Health Matters in Senate District 14

2016

Lung Cancer in Nevada

Cancer is the second leading cause of death in Nevada and lung cancer is the leading cause of cancer deaths. Cancer-related mortality rates in Nevada continue to exceed U.S. rates[i].

Cancer Deaths in Nevada

Lung Cancer: 48.8 per 100,000 Nevadans in 2011

Breast Cancer (Female Only): 23.2 per 100,000 Nevadans in 2011

Colorectal Cancer: 16.6 per 100,000 Nevadans in 2011

Nevada is attempting to relieve the lung cancer burden by focusing efforts on:

- Eliminating exposure to secondhand smoke
- Eliminating tobacco-related disparities
- Eliminating tobacco use initiation
- Increasing tobacco use cessation
- Increasing the use of low-dose CT screening in order to detect lung cancer earlier
- Increasing Radon Awareness & Radon Control efforts

Funding for Lung Cancer Control efforts are provided by the Centers for Disease Control and Prevention (CDC) Comprehensive Cancer Control Grant ($252,444 in SFY17) and Tobacco Control Grants (federal funding totaling $924,627 for SFY17 and State Tobacco Master Settlement Agreement funding totaling $1 million in SFY17). The Centers for Disease Control and Prevention recommend Nevada receive $30 million for tobacco control efforts in the Silver State[ii].

The Comprehensive Cancer Control Grant funds two FTEs dedicated to cancer control efforts. The Tobacco Control Grants funds three dedicated FTEs for tobacco control efforts.

How does Nevada compare to other states?

Nevada

Mortality rates for lung cancer in Nevada continue to exceed the national rates and the rate of decrease has begun to slow as challenges increase. The Nevada Division of Public & Behavioral Health houses both the Comprehensive Cancer Control Program and the Tobacco Control Program in the Chronic Disease Prevention and Health Promotion Section at the Bureau of Child, Family, and Community Wellness.

The Comprehensive Cancer Control Program is 100% federally funded. Fifty percent is allocated to the Nevada Cancer Coalition to assist in the implementation of the 2016-2020 Nevada

Comprehensive Cancer Control. Nevada does not allocate any state funding to cancer control efforts.

The Tobacco Control Program is 48 percent federally funded and 52 percent state funded. Eighty percent is allocated to community partners to assist in implementing state tobacco control initiatives. With $1 million in state funding, Nevada spends 34 cents per citizen on tobacco control efforts.

Utah

Utah is similar to Nevada in terms of both geography & population. The state has excelled in their lung cancer control efforts, decreasing the mortality of lung cancer to 20.4 per 100,000 persons in 2012[iii].

The Utah Comprehensive Cancer Control Program (UCCCP) is located within the Utah Cancer Control Program in the Bureau of Health Promotion, Division of Disease Control and Prevention within the Utah Department of health. The program is staffed by 4.0 FTEs. UCCCP receives a total of $150,000 from the state's general fund, meaning the state spends 5 cents per citizen on comprehensive cancer control efforts. These funds amount to 20% of the program budget- the additional 80% is federally funded.

The priorities of the UCCCP include decreasing skin cancer, increasing physical activity, increase cancer screenings, and improving cancer survivorship and quality of life.

The Utah Tobacco Control Program (UTCP) is considered its own program within the Bureau of Health Promotion at the Division of Disease Control and Prevention. The program is staffed by 12.5 FTES dedicated to Tobacco Control efforts. The UTCP receives approximately $7 million annually from Tax Revenue and MSA funding, meaning the state of Utah spends nearly $2.34 per citizen on tobacco control efforts. State funding accounts for approximately 58 percent of the programs total funding.

The priorities of the UTCP include increasing the legal age of tobacco possession to age 21, regulating e-cigarettes, and ending tobacco related disparities.

Michigan

While lung cancer mortality in Michigan is still rather high, the state has been very successful in precipitously decreasing lung cancer deaths at a rate of almost 9 deaths per 100,000 per year in 2004, from 56.7 to 47.9 per 100,000 only ten years later. Michigan has achieved this by utilizing aggressive, but resource intensive, strategies designed to address lung cancer.

The Michigan Comprehensive Cancer Control Program (MCCCP) is located in the Michigan Department of Health and Human Services Division of Chronic Disease and Injury Control. The program receives $15 million bi-annually in state funding and is staffed by 10 FTEs, meaning the state of Michigan spends 75 cents on each citizen in cancer control efforts each year. The priorities of the MCCCP care currently to increase HPV vaccination rates, increase cancer screening, increase cancer treatment clinical trial enrollment, and increase the number of cancer survivors.

Michigan's tobacco control program is also located within the Division of Chronic Disease and Injury Control. The program receives $1.63 million annually in state funds from general funds and tobacco excise tax revenue, equaling 16 cents per citizen spent on tobacco control

efforts annually. These state dollars account for 28.6% of the total tobacco control budget. Additional funds are received from federal grants and FDA Tobacco Retail Inspections. The program is staffed by 17 FTEs dedicated to tobacco control efforts. Currently, the program has prioritized decreasing tobacco use rates among disparately affected populations, integrating evidenced-based tobacco dependence treatment protocols into primary care and local health departments, dental care, behavioral health, and HIV care systems, creating a user-friendly, highly promoted and motivating Quiltline, monitoring and enforcing the state and federal SFA law and all federal laws, keeping e-cigs and emerging products out of the hands of underage youth through public policy to regulate and tax these alternative products as tobacco products.

Utah and Michigan may be considered models for Nevada in order to achieve greater strides in lung cancer control efforts. However, the resources and capacity of these programs must be considered. Nevada allocates far fewer resources and spends far less per citizen in attempting to decrease the lung cancer burden than comparative states.

The 2016-2020 Nevada Comprehensive Cancer Control Plan

In 2015, the Nevada cancer control community, made up of local private citizens, community not-for-profit organizations and businesses, and local health authorities, came together to create the 2016-2020 Nevada Comprehensive Cancer Control Plan. This plan identifies community identified priorities, goals, and activities designed to alleviate the burden of cancer across Nevada. Decreasing the burden of lung cancer was one such identified priority. In order to decrease the burden of lung cancer, the plan outlines the following strategies:

- Decrease tobacco use initiation among youth and young adults
- Promote quitting the use of tobacco products
- Decrease exposure to radon
- Increase the use of Low Dose CT for the purpose of early diagnosis of lung cancer
- Eliminate tobacco-related disparities
- Eliminate exposure to secondhand smoke

The goals and objectives of this plan are supported by evidenced-based and CDC recommended activities. The plan in its entirety can be viewed at: http://dpbh.nv.gov/Programs/CCCP/dta/Publications/Comprehensive_Cancer_-_Publications/

The 2016-2020 Nevada Comprehensive Cancer Control Plan is supported by the Nevada Comprehensive Cancer Control Program and Nevada Cancer Coalition. Limited funding is given to accomplishing the goals of the plan and is largely dependent on the support of the cancer control community. More resources are needed to successfully achieve the priorities of the plan, decrease the burden of cancer statewide, and improve the health of all Nevada citizens.

[i] Nevada Division of Public and Behavioral Health. Office of Public Health Informatics and Epidemiology. *Comprehensive Cancer Report.* (January 2015).

[ii] Centers for Disease Control and Prevention. Best Practices for Comprehensive Tobacco Control Programs (2014). Retrieved from: http://www.cdc.gov/tobacco/stateandcommunity/best_practices/index.htm.

[iii] Centers for Disease Control and Prevention. Lung Cancer Rates by State. (2012). Retrieved from:

http://www.cdc.gov/cancer/lung/statistics/state.htm

Health Matters in Nevada: Colorectal Cancer

2016

Colorectal Cancer in Nevada

Colorectal Cancer (CRC) is the fourth most commonly reported cancer in Nevada and the second leading cause of death behind lung cancer for men and women in both Nevada and the United States.[1] In 2015 there were 1,110 newly diagnosed cases and 470 deaths due to colorectal cancer in Nevada. Sixty of these deaths can be prevented if the recommended screening is done.

The Colorectal Cancer Control Program (CRCCP) is working to reduce disparities and to reduce overall colorectal cancer incidence and mortality by increasing CRC screening rates in Nevada by working with health systems to implement clinic and system wide priority interventions including:

- Provider Reminders
- Client Reminders
- Reduction of structural barriers
- Provider Assessment and Feedback

The Colorectal Cancer Control Program is housed in the Chronic Disease Prevention and Health Promotion Section (CDPHP) at the Bureau of Child, Family, and Community Wellness. The CRCCP Program is 100% federally funded by the Centers for Disease Control and Prevention (CDC). The operating budget for CRCCP is $860,777.

The CRCCP has one FTE state employee serving as the Program Coordinator, plus a total 3.2 FTEs spread across an additional nine staff positions to provide support in multiple functions to CDPHP, i.e., Evaluator, Fiscal Manager, Administrative Assistant and Supervision.

How does Nevada compare to other states?

Ohio

The state of Ohio (OH) is similar to Nevada in federal funding for colorectal cancer. The Ohio Colorectal Cancer Control Prevention (CRCCP) resides in the newly created Cancer section within the Bureau of Community and Environmental Health. OH CRCCP's total operating budget is $480,638 funded through "Organized Approaches to Increase CRC Screening" CDC cooperative agreement. The program is staffed by 1.2 FTE including 1.0 FTE Health Program Specialist and a 0.2 Health Program Manager.

The priorities of the Ohio CRCCP include increasing overall screening and utilization of a fecal immunochemical test (FIT)/ fecal occult blood test (FOBT) kits.

OH CRCCP is currently implementing five priority evidence-based interventions (EBIs), including:

- Provider Reminders
- Patient Reminders
- Provider Assessment and Feedback
- Reduction of structural barriers
- FluFIT academic detailing (targeted/one-on-one provider outreach)

In addition to implementing the five EBIs mentioned previously, Ohio's CRCCP is working on academic detailing with health systems throughout the state via regional public health district coordinators and population based awareness messaging via social media channels.

[1] Nevada 2011 CRC incidence and mortality

Colorado

The state of Colorado can be considered a gold star state in Colorectal Cancer Control efforts. The CRCCP in Colorado is housed at Colorado Department of Public Health and Environment in (CDPHE) the Prevention Services Division Healthy Promotion & Chronic Disease Prevention Branch Cancer Unit. Like Nevada, Colorado is one of the six grantees that have been awarded additional funds by CDC to provide direct colorectal cancer screening and follow-up services to people who meet specific criteria. CO CRCCP's total operating budget is $730,000 per year. All funds are federal funds from CDC.

The Colorado CDPHE administers a competitive grants program funded by an increase in tobacco taxes initiated in 2006. These funds are generally awarded in 3 year cycles. For the FY16-18 cycle, The University of Colorado Cancer Center (UCCC) is currently a recipient of $600,000 (per year) for the Colorado Colorectal Screening Program (CCSP)—mainly focused on patient navigation for CRC screening.

CDPHE partners with clinics and organizations to assess adherence with preventive service recommendations, provide training, enhanced clinic policies and procedures, make recommendations based on clinic structure to implement EBIs, develop and implement action plans to implement EBIs, and reassess screening rates annually. Specific to Colorado's Colorectal Cancer Control Program, CDPHE has initiated work with 12 health systems, including 24 unique clinics—four of these twelve health systems are FQHCs.

CDPHE's implementation of EBIs is based on the National Colorectal Cancer Roundtable's Physician's Toolkit and Manual for Community Health Centers (CHCs). Colorado's CRCCP is currently implementing four priority EBIs:

- Provider Reminders
- Patient Reminders
- Provider Assessment and Feedback
- Reduction of structural barriers

CDPHE has demonstrated success in significantly increasing colorectal cancer screening rates in eight health systems. These eight health systems represent 27 individual clinics. Upon combining the data for these 27 clinics, CDPHE has reported an average 12.8% increase in screening rates based upon baseline values.

The 2016-2020 Nevada Comprehensive Cancer Control Plan

In 2015, the Nevada cancer control community, made up of local private citizens, community not-for-profit organizations and businesses, and local health authorities, came together to create the 2016-2020 Nevada State Cancer Plan. This plan identifies community identified priorities, goals, and activities designed to alleviate the burden of cancer across Nevada. Promoting, increasing, and optimizing the appropriate use of high-quality cancer screening to decrease early detection of cancer among Nevadans was identified as a priority goal for cancer control in Nevada. The main goal identified for colorectal cancer is to decrease the percentage of late-stage colorectal cancer diagnoses from 59.6% to 56.6%.

The goals and objectives of this plan are supported by evidenced-based and CDC recommended activities. The plan in its entirety can be viewed at: http://dpbh.nv.gov/Programs/CCCP/dta/Publications/Comprehensive_Cancer_-_Publications/

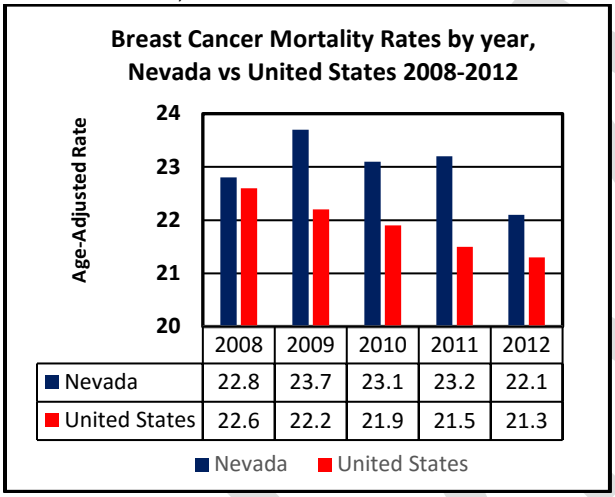
Health Matters in Senate District 14

2016

Breast Cancer in Nevada

Breast cancer is the most common form of cancer among women and the second leading cause of death among women in Nevada. In Nevada, between 2008 and 2012, approximately 1,600 women were diagnosed with breast cancer each year and 325 women died from the disease. As depicted in Table 1, Breast cancer mortality rates in Nevada continue to exceed the National rate.

Table 1: Breast Cancer Mortality Age-Adjusted Rates, Nevada and United States, 2008-2012



Nevada's breast and cervical cancer screening program known as Women's Health Connection (WHC) is housed in Chronic Disease Prevention and Health Promotion (CDPHP) Section at the Bureau of Child, Family and Community Wellness.

WHC is 100% federally funded by the CDC's, National Breast and Cervical Cancer Early Detection Program (NBCCEDP) and receives **NO STATE FUNDING**.

WHC budget for FY17 is $2,671,431 and anticipates to screen 5,787 women. The program maintains four Full Time Employee's (FTE): Program Manager, Program Coordinator, Data Analysis and Compliance and Training Officer.

Four out of five women will survive the disease

WHC focuses its efforts on reducing breast and cervical cancer disparities, morbidity and mortality by increasing screening services.

WHC top three priorities:

- Working with health systems
- System changes
- Care coordination

WHC evidence-based interventions:

- Client reminders
- One-on-one education
- Group education
- Reduce out-of-pocket expense
- Reducing structural barriers
- Small media

How does Nevada compare to other states?

Montana State

The state of Montana is considered a gold star state due to partnering with a variety of health systems and work sites to increase screenings and have added population-based screenings and system changes to their activities.

Montana's Breast and Cervical cancer screening program known as Montana Cancer Control Program (MCCP) is housed within the Chronic Disease Prevention and Health Promotion Bureau within the Public Health and Safety Division of the Montana Department of Public Health and Human Services Department. MCCP total operating budget is $2,404,000 to include $2,000,000 from NBCCEDP and $404,000 in state funds, Tobacco Master Settlement Funds, and a small unspecified amount of donated funds for screenings. MCCP screens approximately 2,500 women a year, reach 16,782 women through media outreach and works with 31 worksites reaching 3,147 women while maintaining 3.5 FTE's.

MCCP top three priorities:

- Navigating women from MCCP program to expanded Medicaid
- Navigating women into the Marketplace reaching the rarely-or-never screened women
- Use HIT to increase screenings

MCCP evidence-based intervention:

- Provider assessment and feedback
- Provider reminder systems
- Patient reminder systems
- Reducing structural barriers
- Small media
- Health Information Technology (HIT)
- Professional Development

The Montana Cancer Coalition (MTCC) are a group of diverse individuals and organizations from communities throughout Montana working to reduce cancer incidence, morbidity and mortality rates across Montana. MTCC developed the Montana Comprehensive Cancer Control (CCC) plan which allows coalition members to utilize coordinated approaches to control cancer and used as a guide for achieving goals.
http://dphhs.mt.gov/publichealth/Cancer/cancercoalition.aspx

Arizona State

The state of Arizona is considered a gold star state due to access and implementing system changes within their clinics to increase population-based breast cancer screenings. Providers are required to focus on population-based screening, conduct baseline assessments of breast cancer screening rates, implement EBI strategies and report screening rates to Arizona Department Health System (ADHS).

Arizona's Breast and Cervical cancer screening program known as Well Women HealthCheck Program (WWHP) is located in the Office of Cancer Prevention and Control, Bureau of Health Systems Development, within the Division of Public Health Prevention. WWHP total operating budget is $3,900,000 to include state funding of $1,300,000.00 and $2,600,000 from NBCCEDP. WWHP maintains 3.30 FTE and 2 contract staff members.

WWHP top three priorities:

- Implementing Care Coordination efforts
- Identifying strategies with community stakeholders
- Work with health

WWHP evidence-based interventions:

- Client Reminders
- Small Media
- Provider Reminders
- Provider Assessment and Feedback

WWHP provides screening and diagnostic services to approximately 7,000 women each year. They are currently implementing Care Coordination for this upcoming fiscal year and anticipate screening and diagnostic services will increase.

The Arizona Cancer Coalition meets twice a year. Work Groups to include:

- Policy, Prevention and Early Detection
- Quality of Life
- Research
- Treatment
- Data

The Coalition created the goals and objectives for the Arizona Cancer Control Plan 2014-2018.
The work of Cancer Prevention and Control could not be done without an incredibly close partnership/collaboration with the Arizona Cancer Registry. The Coalition has created documents,

located on the website, to educate stakeholders on the Cancer Registry
http://azdhs.gov/prevention/health-systems-development/az-cancer-coalition/index.php

The 2016-2020 Nevada Comprehensive Cancer Control Plan

The Nevada Comprehensive Cancer Control Plan provides a roadmap focused on improving health systems and policies to prevent disease, improve the care of our loved ones, and ultimately save lives. Statewide work groups specific to breast cancer, research and data, education and policy have been established. The 2016-2020 plan includes goals and objectives specifically pertaining to breast cancer.

Goal: Decrease the percentage of late-stage breast cancer diagnoses among women from 37.5% to 35.6%.

- Increase the prevalence of women 40 and older who report having had a mammogram and a clinical breast exam within the prior two years from 69.9% to 73.4%.

Goal: Increase the number of pathways for enrollment in Medicaid for eligible women needing treatment for breast or cervical cancer from 1 to 5.

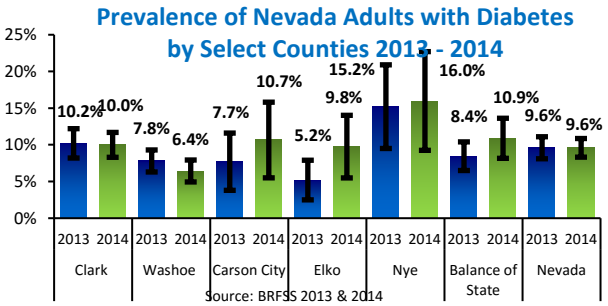
- Increase the number of policy changes from 0 to 1 allowing women of any age under 250% of the Federal Poverty Level (FPL) access to treatment through Medicaid after a breast or cervical cancer diagnosis from any provider.

Health Matters in Nevada: Diabetes

2016

Diabetes in Nevada

Type 2 diabetes (T2DM) is a preventable disease. It is the most common form of diabetes, which develops when the body no longer uses insulin properly or cannot make enough insulin to keep blood glucose at normal levels[i]. Diabetes, particularly T2DM, is a significant and growing health problem that affects both adults and children and can cause a number of serious complications, including blindness, kidney disease, cardiovascular disease, amputation, and premature death.



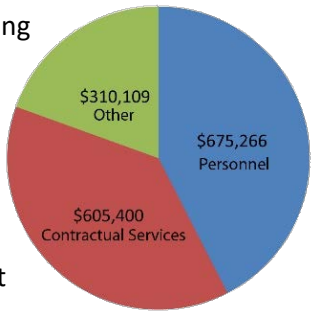
Note: Balance of State includes Churchill, Douglas, Esmeralda, Eureka, Humboldt,

- One in ten Nevadans have diabetes and up to 37% or almost .8 million adult Nevadans have prediabetes. Without intervention efforts, up to 30% of people with prediabetes will develop T2DM within five years, and up to 70% will develop diabetes within their lifetime.
- The operating budget for the Nevada Division of Public and Behavioral Health, Diabetes Prevention and Control Program (DPCP) is $401,463 for FYs 15, 16, and 17. The DPCP's total budget stems from federal funds from the Centers for Disease Control and Prevention (CDC). No state funds have been allocated for diabetes efforts at DPBH.
- The DPCP has one FTE state employee serving as the Program Coordinator, plus a total 1.3 FTEs spread across an additional six staff positions to provide support in multiple functions to the DPCP, i.e., evaluator, fiscal manager, administrative assistant and supervision.

How Nevada Compares

The State of New Mexico (NM) is similar to Nevada in size, population (2,085,109), demographics and federal funding for diabetes. The DPCP[ii] resides in the Chronic Disease Prevention and Control Bureau with the Public Health Division in the New Mexico Department of Health.

- NM DPCP's has nine FTE for a staff of nine that includes a program manager, health educator supervisor, epidemiologist, evaluator, three health educators, one nurse consultant and an administrative assistant.
- NM DPCP's total operating budget is $1,590,775, of which $429,209 is federal funds from the CDC and the remaining $1,061,566 comes from state general funds, and state tobacco settlement funds.



- In 2013, NM DPCP received an additional $134,380 from the National Association of Chronic Disease Directors to build infrastructure for the National Diabetes Prevention Program (DPP), including a marketing plan and a referral system. These funds allowed for the training of 40+ lifestyle coaches representing 20 partnering organizations throughout the state to deliver the program. Since CDC funds cannot be used for training or direct services, Nevada has not been able to build infrastructure for DPP to this scale.
- NM's state funding has allowed them to offer targeted programs:
  - Stanford University Chronic Disease Self-Management Program and Diabetes Self-Management Programs are offered free of charge with the inclusion of the resource book and relaxation CD. The annual budget for FY 16 was $174,436

- The Kitchen Creations curriculum was adapted from the "Dining with Diabetes" program developed by West Virginia University Extension and is considered evidenced-based by New Mexico. Kitchen Creations consists of 4 classes which last about 3 hours each. A Certified Diabetes Educator, Registered Dietitian, or other healthcare professional with expertise in diabetes teaches the nutrition education portion of each class. An Extension Home Economist typically prepares and leads participants in the cooking portion of each class. Preparation and sampling of recipes to make balanced meals that help manage blood sugars is done during sessions 2, 3, and 4. The annual budget for the program varies, depending on our budget resources each year; in FY16 it was $102,000.

THE STATE OF COLORADO is a western state with both urban and rural communities and has about double the population of Nevada. The Colorado Department of Public Health and Environment (CDPHE), Diabetes Prevention and Control Program is within the Health Promotion and Chronic Disease Prevention Branch of the Division of Prevention Services.

- Colorado has both basic and enhanced/ supplemental funding with an overall "diabetes" budget around $700,000. Colorado's staffing is quite integrated, thus it's difficult to list exact FTEs for diabetes staffing. The main diabetes staff member is funded at 90% FTE under diabetes funds and eight other individuals touch diabetes work in one way or another, totaling approximately one FTE.
- Colorado has been recognized nationally for garnering coverage for the National Diabetes Prevention Program (DPP) for state employees. CDPHE partnered and funded the Colorado Business Group on Health (CBGH) to help with this work. In fall 2014 a Request for Proposal (RFP) for this project was released with CBGH receiving the award and starting work in March 2015. The project with CBGH focused on the development of the CDPHE DPP Economic Assessment Tool. The Tool aids employers in quantifying the economic benefits of adding DPP as a covered employee health benefit. The Tool is translatable to employer audiences throughout Colorado and used by CDPHE to continue promotion of DPP as a covered employee benefit statewide. Additionally, this project serves as outreach by engaging a minimum five (5) self-funded public employers to agree to add a CDC-approved DPP as a covered employee health benefit.
- The first year of CBGH's contract was $50,000 (March-June 2015) and currently year (July 2015 - June 2016) funding is also for $50,000. The majority of the budget has been spent on developing the Tool as well as CBGH's staff time to promote the NDPP.

Potential for Nevada

Augmented funding from the state for diabetes prevention and control in Nevada would allow Nevada to build infrastructure to develop evidence-based programs and methodologies that can curve the diabetes epidemic, reduce healthcare cost and improve the economy through a healthy workforce.

The 2014 Nevada KIDS Count indicates there are 2,152,251 Nevadans $\geq$ 18 years of age[iii]. Using the CDC estimate that 37% of the adult population has prediabetes represents almost .8 million Nevadan may have prediabetes and 90% do not know that they have it.

- Nevada has been stifled in building capacity under the current CDC funding which cannot be utilized for training health coaches, or to subsidize organizations providing DPP while they establish their program during the two-year requirement toward achieving CDC recognition in the Diabetes Prevention Recognition Program (DPRP). Thus, while many states have multiple delivery sites for DPP.
- Nevada currently has three in Clark County and one in Carson City. Pursuing the lead of New Mexico's model in building infrastructure for the National Diabetes Prevention Program may perhaps be a prime focus of such an effort. This leaves vast opportunities to creating delivery sites throughout Nevada.
- With the Nevada Public Employee Benefit Program (PEBP) covering the lives of 18,111 Nevadans having the National Diabetes Prevention Program as a covered benefit could save Nevada $198,885 annually or $1,741,956 over the span of five years, based on the *DPP Economic Assessment Tool* developed in Colorado. Thus, by providing DPP as a covered benefit, the state of Nevada would save capital.

[i] American Diabetes Association, "Diabetes Basics: Type 2, http://www.diabetes.org/diabetes-basics/type-2/, Accessed April 2016.

[ii] New Mexico Department of Health, Diabetes Prevention and Control Program, http://archive.diabetesnm.org/index.htm , Accessed June 13, 2016.

[iii] *Nevada KIDS COUNT Data Book 2014,* Center for Business and Economic Research, University of Nevada, Las Vegas. http://kidscount.unlv.edu/databooks/2014.html, Accessed June 21, 2016.

Health Matters in Senate District XX

2016

Introduction

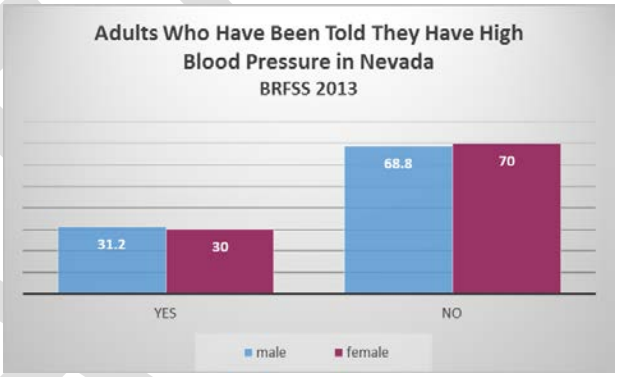
Nationally, heart disease is the leading cause of death, and stroke is the fourth leading cause of death. One in three deaths in the Unites States is attributed to cardiovascular disease. The costly treatments for these conditions equate to $1 for every $6 spent in the U.S. for health services.[i] Nevada demonstrates similar statistics with heart disease being the leading cause of death, however, stroke is the fifth leading cause of death.

Heart Disease and Stroke in Nevada

High blood pressure, heart disease, and stroke affect one in three Nevada residents. These diseases are preventable, and acute events are avoidable, by leading heart-healthy lifestyles including not using tobacco products, limiting sodium in diets, partaking in at least 30 minutes of physical activity daily, limiting or eliminating alcohol consumption, and following prescribed medication regimens.

High blood pressure is the force of blood pushing against the walls of the arteries as the heart pumps blood.[ii] Long term untreated high blood pressure leads to chronic disease of the heart including coronary artery disease, stroke, peripheral vascular disease, cardiomegaly, heart valve diseases, congestive heart failure, and myocardial infarctions (MI, heart attack).

Nevada's overall population is 2,839,099.[iii] The population is disproportionately distributed with the vast majority, 2,069,681, residing in Clark County (Las Vegas), 440,078 within Washoe County (Reno) and 54,522 residing in the state capital Carson City. The remaining 274,818 residents reside in the rural/frontier communities of Nevada. Unfortunately, the specialty care services for Cardiology and Neurology follow similar demographics leaving the rural and frontier communities without access to these vital specialty services and the underserved social economic class, in all communities, with minimal access to providers that service their population.



Currently, Nevada dedicates $4.10 per capita in public health funding and is ranked 33rd in heart disease, 31st in stroke, and 17th in high blood pressure compared to other states.

- Nevada has 27 hospitals with a total of 5,339 staffed beds and 252,467 hospital discharges yearly.[iv]
- There are 170 Cardiologists and a total of 2,807 physicians (MD) and doctors of osteopathic (DO) in Nevada.[v]
- The allocated budget for Nevada Division of Public and Behavioral Health, Heart Disease and Stroke Prevention and Control Program (HDSPCP) is $459,735 for FYs 15, 16, and 17. All funds allocated to HDSPCP stem from Centers for Disease Control and Prevention (CDC) grants. There are currently no state funds allocated to the HDSPCP.
- Currently, there is only one FTE Program Coordinator dedicated to the program with supportive roles from the Administrative Supervision, Administrative Assistants,

Fiscal Manager, and 1305 Evaluator. The FTE dedicated position for this program began in March 2015.

- The HDSPCP Coordinator leads the Heart Disease and Stroke Task Force with approximately 60 members throughout the state from clinical programs, organizations, FQHCs, and coalitions.

- The Nevada Stroke Registry is shared between the HDSPC program and the Office of Public Health Informatics and Epidemiology (OPHIE).

New Mexico

New Mexico demonstrates a similar demographic to Nevada, but dedicates $47.60 per capita in public health, ranks 15th in heart disease, 20th in stroke, and 10th in high blood pressure.[vi][vii]The state of New Mexico is geographically and demographically comparable to Nevada.

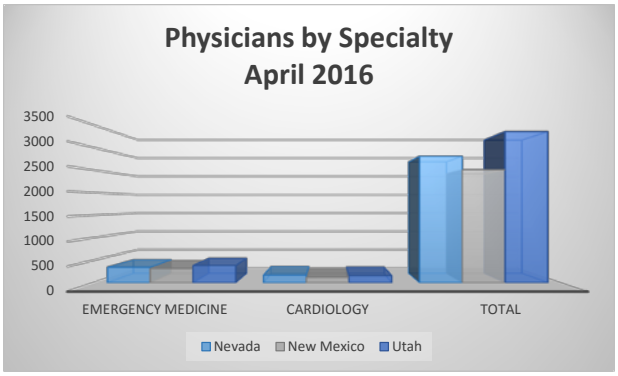
New Mexico has a population of 2,085,109, houses 37 hospitals, has 126 cardiologists and a total of 2,508 physicians. New Mexico's hospitals recognize a total of 168,847 discharges among its 4,085 staffed beds.

Like Nevada, New Mexico, also has a dedicated stroke registry that is maintained by their Department of Health, Epidemiology and Response Division, Emergency Medical Systems Bureau. New Mexico does not have a dedicated heart disease and stroke prevention program and staff. The Department of Health focuses on preventable risks factors and improving qualities of clinical care to address its heart disease, stroke, and high blood pressure disparities, including tobacco cessation and obesity.

Utah

Utah is one of the leading states for heart disease initiatives as reflective in rankings accordingly, 1st in high blood pressure and 2nd in heart disease and stroke. Utah has a population of 2,763,885 with 36 hospitals, 4,681 staffed beds and recognizes 205,069 discharges yearly.[vi]

Utah has a comparable provider population with a total of 159 cardiologists and 3,354 physicians.



The Henry J. Kaiser Family Foundation, www.kff.org

Designated public health funding in Utah equates to $31.60 per capita. Utah has a stroke registry maintained by their Department of Health, Bureau of Emergency Medical Services. Like New Mexico, Utah no longer has a dedicated heart disease and stroke prevention program but instead, focuses on emergency standards of acute care and preventable risk factors. Utah's public health program is aligned with the four key domains of chronic disease prevention as outlined by the CDC including Domain 1: epidemiology and Surveillance, Domain 2: Environmental Approaches, Domain 3: Health Care System Interventions, and Domain 4: Community-Clinical Linkages.

Potential in Nevada

Nevada is one of the lowest CDC-funded states for public health. The Heart Disease and Stroke Prevention program receive and operates solely on the 1305 Enhanced funding from the CDC. The CDC sets strict guidelines for the expenditure of these funds that greatly limits the impact that can be made to improve the heart health of the population. By contributing state funds to the heart disease and stroke program, obesity, nutrition, and EMS programs earmarked for improving the heart health of the population by addressing awareness, prevention, and control while improving the quality of care, Nevada could greatly reduce the disparities and deaths for its leading causes of death.

The high blood pressure, heart disease, and stroke disparities can be improved by increasing the amount of emergency medical services (EMS) personnel and quality of training, improving communications between EMS, the hospitals, and

primary care providers improving the quality of heart attack and stroke care. Increasing the utilization of Community Health Workers and Community Paramedics to complete screenings, education, prevention awareness, and assessments will help close the gap left by limited specialty provider access in rural communities and for those in the lower social economic class. Establishing quality reimbursement models for these programs will garner sustainability and contribute to improving the care continuum.

Gathering a picture of the disparities and data throughout Nevada is imperative. This could be achieved by adapting the Stroke Registry into a Heart and Stroke Registry that would be inclusive of high blood pressure, heart, and stroke measures. A state-funded registry would remove the cost-prohibitive barriers, allow for primary care and EMS providers to enter information, lend to painting a complete picture of care from the warning signs, through acute events and admissions, and ultimately 30-day post care unifying the continuum and allowing for identifying gaps and facilitating meaningful quality improvements.

Lastly, dedicating state funds to secure self-monitoring blood pressure devices, garnering reimbursement for self-monitoring blood pressure devices, and increased support for the Self-Monitoring Blood Pressure Program and Hypertension Education and Self-Management Program will develop a sustainable plan that engages the population of Nevada to become active participants in their health care which demonstrate proven impacts to their chronic disease conditions and overall heart health.

[i] Million Hearts, www.Millionhearts.hhs.gov
[ii] National Heart , Lung, and Blood Institute, www.nhlbi.nih.gov/health/health-topics, accesses July 2016
[iii] Nevada County Health Rankings 2016, www.countyhealthrankings.org, accessed July 2016
[iv] American Hospital Directory, www.ahd.com
[v] The Henry J. Kaiser Family Foundation, www.kff.org
[vi] Trust for America's Health: A State-by-State Look at Public Health Funding and Key Health Facts, www.healthyamericans.org/states, Accessed July 2016
[vii] American's Health Rankings, United Health Foundation, www.amerashealthrankings.org, accessed July 2016