Analysis of Native Elder Data: What are the Possibilities?

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Project Purpose

• Assist tribes in collecting data they can use to build infrastructure in their communities.
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 norm

Local Communities Provide:

- A list of all area elders
- Interviewers and a mechanism for collecting completed questionnaires
- Resources for reviewing and disseminating survey results
- Local implementation and coordination
- Additional Data Analyses (as needed)
Different Ways to Slice It

- Within Tribe - One Point in Time
- Within Tribe - Multiple Points in Time
- Tribe vs. National Comparisons
- Regional Comparisons
- National Studies

Topics of Study

- Health Risk Factors
  - Overweight and obesity
  - Tobacco use
  - Alcohol use
- Nutritional Health
- Social Support and Housing
- Health Service Use
  - Cancer screenings
  - Dental, vision
  - Barriers
Topics of Study (cont.)

• Health Care Access
  - Insurance
  - Regular health care provider
  - Barriers to care

• Health Status
  - Self-perceived health
  - Chronic Diseases – which and how many?
  - Activities of Daily Living – which and how many?

Uses of Local Data Analysis

• Grant-writing (ex: Title VI applications)
• Generating ideas for local health promotion and prevention programs
• Planning for addressing current and future long-term care needs
• Public Awareness & Education
Example: Diabetes Prevalence among Al Elders

![Bar Chart]


Example: Diabetes Prevalence among Al Elders, Multiple Surveys

![Bar Chart]
Exercise: Cycle I & Cycle II

Example: Diabetes Prevalence among Tribe N Elders, by Community
Example: Diabetes Prevalence among Tribe N Elders, by Region

Example: Diabetes Prevalence among Geographic Regions
**Uses of National Data Analysis**

- Assess whether there are health disparities by race (ex: arthritis prevalence)
- Assess whether health trends and relationships among whites hold true or are different among AI/ANs (ex: BMI and cancer screening)
- Educating others about AI/AN health and social issues
- Informing health policy (ex: IHS)

**Three Key Needs to Address Long-Term Care Issues among AI / AN populations**

- Reduce chronic diseases and functional limitations;
- Eliminate disparities across tribes, and between Native American elders and the general population, and to increase life expectancy; and
- Address the shortages or lack of long-term care options in Indian Country.
We Link AREA RESOURCE FILE (ARF) to the Aggregate Elder Data

**ARF contains:**

- 6,000 variables for each of the nation's counties.
- Information on:
  - health facilities;
  - health professions;
  - measures of resource scarcity;
  - health status;
  - economic activity; and
  - socioeconomic and environmental characteristics.
- Geographic codes and descriptors which enable it to be linked to many other files and to aggregate counties into various geographic groupings.

**National Studies**

- Extent of Health Insurance Coverage
- Chronic Diseases & Functional Limitations
- Body Mass Index and Cancer Screenings
- Social Integration and Cancer Screenings
National Studies (cont.)

• Nutrition and Social Support Networks
• Health Status: Subjective versus Objective
• Arthritis: Prevalence, Demographic Patterns, and Comorbidities

Arthritis among American Indian and Alaska Native Elders: Prevalence, Demographic Patterns, and Comorbidities

Background

• Arthritis is a leading cause of disability in the United States.
• As the older AI/AN population increases due to increased longevity, arthritis prevalence and disability are also expected to rise.
• However, studies addressing its prevalence and impact among American Indian and Alaska Native (AI/AN) populations, especially the elderly, are very limited.

Objectives

• Assess the prevalence of arthritis among AI/AN elders.
• Determine the presence and extent of demographic patterns for elders with arthritis.
• Delineate the predominant comorbidities among elders with arthritis.
Arthritis Prevalence among AI/AN Elders by Gender

- Female:
  - Arthritis: 49.8%
  - No Arthritis: 50.2%
- Male:
  - Arthritis: 64.6%
  - No Arthritis: 35.4%

Arthritis Prevalence among AI/AN Elders by Age

- 55-64:
  - Arthritis: 59.9%
  - No Arthritis: 40.1%
- 65-74:
  - Arthritis: 54.4%
  - No Arthritis: 45.6%
- 75+:
  - Arthritis: 50.2%
  - No Arthritis: 49.8%
Arthritis Prevalence among AI/AN Elders by Annual Income

- $0-9,999: 47.1% Arthritis, 52.9% No Arthritis
- $10,000-19,999: 42.4% Arthritis, 57.6% No Arthritis
- $20,000+: 39% Arthritis, 61% No Arthritis

Arthritis Prevalence among AI/AN Elders by Rurality of Residence

- Rural: 45.3% Arthritis, 54.7% No Arthritis
- Urban: 43% Arthritis, 57% No Arthritis
Results

- Overall prevalence of arthritis was 43.5%.
- Demographic characteristics which increased the likelihood of arthritis prevalence included:
  - being female;
  - older;
  - obese;
  - residing in urban areas.
- Chronic conditions found to commonly co-exist with arthritis included:
  - osteoporosis;
  - asthma;
  - high blood pressure;
  - congestive heart failure;
  - depression.
Conclusion

• Arthritis prevalence was estimated to be slightly higher among AI/AN elders when compared to similar estimates for U.S. elders.
• The majority of AI/AN elders with arthritis had one or more other chronic conditions.
• Arthritis and its comorbidities appear to represent serious challenges to the health and mobility of AI/AN elders.

Conclusion (cont.)

• Future studies are needed to examine the types and characteristics of disease management and other health care programs that could be modified to mesh with AI/AN cultures and be useful for AI/AN people, including the elderly.
• These needed improvements in chronic care management stand to improve AI/AN elders’ health status, quality of life, and life expectancy.
Questions or Comments?

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