

10-1-1998

## Treatment and Outcomes Among Rural and Urban Nursing Home Residents with Depression

Elise Bolda

Robert G. Keith

Patricia Dushuttle

Katherine Bridges

Follow this and additional works at: [https://digitalcommons.usm.maine.edu/longterm\\_care](https://digitalcommons.usm.maine.edu/longterm_care)

---

### Recommended Citation

Bolda, Elise; Keith, Robert G.; Dushuttle, Patricia; and Bridges, Katherine, "Treatment and Outcomes Among Rural and Urban Nursing Home Residents with Depression" (1998). *Long Term Services and Supports*. 19.

[https://digitalcommons.usm.maine.edu/longterm\\_care/19](https://digitalcommons.usm.maine.edu/longterm_care/19)

This Policy Brief is brought to you for free and open access by the Maine Rural Health Research Center (MRHRC) at USM Digital Commons. It has been accepted for inclusion in Long Term Services and Supports by an authorized administrator of USM Digital Commons. For more information, please contact [jessica.c.hovey@maine.edu](mailto:jessica.c.hovey@maine.edu).

## Treatment and Outcomes Among Rural and Urban Nursing Home Residents with Depression

Untreated depression can lower life expectancy and increase levels of functional and cognitive impairment. Among nursing facility residents, depression is a widely recognized problem that has been shown to increase use of facility resources. Nonetheless, the mental health needs of nursing facility residents are widely reported to be unmet, and the types of services available to residents are known to vary by location and type of facility. Specifically, nursing facility residents in metropolitan areas are more likely to have access to mental health specialists than residents in non-metropolitan areas. To better understand if limitations in access to mental health specialists affect rural nursing facility residents with depression, this study examines differences in the diagnosis, treatment and health outcomes of rural and urban nursing facility residents with depression.

This study uses data from: (1) the Maine Nursing Home Resident Assessment (MDS+) and Discharge Log Files, (2) Medicaid paid claims files; (3) the state's Nursing Facility File, and (4) a telephone survey of all Directors of Nursing of licensed nursing facilities. The survey of Directors of Nursing provided data on the availability of mental health services in Maine nursing facilities. Detailed findings from this survey are reported elsewhere.<sup>1</sup> The initial sample frame included residents served in Maine nursing facilities during an 18-month period (n=10,221). Only residents with an indication of depression, who were Medicaid beneficiaries aged 65 and older, and who were in a facility on July 1, 1993 were included in the final sample (n=2,594). Indicators of depression for sample selection included: (1) diagnosis of depression; (2) use of antidepressants; or (3) symptoms of depression. From initial analyses, no significant differences

in the prevalence of depression were found for rural and urban residents: 40 percent of rural residents and 41 percent of urban residents had an indication of depression.

Multivariate analyses controlling for resident and facility characteristics suggest that rural residents of facilities where staff have formal training on depression are more likely to receive effective treatment compared with urban or rural residents in facilities without trained staff. Rural residents were also found to be at significantly greater risk than urban residents for loss of physical function and were less than half as likely to have improved cognitive function as urban residents, controlling for other resident and facility characteristics. Urban residents and residents of facilities with formal agreements for mental health specialist support were more likely to have improved cognitive function at the end of one year as compared with rural residents and those in facilities without employment or contractual agreements with mental health specialists. Residents receiving effective treatment were also significantly more likely to have improved cognitive function and less likely to lose physical function, regardless of urban-rural residence.

This research suggests that rural facilities with staff formally trained in the care of older adults with depression have greater success in their treatment of residents with depression. Policy initiatives targeting staff training in rural areas and improved access to mental health specialists for nursing facility residents must be encouraged through thoughtfully developed policy incentives and professional development programs. Combined with greater attention to the diagnosis and active treatment of residents with symptoms of depression, such efforts likely will be rewarded by improved functional capacity (or avoidance of hastened functional decline) and reduced resident reliance on nursing facility staff.

<sup>1</sup>Bolda, Elise J., Keith, Robert G., Coburn, Andrew F., Dushuttle, Patricia and Bridges, Katherine. (1998). Does access to mental health services available for rural and urban nursing home residents with depression differ? Working Paper #11. Maine Rural Health Research Center, University of Southern Maine, Portland, ME.

This study was funded by a grant from the Federal Office of Rural Health Policy, Health Resources and Services Administration, DHHS (Cooperative Agreement # CSUR00003-02-0). The conclusions and opinions expressed in the paper are the authors' and no endorsement by the University of Southern Maine or the funding source is intended or should be inferred. Working Paper #12, *Treatment and Outcomes Among Rural and Urban Nursing Home Residents with Depression* (Bolda, Coburn, Keith, Thompson and Korsen, 1998) describes the policy and research background, research methods, and findings in depth and is available from Maine Rural Health Research Center. Copies are free of charge.

Maine Rural Health Research Center  
Edmund S. Muskie School of Public Service  
96 Falmouth Street  
P.O. Box 9300  
Portland, Maine 04104-9300

Nonprofit Org.  
U.S. Postage  
P A I D  
Portland, Maine 04101  
Permit No. 370



## Research & Policy Brief

Maine Rural Health Research Center • Institute for Health Policy

OCTOBER, 1998

Treatment and Outcomes Among Rural  
and Urban Nursing Home Residents  
with Depression

Established in 1992, the Maine Rural Health Research Center (MRHRC) is one of five national rural health services research and policy analysis centers funded by the federal Office of Rural Health Policy. The Center is also one of five rural managed care centers funded by the federal Agency for Health Care Policy and Research (AHCPR). The Center has three areas of special interest in its research agenda: (1) the availability, organization, and financing of rural mental health services, (2) institutional and community-based services for rural elders, and (3) changes in the organization and financing of rural health services.

*Edmund S. Muskie School of Public Service • 96 Falmouth Street, P. O. Box 9300, Portland, Maine 04104-9300  
Tel: (207) 780-4430 • Fax: (207) 780-4417 • TDD: (207) 780-5646 • [www.muskie.usm.maine.edu/mrhrhc](http://www.muskie.usm.maine.edu/mrhrhc)*

### Recently Published and Forthcoming Working Papers:

How Do Primary Care Practitioners Manage Depression: Treatment or Referral? (#7)

Differences in Nursing Home Discharge Rates for Urban and Rural Nursing Facility Residents with Hip Fracture (#8)

Mental Health Carve Outs Under Medicaid Managed Care: Impact on the Rural Mental Health Delivery System (#9)

Rural Models for Integrating and Managing Acute and Long-term Care Services (#10)

Does Access to Mental Health Services Available for Rural and Urban Nursing Home Residents with Depression Differ?? (#11)

Urban-Rural Differences in Employer-based Health Insurance Coverage of Workers (#13)

How Do Older Rural Medicaid Beneficiaries with Depression Access Care? (#14)