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Center *for* Rural Health

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Healthcare Needs of North Dakota American Indian Veterans

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March 31, 2008

Funded by the Otto Bremer Foundation

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HEALTHCARE NEEDS OF NORTH DAKOTA AMERICAN INDIAN VETERANS

Executive Summary

Research concerning American Indian (AIs) veterans' health status, health service availability and resources, and healthcare access is limited. Although AIs make up only 1% of the U.S. population (U.S. Census, 2000), they lead with highest record of military service per capita when compared with other ethnic groups throughout the United States (Native American Report, 2003). Warrior societies have been historically responsible for the protection of the people, and this cultural tradition is reflected in the AI service to country. Yet, in spite of this record of service, AI veteran are required to transcend a number of barriers before receiving the standard healthcare taken for granted by the majority of Americans who have no record of military service.

To explore the uniqueness of the AI veterans' situation in regarding to accessing healthcare, the Center for Rural Health applied for and received funding from the Otto Bremer Foundation to conduct a survey on the four reservations and one Indian service area in North Dakota. The assessment was focused on collecting information on health status, healthcare access, and health risk that could be used by each participating community to develop infrastructure and action plans to increase the health status of AI veterans. Additionally, the state report derived from all participating tribes would be disseminated to Indian Health Service and the Veteran's Administration in an effort to inform the primary health providers and policy makers of North Dakota AI veterans healthcare needs.

The following highlights are from three participating tribes in North Dakota who chose to participate. Each have received reports specific to their areas and each will receive a copy of the state report generated from their contributions.

Highlights of Overall Results

Demographics

- North Dakota's AI veterans on reservations were female at 15.7% compared to 7% nationally.
- AI veterans were older: 55.1% age 55 and over.
- AI veterans were more likely to have less than a high school education and also more likely to have some college, but not a degree than the general population.
- Incomes for the veterans were low as compared to the general population and were particularly low for the older veterans.

Health Status

- The overall health of AI veterans appeared to be comparable to the general population.
- Older cohorts were less likely to report excellent or very good and more likely to report fair or poor health status.
- Younger veterans had higher rates of self reported poor mental health.

- The highest prevalence rates for chronic diseases were for high blood pressure, arthritis, diabetes, and emotional problems
- AI veterans who were diabetic used oral medication (77.4%) for control.

Behavioral Risk Factors

- Obesity was substantially greater among the youngest two cohorts, or those under age 55.
- Weight loss as a goal was low among AI veterans.
- Goals for weight were related to age with younger people more likely to aggressively set goals for weight control.
- Weight loss and management efforts exhibited the largest proportion of veterans (68.8%) using a combination of counting both calories and fat.
- A.I. veterans reported smoking either every day or on some days at 48.7% compared to 21% in the general population.
- A.I. veterans reported higher rates of alcohol abstinence at 67.5% compared to the state's general population at 62.9%
- Among those who did drink
    - Average number of drinks = 6.50
    - Proportion of drinkers defined as chronic = 76.6%
    - Average number of days with 5 or more drinks = 4.36
    - Proportion of drinkers who binge = 93%
    - Average number of days with drinking = 5.63

Preventive Care

- A.I. veterans experienced less dental care than the general population in terms of visits and cleanings
- Health screenings were relatively high for AI veterans for cholesterol, HIV testing, blood stool tests, digital rectal exams and PSA tests, but not for sigmoidoscopes or colonoscopes.

Access and Use of Services

- Thirty-nine percent of the veterans reported that they did not have health coverage in the form of insurance, Medicare, an HMO or similar such plans.
- The rate for having a regular doctor was low for AI veterans at 44% compared to 68.6% for the general population
- AI veterans reported that 23.6% of the time in the past year they could not access needed care

Veterans Administration Care

- 22.8% had received care from the Veteran's Administration in the past year.
    - While older veterans needed more care, younger veterans reported higher rates for experiencing difficulty in accessing care from the VA.

- Distance, costs and competing demands on one's time were the leading reasons for difficulty in accessing VA care.
- The proportion in each chronic disease category who reported having been unable to access VA health services is higher than the proportion who actually received care.

Indian Health Service Care

- Seventy-seven percent of the veterans reported having used IHS services at least once in the past year and the average number of visits to IHS was 5.09 visits in the past year.
- Twenty-one percent reported having been unable to access care from IHS compared to 20.5% who reported being unable to access care from the Veteran's Administration.
- Competition with other demands on one's time as a barrier to access is nearly the same for both sources of care.
- Other factors affecting access to care appeared to create more difficulty in accessing care from IHS.
  - Transportation,
  - uncertainty over coverage,
  - trust issues, uncertainty over acceptance,
  - weather and
  - problems with appointments

INTRODUCTION

Research concerning American Indian (AIs) veterans' health status, available health services and resources, and access to healthcare is limited. Although AIs make up only 1% of the U.S. population (U.S. Census, 2000), they lead with highest record of military service per capita when compared with other ethnic groups throughout the United States (Native American Report, 2003). Warrior societies have been historically responsible for the protection of the people, and this cultural tradition is reflected in the AI service to country. Yet, in spite of this record of service, AI veteran are required to transcend a number of barriers before receiving the standard healthcare taken for granted by the majority of Americans who have no record of military service.

The majority of all health care for AIs in Native communities is provided by Indian Health Service (IHS). Like the Veterans Administration (VA), the IHS is under funded for the services they are directed to provide. If health services are not available onsite, these patients are referred out only when funding is available or if the patient's diagnosis is immediately life threatening. Additionally, IHS is considered a payer of last resort as the facility will seek out all other methods of payment for referral services not available at their facilities prior to paying for these services as an organization.

This policy and shared experiences from a Mandan Hidatsa Arikara Viet Nam veteran and a Spirit Lake Dakota veteran prompted the writing of this proposal by Center for Rural Health staff. In both cases, the AI veterans had difficulty accessing healthcare due to distance, poverty, and inadequate coordination between the Indian Health Service and the Veteran's Administration. The reservations' social services and health care delivery systems are geared for the civilian population, and when it comes to determining eligibility for services, the veterans are usually referred to the Fargo VA for services.

Because Lake Sakakawea cuts through the middle of the reservation, those veterans residing in the Twin Buttes community, and eligible for IHS services, must drive 100 miles to New Town in order to be seen by a doctor, only to be referred to the Fargo VA, which is 373 miles in the opposite direction. IHS will generally refer the veteran to the closest VA facility once eligibility is determined. For North Dakota (ND), the VA hospital is located in Fargo, ND. Driving distance from the farthest ND AI community of Trenton, located on the western side of Lake Sakakawea, is 854 miles round trip.

Concerning the Spirit Lake veteran, he initially went to IHS to get help with abdominal pain. Over the course of the next two months, doctors were unable to diagnose the problem and prescribed antibiotics to the veteran. Once IHS found out the veteran was eligible for VA services, he was referred out to Fargo VA (346 mile roundtrip), but was denied transportation, although he is an enrolled tribal member and eligible for IHS services. By the time he was referred, the infection had progressed to the point that Fargo VA was unable to treat him for the condition, so they referred him to Minneapolis VA Medical Center (832 mile roundtrip). When the veteran finally received services, his condition had progressed to the point where he had become disabled and was unable to work. Fortunately, family members were able to drive him

to appointments, and the Minneapolis VA was able to provide mileage (11 cents/mile) and discounted motel rates at a nearby motel.

The above situations and other examples are unique to AI veteran populations as they must maneuver a series of health systems in order to receive standard health care. The feeling of the veterans in most cases is that of one being in limbo as the mere distance and restriction of personal financial resources prevents them from receiving and accessing health services that may improve their health status or allow them to manage chronic disease more efficiently.

PURPOSE OF THE STUDY

The purpose of this project was to explore the uniqueness of the AI veterans' situation in regarding to accessing healthcare by conducting a statewide assessment of health status, healthcare access, and health risk for AI veterans residing on North Dakota's four reservations and one Indian service area. The project's significance was the provision of clarifying information for developing community plans of action, developing infrastructure, and decreasing jurisdictional confusion between the Indian Health Service and Veteran's Administration.

The primary objective for this project was to assess American Indian veteran health status, available health services and resources, and to gain understanding as to how AI veterans access health care. A secondary objective was to return each tribe's results back to the community by providing a community presentation and written report. The third objective was to disseminate a community specific report to the tribal council and community health providers. Lastly, dissemination of a state report reflecting the aggregate results of the assessment was provided to the participating tribes, the North Dakota Veterans Administration and the North Dakota State Department of Health to inform tribal and state health policymakers of the needs of North Dakota's AI veterans.

METHODOLOGY

Principal investigators were required to approach tribal councils to seek permission for any research conducted within the exterior boundaries of their respective reservations. The tribal council is considered the ultimate authority within tribal boundaries as they are responsible for ensuring that the rights of their people are protected. Ethical procedures, both culturally and academically, must be clearly outlined to the council before permission is granted. Once tribal council permission has been obtained, survey protocols were submitted to the University of North Dakota Institutional Review Board for review of ethical and human considerations.

The Behavioral Risk Factor Surveillance Survey (BRFSS) developed by the Centers for Disease Control (CDC) was adapted for use in this project. The BRFSS, the world's largest telephone survey, tracks health risks in the United States. Administered by the Center for Disease Control, information from the survey is used to improve the health of the American people. Although national BRFSS data is available for secondary data analysis, the data does not have an adequate sample for analysis of Native American populations; therefore, we utilized existing BRFSS questions for the majority of the survey and constructed additional questions to explore the coordination between IHS and VA.

The use of existing questions served two purposes: 1) North Dakota comparison data was available as benchmark information for the documentation of disparities; and 2) questions were assumed to be field tested through the national project. Variables included from the North Dakota BRFSS modules were: chronic disease, health status, health care, health services, disability status, nutrition, exercise, and healthcare access issues. The constructed questions were those related to access for both the IHS and VA.

Because of high poverty rates and the lack of home telephones among AI populations, the BRFSS was adapted for Computer Assisted Interviewing (CAI) using laptop computers and was administered face to face with each veteran. The benefit of using laptops is that the collected information was automatically entered into a database and transfer to statistical software was uncomplicated, thus allowing for almost immediate analysis of the data. This process decreased the amount of time needed to process the data because it skips the manual data entry step, decreases the amount of human error incurred during manual data entry, and expedites the process of report preparation. The BRFSS survey is particularly long and interviews consequently were difficult to arrange and conduct, consuming more time than was originally anticipated.

The populations were veterans residing within the boundaries of the reservations. A veteran was defined as a person over the age of 18 who served in the active military, naval, or air service for longer than 18 months, and who was discharged or released under conditions other than dishonorable. According to the 2000 Census, the estimated number of veterans residing on all of the four reservations totaled to 2,261 to include: Fort Berthold at 287, Spirit Lake at 94, Standing Rock at 847, and Turtle Mountain at 1,033. Although these numbers initially appeared to be accurate, reservation veteran service officers (VSOs) thought the numbers were low for their areas.

To account for discrepancies, Center for Rural Health (CRH) staff provided training to the VSOs for constructing veteran lists for their areas. Once the list was constructed, a random sample of 125 veterans was drawn for each reservation using the Statistical Package for the Social Sciences (SPSS). For each of the tribes, over-sampling at a rate of 25% was employed. A list of 125 veterans was pulled with the realization that some veterans might refuse to participate or that locating the veteran might not be possible. Those veterans not included in the sample who volunteered to fill out the survey were welcomed.

These efforts yielded data from 254 AI veterans from three North Dakota reservations who were interviewed using the BRFSS survey. Technical difficulties with the CATI system resulted in a loss of 30 corrupted files in the information collected from one of the participating tribes. The sampling methodology used allowed us to attain a 95% confidence level and 6% confidence interval for the combined statewide sample, and a 95% confidence interval and a range of 6 to 11% margin of error for the individual tribal samples.

A dataset was created by transferring the information from the computer assisted interviewing software to the Statistical Package for the Social Sciences (SPSS) V15.0 for Windows. Once entered, the data was cleaned and checked for accuracy. Analysis consisted of running frequencies for descriptive statistics with additional analysis exploring questions raised by these

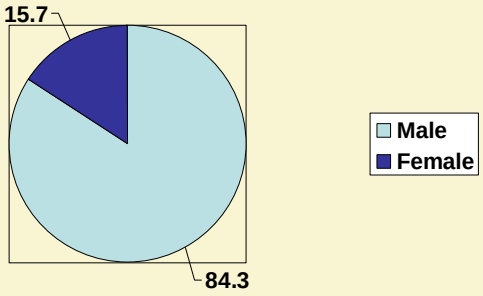
results. The small size of the sample limited the cross-tabulations, but a number of meaningful comparisons were examined focusing attention on health and access to care issues that appeared salient for North Dakota's American Indian veterans.

RESULTS

Demographics

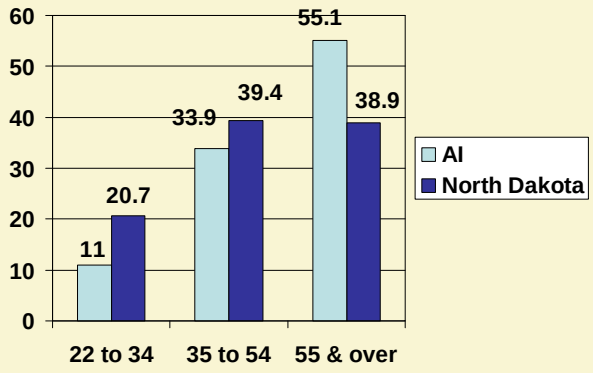
The respondents included 40 women in addition to 214 men. The proportion of women was considerably greater for North Dakota AI respondents than in the nation's veteran population. Nationally, 7% of the 24.2 million vets were women compared to 15.7% of the North Dakota AI respondents. (***VetPop04)***

Figure 1
Gender: N.D. American Indian Vets



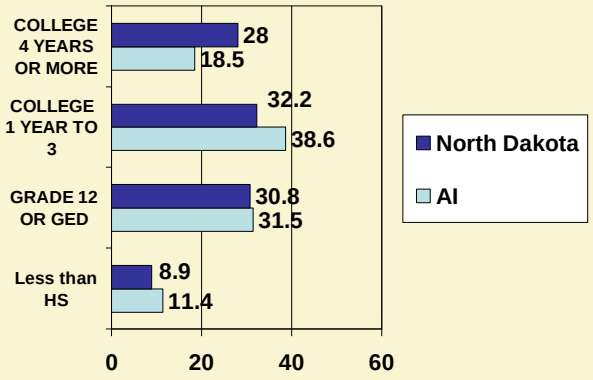
The veterans living on North Dakota reservations were older than the general population of the state (Figure 2). Possible interpretations from these results are: 1) younger veterans moved in search of employment; 2) younger veterans are still serving on active duty; and/or 3) there are less young veterans. Regardless of the interpretation, older veterans were more likely to reside on the reservations and these higher rates are reflected in the results.

Figure 2
Age Distribution: American Indian Vets and ND



North Dakota A.I. veterans were less like to have obtained a high school education, more likely to have some college, and less likely to have obtained a college degree when compared to the general ND population.

Figure 3
Educational Levels: N.D. American Indian Vets and N D



Substantially higher percentages of AI veterans when compared to the general population fell in the lowest income category (Figure 4). The middle aged veterans (ages 35 to 54) reported 42.9% and older veterans (ages 55+) reported 40.9% for incomes below $15,000 per year compared to 10.7% for the younger AI veterans, ages 22 to 24. While these results indicate younger veterans are experiencing greater success in earnings, they also present an important limiting factor for older veterans when accessing health care requires personal contributions.

Finally, seven percent of those interviewed reported that they had been homeless at some time during the past year.

Figure 4
Income N.D. American Indian Vets & ND

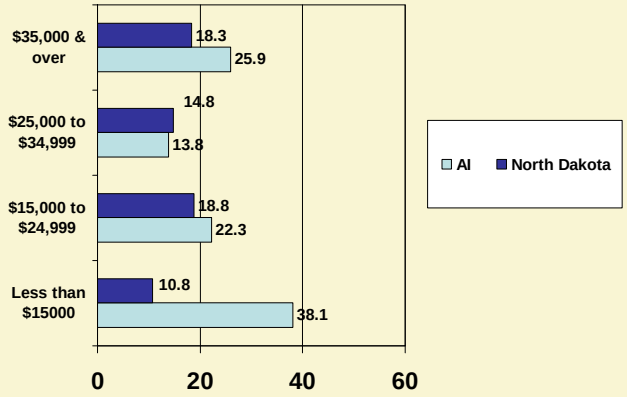
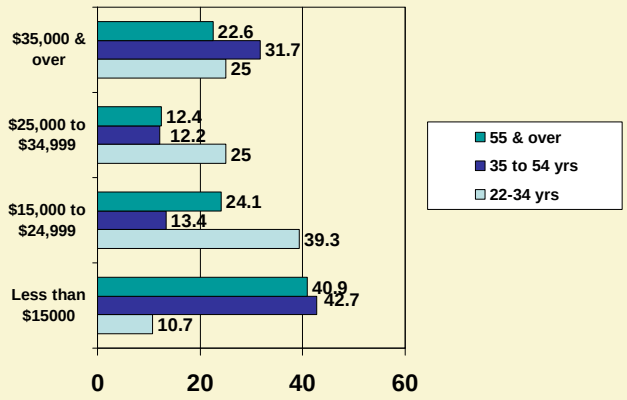


Fig. 5
Income by Age, Spirit Lake Vets and ND



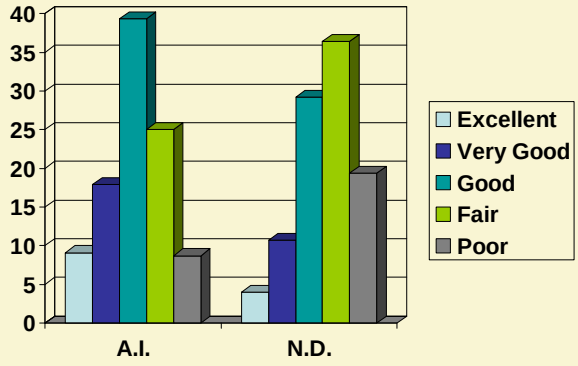
HEALTH STATUS

In this section, comparisons were made with the North Dakota BRFSS data for the general population for purposes of interpretation. Results were cross tabulated with age when sufficient data were available.

Global Health Rating

Nationally, veterans reported poorer health and more days with physical and mental health problems than non-veterans (West and Weeks, 2006, Aghas, Lofgren, Van Ruiswyk and Layde, 2006; Weeks, Kazis, Shen, Cong, Ren, Miller, Lee and Perlin, 2004). Self reports of overall health by North Dakota A.I. Veterans appeared to be good when compared to the general population. More reported their health as excellent, very good or good, while fewer reported fair or poor health (Figure 6).

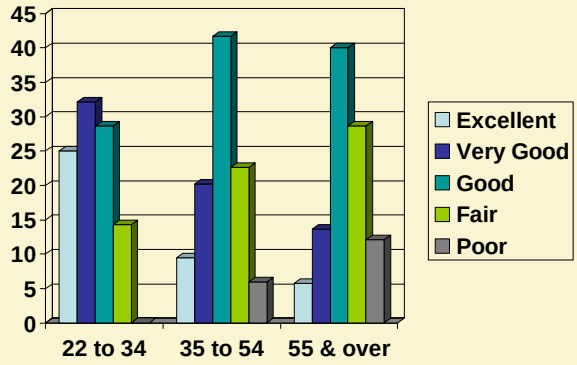
Figure 6
General Health Status: N.D. American Indian Vets and N.D.



Age Comparisons

Age related to general health status with older cohorts less likely to report excellent or very good and more likely to report fair or poor health (Figure 7). Among veterans, these results are influenced by military service during different historical events, but the overall influence of age appeared to continue to be a decisive factor in general health status.

Figure 7
General Health Status by Age:
N.D. American Indian Vets

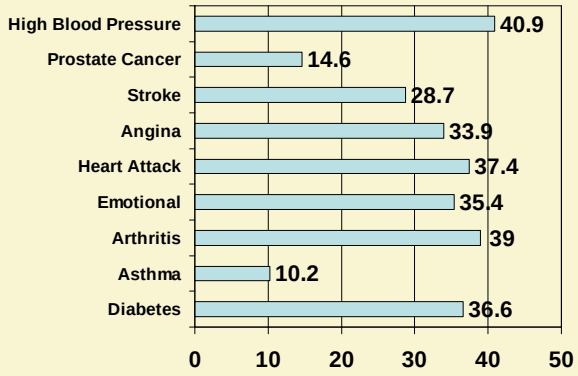


Chronic Diseases

The chronic disease data presents a profile of the chronic conditions for the veterans that require on-going medical attention and self management (Figure 8). The highest prevalence rates were for high blood pressure, arthritis, heart attack and diabetes, closely followed by emotional problems. All of these had self report prevalence rates over 33%.

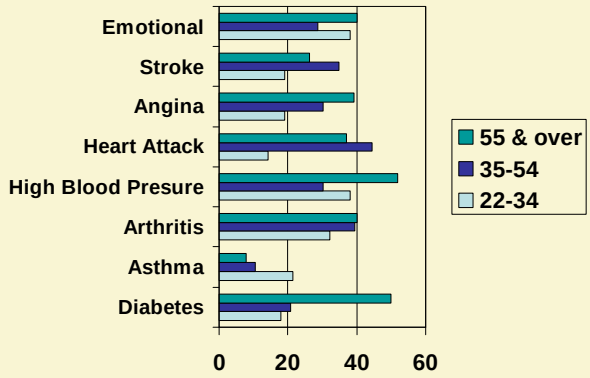
Figure 8

Self Report Rates of Chronic Diseases: N.D. American Indian Vets



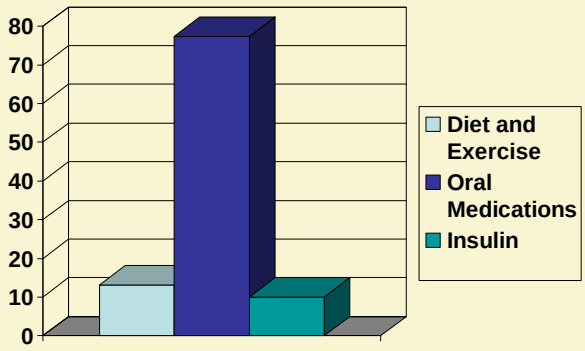
The pattern for high rates of disease among the old and young veterans was found for emotional problems and high blood pressure (Figure 9). Asthma was more prevalent among younger vets and the remainder generally increased with age. Diabetes rose consistently and dramatically with age as one might predict.

Figure 9
Chronic Diseases by Age: N.D. American Indian Vets



Diabetes, as the leading chronic disease for American Indian adults, ranks high in importance among AI veterans. Levels of diabetes can be broken down into those controlled by diet and exercise, those dependent on oral medication, and at the most severe level, insulin. The results indicated that AI veterans who are diabetic are largely dependent on oral medication for control (Figure 10). Diabetes increased with age, and in all likelihood, will also increase in severity with age. Please note that none of the insulin dependent diabetics were in the youngest cohort ages 22-35.

Figure 10
Levels of Diabetes: N.D. American Indian Vets



Behavioral Risk Factors

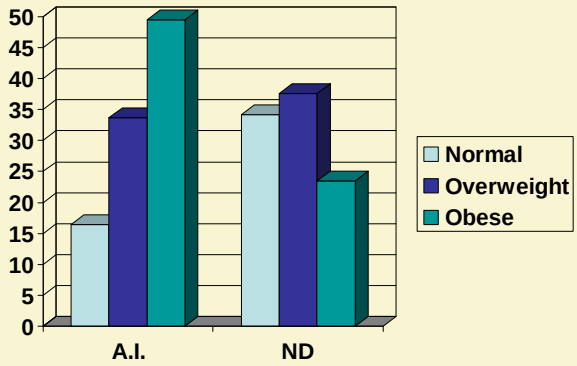
Obesity

Obesity is a factor related to numerous chronic health conditions such as diabetes, arthritis, high blood pressure and stroke among others. The height and weight variables were used to calculate Body Mass Index (BMI) to place the veterans into categories of low/normal, overweight and obese categories. BMI relates one's weight to his/her height and has become the standard for measuring weight. The formula is weight (lb) / [height (in)]^2 x 703 .

The results of the BMI measure for the North Dakota A.I. Veterans indicated that obesity is a much greater problem for them than for the general population. Unfortunately, obesity is the category with the greatest implications for the development of chronic diseases. Simply stated, the most severely overweight run the greatest risks for diabetes, heart disease and arthritis and the North Dakota A.I. Veterans have a high percentage who are severely overweight!

Figure 11

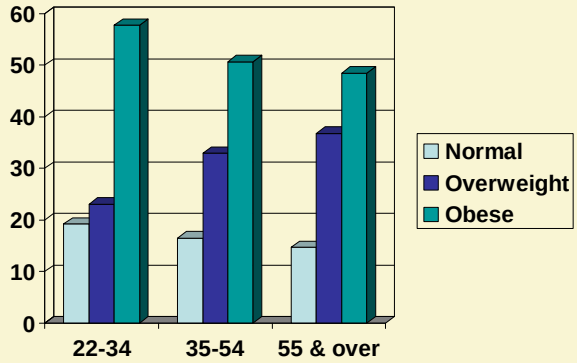
Body Mass Index (BMI) N.D. American Indian Vets



Obesity is higher among the youngest two cohorts or those under age 55 (Figure 12). Although the 55+ group has higher rates of those being overweight when compared to the younger cohorts, the percentage for obesity is plainly the majority for all age groups. These results may reflect the younger generations' greater exposure to processed foods, fast foods and sedentary lifestyles, but clearly elevates their risk for future chronic diseases.

Figure 12

Body Mass Index (BMI) N.D. American Indian Vets by Age

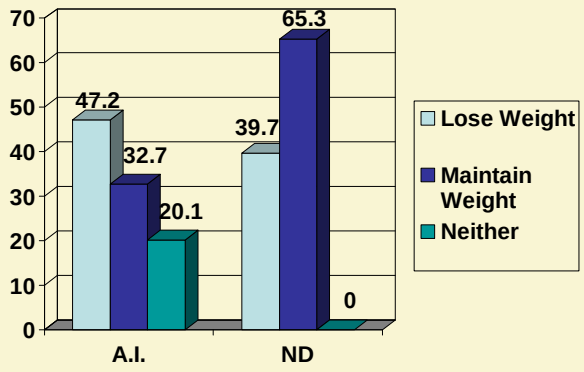


The majority indicated they had not been advised by a physician about their weight problem, although nearly 90% of the population fell into the overweight or obese categories. Among the overweight, 76.2% had not been advised about their weight, while 47.9% of the obese reported a lack of medical advice regarding weight. The opportunity to apply multifaceted efforts to decrease high rates of obesity is present and may wish to engage a community campaign to influence societal norms. The medical community is a leader in this area and should be continually engaging the veterans to reinforce the importance of addressing weight control as a central tool for health promotion.

Weight management

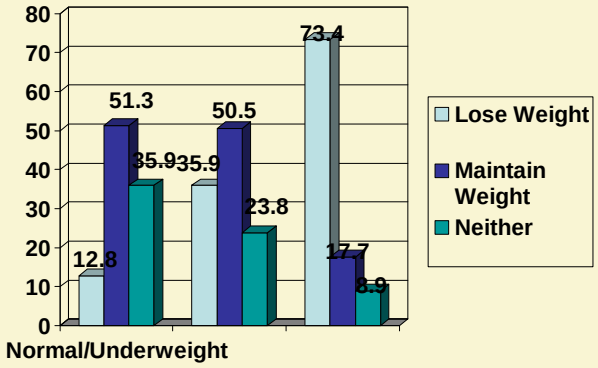
Although the A.I. veterans present a higher proportion who are obese than the general population, the proportion with a weight management goal calling for losing weight is much lower (Figure 13). These results clearly suggest the need for encouragement in setting and pursuing personal weight goals among these veterans and reinforce the suggestion that the medical community be pro-active in a campaign to reduce this risk factor.

Figure 13
Weight Management Goals: N.D. American Indian Vets and ND



A goal of losing weight increases as the severity of overweight increases in evident when weight management goals were cross tabulated with BMI (Figure 14). These results suggest the overweight and obese population is receptive to better weight management and may be the opportunity for the medical community to assist the veteran in identifying weight related risks and goal setting for weight loss.

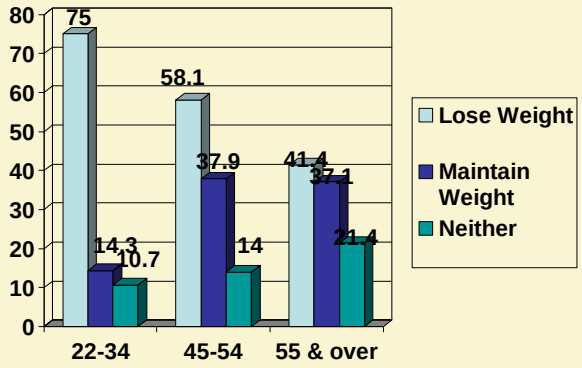
Figure 14
N.D. American Indian Vets Weight Management Goals by BMI Category



Goals for weight are also related to age with younger veterans more likely to aggressively set goals for weight control when compared to the older veteran (Figure 15). The need for a targeted effort regarding weight management should focus on older veterans. These may include promoting healthy weight goals, access to exercise facilities and programs, and dietary improvement. The need for exercise and healthy diets are lifelong; thus, we must look at the total population rather than just the youth in program development.

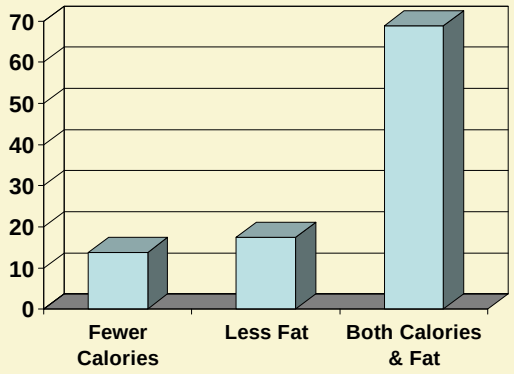
Figure 15

N.D. American Indian Vets Weight Management Goals by Age Category



Reducing both calories and fat intake combined was the dominant strategy for weight management (Figure 16). Reducing fat intake was second and calorie counting alone was used by the smallest proportion. While evaluations of these results are beyond the scope of this report, they do establish a base that programs might utilize for weight control program development.

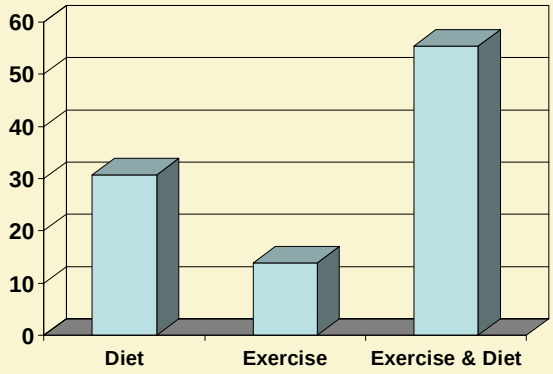
Figure 16
Weight Management for Weight Loss by Diet: N.D. American Indian Vets



Diet is normally combined with exercise in weight loss efforts and the majority of AI veterans are applying this combination. Among those using only exercise or only diet, a higher percentage of the veterans reported that they used exercise for weight loss, suggesting that exercise is more popular than dieting among veterans (Figure 17).

Figure 17

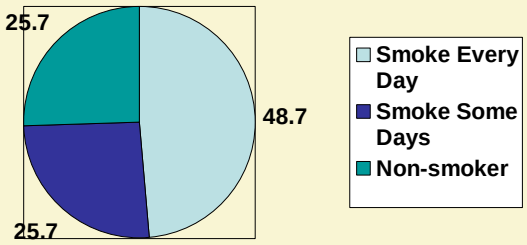
Weight Management Methods for Weight Loss: N.D. American Indian Vets



Smoking

The health risks associated with smoking are common knowledge, yet 48.7% of the A.I. veterans reported that they smoke either every day or on some days. Smoking is the one behavioral risk factor singled out as being high among veterans even after socio-demographic variables such as age, gender and income are controlled (Koepsell T, Reiber G, Simmons KW, 2002). The general population in North Dakota reported an overall smoking rate of 21% or less than half of what was reported by AI veterans. Smoking cessation programs are evidently needed for the veterans. (Figure 18)

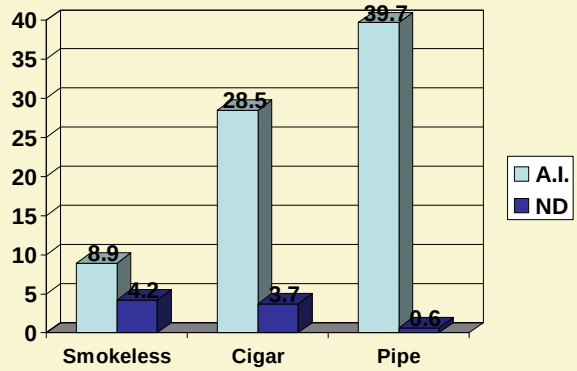
Figure 18
Smoking: N.D. American Indian Vets



Non-cigarette use among A.I. veterans is also higher than found among the North Dakota general population (Figure 19). Pipe smoking was dramatically higher, but may reflect ceremonial uses rather than habit. Smokeless tobacco use and cigar smoking were also higher, but not quite so dramatically. Nonetheless, tobacco use of all varieties appeared to be relatively high for the AI veterans and represents an area of health risks that merits additional attention. Finally, those who had been seen by physicians and were regular smokers (65%) were advised by a physician to quit smoking. The rate of advice is high, but the results appeared to be lacking among the veterans.

Figure 19

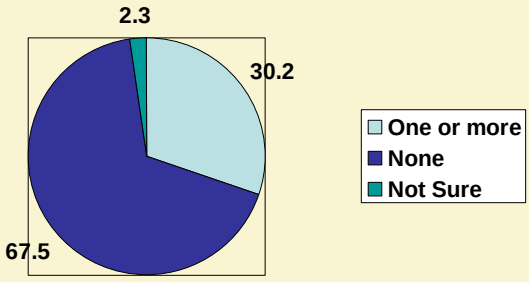
Current Non-cigarette Tobacco Use: N.D. American Indian Vets and ND



Alcohol Use

Several alcohol use variables were included in BRFSS instrument. In response to a question of whether they had consumed any alcohol in the past 30 days, A.I. veterans reported higher rates of alcohol abstinence at 67.5% compared to the state's general population at 62.9%. This observation contradicts a common stereotype and consequently represents an important observation.

Figure 20 Alcohol Use – Had One or More Drinks in Past 30 Days: N.D. American Indian Vets



Nonetheless, when one restricts attention to those who do drink, the findings suggest a continuing need for attention. Among those who did drink in the past 30 days the following profile was observed:

- Average number of drinks = 6.50
- Proportion of drinkers defined as chronic = 76.6%
- Average number of days with 5 or more drinks = 4.36
- Proportion of drinkers who binge = 93%
- Average number of days with drinking = 5.63

The conclusion suggested slightly fewer AI veterans actually drink than is found for the state's general population; however, those who do drink tend to fall into the categories of chronic and binge drinking. Chronic drinking is defined as averaging two or more drinks per day while binge drinking is defined as having 5 or more drinks at any one occasion. Among drinkers, the result for each of these measures was high.

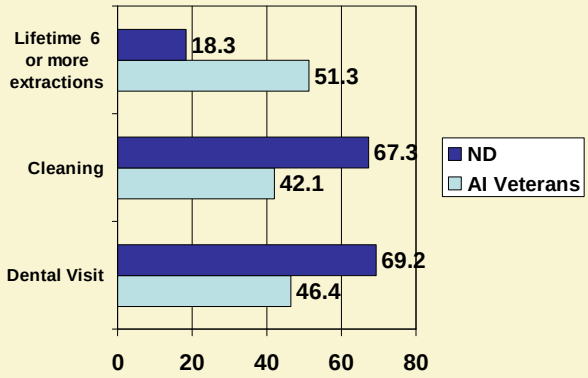
Preventive Care

Preventive care as a special category is comprised of topics such as dental care, immunizations, health screenings, disease prevention, and injury prevention. Dental care is the most systematic among these with regular check-ups and cleaning having become an established norm. AI veterans experienced less dental care than the general population, both in terms of the number of visits and in terms of having had a cleaning (Figure 21). Corresponding to this diminished level of preventive care, they also reported a higher rate for having had extractions of 6 or more teeth over their lifetime. Dental care, consequently, is an area in need of improvement for the

American Indian veterans. Oral health is important for a wide variety of reasons including appearance, self concept, diet (ability to eat healthy foods), and an overall feeling of well being. Oral health care is neglected and easily avoided and while the evidence is not available in this project, the performance quite likely results from a combination of limited access and personal avoidance. Both should become targets for improving dental care for this population.

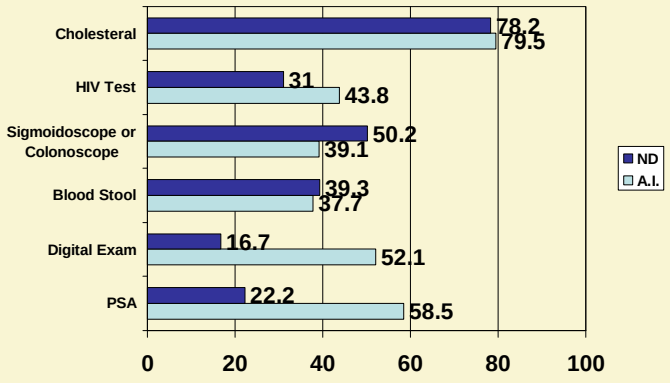
Figure 21

Dental Care in Past Year: N.D. American Indian Vets and ND



Health screenings were relatively high for AI veterans for cholesterol, HIV testing, blood stool tests, digital rectal exams and PSA tests. The one exception was with sigmoidoscopes or colonoscopes. When only the 55 and over cohort were examined, the proportion rose to 43%; however, the figure is still below the overall average for the general population.

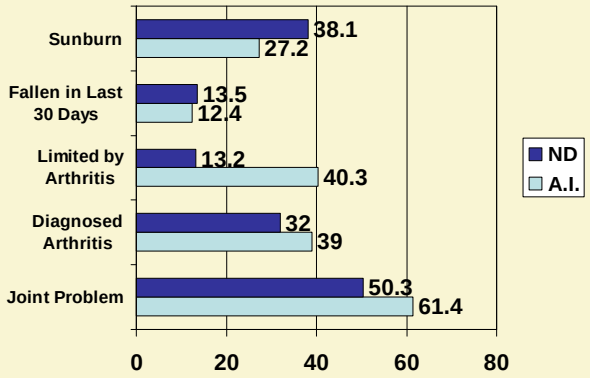
Figure 22
Health Screenings: N.D. American Indian Vets and ND



Data on a residual set of health issues related to preventive care are presented in Figure 23. Sunburn rates were high, but slightly below the general population. Nonetheless, protection from sunburn was insufficient for nearly a third of the population. Falls, as another category was also lower for AI veterans, but again the rate is high enough to merit attention. Lastly, a series of observations about arthritis found the AI veterans more afflicted by joint problems, both diagnosed and undiagnosed and much more likely to experience activity limitations as a result of arthritis.

Figure 23

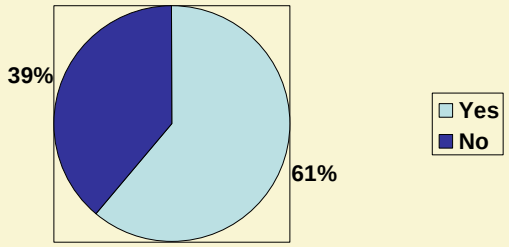
Joint Problems and Arthritis: N.D. American Indian Vets and ND



Access and Use of Services

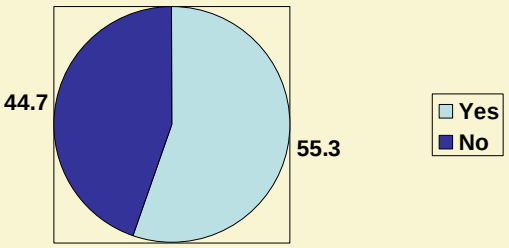
Rural settings have been associated with lower health-related quality of life, high morbidity rates, and higher costs (Weeks, et al, 2004). Because the North Dakota reservations are primarily located in the more rural areas of the state, these factors are exacerbated for the AI veteran populations and by their minority status. According to the Agency for Health Care Quality and Research (AHCQR) (2000), race, ethnicity, and sex were related to access to healthcare, quality of care, and health insurance. The AHCQR articles support the results found in the following results regarding health plans. Thirty-nine percent of the A.I. veterans reported that they did not have health coverage in the form of insurance, Medicare, HMO, or similar such plans compared to 10.7% for the North Dakota population. These results are important to not only for access to care, but also the financial security that health coverage provides. People with coverage are more likely to have a physician or group they define as their usual source of care and consequently are more likely to access early or preventive care as a result of having some type of medical coverage...

Figure 24
Health Coverage: N.D. American Indian Vets



Familiarity between the patient and practitioner is a positive element in the relationship and establishes a sense of propriety that can facilitate continuity of care and a sense of comfort in accessing care. Among the AI veterans, the rate for having a regular doctor or doctors was 55.3% compared to 68.6% for the North Dakota population.

Figure 25
Regular Doctor: Spirit Lake Vets



Nearly 1/4 of the AI veterans reported that they experienced a time in the past year when they needed care but could not access it (Figure 26). As shown in figure 27, this limitation was experienced uniformly by all age groups.

Figure 26
Could Not Access Needed Care: N.D. American Indian Vets

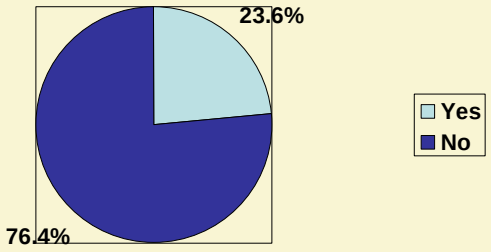
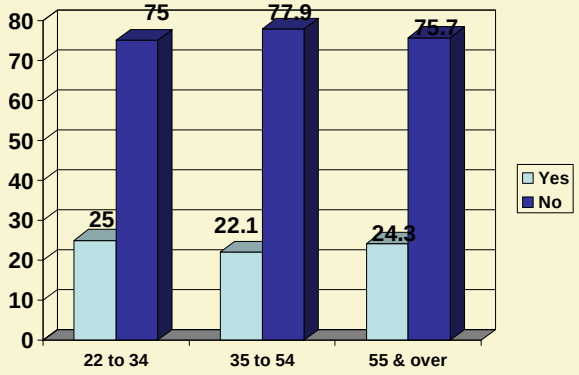
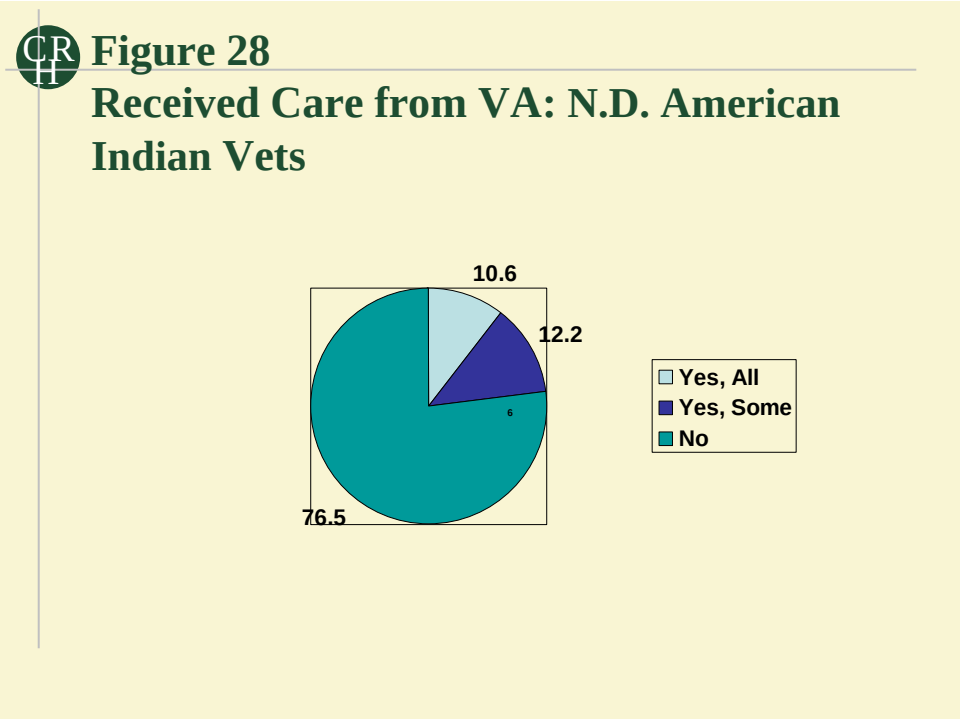


Figure 27
Unable to Access Needed Care by Age: N.D. American Indian Vets



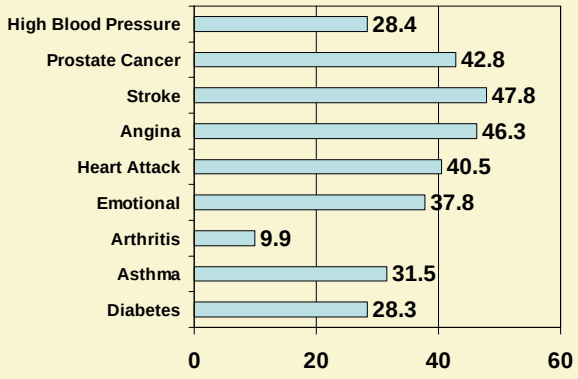
Care from Veteran's Administration

Among the AI veterans, 22.8% had received care from the Veteran's Administration in the past year. All of their care was received by 10.6%, while 12.2% received part of their care from the VA.



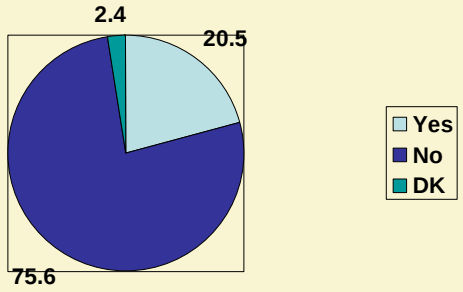
The use of VA health care by AI veterans is focused on those diseases that have the potential to be life threatening (Figure 29). Cardiovascular diseases and prostate cancer led in terms of use, all reporting use rates in excess of 40%. According to Agha et al (2006), VA users had more emergency room use, greater specialists care, and longer hospital stays, suggesting that veterans had higher levels of severity for their illnesses.

Figure 29
Use of VA Health Care by Chronic Diseases: N.D. American Indian Vets



Overall, 20.5 percent of the A.I. veterans were unable to access care from the VA at least once during the past year. The difficulty in accessing care was greatest for those who relied on the Veteran's Administration for all of their care (Figure 46).

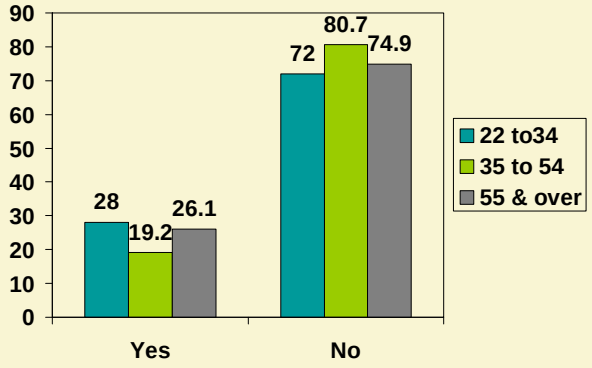
Figure 30
Unable to Access Care from VA: N.D. American Indian Vets



Age was a factor in access care from the Veteran's Administration, but while older veterans required more care, the younger veterans reported the greatest proportion for experiencing difficulty in accessing care.

Figure 31

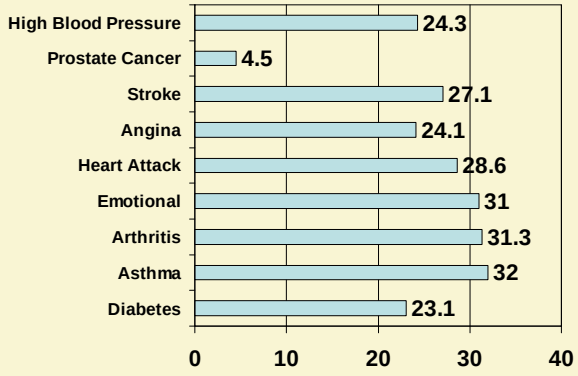
Unable to Access Care from VA By Age: N.D. American Indian Vets



AI veterans with asthma, arthritis or emotional problems reported the greatest likelihood of being unable to access VA health care (Figure 32). The rates of being unable to access VA health care appear high for people with all chronic diseases with the exception of prostate cancer.

Figure 32

Unable to Access VA Health Care by Chronic Diseases: N.D. American Indian Vets

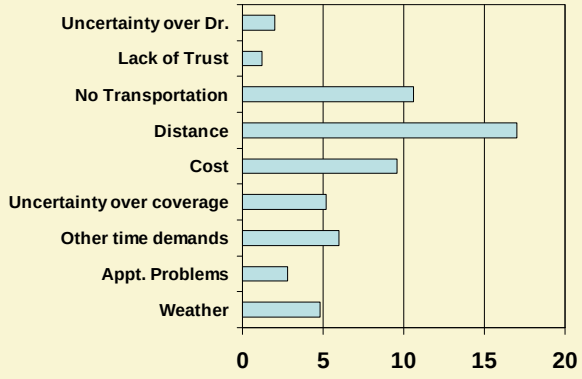


Although not included in the slide, younger veterans reported greater difficulty for accessing care than their older counterparts. Clearly, distance was a factor for all as the reservations are located in sparsely populated areas with varying proximities to VA facilities (Figure 33). North Dakota is well known for the harsh winters and the presence of winter snowstorms and icy conditions only exacerbate this barrier to service. Lack of transportation ranked second, with costs third. Uncertainty over coverage and acceptance may reflect a lack of familiarity that may be overcome by experience and/or information concerning the VA system. Time constraints are also more likely to be present among working aged veterans as they must accommodate their work lives, distance, and travel incidentals to access care from the VA.

The geography cannot be changed, but improving access by bringing services to people rather than people to services may be a means of resolving part of the access problem. Community Based Outpatient Clinics (CBOC) provides an approach to this issue by bringing services closer to the residences of patients. These are positive steps to access; however, the CBOC concept is focused on primary care and not the specialty care that veterans seek out from VA Medical Centers (Fortney et al, 2002). Regardless, Indian Health Service plays a substantial primary care role for American Indians and VA outreach clinical service development may wish to coordinate care with IHS to provide a continuum of care to better serve AI veterans.

Figure 33

Reasons for Being Unable to Access VA Care: **N.D. American Indian Vets**

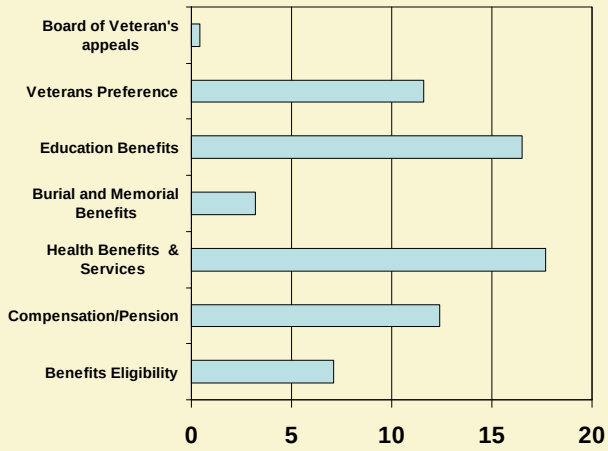


AI veterans reported receiving Veteran's Administration outreach services at levels generally below 20% (Figure 34). The pattern for receipt of outreach services showed health benefits as the most common at 18%. Education benefits ranked second, followed by compensation/pension services and veteran's preference. The remaining services; benefit eligibility, burial and memorial benefits and VA home loan guarantees were all below 10%. The burial and memorial benefits would not be used until death; thus, the low rates are understandable. Furthermore, the

home loan guarantees may not be used by AI veteran as most tribal lands are trust lands and most lending agencies do not loan money for homes built on trust lands.

Figure 34

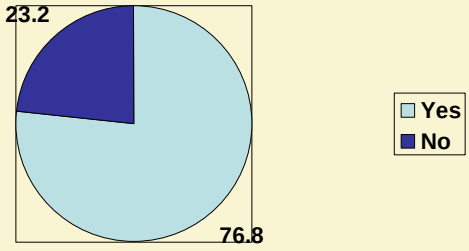
Receipt of VA Outreach Services: **N.D. American Indian Vets**



Indian Health Service Care

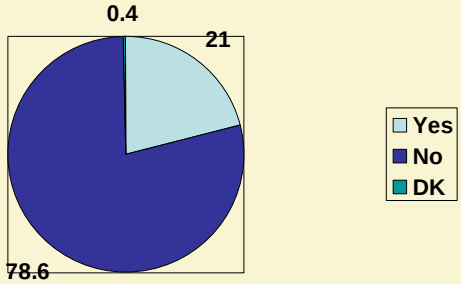
Veterans living on North Dakota reservations access the majority of their health care services at the IHS (Figure 35). Over 3/4 of the veterans reported having used IHS services at least once in the past year and the average number of visits to IHS was 6.4 visits in the past year. This is substantially higher than the 22.8% for those receiving some or all health care from the VA with the average number of visits of 5.09.

Figure 35
Received Care from IHS: Spirit Lake Vets



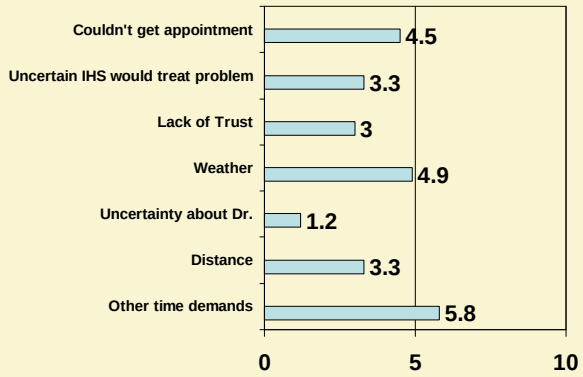
Twenty-one percent reported having been unable to access care from IHS (Figure 36) compared to 27% reporting being unable to access care from the VA. Among the veterans unable to access care from the VA, 39.2% also reported being unable to access care from IHS. This suggested that a significant portion of the access issue is generalized and not necessarily a function of policies or location of the VA.

Figure 36
Unable to Access Care from IHS: N.D. American Indian Vets



Distance and cost were substantially higher as reasons for being unable to access care for VA than for IHS. Indeed, these are companion barriers to accessing healthcare. Competition with other demands on one's time is nearly the same for both sources of care. Transportation, uncertainty over coverage, trust issues, uncertainty over acceptance, weather and problems with appointments were additional barriers that appeared greater for veterans seeking to access IHS services when compared to the VA.

Figure 37
Reasons for Being Unable to Access IHS Care: **N.D. American Indian Vets**



Veteran Outpatient Clinics

Summarily, lower education levels, lower income levels, higher chronic disease rates, higher risk factors, and lower healthcare access rates are indicators of the need for the Veterans Health Administration and Indian Health Service to coordinate services for American Indian veterans. AI veterans were less likely to access VA services due to distance, transportation, and cost; thus, the veteran outpatient clinics are an additional resource for the veterans to receive primary and follow-up care. Both are important for health promotion and maintenance of good health and are considerations for development of veteran services. Nonetheless, higher levels of care will still require the veterans to travel long distances, but healthcare costs will be decreased due to the veterans' eligibility for services.

Veterans' outpatient clinics were established in Grafton, Minot, and Bismarck, with additional new veterans' outpatient clinics in Dickinson, Williston and Jamestown approved for opening by September 30, 2006. Senators Byron Dorgan and Kent Conrad and Congressman Earl Pomeroy

also announced on December 7, 2007 that a VA outreach clinic is scheduled to open in 2009. A news release from the office of Representative Sandlin of South Dakota described outreach clinic services for these areas. Services provided by outreach clinics are designed to include comprehensive primary care, health promotion, maintenance, routine/urgent care procedures and education.

Mental Health Services are also to be provided onsite or through telemedicine from the parent facility. Screening, prevention, and diagnostic evaluation for mental disorders, mental illness, and substance abuse would be provided in addition to psychotherapy and/or psychosocial counseling for mental disorders. Referral for inpatient or residential care, direct care, or consultation for complex problems would also be available through the outreach clinics. Routine specialty care consults will normally be referred to the parent facility. Basic x-rays and invasive radiology or more complex diagnostic imaging procedures will be referred to the parent Veterans Administration Medical Center (VAMC). Emergency care will be obtained at the nearest hospital and laboratory services will be provided by the parent facility. The Parent VAMC through the CMOP will provide all routine medications or through contractual agreements.

The role of outreach clinics in the mix of services provided for AI veterans is recent and positive outcomes regarding the integration of services consequently remains an unknown. Primary care visits for AI veterans are normally provided by IHS physicians; thus, follow up care for VAMC specialty care should also fall under this realm of services. Nonetheless, the mission of outreach clinics appears to be primary care and the provision of outreach clinics will only enhance the AI veterans' ability to access healthcare. Referral to outreach clinics was not investigated in this project and may be a future research topic for consideration by VA to evaluate the effectiveness of healthcare access for ND AI veterans.

IHS refrains from providing additional services to the AI veteran once the veteran has been referred out, although they are eligible for IHS services as tribal members. Because the goal of IHS is to be the payer of last resort, IHS may wish to encourage AI veterans to access the majority of their primary care from the VA outreach clinics in order to save their own resources. The results indicated AI veterans were more likely to access VA services for specialty care or chronic diseases of a more serious nature; however, primary access barriers such as distance and transportation does not allow for adequate follow up for AI veterans utilizing VAMC services. Nonetheless, existing and planned VA outreach clinics located near reservations may assist the AI veteran in receiving a continuum of care not available through a coordinated effort between VA and IHS.

An additional possibility would be to have IHS contract as a Community Based Outpatient Clinic (CBOC) in order to obtain third party reimbursement for providing these services; however, if IHS seeks a CBOC contract, they will have to provide services to non-Native veterans in addition to the Native veterans. This may conflict with their mission to provide services for individual tribes, but may also be a conflict of interest as they are funded through treaty obligation to provide health services to tribal members. In any event, a coordinated effort would be ideal, but if not available, the goal would be to provide assistance to the veteran to negotiate both systems to obtain required care.

Summary and Conclusions

Research concerning American Indian (AIs) veterans' health status, health service availability and resources, and healthcare access is limited. Although AIs make up only 1% of the U.S. population (U.S. Census, 2000), they lead with highest record of military service per capita when compared with other ethnic groups throughout the United States (Native American Report, 2003). Warrior societies have been historically responsible for the protection of the people, and this cultural tradition is reflected in the AI service to country. Yet, in spite of this record of service, AI veteran are required to transcend a number of barriers before receiving the standard healthcare taken for granted by the majority of Americans who have no record of military service.

The following highlights are from three participating tribes in North Dakota who chose to participate. Each have received reports specific to their areas and each will receive a copy of the state report generated from their contributions.

Highlights of Overall Results

Demographics

- North Dakota's AI veterans on reservations were female at 15.7% compared to 7% nationally.
- AI veterans were older: 55.1% age 55 and over
- AI veterans were more likely to have less than a high school education and also more likely to have some college, but not a degree than the general population.
- Incomes for the veterans were low as compared to the general population and were particularly low for the older veterans.

Health Status

- The overall health of AI veterans appeared to be comparable to the general population.
- Older cohorts were less likely to report excellent or very good and more likely to report fair or poor health status.
- Younger veterans had higher rates of self reported poor mental health.
- The highest prevalence rates for chronic diseases were for high blood pressure, arthritis, diabetes, and emotional problems
- AI veterans who were diabetic used oral medication (77.4%) for control.

Behavioral Risk Factors

- Obesity was substantially greater among the youngest two cohorts, or those under age 55.
- Weight loss as a goal was low among AI veterans.
- Goals for weight were related to age with younger people more likely to aggressively set goals for weight control.
- Weight loss and management efforts exhibited the largest proportion of veterans (68.8%) using a combination of counting both calories and fat.
- AI veterans reported smoking either every day or on some days at 48.7% compared to 21% in the general population.
- AI veterans reported higher rates of alcohol abstinence at 67.5% compared to the state's general population at 62.9%

- Among those who did drink
    - Average number of drinks = 6.50
    - Proportion of drinkers defined as chronic = 76.6%
    - Average number of days with 5 or more drinks = 4.36
    - Proportion of drinkers who binge = 93%
    - Average number of days with drinking = 5.63

Preventive Care

- AI veterans experienced less dental care than the general population in terms of visits and cleanings
- Health screenings were relatively high for AI veterans for cholesterol, HIV testing, blood stool tests, digital rectal exams and PSA tests, but not for sigmoidoscopes or colonoscopes.

Access and Use of Services

- Thirty-nine percent of the veterans reported that they did not have health coverage in the form of insurance, Medicare, an HMO or similar such plans.
- The rate for having a regular doctor was low for AI veterans at 44% compared to 68.6% for the general population
- AI veterans reported that 23.6% of the time in the past year they could not access needed care

Veterans Administration Care

- Twenty-two point eight percent had received care from the Veteran's Administration in the past year.
    - Older veterans needed more care; whereas, younger veterans reported higher rates for experiencing difficulty in accessing care from the VA.
    - Distance, costs and competing demands on one's time were the leading reasons for difficulty in accessing VA care.
    - The proportion in each chronic disease category who reported having been unable to access VA health services is higher than the proportion who actually received care.

Indian Health Service Care

- Seventy-seven percent of the veterans reported having used IHS services at least once in the past year and the average number of visits to IHS was 5.09 visits in the past year.
- Twenty-one percent reported having been unable to access care from IHS compared to 20.5% who reported being unable to access care from the Veteran's Administration.
- Competition with other demands on one's time as a barrier to access is nearly the same for both sources of care.
- Factors affecting access appeared to create more difficulty in accessing care from IHS.
    - Transportation
    - Uncertainty over coverage
    - Trust issues, uncertainty over acceptance
    - Weather
    - Problems with appointments

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