



# Functional Limitations and the Future Needs for Long Term Care

National Resource Center on Native American Aging  
at the University of North Dakota

In this analysis we examine functional limitations among Native American elders using data collected across the nation in the program for conducting local needs assessments entitled "Identifying Our Needs: A Survey of Elders". The data were collected by tribes participating in the needs assessment activity conducted by the National Resource Center on Native American Aging (NRCNAA) with funding provided by a cooperative agreement with the Administration on Aging (AoA). An aggregate data file containing the results from participating tribes now contains data from 83 tribal needs assessments with a total of 8,560 respondents. Although more tribes are collecting data for their needs assessments, the size of the aggregate file is now quite large and analysis is now appropriate. We believe at this point the data provides an accurate picture of the status of the nation's Native American elders.

In this assessment project, tribes from the nation have been invited to use a standardized survey instrument and data collection procedures to conduct local needs assessments that provide each tribe with an accurate picture of the status of their local elders with respect to health status and their need for services. As each tribe completes this process, they are provided statistical results for their local area and are added to the total "aggregate" file that will represent the overview of all Native American elders. This analysis examines the aggregate file.

Functional limitations reflect the level of disability in the population and relate to criteria normally used for admission to nursing homes, assisted living and to community based long term care programs. Definitions of functional disability vary considerably, but nearly all use information about "activities of daily living" (ADLs) or "instrumental activities of daily living" (IADLs). ADLs include difficulties with eating, walking, using the toilet, dressing, bathing and getting in and out of bed. These are considered fundamental to survival. IADLs reflect activities required for independent living, but are less severe than ADLs. IADLs include cooking, shopping, managing money, using a phone, doing light or heavy housework and getting outside the home.

People normally experience needs with IADLs in advance of ADL limitations and the ADL limitations tend to evolve in a pattern with bathing one's self commonly being the first and most frequent ADL for which assistance is needed. Eating and toileting are the least frequently identified ADLs among the non-institutional elderly (Sahyoun, Pratt, Lentzner, Dey, & Robinson, 2001).

## **A Classification of Functional Limitations**

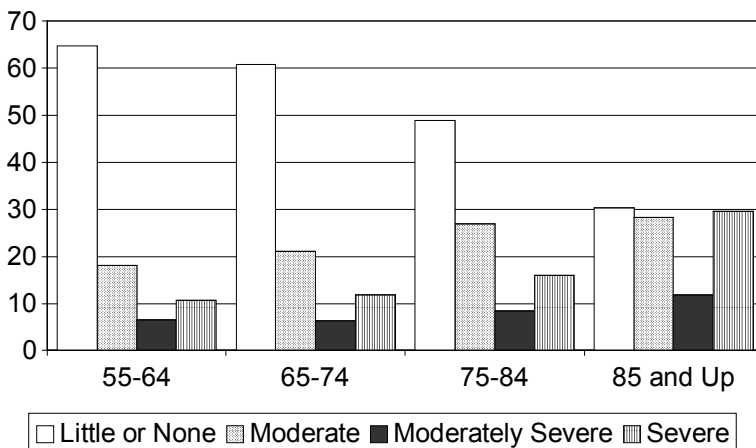
In this report, we combine ADLs and IADLs into a classification that places people into one of four levels of need and that corresponds to different levels of care. This model was developed employing an approach found in a report prepared by Kunkel and Applebaum (1991) for the U.S. Department of Human Services.

## Functional Limitation Categories

Functional Limitation Categories	ADL's	IADL's
Little or None	0	1 or less
Moderate	0 1	2 or more 0
Moderately Severe	2	0
Severe	3	0

The lowest level, Little or None, requires no long term care services and represents those who have retained vitality. The Moderate category reflects a beginning level of long term care need and would most appropriately be met with home and community based care and/or personal care services. Moderately Severe functional limitations serve as the threshold for assisted living and Severe functional limitations serve as the basis for admission into skilled nursing care. Using these categories, we are able to estimate the numbers of people at these different levels of need and who would be appropriate candidates for different levels of long term care services.

**Figure 1. Functional Limitation Rates by Age: Native American Elders 2000**

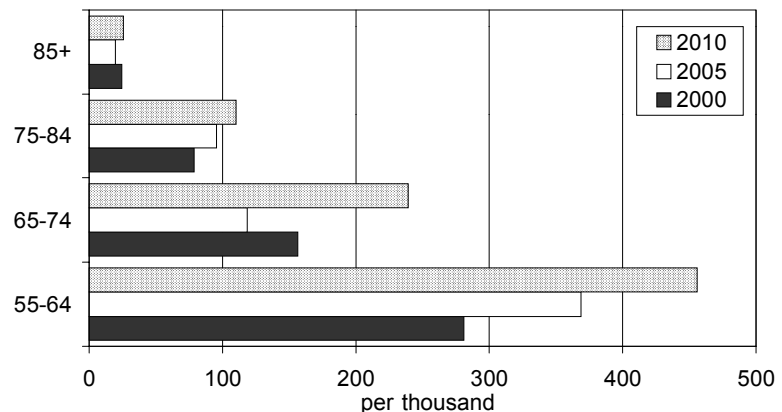


The rates for functional limitations among Native American Elders are presented in Figure 1. Note how the proportion of the population free from functional limitations drops with age. As the population ages, there will be an increased need to provide long term care services.

The numbers of people classified as elders in the Native American population is about to explode with the arrival of those born during the baby boom.

Figure 2 illustrates the dramatic growth expected for Native American elders. These projections are based on current life expectancies and constitute conservative estimates of the future growth of elders. Life expectancy for Native American elders has been growing rapidly and should be expected to grow in the future.

**Figure 2. Population Changes by Age: 2000 to 2010**



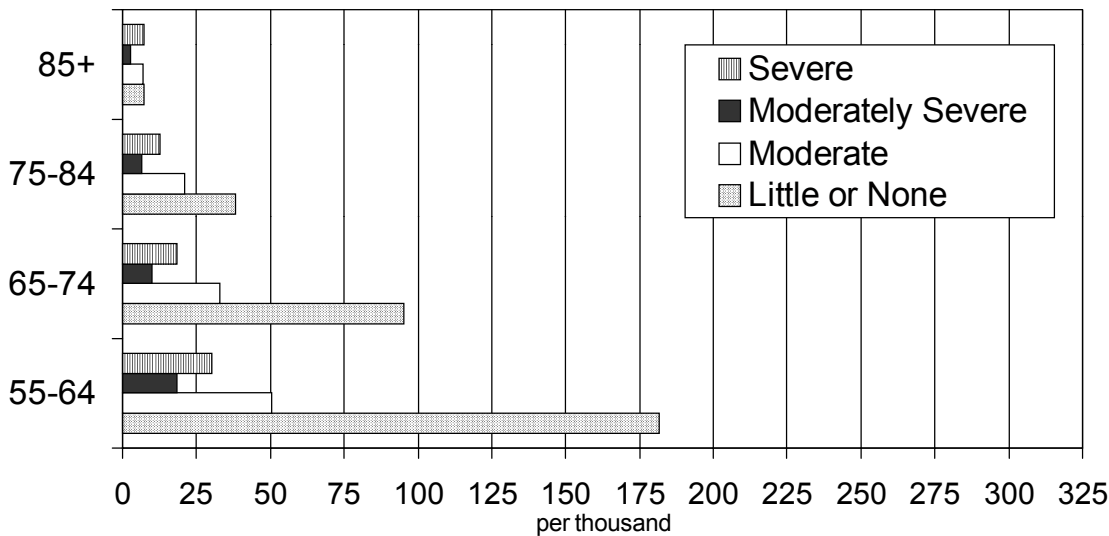
It is important to note that the "young old" will be the first to exhibit substantial growth and as each year passes, the growth will shift to older ages. Functional limitations relate to age, with the older age groups having the highest levels of limitation, or the greatest need for higher levels of care.

## How will functional limitations change in the future?

When one combines the population data with the measure of functional limitation, a picture of the growth in need for long term care is generated. This is presented in Figure 3. In the year 2000, applying the prevalence rates for the three levels of functional limitations, a total of 217,922 Native American elders would have had a level of limitation appropriate for long term care services.

and is based on projections using Indian life tables to estimate how long people could be expected to live. If current rates of disability continue while the population of elders grows, 328,927 people with functional limitations of moderate or more severe levels can be expected by 2010. A combination of large numbers of people becoming elders and early ages of onset for many chronic diseases that produce functional limitations creates a growth in functional limitations of 51% in just one decade.

**Figure 3. Population with Functional Limitations by Age: 2000**



As the population ages, the number of elders with functional limitations will grow, assuming the same rates of disability are continued. Figure 4 demonstrates the impact of a decade of growth and change in the population

promoting their own health. In addition to this, there is evidence that access to modern medicine can make a significant difference as well. New medications that control arthritis and joint replacement surgery are becoming much more

## What can be done to reduce the level of functional limitations?

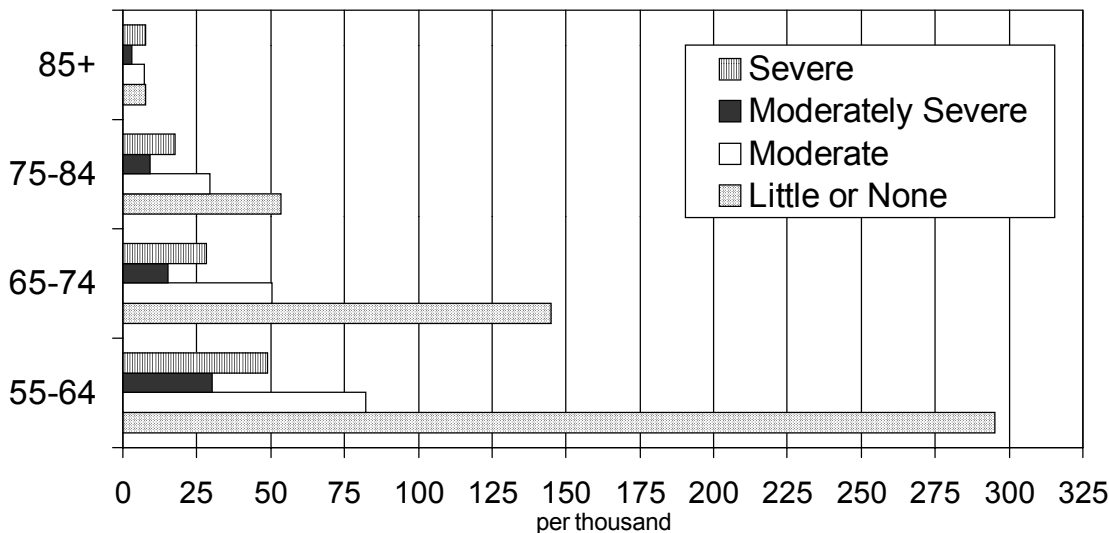
The health and vitality of future elders depends on healthy lifestyles - good diets, regular exercise and refraining from drinking and smoking. If people take care of themselves, they can reduce the need for long term care services by

promoting their own health. In addition to this, there is evidence that access to modern medicine can make a significant difference as well. New medications that control arthritis and joint replacement surgery are becoming much more

common and both serve to enable people to remain more vital.

Figure 5 suggests the possible impact of this kind of improvement. An overall reduction of 16,919 people with functional limitations can be achieved with a 10% reduction in limitation. It is also important to note that a reduction in limitation would also produce a

**Figure 4. Population with Functional Limitations by Age: 2010**

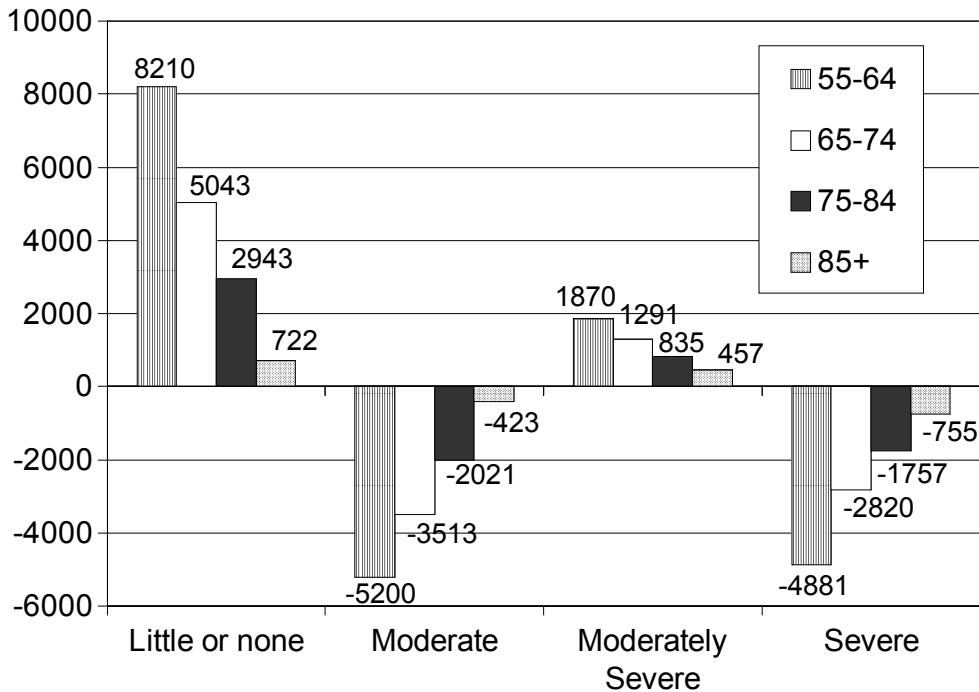


lessening of severity in addition to reducing the overall number of persons with limitations. Ten percent of those who would have become severe would be maintained at the moderate level and would not move into the severe category. Similarly, ten percent of those expected to become moderately severe would be maintained at the moderate level of severity rather than progressing to severe. Lastly, 10% of those who would have become moderately limited would be kept at a sub-threshold level with little or no limitation. The net result of this “stepped down” functional limitation is that both the total numbers classified as limited and in need of assistance and the amount of help required at the higher levels of assistance would be reduced. This would be a good investment!

## References

- Kunkel, S.R. and Applebaum, R.A. (1991). Estimating the prevalence of long-term disability for an aging society. Report to the U.S. Department of Health and Human Services, Office of Disability and Long-Term Care Policy, Contract #87ASPE1821.
- Sahyoun, N., Pratt, L., Lentzner, H., Dey, A. and Robinson, K. (2001). *The changing profile of nursing home residents: 1985-1997*. Aging Trends, No. 4. Center for Disease Control and Prevention.

**Figure 5. Functional Limitations 2010 with 10% Stepped Down Reduction**



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