

## Dementia Care Services Project: Continued Progress in Providing Assistance to Caregivers

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### Key Findings

- Dementia Care Services Project (DCSP) participation coincided with increases in caregivers' obtaining health care objectives (powers of attorney, health care directives, and medical alerts), and decreases in estimated health care and long-term care (LTC) costs.
- Higher caregiver participation (e.g., more in-person visits) was associated with better outcomes.
- As compared to their urban counterparts, rural caregivers and persons with dementia who used DCSP services were more likely to obtain health care objectives and delay LTC placement, and they had larger estimated cost savings for emergency care or 911 calls.
- Satisfaction survey participants provided high ratings for the DCSP's overall performance.

### Background

In 2009, the North Dakota Legislature passed the Dementia Care Services bill (House Bill 1043; North Dakota Century Code 50-06-33) to provide resources, assistance, and support for the people of North Dakota. The Aging Services Division of the North Dakota Department of Human Services awarded the contract to do this work to the Minnesota–North Dakota Chapter of the Alzheimer's Association. The Minnesota–North Dakota Chapter is working with the UND Center for Rural Health to evaluate the program and provide a cost analysis.

### Purpose of the Study and Approach

The project provides care consultations for caregivers, which can consist of assessments of needs, identifying issues and concerns, identifying available resources, developing a plan of care, referrals, providing support and education about dementia, and follow-up. It also provides education for communities, professionals, and law enforcement agencies.

The project's goal is to inform people with dementia and their caregivers about dementia care issues, which, in turn, may lead to decreased depression, increased family support, delays in nursing home placement, and reductions in redundant use of health services.

Contacts through the information help line and care consultations have steadily increased:

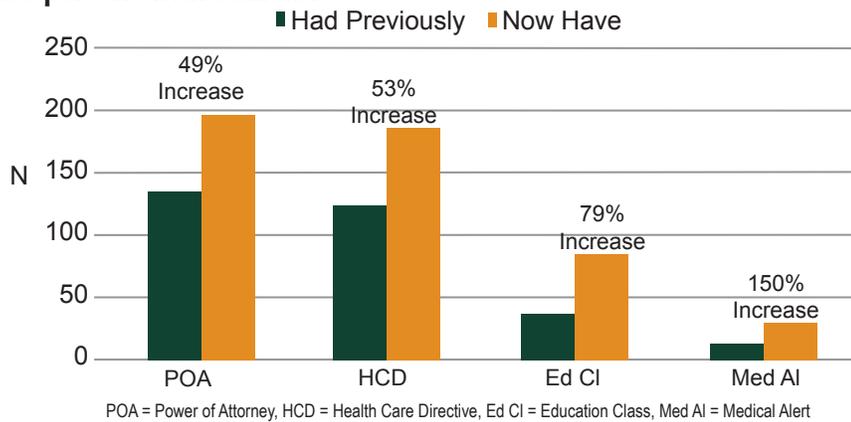
- From January 2010 through June 2011, the Dementia Care Services Project (DCSP) worked with 717 caregivers, providing 1,456 contacts for 454 persons with dementia.
- The Alzheimer's Association provided service delivery within all eight human service center regions defined by the North Dakota Department of Human Services.
- Forty-seven percent of participating persons with dementia lived in rural areas.

### Results

**Finding #1: DCSP participation coincided with increases in caregivers' obtaining health care objectives (powers of attorney, health care directives, and medical alerts), and decreases in estimated health care and long-term care (LTC) costs.**

- Fifteen percent of caregivers reported decreased likelihood of LTC placement for the persons with dementia, while 50% indicated no change.
- A median estimate of potentially avoided LTC costs for North Dakota was \$3,006,147 (based on 46 caregivers who indicated decreases in likelihood of LTC placement).

**Figure 1. Percentage increases in health care objectives for caregivers and persons with dementia.**



- There was a 49% increase in the number of people with powers of attorney, 53% increase in obtaining health care directives, 79% increase in taking education classes, and a more than doubling (150% increase) in the number of people obtaining medical alert systems (Figure 1).
- Health care cost savings associated with DCSP participation was estimated at \$216,928 (through reduced hospital stays, ambulance runs, emergency room visits, and 911 calls).

**Finding #2: Higher caregiver participation (e.g., more in-person visits) was associated with better outcomes.**

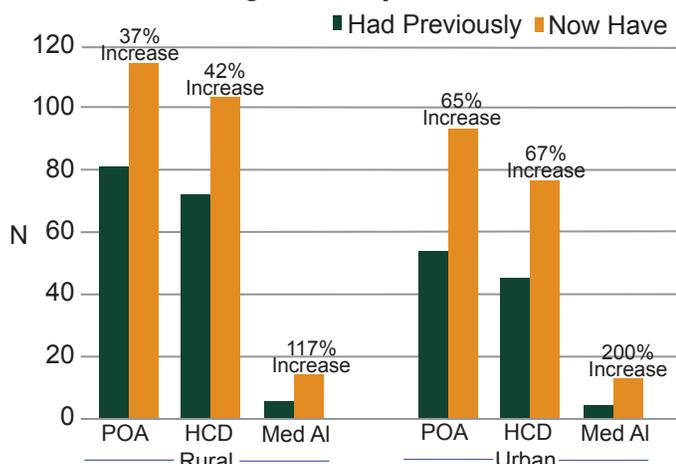
Caregivers who were more engaged in the project activities, as measured by increased numbers of in-person visits with DCSP staff, were more likely to

- get resources from the DCSP;
- obtain health care objectives;
- have greater estimated hospital and rural ambulance cost savings; and
- decrease their intention to place persons with dementia in LTC, which translated to reduced potential LTC costs.

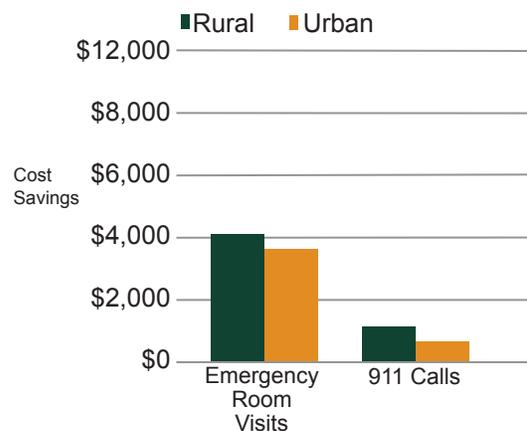
**Finding #3: As compared to their urban counterparts, rural caregivers and persons with dementia who used DCSP services were more likely to obtain health care objectives and delay LTC placement, and they had larger estimated cost savings for emergency care or 911 calls.**

- Rural caregivers and persons with dementia were more likely to have obtained health care objectives than urban caregivers (Figure 2).
- Living in the country rather than in town was a contributing factor in delaying LTC placement.
- Persons with dementia who resided in rural areas had larger estimated cost savings in Emergency Room use and 911 calls than those who resided in urban areas (Figure 3).

**Figure 2. Percentage increases in health care objectives for urban and rural caregivers and persons with dementia.**



**Figure 3. Estimated cost savings for urban and rural persons with dementia.**



#### **Finding #4: Satisfaction survey participants provided high ratings for the DCSP's overall performance.**

- The DCSP's convenience, quality, and positive influence each received an average score of four on a five-point scale.
- Several respondents praised DCSP's performance and helpfulness, appreciated the useful information or referrals, and some indicated the DCSP helped them reduce stress:
  - "We were really satisfied. We probably didn't contact them soon enough. We waited too late in the process."
  - "I thought the Alzheimer's Association staff were very knowledgeable. I was pleased with the experience. They were right on in what they told me."
  - "It was immensely helpful and stress reducing to know that what we were seeing was not unusual with Alzheimer's disease and to receive guidance in managing various situations."
  - "Overall, it was helpful in gaining a foundation of information regarding dementia and learning what to expect."

### **Conclusion**

The DCSP has provided a great amount of assistance for caregivers of persons with dementia in a very rural state. It is having a positive impact in many ways, including providing enhanced support, increasing the use of health care directives, and reducing estimated health care and LTC costs. These outcomes in turn may lead to improved physical, mental, emotional, and financial health of North Dakota caregivers and persons with dementia.

### **Recommendations**

Endeavors like the DCSP may benefit other regions of the country and particularly rural/frontier areas where caregivers face many challenges, including limited access to health care, public transportation, and various caregiving resources. DCSP support and assistance may be especially helpful to rural participants, as they are facing a greater number of care provision challenges based on being in remote areas (e.g., longer transportation times, isolation, and poorer access to health care), and should be encouraged in rural areas.

Projects like DCSP need to focus on providing multiple in-person visits because caregivers with higher levels of participation in DCSP may have derived greater levels of benefits (e.g., lower depression, lower stress, and greater self-efficacy). This in turn translated into lower use of health care services and greater estimated cost savings. Further, as costs for nursing home care are soaring<sup>1</sup> and dementia increases nursing home placement among elderly by about five-fold,<sup>2</sup> it is important to provide support such as the DCSP to caregivers of persons with dementia in efforts to meet their abundant needs and delay LTC placement.<sup>3</sup>

### **References**

- <sup>1</sup>Genworth Financial. (2011). *Cost of care survey*. Richmond, VA: Author.
- <sup>2</sup>Eaker, E. D., Vierkant, R. A., & Mickel, S. F. (2002). Predictors of nursing home admission and/or death in incident Alzheimer's disease and other dementia cases compared to controls: a population-based study. *Journal of Clinical Epidemiology*, *55*, 462–468.
- <sup>3</sup>Mittelman, M. S., Haley, W. E., Clay, O. J., & Roth, D. L. (2006). Improving caregiver well-being delays nursing home placement of patients with Alzheimer disease. *Neurology*, *67*(9), 1592–1599.

### **Additional Information**

The information in this policy brief is based on The University of North Dakota Center for Rural Health report *Assessment of North Dakota Dementia Care Services Program: Outcomes and Cost Analysis, January 2010 to June 2011* by Marilyn G. Klug, PhD; Boris Volkov, PhD; and Kyle Muus, PhD.

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