chose Not To	% Didn't Have Time	% Didn't Need	% Have Scheduled	% Other Reasons
Vashoe	NV	97,544	34.4%	5.4%	9.2%	2.7%	3.2%	13.6%
Pleacer	CA	84,408	33.8%	5.4%	9.3%	3.0%	3.4%	12.5%
El Dorado	CA	45,911	33.9%	5.5%	9.5%	2.7%	3.2%	13.0%
Nevada	CA	28,780	33.9%	5.9%	9.3%	3.0%	3.4%	12.0%
Carson City	NV	13,967	35.0%	6.0%	9.3%	3.1%	3.5%	12.7%
Douglas	NV	13,831	32.6%	5.9%	9.4%	2.7%	3.5%	10.8%
Lyon	NV	13,108	38.1%	6.8%	10.5%	2.7%	3.7%	14.1%
Elko	NV	9,957	37.1%	5.8%	10.3%	2.1%	3.4%	15.1%
Churchill	NV	5,153	37.0%	6.4%	9.7%	2.9%	3.4%	14.3%
Lassen	CA	3,094	39.1%	6.5%	10.3%	2.9%	3.7%	15.5%
Humboldt	NV	3,938	36.2%	5.7%	10.6%	2.3%	3.6%	13.8%
Lander	NV	1,268	32.6%	5.5%	9.7%	2.4%	3.6%	11.2%
Pershing	NV	1,155	38.6%	5.9%	11.3%	2.8%	4.0%	14.6%
Storey	NV	1,109	35.7%	5.6%	11.5%	2.6%	3.4%	12.2%
Eureka	NV	408	40.4%	6.3%	10.7%	3.1%	3.7%	16.4%
		327,631	34.5%	5.6%	9.4%	2.8%	3.3%	13.0%

Table 3. © 2009, Claritas Inc.,© 2010 Thomson Reuters. All Rights Reserved

Mammography

Data in table 3 illustrates that 34.5% of women in our service area did not receive a mammogram in the past 12 months. When mammography data was broken down by county,

results indicated that rural counties in our service area have the highest rates of women who have not received an annual mammogram.

These findings are congruent with research which suggests rural women are less likely to be in compliance with mammography recommendations (77.9 %) than were urban women (82.2 %) (Bennett, K.J., Olatosi B., Probst J.C., 2008). Table 2 demonstrates that 6 rural counties have high percentages of women who have not received an annual mammogram, they are as follows: Eureka (40.4%), Lassen (39.1%), Pershing (38.6%), Lyon (38.1%), Elko (37.1%) and Churchill (37.0%). Data indicates that the aforementioned 6 rural counties should be targeted with additional education regarding screening and increased access to mobile mammography services.

Incidence, Stage of Diagnosis and Mortality

In 2009, 2,998 women were diagnosed with breast cancer in our service area (Thomson Reuters, 2010). The counties with the highest incident rates were Nevada, Lassen, Douglas, Eureka and Carson City. Nevada County had the highest incident rate at 190.17 per 100,000 which is significantly higher than the national average of 118 per 100,000. Counties with high incident rates suggest that there are higher rates of women in those service areas who may need financial and personal support through breast cancer treatment.

There were not significant disparities in the percentage of women with late diagnoses in our service area. Through all counties in our service area 4.1%-4.3% of women were diagnosed at stage IV. This is lower than the national average which is 4.6% diagnosed at stage IV.

Breast Cancer Incidence Rate by County and Stage						
Area: Northern Nevada Affiliate						
Ranked by 2009 Female Per 100K Pop Rate (Desc)						
County	State	2009 Female Per 100K Pop Rate	Stage I %	Stage II %	Stage III %	Stage IV %
Nevada	CA	190.17	65.7%	26.8%	3.3%	4.2%
Lassen	CA	142.09	65.0%	27.6%	3.3%	4.2%
Douglas	NV	139.25	65.7%	26.8%	3.3%	4.2%
Eureka	NV	127.14	65.6%	26.9%	3.3%	4.2%
Carson City	NV	121.91	65.9%	26.6%	3.3%	4.3%
El Dorado	CA	121.49	64.7%	27.8%	3.3%	4.2%
Placer	CA	120.13	65.3%	27.1%	3.3%	4.3%
Pershing	NV	113.85	65.2%	27.3%	3.3%	4.2%
Storey	NV	110.15	64.0%	28.6%	3.3%	4.1%
Churchill	NV	107.89	65.3%	27.1%	3.3%	4.2%
Lyon	NV	107.27	65.1%	27.4%	3.3%	4.2%
Washoe	NV	105.77	64.8%	27.7%	3.3%	4.2%
Lander	NV	104.23	64.6%	28.0%	3.2%	4.1%
Humboldt	NV	99.34	64.5%	28.1%	3.3%	4.1%
Elko	NV	90.86	63.9%	28.7%	3.3%	4.1%

Table 4. © 2009, Claritas Inc., © 2010 Thomson Reuters. All Rights Reserved.

The percentages of women diagnosed at all other stages were also similar across counties. Please refer to Table 3 for a breakdown of stage of diagnosis in our service area.

In all counties, black women were diagnosed at later stages than white women (8% diagnosed at stage IV compared to 4.2%). Although late stage diagnosis in black women was nearly twice that of white women in our service area, black women have lower mortality rates at 20 per 100,000 compared to white women 25 per 100,000. Data on ethnicity and staging is limited because Thomson Reuters (2010) only divided ethnicity by black, white and other.

The highest mortality rates (per 100,000 women) were seen in Nevada (30.33) Humboldt, (27.87), Eureka (27.76) and Carson City (26.75) counties. Mortality rates in these counties are above the national average (24.0) (The National Cancer Institute, 2007).

Communities of Interest

The Community Profile team identified communities of interest based on the frequency they appeared in the statistics analyzed. The team identified the following variables to be analyzed for frequency: low incidence of annual mammography, high rates of mortality, uninsured and low SES. Based on these variables the following counties were targeted: Eureka County, Nevada, Lassen County, California, our service area in Nevada County, California. In addition, the team targeted rural counties that indicate high rates of low SES and geographic barriers to treatment, education and service. The counties that meet these criteria are as follows: Elko, Lander, Lyon, Storey, Humboldt and Churchill counties. Lastly, data indicates that our affiliate should target Latina women in our service area as research demonstrates that they are at risk for late stage detection and financial barriers to treatment.

Conclusions

Eureka County was chosen due to:

- High rate of breast cancer mortality
 - 27.76 per 100k
- Low mammography rates
 - 40.4% without mammogram in past 12 months
- *Highest* uninsured rate in our service area
 - 34% uninsured
- Newly annexed county/rural county with geographic barriers to service
- High incidence of breast cancer
 - 127.14 per 100k

Lassen County was chosen due to:

- Low mammography rates
 - 39.1% without mammogram in past 12 months
- High uninsured rate
 - 25% uninsured
- High poverty
 - 18.2% living below poverty line
- Newly annexed county/rural county with geographic barriers to service

Our service area in Nevada County was chosen due to:

- *Highest* incidence rate in service area
 - 190.7 per 100k (national average is 118 per 100k)
- *Highest* mortality rate in service area
 - 30.33 per 100k

Select Rural counties were chosen due to:

- High rates of low SES and medically underserved populations as well geographic barriers to treatment, education and service. In addition, with the exception of Churchill County, none of the following counties have received a Komen grant.
 - Elko, Lander, Lyon, Storey, Pershing, Humboldt and Churchill counties.

Latinas throughout the northern Nevada service area were chosen due to:

- Significant increase in the Hispanic Population in Nevada
 - 19% in 2000 to 26% in 2010
- Only 38% of Latina women, age 40 and older, have regular mammograms in Nevada.
- Breast cancer is the most commonly diagnosed cancer and the leading cause of cancer death among Latina women.
- Research indicates breast cancer may be harder to treat in Hispanic women because they wait longer to receive care, often because they do not have health insurance and cannot afford treatment.

Low screening rates, lack of insurance, low SES, geographic barriers and high mortality rates in the aforementioned communities suggest that breast health education services and grant monies should be disseminated to these targeted communities of interest.

Health Systems Analysis of Target Communities

Overview of Continuum of Care

The continuum of care is a model which illustrates each stage in the breast health continuum. The continuum is composed of four stages: Screening, Diagnosis, Treatment and Follow-up Care. Figure 3 illustrates the full continuum of breast health care. If a woman is screened with normal results, she will stay in the screening stage of the continuum. If a woman is screened with abnormal results, she will move onto the diagnosis stage, where if diagnosed with breast cancer, she will continue on through to the

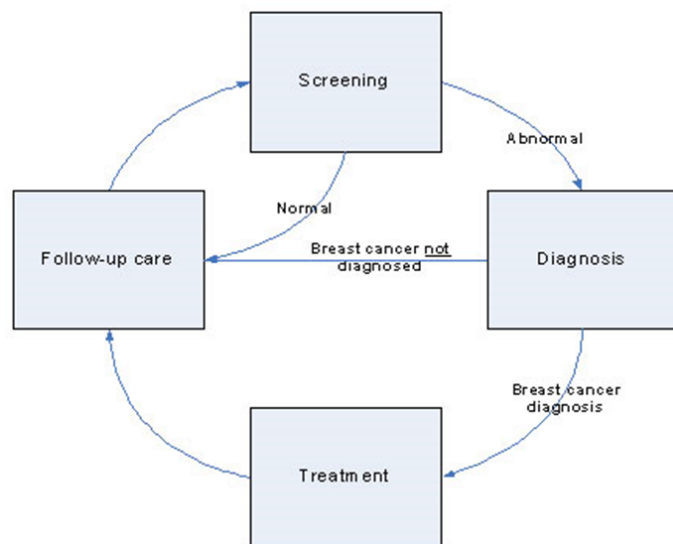


Figure 3. Breast Health Continuum of Care. Susan G. Komen for the Cure, Community Profile Guide, 2010.

treatment and follow-up care stages. Each step in the breast health continuum is critical. Missing one of the steps can have a negative impact on a woman's chance of survival.

Methodology

A resource list was compiled of all breast health providers in our service area. The list identified breast cancer screening, diagnostic and treatment agencies in northern Nevada to determine access and gaps to breast health services. Information on breast screening was retrieved from The Food and Drug Administration (2010). Information on breast cancer treatment facilities was gathered from the American Hospital Directory (2010). Northern Nevada is largely rural and sparsely populated, thus all hospitals in our service area were contacted to confirm whether they had an oncology department and the capacity to treat breast cancer patients. Asset maps were created using mapping software from BatchGeo©. In addition to mapping breast health services, a map was also created to look at the geographic location of our grantees during FY2010. As a result of the newly annexed counties, it is important that our affiliate diversify the geographic location of grantees.

Overview of Community Assets

Screening Availability

An asset map of the entire service area was created to determine the availability of screening facilities. Red dots on the map in Figure 4 indicate the availability of screening facilities throughout the service area.

The Reno/Sparks metropolitan area has the largest population in northern Nevada and the most access to screening with 5 facilities. Carson City, Elko and Winnemucca have 2 screening facilities, while the remainder of the cities with a screening location have only one facility. It should be noted that there are no screening facilities in Lander or Eureka counties. The Komen Northern Nevada Affiliate grants a mobile mammography van which frequents these two counties, but the van does not have the capacity to screen all women who are in need of mammography in Lander or Eureka counties. The Eureka county health center was contacted for the purposes of this assessment and the staff member reported that the mobile mammography van had only been to Eureka for ½ a day during the past year and administered only 11 mammograms. If patients do not receive a mammogram from the mobile mammography van, they must travel to either Reno, Nevada or Salt Lake City, Utah for screening. Eureka County has the highest mortality rate in the service area and the lowest number of insured.

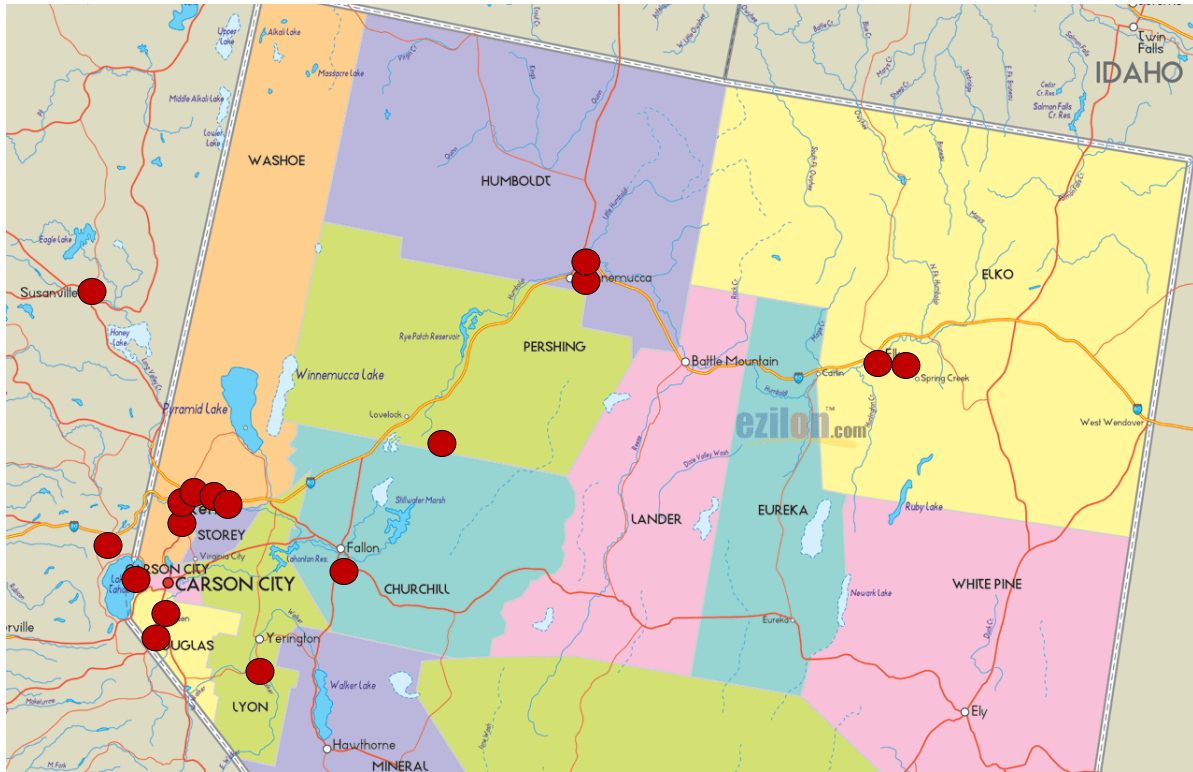


Figure 4. Hospitals and Agencies that provide screening services in the Komen Northern Nevada Affiliate Area. Food and Drug Administration, 2011. Map retrieved from Ezilion Directory and Search Engine (2011).

Treatment

As illustrated in Figure 5, breast cancer treatment facilities are located in only the most densely populated urban areas in northern Nevada. There are no breast cancer treatment facilities in Eureka, Humboldt, Pershing, Lander or Lyon counties. If a patient is diagnosed with breast cancer in any of the aforementioned counties, they must travel a lengthy distance from their home to receive treatment. In addition to having no treatment facilities in Eureka, Humboldt, Pershing Lander or Lyon counties, there is also a high percentage of uninsured and unemployed residence in these areas indicating that patients are likely to encounter both financial and geographic barriers to treatment.

Lander and Eureka counties do not have breast cancer screening or treatment facilities available to residents. In order for women in these two counties to access breast cancer screening or treatment, they must either make an appointment with mobile mammography or travel hundreds of miles from their homes.

The screening and treatment asset maps indicate that many women in rural areas have geographic and financial barriers to the entire continuum of breast health care. When women in rural locations do not have adequate access to screening, they are unable to enter the continuum of care and when they do not have access to treatment, they are unable to move through the continuum of care which has a negative impact on breast health in rural counties.



Figure 5. Hospitals and Agencies that provide breast cancer treatment in the Komen Northern Nevada Affiliate Area. American Hospital Directory, 2011. Map retrieved from Ezilon Directory and Search Engine (2011).

Affiliate Grantees

In order to illustrate how grant monies in northern Nevada were distributed throughout the service area, a map was created to show the geographic location of our 2010 grantees. Figure 6 illustrates the location of our 2010 grantees with red dots. In addition to the below locations, we also granted the mobile mammography van which visits rural locations in our service area. However, as stated above the mobile mammography van does not have the capacity to reach all women in our rural service areas. With the recent acquisition of five rural counties to our service area, it is important for our affiliate to geographically diversify our grantee base so that grants and breast health services are accessible to women in rural locations and newly annexed counties. As part of our priorities for FY 2012, we will increase grant access for newly annexed rural counties by providing grant writing workshops via teleconference. We will also provide educational outreach to newly annexed counties and work closely with mobile mammography to ensure that women in rural locations are receiving much needed screening.



Figure 6. FY 2010 Komen Northern Nevada Affiliate Grantees. Map retrieved from Ezilion Directory and Search Engine (2011).

Women’s Health Connection (WHC)

The Women’s Health Connection Program is funded by the National Breast and Cervical Cancer Early Detection Program of the Centers for Disease Control and Prevention. The program pays for breast cancer screening services for age-eligible women who do not have health insurance and who meet the Program’s income guidelines. The program covers the cost of an Annual Clinical Breast exam for women who are 40-49 years of age or older who do not have health insurance, Medicaid, Medicare Part B, HMO coverage, or whose health insurance coverage does not pay for preventive services. Women 50 years of age or older are eligible for one screening mammogram per year (Nevada State Health Division, 2006). There are no out-of-pocket expenses for these services for eligible women. All women must meet the program’s income guidelines in order to qualify which are illustrated in Table 4. The

WOMEN'S HEALTH CONNECTION PROGRAM		
2010 Income Guidelines		
Number of People in Household	Household Income Before Taxes	
	Yearly	Monthly
1	\$27,075	\$2,256
2	\$36,425	\$3,035
3	\$45,775	\$3,815
4	\$55,125	\$4,594
5	\$64,475	\$5,373
6	\$73,825	\$6,152
7	\$83,175	\$6,931
8	\$92,525	\$7,710
For each additional person, add \$3,740 per year		

Table 5.
© Copyright 2006 - State of Nevada - Nevada State Health Division

largest gap in the WHC Program is that it does not provide breast cancer screening for women under the age of 40.

Legislative Issues

The Women's Health Connection program is federally funded. The WHC budget is expected to be cut 12.6% in FY2012. This cut will result in a decrease in the amount of women who can receive free breast cancer screenings in Nevada. Federal and state budget shortfalls continue to strain the already overextended government health programs in the northern Nevada service area. The Affiliate needs to be involved in advocacy efforts to protest breast health care programs in the state.

Key Informant Findings

Informants identified that breast health information is generally only accessible to women who are already accessing health care providers for health needs, thus our Affiliate must increase education outreach efforts throughout the service area. Key informant findings indicated that many women rely on their health care providers for breast health information, but that the breast health information provided by the medical community is often clinical and can be difficult for women who are undereducated or who do not speak English to understand. Informants related that the northern Nevada service area would benefit from increasing the distribution of Komen education materials to the community because the material is easy to understand, with non-clinical verbiage and is available in many languages.

Urban breast health providers identified that we need to increase education efforts in the community regarding what financial resources are available to uninsured and underinsured women in order to decrease financial barriers to breast health care. Urban providers identified that once a breast cancer diagnosis is made, financial barriers often prevent women from continuing to move through the continuum of breast health care. With substantial cuts to the Women's Health Connection program, many women in our area will not be able to afford to have annual screenings. Urban informants also indicated that there needs to be an increase in the amount of breast health care navigators in the Reno/Sparks community, where there are currently only 2 Nurse Navigators. Lastly, urban providers reported that it would be beneficial for urban providers to coordinate with rural providers in order to streamline services for women in rural service areas.

Rural providers identified that most women in rural communities get breast health information from rural clinics. They identified that patients feel "safe" coming to the clinics because they have developed relationships with rural providers. Due to the lack of breast health services in the rural areas and the high number of uninsured, once a diagnosis is made, rural physicians often must call urban providers to see what options are available for uninsured women. Rural providers unanimously identified that the largest barrier to breast health screening in rural service areas is lack of health insurance. Women cannot qualify for a federally funded mammogram through Women's Health Connection (WHC) until they are 50 years of age. Women can get free mammograms from the mobile mammography van, but it only frequents the communities once or twice a year, providing around 25-30 annual mammograms total.

WHC and the mobile mammography van do not have the capacity to provide mammograms for all of the uninsured women in rural areas. Rural providers identified that increased educational outreach is important in rural communities, specifically education regarding the importance of screening and resources for women who are uninsured. The informants said that Komen could best partner with rural communities by attending and providing educational materials at large community events, speaking engagements and/or church services. Lastly, rural providers indicated that they believe women in their communities would most benefit from increased visits from the mobile mammography van and information about financial resources available to help them pay for treatment and transportation when applicable.

Both urban and rural providers reported that there is a need to increase education to the Hispanic population in our service area because this population often encounters financial, cultural and language barriers to breast health services which can inhibit them from entering and progressing through the continuum of breast health care.

Conclusion

Key informant interview responses built upon findings gathered from statistical data. Urban providers reported that women in urban areas would benefit from increased education related to breast health awareness, screening and financial support. They also reported that it would be beneficial for urban providers to coordinate services with rural providers so that women in rural areas can more easily navigate the breast health continuum of care.

Rural providers reported that women in rural areas would benefit from increased breast health education and information regarding financial support for screening and treatment. Women in rural areas do not have adequate access to mammography and screening services, thus rural providers recommended increased visits from the mobile mammography van.

Both urban and rural providers identified that the Hispanic community would benefit from education that is both language and culturally appropriate. They would also benefit from information regarding how to access financial support for breast health services.

In order for women in our service area to effectively move through the continuum of care, it is important for local agencies to coordinate efforts so that women can successfully navigate breast health services. Data and informant interviews also indicate that increased education is needed in urban and rural service areas as well as culturally specific education provided to the Hispanic community.

Breast Cancer Perspectives in Target Communities

Methodology

After reviewing statistical data and key informant responses, it was important to acquire information from women in the community in order to illustrate a holistic view of breast health care in northern Nevada. The Community Profile team disseminated surveys to breast cancer

survivors in our service area in order to gather data from patients moving through the continuum of care.

The Community Profile team created a survey which was sent to survivors. The survey aimed to identify barriers to treatment experienced by survivors as they moved through the continuum of breast health care in northern Nevada. Survivors who had previously participated in our local race were chosen as recipients. Surveys were distributed via email. The team received 40 completed surveys which were analyzed.

Review of Qualitative Findings

Survey results did not demonstrate a large pool of ethnic diversity, 39 of the respondents identified as white/non-Hispanic and one identified as Asian. 7 of the respondents were from rural locations while 33 lived in urban areas. The 7 women from rural communities identified that the large geographic distance to accessing treatment presented a barrier to service, which supports findings from both key informants and statistical data. Women from rural areas also reported that they often had to stay in motels, with extended family or even in RV parks in order to be close to urban treatment centers.

37 of the women reported that they had health insurance during treatment. 3 women reported being uninsured but had access to federal and state programs for treatment. 11 women identified that treatment was a large financial burden because they were forced to miss work and cut down on other expenses. 8 women who had health insurance reported that the cost of treatment resulted in a large financial burden for themselves and their families because health insurance co-pays and deductibles amounted to thousands of dollars.

47% of respondents were between the ages of 35 and 49 when they were diagnosed with breast cancer. Only 42% of respondents were diagnosed at stage one. 59% of respondents were diagnosed at stage two or greater.

Conclusions

Themes that emerged from survey responses were congruent with findings gathered from statistical data and key informant health care providers. Women in rural locations unanimously reported that in order to access screening and treatment, they must overcome geographic barriers to service. Both insured and uninsured women reported that financial barriers to treatment made it difficult to smoothly transition through the continuum of care. The large percentage of late stage diagnosis supports the recurring theme that there is a need for increased education related to breast health awareness, access to screening and financial support. High rates of late stage diagnosis in respondents also indicate that there is not enough breast health information available to the communities in our service area. This supports our objective to increase communication within our service regarding breast health and increase awareness regarding the Komen Northern Nevada Affiliate as a source of breast health support, specifically in newly annexed counties. As previously stated, the sample of women who responded to the survey did not demonstrate cultural diversity across ethnicities (39

white/non-Hispanic, 1 Asian). The lack of diversity, along with the relatively small number of respondents were weak areas in the survey results.

Conclusions: What We Learned, What We Will Do

Review of the Findings

Utilizing findings gathered from statistical data, key informant interviews and survivor surveys, the team identified the following target communities: Eureka County; Lassen County; our service area in Nevada County; the rural counties Elko, Lander, Lyon, Storey, Humboldt and Churchill; as well as the Latina community throughout our service area.

Most at Risk Communities

Eureka County

Statistical data indicated high rates of breast cancer mortality, low mammography rates, high incidence of breast cancer and the highest uninsured rate in our service area. In addition, Eureka is a newly annexed county/rural county with geographic barriers to service. Findings from survivor surveys and key informant interviews identify that the Komen Northern Nevada Affiliate should target geographic locations with barriers to service.

Lassen County

Lassen was chosen due to low mammography rates, high uninsured rates and high rates of poverty and unemployment. Lassen County is also a newly annexed/rural county.

Nevada County

Nevada was chosen due to having both the highest incidence and mortality rate in the entire service area.

Select Rural Counties

In addition to the aforementioned counties, Elko, Lander, Lyon, Storey, Humboldt and Churchill counties were chosen to be included in a strategic marketing campaign due to the following indicators: high rates of low SES and medically underserved populations as well geographic barriers to treatment, education and service. In addition, with the exception of Churchill County, none of the counties have received a Komen grant. Findings from survivor surveys and key informant interviews identify that the Komen Northern Nevada Affiliate should target rural locations with geographic barriers to service. The Komen Northern Nevada Affiliate will target the aforementioned communities with strategic marketing and education campaigns so that health providers in these areas are aware of grant and support services provided by the Affiliate. We will also ensure that two writing workshops facilitated by the Affiliate will be available to rural health care providers via teleconference. The use of teleconference for the workshops will ensure that rural health care providers will not be discouraged from participating in the workshops due to geographic barriers.

Latinas throughout the northern Nevada Service Area

Latinas were chosen due to the significant increase in the Hispanic population in Nevada which rose from 19% in 2000 to 26% in 2010. Statistical findings indicated that only 38% of Latina women, age 40 and older have regular mammograms in Nevada. Breast cancer is the most commonly diagnosed cancer and the leading cause of cancer death among Latina women. Research indicates breast cancer may be harder to treat in Hispanic women because they wait longer to receive care, often because they do not have health insurance and cannot afford treatment. Lastly, both urban and rural key informants identified that the Hispanic community would benefit from education that is both language and culturally appropriate. They also identified that they would benefit from information regarding how to access financial support for breast health services.

Action Plan

The strategic plan that the Komen Northern Nevada Affiliate will follow for the next two years will be in accordance to the following priorities as outlined with SMART (specific, measureable, achievable, realistic, and timely) objectives.

Priority 1: Increase education efforts in our service area that target breast health, breast cancer screening and resources available to uninsured and underinsured women:

Objective 1: Attend at least one large event in each county in FY 2011 and FY 2012. Distribute education materiel at each event and solicit volunteer contacts.

Objective 2: By FY 2012 aim to grant at least 3 new breast health agencies in rural service areas.

Objective 3: By end of FY 2011, contact Nevada Hispanic Services (NHS). Coordinate with the director of NHS to determine the most effective way to educate the Hispanic community in northern Nevada about breast health.

Objective 4: RFAs for FY 2012 will include a requirement that grantees must collaborate with at least one breast health agency in our service area during their grant term.

Priority 2: Reduce barriers to education, screening and treatment in rural service areas:

Objective 1: By end of FY 2011, call all clinics in rural service counties and notify them of the support and grant funding workshops available from the Komen Northern Nevada Affiliate.

Objective 2: Hold two grant writing workshops, one in FY 2011 and one in FY 2012. Make workshops available via teleconference for rural providers and target grant applications that address barriers to education, screening and treatment in rural and newly annexed service areas.

Objective 3: By the end of FY 2012 recruit a lead volunteer from each rural county to serve as a liaison between the rural community and the Komen Northern Nevada Affiliate.

Objective 4: Work with mobile mammography to ensure that rural areas are adequately serviced.

Priority 3: Increase marketing efforts throughout service area so that women and health care providers are aware that the Komen Northern Nevada Affiliate is a source of breast health support.

Objective 1: By the end of FY 2011, make a radio public service announcement that will notify the community of the breast health support that is provided by the Komen Northern Nevada Affiliate. The announcement will be played on radio stations (including Spanish speaking stations) throughout service area.

Objective 2: By the end of FY 2012, make a video that will communicate the efforts of the Komen Northern Nevada Affiliate to the local community. The video will be played at Komen Northern Nevada education presentations and events.

Objective 3: Work collaboratively with news and paper media throughout service area. Ensure that media are invited or notified of Komen sponsored events in service area when appropriate.

References

- American Association for Cancer Research. (2009). Hispanic Women and Breast Cancer: An Understudied Group. Retrieved from <http://www.aacr.org/home/public--media/aacr-p-press-releases/press-releases-2008.aspx?d=1252>
- American Cancer Society. (2010). Breast Cancer Overview. Retrieved from <http://www.cancer.org/Cancer/BreastCancer/OverviewGuide/breast-cancer-overview-key-statistics>
- American Cancer Society. (2011). Cancer Facts and Figures 2011: Poverty is a Carcinogen. Does Anyone Care? Retrieved from <http://www.cancer.org/AboutUs/DrLensBlog/post/2011/06/17/Cancer-Facts-and-Figures-2011-Poverty-is-a-Carcinogen-Does-Anyone-Care.aspx>
- American Hospital Directory. (2010). Retrieved from <http://www.ahd.com/freesearch.php>
- Bennett, K.J., Olatosi B., Probst J.C. (June 2008). Health Disparities: A Rural-Urban Chartbook. *Technical report provided to Health Resources and Services Administration/Office of Rural Health Policy*. Retrieved from <http://rhr.sph.sc.edu>.
- Levin, H., Belfield, C., Muennig, P. & Rouse, C. (2007). The Costs and Benefits of an Excellent Education for All of America's Children. New York, NY: Columbia University. p. 6. Retrieved from www.cbcse.org/media/download_gallery/Leeds_Report_Final_Jan2007.
- Nevada State Health Division. (2011). Women's Health Connection. Retrieved from http://health.nv.gov/cd_whc_breastcervical_cancer.htm
- The Kaiser Family Foundation. (2009). Health Insurance Reform and Breast Cancer. Retrieved from <http://www.healthreform.gov/reports/breastcancer/breastcancer3.pdf>
- The National Cancer Institute. (2007). Surveillance, Epidemiology and End Results. Retrieved from <http://seer.cancer.gov/data/citation.html>
- The Office of Rural Health Policy. (2009). Retrieved from <http://www.hrsa.gov/ruralhealth/about/community/index.html>
- The State of Nevada Comprehensive Cancer Plan. (2005). Retrieved from <http://health.nv.gov/PDFs/canplan.pdf>
- Thompson Reuter. (2010). SGK Community Profile Analysis Data Pack [Data file].

United States Census Bureau. (2010). 2010 Census Population Profile Maps. Retrieved from http://www2.census.gov/geo/maps/dc10_thematic/2010_Profile/2010_Profile_Mp.pdf

United States Department of Labor and Statistics. (2010). Labor Force Statistics from Current Survey Data. Retrieved from <http://www.bls.gov/cps/>

United States Department of Agriculture. (2010). Economic Research Service. Retrieved from <http://www.ers.usda.gov/Briefing/IncomePovertyWelfare>