

## 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.

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## Research & Policy Brief

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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.

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