



Center for
Rural Health

University of North Dakota
School of Medicine & Health Sciences

<http://medicine.nodak.edu/crh>

Conducting and Uses for Native Elder Needs Assessments

Regional Training Conducted
at Scottsdale, AZ & Reno, NV

Funded by Administration on Aging
Grant Number 90-AM-2751-03



*Connecting resources and knowledge to strengthen
the health of people in rural communities.*



Objectives

Following this training, you will:



- **Be able to conduct a local needs assessment.**
- **Understand what a needs assessment is.**
- **Understand the reasons for conducting a needs assessment.**
- **Be able to use data collected after conducting a local needs assessment.**



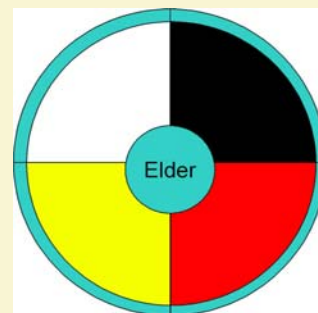
National Resource Center on Native American Aging

- Established in 1994, at the Center for Rural Health, University of North Dakota School of Medicine and Health Sciences
- Focuses on:
 - Education, Training, and Research
 - Community Development & Technical Assistance
 - Native Elder Health, Workforce, & Policy
- Web site:
<http://ruralhealth.und.edu/projects/nrcnaa/>



What is a needs assessment?

- A process where local interests or issues are defined.
- A method by which the nature and extent of needs can be both assessed and documented.
- A basis for planning that is evidence based.





Why conduct a needs assessment?

It allows you to *identify and document issues* that are important for your community.

It assists you in *locating options* for addressing the needs identified by your community.

It assists you in *assessing options and developing an action plan* to address your local needs.

It *provides documentation* required for planning and grant purposes.

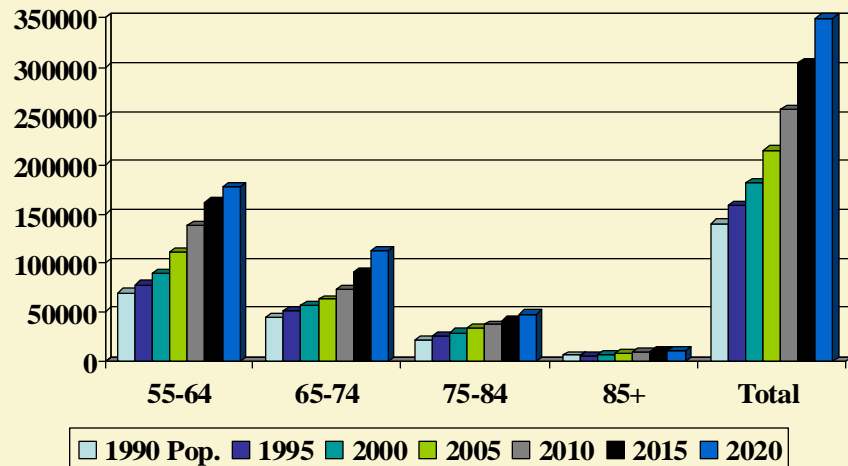


Native Elder Issues

- Growing elder population with Boom generation
- Lower life expectancy
- Higher chronic disease rates
- Higher health risk factors
- Lack of screening
- Lack of long-term care services in Indian Country
- Changing family structure



Native Elder Population Projections 1990-2020



McDonald & Ludtke



7



Regional Variances

- One size does not fit all
- Variation in regard to life expectancy and chronic disease
 - Ex. California Indian Health Service Area life expectancy at 76.3 years is close to the nations; however, Aberdeen Area is 64.3, a difference of 12 years.
 - Ex. Alaska Area has a diabetes rate slightly higher than the general population at 16%; whereas, the majority of other regions are at 37% or higher.
- Once you seen one tribe you've only seen one tribe

McDonald & Ludtke



8



Life Expectancy at Birth, ages 55, 65 and 75 by IHS Area

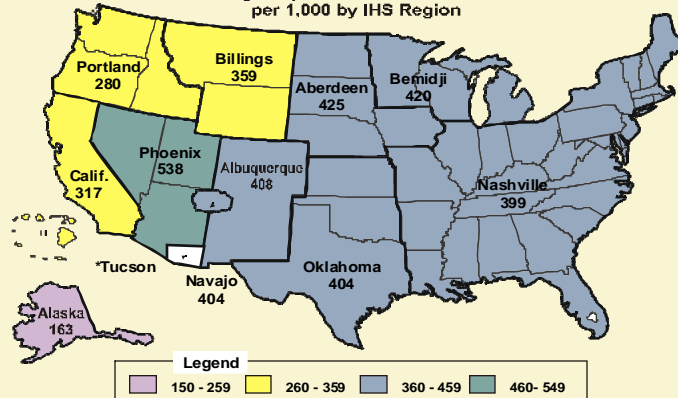
IHS Area	At Birth	At Age 55	At Age 65	At Age 75
Aberdeen	64.3	18.9	13.2	8.5
Bemidji	65.7	18.7	12.7	10.1
Billings	67.0	20.2	13.9	8.9
Alaska	68.0	21.3	14.7	9.2
Tucson	68.4	22.2	15.8	10.0
Phoenix	69.8	22.6	16.1	10.6
Portland	71.7	23.1	16.0	10.1
Navajo	71.9	24.9	17.7	11.7
Nashville	72.2	22.8	16.3	10.5
Albuquerque	72.7	25.4	19.6	12.2
Oklahoma	74.2	25.7	18.2	13.1
California	76.3	26.9	19.4	13.3
All Indians	71.1	23.5	16.7	11.2
**U.S. All Races	76.8			

Source: I.H.S. Division of Statistics (1998); **National Center for Health Statistics (2000)



Diabetes Rates by Region

Native Elders 55 and Over
Age Adjusted Diabetes Rates
per 1,000 by IHS Region



Source: NRCNAA Needs Assessment Data, UND Center for Rural Health.
* No data are available.





The Framework

- The Premise For The *Identifying Our Needs: A Survey of Elders* Social and Health Needs Assessment for Phase I-III is to provide tribal nations with the opportunity to collect information for their communities.
- The AoA funded project provides technical assistance and training opportunities to conduct a needs assessment using an established model.
- The NRCNAA model uses:
 - Academically accepted design and methodology
 - Random sampling ensures fair subject selection
 - The results are independent from political influence
 - Informed consent, tribal approval, and tribal ownership ensure tribal sovereignty is protected
 - The model developed with input from Native elders and Native elder providers ensures respect for Native elders.



Current Status of Project

- **Cycle I**
 - 190 tribes from 87 different sites are represented in national file
 - 9,403 Native elder participants have filled out the survey
 - At least one tribe from 11 of the 12 I.H.S. Regional Areas is represented in the national file
- **Cycle II**
 - 254 tribes from 75 sites representing 10,521 Native elders have completed Cycle II
 - 17 tribes have resolutions on file and are now collecting data
 - All 12 I.H.S. Regional Areas are represented in the national file





Center for
Rural Health

University of North Dakota
School of Medicine & Health Sciences

<http://medicine.nodak.edu/crh>

Additional Resources



*Connecting resources and knowledge to strengthen
the health of people in rural communities.*



Where can I find the needed data?

Census Data

Data from the 2000 census can be located at

- http://factfinder.census.gov/home/aian/sf_aian.html - this site locates data for each of the 526 tribes online. It is a source for getting a demographic profile of your tribe.
- For larger groupings containing numerous tribes in a single organization data can be obtained from http://factfinder.census.gov/home/aian/sf2_sf4.html where findings are based on 39 tribal groupings.
- The 2000 census data is now several years old and to represent the current year you may want to use current estimates. In order to estimate the population of each state and county, the Census Bureau conducts annual estimates of our population by age and race for each county. Estimates for years between censuses can be found at <http://www.census.gov/popest/estimates.php>, but you might be restricted to obtaining data for counties and not for boundaries that reflect your service areas or reservations.

Hawaiian sites should use the Hawaiian Data Center



Where can I find the needed data? (Continued)

Census Data Centers

Each state also has a Census Data Center. You can contact them using the following web site, <http://www.census.gov/sdc> with special requests for population data for your state and locality. In addition to serving as the central location for demographic statistics for the state, the Census Data Center also receives a wide array of data from state and local sources. Consequently, they are well positioned to address questions about the demographic profile of your service area. Find and use them!



Where can I find the needed data? (Continued)

Future Populations

YOU SHOULD LOCATE THE POPULATION PROJECTIONS FOR YOUR SERVICE AREA.

Many states have a series of projections for population for counties that are useful in anticipating the future. These provide a scenario for the future that you can use in the planning process and they are broken down by age and sex. They are normally at county level. County level data is common for demographic data and may require you to make inferences about how well they reflect the future of a reservation.





Where can I find the needed data? (Continued)

Future Populations

Another source, we have used, is the Indian Health Service Office of Public Health, Division of Community and Environmental Health. This office has a program statistics team that provide population statistics broken down by age and sex for each service unit and life table statistics for each service area. Using their data we were able to develop population forecasts for each service unit and we suggest that you use these. These will be provided to you by the NRCNAA.

Note: Since the projections are for service units, you can estimate the tribes numbers by using the proportion your tribe is of the service unit to which you belong. Some are the same and other units consist of many tribes. Thus if you are 15% of a service unit, you can lay claim to 15% of the population in each age group for each time period.



Where can I find the needed data? (Continued)

Future Populations

- As we recognize the growth of the Native elderly populations, we must also recognize that the population growth at advanced ages brings increased needs for services, both health care and social.
- For example, after one computes the rates for ADL limitations, we can apply those rates to the over 55 cohort and derive the number of people who will need some form of assistance today and in the future.
- Similar computations can be done with specific chronic diseases, obesity or any prevalence rate. This tool assists you in seeing what the future is likely to bring.



Combining Data with Population Projections

- Approximately 38% of Native Elders in the nation currently have diabetes
- 2000 Native Elders = 182,057
 $.38 \times 182,057 = \mathbf{69,182}$
- 2020 Native Elders = 349,109
 $.38 \times 349,109 = \mathbf{132,661}$



Center for
Rural Health

University of North Dakota
School of Medicine & Health Sciences

<http://medicine.nodak.edu/crh>

Identifying Our Needs: A Survey of Elders III



*Connecting resources and knowledge to strengthen
the health of people in rural communities.*



How do we obtain local data on Elder needs?

A standardized, self-administered instrument* that can be read by optical scanning equipment is provided by the National Resource Center on Native American Aging, at the University of North Dakota, for use in community assessments. A copy of the survey can be viewed at <http://ruralhealth.und.edu/projects/nrcnaa/cycle3.php>

Use of this instrument will:

- *Enable you to develop local data for planning and grant applications*
- *Enable you to train volunteers to help with data collection*
- *Expedite data entry, ensuring that you get results quickly*
- *Allow you to gain data at substantially reduced costs.*



Community Assessment Survey Data

- General health status of your elders
- Indicators of chronic disease
- Measures of disability - Activities of Daily Living (ADLs)
- Instrumental Activities of Daily Living (IADLs)
- Indicators of visual, hearing and dental problems
- Tobacco and alcohol use patterns
- Diet, nutrition and exercise
- Weight and weight control (BMI indicators)
- Social support patterns, housing and work
- Health care access
- Unmet needs
- Use and acceptance of services





Why Local Survey Data?

- Community needs assessments:
 - Identify and assess local community needs
 - Provide objective data for evaluating the status and needs of your communities elders
 - Obtain information that permits an unbiased examination of the needs
 - Provides an opportunity to document these needs for key funding agencies.
- You should be aware, however, that this type of systematic community diagnosis might yield results that are upsetting.
- While people may talk willingly about their health, an assessment may tell them that they have high risk factors for obesity, inactivity and such.
- We often would prefer not to be told that we need to eat better, lose weight and get more exercise.



Why local survey data? Cont...

Survey Advantages

- You are assured of a representative cross section of the community. It allows for broad participation.
- The responses of people from the community are often best solicited through an anonymous survey response.
- Detailed information about behavior, attitudes, beliefs, attributes and opinions can be recorded.
- Cross tabulation can help profile problems and assist in targeting programs.
- Surveys are lower in cost and consume less time than many alternatives.
- They permit you to reach people who live in more isolated parts of the community.





The Survey

Properly conducted Surveys will provide accurate descriptions of your people based either on surveying all or a representative sample of the people from your community.

NRCNAA recommends:

- Face-to-face surveying
- Staff or community volunteers trained to ask the questions and fill out the survey for their elders
- Sampling may be used - In many cases the population of elders is small enough that you can interview all of them. If the population is large, a properly selected representative sample can act as a mirror of the population for purposes of estimating characteristics of a population while using only a small fraction of the people.
 - *In order to draw a sample with reasonable assurances of adequacy **you must have a complete list of the population to be sampled and a method that will ensure a representative selection of respondents.** The size of a sample depends on the level of accuracy you require, with larger samples yielding the greatest precision.*



The Survey (continued)

APPROXIMATE SAMPLE SIZE REQUIRED

POPULATION	SAMPLE 20%	OVER SAMPLE
200	134	160
300	172	206
400	200	240
500	222	266
600	240	288
700	255	306
800	267	320
900	277	332
1000	286	343
1500	316	379
2000	333	399
2500	345	414
3000	353	423





How to draw a sample from your list.

Before drawing a sample, you will need to obtain a list of the elders in your community. This may require combining lists from more than one source, but is usually readily available from tribal offices. Once you have a list and have determined the size of the sample you will need, sampling using a systematic random sample in which every n th (e.g. 10th or 15th etc.) name is drawn, is recommended.



How to draw a sample from your list (continued).

To use this approach

- Know what proportion you need to draw. The fraction you need is the size of the required sample divided by the population, rounded up to the nearest whole number.
- Over sample – The population you select for your sample should include a 20% oversample in order to allow for people who cannot be found or who are unwilling to participate. This helps you reach the target sample size of completed surveys.
- You must have a random start – if you need every 12th name you can put numbers from 1 through 12 in a hat and draw one as the starting point.
- Thus if you wanted to use 25% of your population, you would randomly select a number between 1 and 4 and then select every 4th name thereafter. (E.g. If you start with # 2, would take the 6th, 10th, 14th 18th and so forth.)
- **If you use the National Resource Center on Native American Aging, we will assist you with determining sample size and how to draw your sample. Call toll free – 1 800 896-7628.**





How to collect survey data.

- Face-to-face interviews are recommended because they are likely to yield excellent response rates and more complete responses.
- Train the interviewers – practice interviewing each other to become familiar with the questions.
- Contact each person on the list. Try different times of the day and days of the week for those not at home or call to arrange a time for a visit. Try each person at least 3 times.
- Keep records for each attempt and for each completed interview to avoid duplication.
- Always thank people for talking with you and let them know where to look for the results.



Getting the results.

- Survey data can be computerized and analyzed using statistical programs. The NRCNAA will do this for you; however, you may analyze the data using a PC computer locally.
- Sending machine-readable data to the NRCNAA for both analysis and interpretation will reduce your costs substantially while retaining critical inputs from someone who is an expert in survey analysis.
- NRCNAA will.....
 - Code the data for statistical analysis.
 - Create a data file for your tribe.
 - Create standard measures (such as Body Mass Index, ADL and IADL limitations, chronic diseases and service uses).



Getting the results (continued).

- The NRCNAA prepares tabulations for the responses using SPSS (Statistical Package for the Social Sciences). Compare your tribe with national data and with all Native American elders in the combined data for all participating tribes.
- You will receive a comparison sheet including your tribe's data, national data and data for all Native American elders. This helps one determine whether their elders are healthier or less healthy than the norm or whether they have more chronic disease. The comparisons allow a context for interpretation. A sample can be seen at <http://ruralhealth.und.edu/projects/nrcnaa/pdf/comparison.pdf>
- Previous participants will also be provided information on changing patterns that may affect their future elders for planning and grant purposes.



Provider Profiles

- Provider profiles establish whether your community has the services available to its residents and where these services exist.
- In order to establish this information for you to compare the expressed needs of your people with the services that are available
- A service locator is being established jointly by the three national resource centers, N4A, and Kaufmann and Associates.
- The data are now being gathered to build this and will be posted as soon as a workable web page is developed.





Center for
Rural Health
University of North Dakota
School of Medicine & Health Sciences

<http://medicine.nodak.edu/crh>

NRCNAA Data Use General Templates



*Connecting resources and knowledge to strengthen
the health of people in rural communities.*



Title VI Needs Assessment Requirements

- <http://www.aoa.gov/doingbus/fundopp/announcements/2007/titlevi/t6%20draft%20application-2007.pdf>



NRCNAA Data Use Template

Background Information

According to the _____ enrollment office, there are presently 853 men and women over the age 55 enrolled and living on or around the _____ reservation. Of the 853, there are 492 over the age of 65. According to the National Resource Center on Native American Aging (NRCNAA), the national Native elder population ages 55 and over are expected to grow by 110% between 2000 and 2020. Clearly the impact of the large cohorts born during post World War II, now known as the Baby Boom generation, will become a major source of change for our tribe.



NRCNAA Data Use Template

Chronic Disease

The top chronic diseases found among our elders were high blood pressure, arthritis, diabetes, depression and osteoporosis. Each of these lead to limitations on peoples' ability to take care of themselves and each are diseases where treatments are available to manage the disease. Nutritional care is particularly important for high blood pressure, diabetes and osteoporosis.

Five most common chronic diseases in our tribe for persons 55 and over

High blood pressure	52.9%
Arthritis	45.9%
Diabetes	36.1%
Depression	17.1%
Osteoporosis	8.4%





NRCNAA Data Use Template

Data Comparison

Comparisons between our tribe and the nation provide documentation of disparities on specific diseases where American Indian people appeared to be at greater risk than others in the nation. This information assists in identifying diseases where health promotion efforts will assist in making significant improvements in health status for our elders. The table on the next slide presents these diseases.



NRCNAA Data Use Template

Chronic diseases with higher rates than the nation

	<u>Our tribe</u>	Nation
Arthritis	45.9%	28.0%
Congestive heart failure	9.2%	7.3%
Stroke	7.9%	6.5%
Asthma	14.2%	10.8%
Diabetes	36.1%	14.6%
Colon/rectal cancer	1.9%	.4%
Osteoporosis	8.4%	4.6%





NRCNAA Data Use Template

Functional Limitations

Functional limitations serve as the basis for establishing informal or formal need for care. Functional limitations or Activities of Daily Living (ADLs) include bathing, dressing, getting in or out of bed, walking and using the toilet. One's ability to manage each of these is essential for self care. The following table shows American Indian people, although reporting higher rates of chronic diseases, are significantly less likely to report such needs for assistance.



NRCNAA Data Use Template

Activities of Daily Living: Our Tribe & the Nation

	Our Tribe	Nation
Bathing	17.6%	36.8%
Dressing	12.0%	15.8%
Eating	7.7	8.1%
Getting in or out of bed	11.7	22.1%
Walking	23.2%	33.7%
Using the Toilet	9.3%	22.8%





NRCNAA Data Use Template

Instrumental Activities of Daily Living

Instrumental Activities of Daily Living (IADLs) serve as indicators for assistance for living safely in ones home. This includes meal preparation, shopping, money management, telephone use, heavy and light housework and getting outside of the home. With the exception of meal preparation, our tribe’s elders reported fewer IADL limitations than the nation. This may be due to the relatively young age of our elders compared to the nation.



NRCNAA Data Use Template

Instrumental Activities of Daily Living: Our Tribe and the Nation

	Our Tribe	Nation
Meal preparation	20.3%	19.7%
Shopping	17.7%	34.8%
Money management	12.2%	17.9%
Use of telephone	8.4%	9.6%
Heavy housework	33.3%	51.6%
Light housework	16.8%	17.0%
Getting outside	13.5%	44.2%





NRCNAA Data Use Template

Functional Limitations

The measure of need for long term care contains four levels of limitation; little or none, moderate, moderately severe and severe. Each of these reflected differing levels of need and eligibility for care. Although our elders are relatively independent, they are also relatively young. The table on the next slide contains the percentages for each level of need for both our tribe and the nation.



NRCNAA Data Use Template

Levels of Functional Limitation: A Measure of Need for Long Term Care

	<u>Our Tribe</u>	<u>Nation</u>
Little or none	61.7%	44.9%
Moderate	20.0%	21.5%
Moderately Severe	5.8%	9.2%
Severe	12.4%	24.5%





NRCNAA Data Use Template

Caregiver

The NRCNAA survey asked a series of questions on whether services were available, whether people were using them now and whether they would use them. The following table shows the services now available and the additional services that would most likely be in future demand. The survey suggested that people would use a larger array of services if they were available. In some instances, the expression of interest is very high when the services are rarely available. For example, respite care is almost non-existent, but over 40% indicated they would use it when the time was appropriate. These results provide the basis for maintaining and prioritizing services, and for determining what services the elders need to continue living in their homes.



NRCNAA Data Use Template

Available Services, Extent of Use and Projected Use If One Could Not Meet Own Needs

	Available	Use Now	Would use
Dietary	44.5%	25.3%	39.5%
Meals on Wheels	64.8%	32.2%	47.3%
Transportation	64.9%	27.9%	49.3%
OT	22.0%	3.1%	30.7%
Speech Therapy	18.8%	1.3%	28.5%
Respite Care	34.7%	3.4%	40.4%
Personal Care	32.3%	7.6%	39.7%
Skilled Nursing	36.7%	8.7%	39.5%
Physician	45.3%	28.7%	36.9%
Social Services	59.1%	16.6%	39.3%
PT	33.8%	5.5%	42.3%
Home Health	40.8%	9.1%	41.9%
Adult Day Care	20.4%	8.7%	30.7%
Assisted Living	18.5%	.9%	31.3%
Skilled Nursing	24.8%	1.4%	30.2%





NRCNAA Data Use Template

Weight and Nutrition

Specifically related to nutrition are the findings about weight, diet and exercise. Using the people's weight and height, a Body Mass Index was calculated to determine how many people are overweight (BMI 25 to 29) or obese (BMI 30 and over). Weight issues have become a focus of concern due to the relationship between weight and chronic disease (diabetes, arthritis, hypertension, and cancer) and functional limitations (ability to get around). Our results for the Body Mass Index are found on the next slide.

Note: Another method used to determine weight issues is waist circumference.



NRCNAA Data Use Template

Proportions in each Weight Category for Our Tribe

Low/normal weight	21.4%
Overweight	35.5%
Obese	43.1%





NRCNAA Data Use Template

Dietary concerns are reflected in an item that asked about eating habits and conditions that are important to consider when designing nutrition programs for our elders. A large proportion of the elders reported too few fruits and vegetables in their diet and many have an insufficient number of meals per day to receive adequate nourishment.



NRCNAA Data Use Template

Responses to nutritional items

I have an illness or condition that made me change the kind and or amount of food I eat.	28%
I eat fewer than 2 meals per day.	19%
I eat few fruits and vegetables or milk products.	39%
I have 3 or more drinks of beer, liquor or wine almost every day.	2%
I have tooth or mouth problems that make it hard for me to eat.	15%
I don't always have enough money to buy the food I need.	13%
I eat alone most of the time.	28%
I take 3 or more prescription or OTC drugs a day.	40%
Without wanting to, I have lost or gained 10 lbs in the past 6 months.	12%
I am not always physically able to shop, cook and/or feed myself.	13%





Center for
Rural Health

University of North Dakota
School of Medicine & Health Sciences

<http://medicine.nodak.edu/crh>

NRCNAA Data Use Specific Areas



*Connecting resources and knowledge to strengthen
the health of people in rural communities.*



NRCNAA Data Use Specific Areas

- Question 44 on the comparison sheet will assist in reporting the number of elders who are receiving care from a family member.
- Question 45 will assist in reporting the number of elders providing care to their grandchildren.
- The percentages from these two questions will provide a baseline for service use and acceptability of people involved in caregiving relationships. These should improve over time and will be measured again after 3 years.



NRCNAA Data Use Specific Areas

Caregiver, Social, and Housing Characteristics

One third of the elders in our community live alone. These results indicate that 1/3 of our elders are at risk for requiring help from outside the household – formal services or informal care from relatives who do not live with them. This proportion is large and suggests a strong need for building home and community based services that can support both the elder and his or her informal care provider. Additionally, our elders reported 56% had received care from family members. Again, this supports the need for family caregiver support services as well as formal services for the elders.

Almost a third (30.4%) of the elders reported providing care to grandchildren. This responsibility is high and must be considered when designing programs for the elders. They have responsibilities and tasks that in many other contexts would not be present. This responsibility for child care limits their options for using some services.



NRCNAA Data Use Specific Areas

- The first three nutrition items on Question 35 on your comparison sheet will help to establish a baseline of need.
 - Persons reporting illnesses or conditions that require them to change their diet are in need of education and counseling.
 - The next two items, fewer than 2 meals per day and eating few fruits and vegetables, are also both important for nutritional education and counseling.
- The thirteen (home delivered meals) and fourteenth (congregate meals) items *now using and would use* on Question 46 of your comparison sheet reflect current level of use and receptivity to nutritional services and will also assist in answering this question.



NRCNAA Data Use Specific Areas

- The thirteen (home delivered meals) and fourteenth (congregate meals) items on Question 46 *now using* document access; whereas, the *would use* column indicates an increase in demand for the next funding cycle.
- Use Question 35 to document levels of dietary adequacy and state that you expect the percentages with fewer than 2 meals a day and those with few fruits and vegetables to decrease over the next 3 years.
- You can monitor progress by comparing the percentages from this year to three years from now.



Community Level Data Uses

- Renewal of Title VI Native Elder Nutrition and Caregiving Grants
- Strengthening of grant proposals
- Documentation of health disparities
- Documentation of need for health promotion, home and community based services, and assisted living



Regional and National Data Use

The applications for data at these levels are numerous and focus on:

- Training for increasing skills for Native elder service providers
- Advocating for resources at the state, regional, and national level
- Developing policy for informing national Native elder organizations
- Filling the research gap for Native elder related publication
- Training Native researchers in the aging field



State & National Advocacy & Policy Examples

- South Dakota State Legislative Research Committee
- Senate Committee on Indian Affairs
- National Indian Council on Aging
- National Congress of American Indians
- White House Conference on Aging

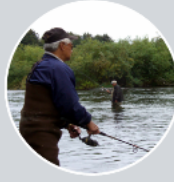




Final Overview



The assessment survey determines the rates for specific types of needs for your local community.



When these rates are applied to population data, you get an estimate of the total numbers of older persons who present each type of need.



After determining the higher levels of need, you can determine the extent of unmet need by examining the service locator data. Needs, without available services, can be clearly identified.



Needs assessment summary

A needs assessment should be conducted every three years to document changes.

A needs assessment is required by the Administration on Aging for Title VI projects.

AoA, the NRCNAA, and others can assist you with conducting a good needs assessment

A needs assessment is a method to document local needs.

Data from a needs assessment can be used for planning purposes.





Center for
Rural Health

University of North Dakota
School of Medicine & Health Sciences

<http://medicine.nodak.edu/crh>

For more information contact:
*National Resource Center on
Native American Aging*

Center for Rural Health
School of Medicine and Health Sciences
Grand Forks, ND 58202-9037
Tel: 800-896-7628

Fax: (701) 777-6779
<http://ruralhealth.und.edu>



*Connecting resources and knowledge to strengthen
the health of people in rural communities.*