Native Elder Needs Assessment Project

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Center for Rural Health

- Established in 1980, at the University of North Dakota - Grand Forks, ND
- Focuses on access, financing, quality, and information dissemination through:
  - Education, Training, and Awareness
  - Community Development & Technical Assistance
  - Native American Health
  - Rural Health Workforce
  - Rural Health Research
- Web site: [http://ruralhealth.und.edu](http://ruralhealth.und.edu)
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: [www.nrcnaa.org](http://www.nrcnaa.org)

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

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 is close to the nations; however, Aberdeen Area is 64.3, a difference of 12.5 years.
  - Ex. Alaska Area (16%) has diabetes rate close to the general population at 14%; whereas, the majority of other regions are at 37% or higher.
- Once you seen one tribe you’ve only seen one tribe
Life Expectancy at Birth, ages 55, 65 and 75 by IHS Area

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


Diabetes Rates by Region

Legend

- 150 - 259
- 260 - 359
- 360 - 459
- 460 - 549

Source: NRCNAA Needs Assessment Data, UND Center for Rural Health.
* No data are available.
Identifying our Needs III: A Native Elders Needs Assessment

The Needs Assessment Team

- Leander “Russ” McDonald, Ph.D – Director
- Richard Ludtke, Ph.D.
- Kyle Muus, Ph.D.
- Twyla Baker-Demaray, Research Analyst
- Kim Ruliffson, Project Assistant
- Joelle Ruthig, PhD, Research Associate
- Mary Gattis, Graduate Research Assistant
- Pam Ness, Graduate Research Assistant
  - Kaylee Compton, Student Assistant
  - C.W. Hall, Student Assistant
Purpose of the Project

- Assist tribes in collecting data useful for building infrastructure in their communities.
- Multiple methods are used throughout the study, primary method of data collection is the survey instrument (administered face-to-face with the elders).
- Fulfills requirements for tribes’ Title VI Elder Nutrition program grant applications.

Population

- Native American elders residing primarily on reservations
- Individuals age 55 and over living on or around Indian areas.
  - Age 55 is considered comparable to 65 and over in the general population
Data is collected on:

- General health status
- Activities of Daily Living (ADL’s)
- Instrumental Activities of Daily Living (IADL’s)
- Indicators of chronic disease
- Cancer screenings
- Access to healthcare
- Indicators of vision and hearing
- Tobacco and alcohol use
- Nutrition and exercise
- Weight and weight control
- Social supports

National Resource Center Provides:

- Survey instruments – a standardized tool
- Assistance with sampling
- Training on data collection
- Technical support
- Data entry
- Data analysis
- Statistical profiles of your elders
- Comparisons with national norms
Local Communities Provide:

- A resolution from their tribal councils
- A list of names/subjects for the sample
- Data collection
- Local implementation and coordination

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 were represented in the national file

- **Cycle II**
  - 254 tribes from 75 sites representing 10,521 Native elders have completed Cycle II
  - All 12 I.H.S. Regional Areas were represented in the national file
Current Status of Project

- **Cycle III**
  - 298 Tribes/Alaska Native Villages/Hawaiian Homelands from 127 different sites are represented in national file.
  - 14,751 Native elder participants have filled out the NRCNAA survey, 774 have filled out the NSAIE survey, for a total of 15,565 AIANNH elders.
  - All 12 I.H.S. Regional Areas are represented in the national file.

Changing Demographics: Survey Results
Age Distributions: Cycle I through Cycle III

Gender Distributions: Cycle I through Cycle III
Living Arrangements: Cycle I through Cycle III

Marital Status: Cycle I through Cycle III
Income: Cycle I through Cycle III

<table>
<thead>
<tr>
<th>Income Range</th>
<th>Cycle I</th>
<th>Cycle II</th>
<th>Cycle III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 5,000</td>
<td>12%</td>
<td>17%</td>
<td>9%</td>
</tr>
<tr>
<td>5,000-6,999</td>
<td>9%</td>
<td>11%</td>
<td>14%</td>
</tr>
<tr>
<td>7,000-14,999</td>
<td>37%</td>
<td>31%</td>
<td>32%</td>
</tr>
<tr>
<td>15,000-19,999</td>
<td>3%</td>
<td>20%</td>
<td>17%</td>
</tr>
<tr>
<td>20,000-24,999</td>
<td>31%</td>
<td>9%</td>
<td>10%</td>
</tr>
<tr>
<td>25,000-49,999</td>
<td>13%</td>
<td>15%</td>
<td>9%</td>
</tr>
<tr>
<td>50,000 &amp; up</td>
<td>2%</td>
<td>4%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Education: Cycle I through Cycle III

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Cycle I</th>
<th>Cycle II</th>
<th>Cycle III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than High School</td>
<td>23%</td>
<td>22%</td>
<td>20%</td>
</tr>
<tr>
<td>High School</td>
<td>23%</td>
<td>24%</td>
<td>19%</td>
</tr>
<tr>
<td>College &amp; up</td>
<td>24%</td>
<td>16%</td>
<td>16%</td>
</tr>
</tbody>
</table>
The Health of America’s Indian Elders: Chronic Diseases

Chronic Diseases – Arthritis (N=14,751)

- Native elders were 13% more likely to experience arthritis than the U.S. general population.
Chronic Diseases – Congestive Heart Failure (N=14,751)

- Native elders were 25% more likely to experience congestive heart failure than the general U.S. population.

Chronic Diseases – Stroke (N=14,751)

- Native elders were 29% more likely to experience a stroke than the general population.
Chronic Diseases – Asthma (N=14,751)

- Native elders were 57% more likely to experience asthma than the U.S. general population.

Chronic Diseases – Cataracts (N=14,751)

- Native elders were 25% less likely to experience cataracts than the general population.
Chronic Diseases – Cervical Cancer
(N=14,751)

- Native elder women were 85% more likely to experience cervical cancer than the U.S. general population.

Chronic Diseases – Breast Cancer
(N=14,751)

- Native elder women were 22% more likely to experience breast cancer than the U.S. general population.
Chronic Diseases – Prostate Cancer
(N=14,751)

- Native elder men were 40% less likely to experience prostate cancer than the U.S. general population.

Chronic Diseases – Colon/Rectal Cancer
(N=14,751)

- Native elders were 50% less likely to experience colon/rectal cancer than the U.S. general population.
Chronic Diseases – Other Cancer
(N=14,751)

- Native elders were less likely to experience other cancer than the U.S. general population.

Chronic Diseases – High Blood Pressure
(N=14,751)

- Native elders were equally as likely to experience high blood pressure as the U.S. general population.
Chronic Diseases – Diabetes (N=14,751)

- Native elders were 141% more likely to experience diabetes than the U.S. general population.

Chronic Diseases – Osteoporosis (N=14,751)

- Native elders were 44% more likely to experience osteoporosis than the U.S. general population.
Chronic Diseases – Depression (N=14,751)

- Native elders indicated 33% less depression than the U.S. general population.

Functional Limitations

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

- The majority of definitions concerning functional limitations or disability refer to activities of daily living (ADL’s) and instrumental activities of daily living (IADL’s) as indicators of functionality.

Activities of Daily Living (ADL’s)

- Eating
- Walking
- Using the toilet
- Dressing
- Bathing
- Getting in/out of bed
Instrumental Activities of Daily Living (IADL’s)

- Cooking
- Shopping
- Managing money
- Using a telephone
- Light housework
- Heavy housework
- Getting outside

ADLs by Cycles I-III
IADLS by Cycles I-III

LTC Measure by Cycles I-III
### Functional Limitation Categories

<table>
<thead>
<tr>
<th>Categories</th>
<th>Limitations</th>
<th>Recommended Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Little or none</td>
<td>No ADL limitations, up to one IADL limitation</td>
<td>Health Promotion</td>
</tr>
<tr>
<td>Moderate</td>
<td>One ADL limitation with fewer than 2 IADLs</td>
<td>Home and Community Based Services</td>
</tr>
<tr>
<td>Moderately Severe</td>
<td>2 ADL limitations</td>
<td>Assisted Living</td>
</tr>
<tr>
<td>Severe</td>
<td>3 or more ADL limitations</td>
<td>Skilled Nursing Facility</td>
</tr>
</tbody>
</table>

### Functional Limitation Levels Applied to Services and Personnel

<table>
<thead>
<tr>
<th>Level Functional Limitation</th>
<th>Service Goals</th>
<th>Services with best fit</th>
<th>Personnel required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Little or none (59%)</td>
<td>Health promotion, preventive care, maintaining vitality</td>
<td>No caregiver services required Health Promotion/Prevention</td>
<td>Health educators, physical trainers, therapists</td>
</tr>
<tr>
<td>Moderate (21%)</td>
<td>Supportive services to aid persons in remaining in own domicile. Train and support informal providers and buffer them with respite and contact services for a range of possible tasks.</td>
<td>Informal care - w/supports Chronic Disease Management Home &amp; community based</td>
<td>Family and friends, Trainer for skills, Facility staff - LPN/CNA, Rental source RN, LPN, CNA, PT, OT... Cleaning and chore assts, PT, PT aides, tele-health OT, OT aids, tele-health Medication aide Speech therapist Psychologist, Psychiatrist, Psych. Social Worker, Van driver Dietician, aide Trained attendants, Trained respite providers or institutional site</td>
</tr>
</tbody>
</table>

(Updated table content for clarity and formatting)
## Functional Limitation Levels Applied to Services and Personnel Cont…

<table>
<thead>
<tr>
<th>Level Functional Limitation</th>
<th>Service Goals</th>
<th>Services with best fit</th>
<th>Personnel required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moderately Severe (7%)</td>
<td>The goal for this level of care is to provide housekeeping and meals along with a modest level of oversight. People may contact for services from the home and community based services in addition to the basic services found in these settings. Assisted living establishes the goal for this cluster in that it seeks to maintain resident control over services.</td>
<td>Congregate care Basic care facilities Assisted Living</td>
<td>Institutional staff as required by state regulations</td>
</tr>
<tr>
<td>Severe (13%)</td>
<td>With 3 or more ADLs, this level tends to become prime candidates for skilled nursing care. They represent care needs with relatively high levels of acuity.</td>
<td>Skilled nursing care is the most fully institutional and is reserved for those with medical needs necessitating this level of care.</td>
<td>Skilled Nursing Care</td>
</tr>
<tr>
<td>Terminal as special category</td>
<td>End of life care occurs at all points on the above continuum, but is concentrated at the higher levels of limitation. The goal is physical and emotional comfort.</td>
<td>Hospice Care</td>
<td>Hospice volunteers and coordinator</td>
</tr>
</tbody>
</table>

## Five or more drinks in the past 30 days by Cycles I-III

![Bar chart showing the percentage of participants with 5 or more drinks in the past 30 days by cycle](chart.png)
Smoking by Cycles I-III

Last Drank Alcohol by Cycles I-III
Chronic Disease by Cycles I-III

BMI by Cycles I-III
Problems Affecting Nutrition by Cycles I-III

Nutritional Score by Cycles II-III
Conclusions

- Native elder populations are dramatically growing.
- Tribal recognition of age 55 for elder status includes those elders from the baby boom generation.
Conclusions cont.

• Chronic diseases prevalence is mixed with several increasing and others steady.

• Increases may well relate to risk factors.
  – Exercise – Walking increased dramatically in Cycles I to II, but nearly all other exercises decreased. The same trend is hinted at in Cycle III preliminary study.
  – Weight issues increased – young old are heaviest.

Recommendations

• Lifestyle modification continues to merit attention. Positive results for walking provide a major source of encouragement.

• Chronic disease self management will be essential to avoiding future functional limitations as this population grows older.
For more information contact:
National Resource Center on Native American Aging
Center for Rural Health
University of North Dakota
School of Medicine and Health Sciences
Grand Forks, ND 58202-9037
Tel: (800) 896-7628
Fax: (701) 777-6779
http://nrcnaa.org

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