

Does Access to Mental Health Services  
For Rural and Urban Nursing Home Residents  
with Depression Differ?

**Does Access to Mental Health Services  
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Nursing Home Residents  
with Depression Differ?**

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## EXECUTIVE SUMMARY

Left untreated, depression is associated with higher levels of impairment in physical function and cognition, higher mortality and increased use of health care resources. A recent study found, however, that while more than two-thirds of residents had mental health needs, fewer than 3 percent of nursing home residents had contact with a mental health professional in a one-month period (Burns et al. 1993); This same study found that, compared with urban residents, rural nursing home residents were more likely to receive mental health services from non-specialists (Burns et al. 1993). These findings are consistent with previous reports that rural persons with depression rely more on primary care providers than specialists for treatment of their illness.

Based on a survey of 121 nursing facility Directors of Nursing in Maine, this study examines differences in screening for depression; access to mental health specialists; and barriers to obtaining services. Survey responses indicate that mental health services in Maine nursing homes are limited, and that rural facilities face greater challenges in obtaining mental health services than their urban counterparts. In spite of financial incentives to identify and treat residents with depression, fewer than half (43.8%) of nursing facilities routinely screen residents for symptoms of depression using a standardized instrument; and even fewer facilities (39%) have formal protocols to address the needs of residents with symptoms of depression.

Rural facilities were less likely to employ or contract with mental health specialists (40%) than their urban counterparts (almost 62%). Rural and urban Nursing Directors' perceptions of barriers to providing mental health services to residents also varied. The most frequently cited obstacles in rural facilities included lack of available resources, distance to providers, and long waits for services. These findings suggest that current financial incentives to screen for and provide treatment to depressed nursing home resident may not be sufficient to overcome rural barriers to obtaining mental health specialists' services.

## INTRODUCTION

Depression is the most common psychiatric disorder for elderly persons with a range of symptoms, from recurring negative feelings to debilitating, life-threatening psychiatric illness (Fitten, Morley, Gross, Petry and Cole 1989). There is a growing body of literature describing its prevalence among the elderly residing in the community (Lombardo, Fogel, Robinson and Weiss 1996; Parmelee, Katz and Lawton 1989). With passage of the Nursing Home Reform Act of 1987<sup>1</sup>, there has been increased study of the adequacy of mental health diagnosis and treatment in nursing homes as well. Although it is clear that depression among older adults is treatable through pharmacological, psychosocial, and behavioral interventions, the literature suggests that mental illness in the nursing home population has been largely untreated (Teri, Logsdon, Uomoto and McCurry 1997; Singh, Clements and Fiatarone 1997; Mossey, Knott, Higgins and Talerico 1996; Lombardo et al. 1996). Very little information exists, however, about the identification and treatment of depression in rural nursing facilities.

Based on a survey of nursing facility (NF) Directors of Nursing in Maine, this paper examines urban-rural differences in facility protocols and staff training in the identification and treatment of residents with depression and in the availability of mental health specialists. This study is part of a larger project studying facility and resident-level characteristics to better understand potential urban-rural differences in the types of services, treatment, and outcomes for nursing facility residents with depression. The resident-level analyses are reported elsewhere (Bolda et al. 1998).

The survey of Maine nursing homes on which this paper is based addressed several key research questions: (1) Are rural nursing facilities less likely than urban facilities to screen residents for depression? (2) Are rural facilities less likely than urban facilities to employ or contract with mental health specialists? (3) Do rural facilities refer residents to mental health specialists less often than urban facilities? (4) Do the types of mental health providers available to visit residents in the facility vary between rural and urban facilities? (5) Does staff training on working with depressed residents vary geographically? (6) Do perceived barriers to the treatment of residents with depression vary by facility location? and (7) What are the policy implications of urban-rural differences identified by this research?

## **BACKGROUND**

### **The Effects Of Depression**

That depression results in increased functional dependence and higher rates of health care use among elderly people is well documented (Penninx et al. 1998; Unutzer 1997; Bruce et al. 1994; Callahan and Wolinsky 1995). Untreated, depression can lower life expectancy and is positively associated with increased morbidity from certain medical conditions (Fitten et al. 1989). Consequences for nursing home residents with depression, when compared with non-depressed residents, include greater use of nursing home resources (Manton, Cornelius and Woodbury 1995; Fries, Mehr, Schneider, Foley and Burke 1993) and higher rates of mortality - a 56 percent greater likelihood of death among nursing home residents with major depressive disorder, controlling for other health indicators (Rovner et al. 1991).

### **Diagnosing Depression Among Older Adults**

Previous research indicates that depression is more prevalent among nursing facility residents than among the elderly living in the community (Parmelee, Katz and Lawton 1989). Lombardo and her colleagues (1996) cite nursing home rates ranging from 5 to 15 percent for major depressive disorder, and from 25 to 50 percent for minor depression. Using criteria from the *Diagnostic and Statistical Manual of Mental Disorders Revised, third edition (DSM-III-R)* to identify the presence or absence of depression and determine its severity (major depressive disorder versus symptoms of minor depression) in a cross-sectional sample of more than 700 nursing home and congregate apartment residents, Parmelee et al. (1989) found that 12.4 percent of residents had symptoms of major depressive illness. An additional 30.5 percent of residents had symptoms of minor depression. Of those with symptoms of major depression, about 50 percent also had an indication of significant cognitive impairment.

Identifying depression in older people is complicated. Physical ailments and illnesses, more common among the elderly, can obscure the diagnosis of depression since physical complaints occur in both physical and mental illness (Leibowitz et al. 1997). And, up to a third of the elderly with a medical illness suffer from depression (Jenike 1988). Medications prescribed for physical illnesses may further complicate the evaluation and treatment of depression and can even perpetuate or worsen the condition (Fitten et al. 1989). Elderly people also may exhibit

cognitive deficits which can confuse the identification of symptoms of depression. It is important to differentiate between depression and dementia so that the appropriate treatment can be prescribed (Jenike 1988). Finally, older people may deny their feelings of depression and may not disclose their symptoms to their health care provider (Thompson, Futterman and Gallagher 1988).

### **Public Policy and the Provision of Mental Health Services to Nursing Facility Residents**

Following passage of the Nursing Home Reform Act, referred to as the Omnibus Budget Reconciliation Act of 1987 (OBRA87), federal regulations mandated Pre-Admission Screening and Annual Resident Review (PASSAR) to identify nursing facility residents with a history of mental illness. Under these regulations, nursing facilities were prohibited from admitting mentally ill residents in need of 'active treatment.' OBRA87 also introduced stringent criteria to reduce physical and chemical restraint use in nursing facilities, and created the expectation that nursing facilities would assure "the highest practicable physical, mental and psychosocial well-being of each resident" (OBRA87). In pursuit of these goals, nursing facilities were required to make mental health services available to all residents and to assure the availability of specialized services for residents experiencing acute mental health episodes (Bridges 1998). While OBRA87 was effective in decreasing use of restraints and improved training for nurse aides, few other improvements to residents' mental health have been realized in the absence of administrative or reimbursement incentives to encourage facility compliance (Snowden and Roy Byrne 1998; Lombardo et al. 1996).

Prior to enactment of the 1989 Omnibus Budget Reconciliation Act (OBRA89 - supplemented changes introduced under OBRA87), only psychiatrists' services were reimbursable under Medicare, and there was an annual cap of \$500 on outpatient mental health services. OBRA89 expanded Medicare coverage to include licensed social workers' and psychologists' services. OBRA89 also repealed the annual outpatient mental health services cap, thus reducing some of the economic barriers to mental health care for Medicare beneficiaries.

Maine has had several important service and financing initiatives relevant to this study. Between 1993 and 1995, Maine provided mental health services to rural nursing home residents through mobile mental health intervention teams. These mobile teams were funded through Medicaid and state funds. These teams have been cited as an example of state-sponsored programs that reduce reimbursement barriers to mental health services for rural nursing home residents (Lombardo et al. 1996). During this period, geriatric mental health training for nursing facility staff was also offered under state sponsorship.

Maine also reimburses nursing facilities using a case-mix adjusted payment policy under which facilities are paid a higher rate for nursing facility residents with symptoms of depression. In addition, since 1995, quality indicators used in the nursing facility survey and certification process have targeted resident use of anti-depressants.

### **Availability of Mental Health Services in Nursing Homes**

Since much of the research reported in the literature predates the implementation of the 1987 Nursing Home Reform Act, it reflects nursing home practice prior to the requirements to screen for mental illness and to provide appropriate treatment. Using the 1985 National Nursing Home Survey, Burns et al. (1993) found that slightly more than 2 percent of nursing home residents had contact with a mental health professional and an equal proportion were seen by a general physician for mental health needs in a one-month period, for a total of 4.5 percent receiving some form of mental health services. This study demonstrated a considerable disparity, however, between the percent of residents with some form of mental illness (approximately two thirds had a diagnosis of a mental disorder) and the 4.5 percent who received any treatment.

The importance of access to mental health specialist, rather than non-specialist physicians, for the treatment of depression has been the subject of considerable research in the general population. There are fewer studies comparing specialist versus non-specialist care comparisons for nursing home residents. In a study of mortality (using 1985 and 1987 data from the National Nursing Home Survey), nursing facility residents with schizophrenia, other psychoses, or anxiety disorders were found to have reduced mortality when care was

provided by a mental health specialist rather than a non-specialist physician (Castle and Shea 1997a). This pattern was not detected for residents with depression.

Nonetheless, this high level of unmet need is corroborated by other studies. Using data from the Institutional Population Component of the 1987 National Medical Expenditure Survey (NMES), Smyer, Shea and Streit (1994) found that, although 75 percent of the residents with mental disorders lived in nursing homes that offered some mental health services, fewer than 20 percent received any such service from the facilities. When Shea, Streit and Smyer (1997) examined the factors affecting the probability of receiving services from a mental health professional in a nursing home, they found that older residents and those with more ADL limitations were less likely to have received such services than were younger, less impaired residents. They suggest that a typical nursing home resident with depression has less than a 10 percent probability of receiving mental health services.

### **Nursing Facility Characteristics Influence the Availability of Mental Health Services**

The availability of mental health services varies among types of nursing homes (Castle 1995; Smyer, Shea and Streit 1994; Burns et al. 1993). Burns et al. (1993) found that specialty treatment from a psychologist or a psychiatrist was not influenced by the type of ownership of the facility, its location in a rural area, or the number of beds. On the other hand, residents living in homes which are nonproprietary, homes in rural regions, and homes in which more than 25 percent of the residents received Medicaid were more likely to receive mental health services by a non-specialist physician. In addition to the general problems created by the limited number of mental health specialists trained in geriatrics and aging, the limited supply of such specialists in rural communities creates special challenges to obtaining mental health specialty services for rural nursing facility residents (Verricchio and Taylor 1987).

In an analysis of the NMES 1987, Smyer and colleagues (1994) found that fewer than 60 percent of the nation's nursing homes provided counseling or psychotherapy. Government facilities were the most likely to provide the services and were also most likely to use mental health specialists. For-profit facilities were most likely to use other mental health workers, or personnel with little advanced training in mental health. Smaller facilities (less than 50 beds) used psychiatric social workers most often (Smyer, Shea and Streit 1994). Similarly, Castle and

Shea (1973) have found that larger facilities, facilities not affiliated with chains, and those with waiting lists were more likely to have sufficient resources to offer mental health services than were smaller, chain-affiliate facilities or facilities without waiting lists (Castle and Shea 1997b). In an environment of state policies directed at reducing dependence on nursing facilities (which subsequently reduced occupancy) and recognizing the prevalence of smaller facilities in rural communities, these findings also suggest that rural nursing facilities may be disadvantaged in their capacity to offer mental health services.

This literature indicates that there are significant challenges in diagnosing and treating older adults with depression present significant challenges, regardless of the setting. Rural nursing facilities and clinicians may face a number of critical barriers in arranging for appropriate consultation and treatment for residents, including limited availability and accessibility of mental health specialty clinicians with knowledge and experience of depression in older adults, and limited training of rural nursing home staff regarding diagnosis and treatment for residents with depression.

## **METHODS**

### **Definition of Rural Facilities**

Because of Maine's geographic diversity, the traditional definitions of rural and urban communities based on Census-defined Metropolitan Statistical Areas (MSA) do not adequately distinguish rural and urban areas. For this analysis, the rural and urban designation is based on Maine's 31 Hospital Analysis Areas (HAA), with rural HAAs defined as having a population of less than 50,000 or a population density of less than 50 people per square mile. This definition has the effect of counting as urban, several small cities/areas, all of which are urbanized, but do not fall within a MSA. The geographic code for the HAA in which the nursing facility was located was used to define the nursing facility as a rural or urban facility. Using this methodology, there are 53 rural and 68 urban facilities included in this study.

## Facility Characteristics

As shown in Table 1, roughly half of all facilities in both rural and urban areas of Maine are part of a chain and approximately three-quarters are proprietary. Only 5 percent of Maine's nursing facilities are hospital-based, but rural nursing facilities are significantly more likely to be hospital-based. Urban facilities are larger ( $p < 0.1$ ) than rural facilities, with an average of 20 more beds than rural facilities. At the time of this survey there were no significant differences in facility occupancy rates, with occupancy rates of 85 percent in the rural facilities and 88 percent for the urban facilities.

	Rural	Urban	Total
Number of Facilities	53	68	121
Mean Licensed Beds*	60.3	79.8	71.5
Range	8-125	47-235	8-235
Standard Deviation	27.3	41.4	37.2
Proprietary Facilities	72%	79%	76%
Chain Affiliated Facilities	49%	57%	54%
Hospital Affiliated Facilities**	9%	1%	5%

T-test urban-rural differences

\*  $p < 0.1$     \*\*  $p < 0.01$

## The Sample

Trained interviewers conducted 15 to 20 minute telephone interviews with Directors of Nursing in each of Maine's 133 licensed nursing facilities. Interviews were completed by 121 facilities, yielding an effective interview response rate of 91 percent. Nursing facility characteristics, including urban-rural location, ownership, affiliation with a chain or acute care hospital, and bed size were assembled from the nursing facility characteristics file maintained by the Muskie School.

## **Depression Screening and Referral Protocols**

Directors of Nursing were asked questions concerning their facilities' policies and procedures for identifying and treating residents with depression. If they reported routine screening for depression, they were asked to identify the specific screening instruments used. Facilities were asked whether they had formal protocols describing procedures for referral or treatment of residents with depression, and where used, the nature of the protocol.

## **Availability of Mental Health Services**

Directors of Nursing were asked detailed questions about employment, contracts, and referral arrangements between their facilities and various types of mental health specialists, including psychiatrists, doctoral and masters prepared psychologists, psychiatric nurses, and clinical social workers. In addition, they were asked whether other facility staff had training to work with older adults with depression and whether the facility provided orientation or in-service training about depression.

Facilities were asked to describe whether they had encountered barriers in their efforts to obtain mental health services for their residents with depression. The list of barriers was drawn from the literature and refined during the pilot test of the survey instrument. Potential barriers that nursing directors were asked to consider included: lack of available services, inconvenient office hours, services that are too far away, difficulty transporting residents, lack of funds for mental health services, mental health providers willingness to accept Medicare/Medicaid, mental health providers unwillingness to treat nursing facility residents, reluctance of residents to use mental health services, facility staff familiar with available services, mental health providers have no long term care experience, and long wait for an appointment.

## **FINDINGS**

### **Screening for Depression**

Less than half (43.8 percent) of nursing facilities routinely screen residents for symptoms of depression using a standardized instrument; and even fewer facilities (39.7 percent) have formal protocols in place to address the needs of residents with symptoms of depression (Table 2). The most frequently reported response for meeting the needs of residents suspected of

having symptoms of depression was notification of the resident's physician, a response reported by facilities both with and without formal protocols. There is no difference in the percent of rural and urban facilities that report screening all residents for depression. Among facilities routinely using a standardized depression screen, the most frequently cited instrument was the Geriatric Depression Scale, an instrument that was the subject of a state-sponsored mental health training initiative for nursing and residential care facility staff in 1993-1994.

### **Availability of Mental Health Providers In Nursing Facilities**

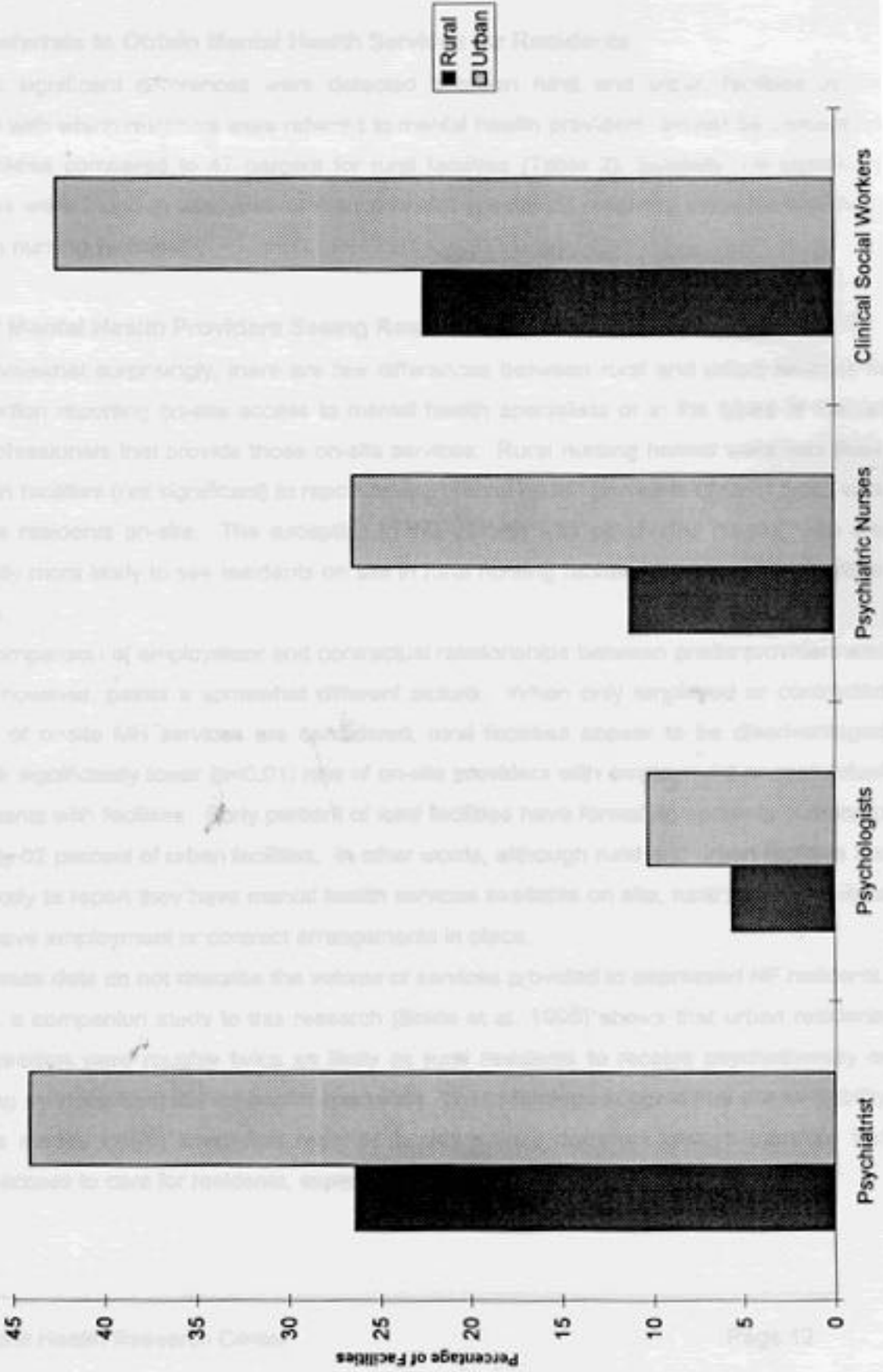
Rural nursing facilities were significantly less likely to employ or contract with mental health providers (40 percent) than their urban counterparts (almost 62 percent). Significant differences were found between rural and urban nursing facilities in the types of mental health providers engaged. Among facilities employing or contracting with mental health specialists, the types of providers with whom facilities had agreements included psychiatrists, psychiatric nurses, psychologists, and clinical social workers. As can be seen in Figure 1, slightly more than one-quarter of rural facilities employed or contracted with psychiatrists or clinical social workers, while only 10 percent had agreements with psychiatric nurses. In contrast, nearly 45 percent of urban facilities had agreements with psychiatrists, more than one-quarter worked with psychiatric nurses, and over 40 percent had agreements with clinical social workers. While employment or contractual agreements with these mental health professionals varied significantly between rural and urban nursing facilities ( $p < 0.05$ ), no significant differences were found between rural and urban facilities in their likelihood of contracting with psychologists, the least frequently reported category of mental health specialist.

Table 2

Nursing Directors' Perceptions of  
Facility Services for Older Depressed Residents

Perception of Facility Service/ Characteristic:	All Facilities n=121		Rural n=53		Non-rural n=68		Rural/Non- Rural Differences (T-test) p > T
	Number of Facilities Reporting	Percent	Percent	Std Dev	Percent	Std Dev	
Use standardized instrument to screen or diagnose depression	53	43.8%	41.51%	0.4975	45.59%	0.5018	ns
Have formal protocols for care of depressed residents	48	39.7%	33.96%	0.4781	44.12%	0.5002	ns
Screen all residents using standardized instrument	39 (miss=1)	32.2%	33.96%	0.4781	30.89%	0.4654	ns
Employ or contract with mental health professionals	63 (miss=1)	52.5%	40.38%	0.4955	61.76%	0.4896	0.05
Refer residents to mental health specialists (not employed/contracted by facility)	63	52.1%	47.17%	0.5040	55.88%	0.5002	ns
Have mental health professionals who see residents on-site	111	91.7%	90.57%	0.2951	92.65%	0.2629	ns
Have staff with formal training in care of older depressed residents	43	37.4	32.00%	0.4712	41.54%	0.4966	ns
Provide orientation and/or in-service training on mental health issues	105	86.8%	81.13%	0.3950	91.18%	0.2857	ns
Offer orientation or in-service to staff on: Interrelationships between mental health and chronic illness	59	51.8%	50.00%	0.5051	53.13%	0.5030	ns
Adjustment reaction and stresses of change	97	80.2%	75.47%	0.4344	83.82%	0.3710	ns
Use of psychoactive drugs	115	95.0%	94.34%	0.2333	95.59%	0.2069	ns
Diagnosis and treatment of late-life depression and anxiety disorders	64	53.8%	54.72%	0.5025	53.03%	0.5029	ns

**Figure 1**  
**Employed or Contracted Mental Health Specialists in Maine Nursing Facilities**





**Figure 1**

## **Use of Referrals to Obtain Mental Health Services for Residents**

No significant differences were detected between rural and urban facilities in the frequency with which residents were referred to mental health providers: almost 56 percent for urban facilities compared to 47 percent for rural facilities (Table 2). Similarly, no significant differences were found in the types of mental health specialists receiving referrals from rural and urban nursing facilities.

## **Types of Mental Health Providers Seeing Residents On Site**

Somewhat surprisingly, there are few differences between rural and urban facilities in the proportion reporting on-site access to mental health specialists or in the types of mental health professionals that provide those on-site services. Rural nursing homes were less likely than urban facilities (not significant) to report having mental health providers of most types who would see residents on-site. The exception to this pattern was psychiatric nurses, who are significantly more likely to see residents on site in rural nursing facilities than in urban facilities ( $p < 0.05$ ).

Comparison of employment and contractual relationships between onsite providers and facilities, however, paints a somewhat different picture. When only employed or contracted providers of onsite MH services are considered, rural facilities appear to be disadvantaged given their significantly lower ( $p < 0.01$ ) rate of on-site providers with employment or contractual arrangements with facilities. Forty percent of rural facilities have formal agreements compared with nearly 62 percent of urban facilities. In other words, although rural and urban facilities are equally likely to report they have mental health services available on site, rural homes are less likely to have employment or contract arrangements in place.

These data do not describe the volume of services provided to depressed NF residents. However, a companion study to this research (Bolda et al. 1998) shows that urban residents with depression were roughly twice as likely as rural residents to receive psychotherapy or counseling services from mental health specialists. These findings suggest that the availability of on-site mental health specialists reported in this survey does not always translate into effective access to care for residents, especially in rural facilities.

## **Barriers to Obtaining Mental Health Care**

The barriers to access of mental health services for residents, as perceived by directors of nursing, are summarized in Table 3. The most commonly cited barriers for rural facilities were “lack of available services,” “services too far away,” and “long wait for appointments.” When compared with urban facilities, rural providers were significantly more likely to report frequent problems with each of these barriers. In contrast, urban facilities were marginally more likely than rural facilities ( $p < 0.10$ ) to report problems with mental health specialists’ unwillingness to accept Medicaid and Medicare payment. No statistically significant urban-rural differences were reported for other potential barriers to service access. Combined, the logistical barriers reported by rural facilities suggest that problems associated with urban-rural differences in the supply of mental health specialists are an underlying problem for nursing facilities and their residents. This finding is consistent with previous research on mental health access in rural communities (Lambert, Agger and Hartley 1996).

## **Staff Training**

Nearly two-thirds of all facilities reported having no staff with formal training or certification in caring for older residents with depression or mental health problems (Table 2). Among rural facilities, 32 percent reported having staff with formal training, while 41.5 percent of urban facilities had such staff. Among all facilities with specially trained staff, social services staff were most likely to have had formal training (68.3 percent), followed by nursing directors (52.5 percent), and charge nurses (39 percent).

Most facilities (67.2 percent) do not offer staff training or orientation specific to depression, and rural facilities were slightly less likely to do so than urban facilities. In contrast, most facilities (86.6 percent) provide in-service training on topics specific to mental health, such as: interrelationships between mental health and chronic physical illness (52 percent); adjustment reaction and stresses of change (80 percent); use of psychoactive drugs (95 percent); and diagnosis and treatment of late-life depression and anxiety disorders (54 percent).

Rural facilities are somewhat less likely ( $p < 0.09$ ) to offer in-service sessions on mental health related topics.

**Table 3**  
**Facility Perceptions of Barriers to Mental Health Service Access**  
**Percentage of Facilities Reporting Problem**  
**“Frequently” or “All/Most of the Time”**

<b>Perceived Barrier</b>	<b>Rural</b>	<b>Urban</b>
Services too far away***	50%	15%
Long wait for appointments	49	29
Lack of available services**	45	28
MH providers no LTC experience	28	27
Difficulty transporting residents	28	21
MH providers won't treat NF residents	27	31
Lack of funds	26	32
MH providers won't accept Medicare/Medicaid*	15	28
Inconvenient office hours*	21	9
Resident reluctance	9	12
Facility staff unfamiliar with MH services	4	9

T-test differences

\*  $p \leq .10$

\*\*  $p \leq .05$

\*\*\*  $p \leq .001$

## **DISCUSSION**

Because this research is based on a single state sample, we are unable to assess the importance of state nursing home payment and mental health policies and their influence on the availability and use of mental health specialist services for nursing home residents. In addition, this study is limited to information and perceptions of nursing home staff, and therefore, does not provide confirmation of the actual barriers to mental health services faced by rural nursing facility residents. Nonetheless, these findings suggest the need for improvements in policy and practice to assure access to mental health services for older adults, including nursing home residents with depression.

As with previous research, this study identified significant urban-rural differences in the types of mental health professionals with whom nursing facilities have employment or contractual agreements. It is interesting to note, however, that while urban-rural differences persist, there is evidence that the types of mental health specialists working with nursing facilities has changed following the removal of reimbursement barriers to the use of clinical social workers and psychologists under OBRA89. Since different types of mental health specialists are likely to provide treatment according to the norms of their profession, the treatment received by residents can be expected to vary by type of provider working with a facility (Bridges 1998). For example, previous research suggests that nursing home social workers may not have adequate training to identify mental health problems of nursing home residents (Territo 1996). Thus, it is important not to over-interpret the impact of recent improvements in the availability of mental health specialists serving nursing home residents.

Barriers reported by facilities to providing mental health services to nursing home residents in rural areas--lack of available resources, distance to providers, and long waits for services--are similar to those associated with general health service access in rural areas. At least one other fundamental barrier to nursing home residents' access to mental health services has received very little attention: transportation. Many, if not most, nursing home residents rarely travel outside the nursing facility. And, even when public transportation is available, mobility impairments and other chronic illness make residents' outings difficult. For this reason, specific attention to the mental health service delivery site is critical to the discussion of services to nursing facility residents with depression.

While rural facilities did not report problems with third party reimbursement, the problem may still exist, but be seen as secondary to more pressing issues of the logistics of reaching mental health professionals in rural areas. And, as noted above, while rural and urban facilities report similar types of onsite mental health services, data on service use suggest that, in general, depressed residents are not very likely to receive therapy from mental health specialists, with rural residents being half as likely to receive such services.

In the absence of mental health specialist support, rural facilities must rely more heavily on primary care physicians and facility staff training to assure that depressed residents are identified and provided appropriate treatment. Recently developed clinical guidelines for the treatment of depressed nursing facility residents (American Medical Directors Association 1995) likely will provide additional information to both rural and urban physicians serving nursing home residents. This initiative alone, however, cannot be expected to remedy the apparent disadvantages in treatment of rural nursing home residents with depression.

In a companion study, we have shown that formal facility staff training in caring for depressed residents appears to have a positive effect on improved cognition for depressed residents (Bolda et al. 1998). Hence, increased access to training may yield additional benefits. Furthermore, recent advances in telemedicine and distance learning techniques offer potential for training initiatives to reach even the most remote facilities.

Finally, demonstration projects, including training initiatives (Verricchio and Taylor 1987) and rural health outreach programs to extend community mental health services to nursing home residents (Richards et al. 1996), offer additional mechanisms which may help minimize the disparity in access to treatment for rural NF residents and facilities. Such training, however, must be on-going if sustained effects are to be anticipated in facilities that have high staff turnover.

Assuring access to mental health specialists becomes a necessity with growing evidence that non-pharmaceutical interventions can offer valuable relief from the symptoms of depression among nursing facility residents, including residents with depression who are cognitively impaired. Ideally, nursing facility residents must be assured access to mental health professionals who are specifically trained in the complexities of identifying depression and other mental illnesses, and in developing and implementing individualized care plans that encompass

the array of therapeutic interventions described in the literature. In light of recent findings that larger facilities and those with waiting lists are more likely to provide mental health services (Castle and Shea 1997b), it is unlikely that the smaller rural facilities, particularly those in states with relatively high vacancy rates, are likely to introduce a reasonable level of service without assistance. Thus, State-sponsored programs supporting interdisciplinary teams, with “circuit-riding” specialists may be required to assure that rural nursing facility residents have access to onsite services that are routinely scheduled and responsive to their changing care needs.

Additional research is needed to determine the appropriateness of using symptoms of depression as a proverbial “canary” to detect facilities that fail to adequately provide for the mental health needs of residents. With federally mandated electronic processing of uniform resident assessments as of July 1, 1998, quality indicators can be used by state survey and certification units to monitor the appropriateness of mental health services at the facility level. This approach offers an opportunity to move from well-intentioned rhetoric to proactive surveillance of mental health service access for nursing facility residents. Finally, it is critical that state policy makers recognize that effective mental health treatments can both improve the quality of life for residents, and produce savings by reducing excess use of other health care resources through amelioration of the secondary effects of depression.

## ENDNOTES

<sup>1</sup> An important component of the Nursing Home Reform Act passed in 1987, as part of the Omnibus Reconciliation Act (OBRA 87), recognized that the mental health needs of the elderly in long term care facilities were not being addressed adequately. To comply with OBRA 87, nursing homes must screen all applicants and residents for mental health problems and must either provide active treatment to residents with mental illness or refer them to treatment at a psychiatric facility. State and federal agencies and individual long term care facilities have mobilized over the last decade to implement the provisions of the law so that elderly residents with mental illness can be identified and treated.

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