

**Meeting the Mental Health Needs
of Older Adults in Assisted Living and
Residential Health Care Facilities:
Community and Facility Factors**

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EXECUTIVE SUMMARY

Purpose & Research Questions

Older adults consistently report that they want to have options for receiving long-term care services other than nursing facilities (Leon and Moyer, 1999). In the past decade there has been an increasing demand for assisted living as a long-term care option nationally and in the state of Kansas.¹ A recent study funded by the Retirement Research Foundation reported a total of 32,886 licensed assisted living facilities nationally with 795, 391 units or beds as of July 2000 which is a 30% increase from 1998 (Mollica, 2000). Chapin and colleagues (1999) documented a 36% increase in the number of licensed assisted living beds in Kansas from 1997 to 1999.

As our population continues to age, it is important to know whether assisted living facilities are indeed equipped to address residents' mental health needs and to examine the related policy implications. Yet, the capacity of assisted living facilities to handle the current and projected mental health needs of their residents is unknown. In our current statewide study examining the role of assisted living settings and the implications for long-term care policy in Kansas, we learned that approximately one-third of residents were diagnosed as having depression, anxiety or a combination of the two disorders (Chapin & Dobbs-Kepper, 2001). Given the prevalence of depression and anxiety disorders in assisted living, these conditions merited specific attention.

This study examined whether the availability and use of mental health services (in the facility and the community) influences the successful integration of residents in assisted

¹ Assisted living and residential health care facilities are licensed separately in Kansas. Both types of homes are considered assisted living settings in most states and in national research. Therefore, when we refer to assisted living facilities we are also including residential health care facilities.

living and residential health care facilities. We also analyzed the relationship between having a mental health diagnosis and the ability to age in place in assisted living settings. This study had five objectives: 1) to assess the need for and awareness of mental health services for older adults in assisted living facilities in the state of Kansas; 2) to examine the institutional and community characteristics that facilitate or impede access to mental health services; 3) to explore the relationship between mental health diagnosis and the ability to age in place; 4) to identify strategies to increase access to needed mental health services, and; 5) to examine policy implications of the strategies identified.

Methodology

In order to accomplish these objectives the following methods were employed: 1) a survey of facility administrators statewide (n=104) to assess their agencies' ability to address clients' mental health needs through facility and community programs and services, and to answer whether a mental health diagnosis contributes to residents' successful integration in the facility and capacity to age in place (see Facility Mental Health Questionnaire in Appendix A); 2) a reanalysis of aggregate data collected as part of a longitudinal study of assisted living (ALs) and residential health care (RHCs) facilities and residents to examine the relationship between length of stay in the facility and mental health diagnosis; 3) a one-day work group session that included facility administrators, state agency staff and officials, industry representatives, and aging specialists from across the state was convened to share study findings with them and to seek their input in identifying strategies to enhance access to and awareness of available mental health services.

Important Findings & Outcomes

This study found that older adults who had a psychiatric/mood condition were nearly twice as likely to discharge to a higher level of care as older adults who did not have these diagnoses. These data revealed that the prevalence of mental illness among older adults who reside in AL/RHC facilities in Kansas is higher than among community dwelling older adults in general (Rogers, 1999). For example, close to one-third of older adults who resided in assisted living/residential health care (AL/RHC) facilities in Kansas had a psychiatric/mood condition (e.g., depression, anxiety disorder, or other psychiatric/mood disorder) when controlling for dementia, compared to Rogers' (1999) estimates of between 15-25%. In our reanalysis of the longitudinal data, it appears that the percentage of older adults in assisted living type settings that have depression and/or anxiety disorder in the Kansas facilities sampled is also higher than the national average (National Investment Conference, 1998).

Participating facilities did not have sufficient training or knowledge of mental health issues pertaining to older adults. In addition, awareness of community based services and referral rates for these services were very low. In particular, access to community-based mental health services was a barrier for AL facilities in rural areas. The work group discussed several strategies related to these barriers, including increased education and outreach to AL/RHC staff and physicians, increased collaboration between AL/RHC providers and staff at Community Mental Health Centers (CMHCs), clarification of the CMHC referral and reimbursement process, and modification of AL directors' state required training to include mental health training. To address the disparities between rural and urban AL/RHC facilities the work group recommended

improvements in transportation services to increase access to mental health providers, and the development of mobile screening and mental health services to increase older adults' access to these services.

Additional recommendations to address these problems were: 1) to include a component on mental health needs of older adults in State-sponsored facility administrator training; 2) to include information about issues related to mental health among older adults in the state required Board and Operator Course; 3) to increase the amount of state regulation hours required for mental health training for direct care staff at AL/RHC facilities; 4) to include a component on older adult's mental health issues in case management training for CMHC staff; 5) to locate an acceptable screening test for AL/RHC facilities to use to facilitate screening and thereby increase referral of residents in need of mental health services; 6) to promote increased collaboration between AL/RHC providers and county extension offices in order to utilize the extension offices' library resources (e.g., such as videos on mental health issues); 7) to prioritize funding of mental health services for older adults and aging specialists at CMHCs; 8) to ensure that a sufficient number of qualified Medicare providers are located at CMHCs, and; 9) to initiate media campaigns and public service announcements to bring attention to the mental health issues of the elderly in order to address the stigma that surrounds mental health.

This research is important to the field of gerontology because it is one of few studies that examines the role of housing and living options in gerontological research, particularly in regard to the ability of these facilities to support frail older adults in need

of supportive care who have mental health issues. Thus, it offers a unique opportunity to contribute to gerontological theory and research.

The Office of Aging and Long Term Care (OALTC) has played an active role in championing the needs of older adults in Kansas and shaping state aging policy. Our research studies have contributed to existing gerontological theory and have been influential in structuring state policy for older adults. In this regard, the current study has been valuable to the OALTC. As a result of this project, the OALTC submitted a proposal and has been granted a contract with the Kansas Department on Aging and Social and Rehabilitation Services, related to mental health training of AL direct care staff and AAA case managers.

GRANT ANALYSIS NARRATIVE²

Significant Problems, Project Modifications & Unanticipated Results

There were no significant problems that occurred related to this grant. The only project modification was that we re-structured the workgroup sessions from what was initially proposed as being on two separate days to being one day with four different breakout groups.

One unexpected finding was the lack of training and awareness on the part of direct care staff and providers about the mental health needs of residents in assisted living and residential health care (AL/RHC) settings. Assisted living and residential health care providers were also unclear about referral and reimbursement issues related to obtaining mental health services for older adults. Additional training and education for staff in AL/RHC settings is needed in order to detect mental illness, understand the referral and reimbursement process, and utilize available treatments and services both in the facility and community. Workgroup recommendations included educating providers, families and residents about funding mechanisms for mental health services. State level policymakers as well as members of the state mental health and aging coalition (of which The Office of Aging and Long Term Care is a member) should play a vital role in this process. The Office of Aging and Long Term Care (OALTC) has worked collaboratively with state policymakers and agencies in the past to improve aging services, and will continue to advocate on behalf of older adults and their needs. We have already begun efforts to address many of the recommendations from the workgroup sessions.

² Additional information related to next steps and dissemination efforts is located in Appendix F. Please refer to Appendix F to view these materials.

Another unexpected finding was low referral rates to community mental health centers in catchment areas where an aging specialist was present. Our findings did not indicate any significant differences in the frequency of referral for residents with depression or anxiety disorder to community mental health centers based on access to an aging specialist or geographic location of the facility. Facilities that had access to an aging specialist were significantly more likely to refer residents with depression or anxiety disorder to a geriatric psychiatrist. There were also important differences in the frequency of referral to geriatric psychiatrists for facilities based on geographic location. A significantly higher percentage of facilities in urban areas compared to rural areas reported that they frequently or very frequently refer residents with depression or anxiety disorder to a geriatric psychiatrist (52.8% versus 25.5%). Discussion at the work group sessions confirmed the disparity in access between rural and urban AL facilities.

Substantive Lessons Learned

It was clear that the professionals who convened had different perceptions of the mental health referral and reimbursement process. Also, some AL/RHC administrators were not aware of the services provided by their CMHC. We also learned that education about treatment and services for older adults' mental health needs is minimal and needs improvement for AL/RHC providers. Further, there is stigma and denial of mental illness among residents and their families. In order to combat this problem and overcome the barrier of stigma and denial, education and outreach for consumers and their families are needed. Many recommendations were made related to this point, including: 1) presentations by the state mental health and aging coalition at AL/RHCs facilities; 2) media campaigns; 3) training for providers; and 4) a care team approach to increase

collaboration between AL/RHC providers, mental health providers and consumers and their families.

Operational Lessons Learned

The work groups with diverse providers were very successful. Assisted living, residential health care facilities, and mental health providers were joined together to share information and identify ways to improve mental health services for older adults in AL/RHCs. The assisted living providers who participated were representative of both rural and urban areas, as well as small and large assisted living facilities. The mental health providers and directors were representative of rural and urban areas and CMHCs with and without an aging specialist. Thus, we achieved excellent participation from all areas of the state. The length of the focus groups, number of participants, moderators, and note takers, were adequately sized to generate discussion among all participants at the individual tables. At the debriefing following the session, staff concluded that the success of the group was due, in some respects, to the initial relationship building between researchers, policymakers and providers by membership in the Kansas Mental Health and Aging Coalition (KMHAC). The project director and other key staff were regular attendees and actively participated the past two years in the KMHAC meetings and events. Thus, well developed relationships, and open lines of communication, with AL/RHC providers and mental health professionals yielded rich, substantive data from the workgroup sessions.

PROJECT REPORT

Background & Significance

Mental Illness Among Older adults

Estimates of community dwelling older adults age sixty-five and older indicate that between 15-25% have mental health impairments and require services (Rogers, 1999). However, recent estimates indicate that less than 3% of older adults see mental health professionals (Administration on Aging, 2001). Two of the most prevalent mental disorders are anxiety disorders, such as phobias and obsessive-compulsive disorder, and mood disorders, such as depression (AoA, 2001). A recent report by the AoA (2001) indicated that “A substantial number [of older adults] experience mental health disorders or problems for the first time late in life – problems which are frequently exacerbated by bereavement or other losses which tend to occur in old age” (AoA, 2001:6).

In regard to community dwelling older adults in assisted living (AL) and residential health care (RHC) facilities, one national assisted living study documented the percentage of persons with anxiety disorder and/or depression at approximately 27% (National Investment Conference, 1998). Consonant with national trends, in our current resident statewide study examining the role of assisted living settings and the implications for long-term care policy in Kansas, we learned that approximately one-third of residents were diagnosed as having anxiety, depression or a combination of the two disorders. Pilot interviews with a small pilot sample of facility administrators who participated in the statewide study (n =10) indicated that residents who have a mental health diagnosis of either anxiety disorder or depression are less likely to successfully

integrate in assisted living facilities. Thus, a mental health diagnosis has an impact on their capacity to age in place.

Anxiety Disorders

Prevalence estimates of anxiety disorders in community dwelling older adults indicate that about 11.4% of older adults have an anxiety disorder (U.S. Department of Health and Human Services, 1999). Some of the most common disorders include phobias, panic disorder and obsessive-compulsive disorders (Copeland et al., 1987; Bland et al., 1988). The Surgeon General's report on mental health in older adults suggests that anxiety disorders and symptoms are important but understudied in older adults (U.S. Department of Health and Human Services, 1999). Persons with anxiety disorder frequently exhibit symptoms of depression as well (AoA, 2001). A dual diagnosis of anxiety disorder and depression was found in a substantial number of residents in our current statewide study of assisted living.

Depression

A recent report from the Surgeon General suggests that between 8-20% of community dwelling older adults exhibit symptoms of depression, and for older adults in primary care settings, 37% experience depression symptoms (U.S. Department of Health and Human Services, 1999; AoA, 2001). Estimates range between 15-25% among older adults in long term care facilities (National Institute of Health Consensus Development Panel on Depression in Late Life, 1992; Blazer, 1989), and between 10-27% among older adults in assisted living facilities (National Investment Conference, 1998; Grayson, Lubin & Van Whitlock, 1995).

Some research has suggested that depression may be a primary cause of disability among older adults. Wells and colleagues (1989) found that the physical, social and role functioning of patients with depression are comparable or worse than that associated with many major chronic medical conditions. Depression-related disability may also have a cumulative effect on existing chronic illnesses and contribute to increased disability and service use. Callahan and colleagues found that patients with any episode of depression were more likely to use significantly more health services than those with no episodes of depression (Callahan, Hui, Nienaber, Musick, and Tierney, 1994). These findings suggest that, if untreated, depression can compound existing medical conditions and thus lead to premature nursing facility placement. Depression has also been linked to incidence of suicide (U.S Department of Health and Human Services: A Report of the Surgeon General, 1999).

Delivery of Mental Health Services to Older Adults

Because little is known about the delivery of mental health services to the assisted living population, it is important to understand referral patterns for the variety of mental health needs in assisted living facilities. Recent epidemiological research suggests that a large percent of psychiatric morbidity in older adults is undetected or poorly managed (Scott-Lennox & George, 1996). Physicians generally discount depressive symptoms that occur alongside physical illness and disability as part of “normal” aging (Blazer, 1996b; George, 1993). A recent study reported that older adults with depression and other mental health problems typically turn to their primary care physician first to avoid the stigma associated with mental illness (Unutzer et al., 1997). Yet, primary care physicians receive insufficient training in mental health and aging

(Bane, 1997). In fact, the U.S. Preventive Services Task Force recently recommended that primary care doctors begin screening all adult patients for depression, noting that more than half of all cases of depression are undiagnosed or mistreated by physicians (Delisser, 2002). It is not uncommon for the older person to receive inappropriate prescriptions of psychotropic medications (Kaplan et al., 1999).

Although there is a high prevalence of anxiety disorders and depression in older adults, less than 3% of the older adult population seeks treatment from mental health professionals (AoA, 2001). Individual and systemic barriers impede older adults from accessing needed services. The most common barriers found in the literature include: 1) perceived stigma on the part of older adults and their family members (U.S. Department of Health and Human Services, 1999); 2) a tendency on the part of older adults, their family members and health professionals to define the symptoms of mental illness as part of “normal” aging (Bane, 1997); 3) a lack of affordable transportation and/or inability to travel to a mental health service provider because of physical frailty and social isolation (AoA, 2001); 4) a lack of affordable drug therapies; 5) a shortage of mental health providers, particularly in rural areas (Gibelman & Schervish, 1997); 6) limited coverage of mental health services through Medicaid and Medicare insurance; 7) a lack of coordination among service agencies and providers, which causes fragmentation in the delivery of mental health services for older adults; and 8) gaps in services due to decreased priority for mental health services for older adults (AoA, 2001). While these general barriers have been identified, little is known about the barriers to mental health services faced by older adults in assisted living settings.

There is evidence, however, that the prevention and treatment of depression is related to decreased mortality among older adults with coexisting illnesses and may also contribute to increased motivation to comply with other medical treatments (Rovner, et al., 1986). Research has been conducted to evaluate strategies to treat mental health disorders among older adults in primary care settings (Bruce & Pearson, 1999; Hartford Foundation, 2000), and several intervention studies have reported improved mental health status of institutionalized residents (Constantino, 1988; Frazier, 1997; Hossack, & Standidge, 1993; Marmar, et al., 1988; Nagel, Cimbolic, & Newlin, 1988; Wood Wetzel, 1980). However, we found a scarcity of literature in regard to treatment modalities and intervention efforts among residents in assisted living settings. One study (Kaas & Lewis, 1999) reported that cognitive behavioral group therapy was effective in reducing depression among residents in assisted living facilities. The AoA reports that,

As continuing care retirement communities, assisted living facilities, and other types of living arrangements become more commonplace, attention will need to be given to ensuring that residents of these facilities have access to mental health services (AoA, 2001:5).

Older adults consistently report that they want to have options other than nursing facilities for receiving long-term care services (Leon and Moyer, 1999). One of the goals of assisted living is to provide increased access to needed services and therefore delay nursing facility admission. Several studies have concluded that care in assisted living facilities can be substantially less costly when compared with nursing facilities (Leon & Moyer, 1999; Kane & Gaugler, 2000; Manard, 1992 & 1996; U.S. Congress General Accounting Office, 1997). Availability of mental health services may be key to a resident's ability to age in place.

Aging in Place In Assisted Living

Aging in place is one indicator of a resident's ability to successfully integrate into an assisted living environment, and has been an integral component of the philosophy and promise of the national assisted living industry (Assisted Living Federation of America [ALFA], 1998). The key to an aging in place philosophy is for facilities to adjust their service provision and level of care criteria in order to meet residents' changing needs and to avoid having to discharge individuals to a higher level of care prematurely (Chapin & Dobbs-Kepper, 2001). This aging in place philosophy means residents will have to relocate to a new setting less often.

A number of factors have been studied in relation to a resident's length of stay, including individual factors such as a resident's medical condition, functional level of care, cognitive level of care, medication use, service use, payor status, family involvement, gender, age, and facility-level factors such as facility size, occupancy rate, staffing ratios, geographic location and discharge criteria (Chapin & Dobbs-Kepper, 2001; Kane and Graugler, 2000). The relationship, however, between mental health diagnosis and residents' length of stay has not been examined in previous studies. The capacity of assisted living facilities to handle the current and projected needs based on increased incidence of depression is unknown. As our society ages, the number of older adults who suffer from depression is expected to increase substantially. It is important to know whether assisted living facilities are indeed equipped to address residents' mental health needs and to examine related policy implications.

This study identified specific barriers to assessing services faced by residents with mental illnesses in assisted living settings. We surveyed facility administrators to

identify facility policies related to admission, care and discharge of people with mental health needs; documented the percentage of residents with mental health diagnoses; assessed administrator's awareness of available mental health services; examined referral patterns; determined whether facilities develop individualized treatment plans or specific programs to address the mental health needs of their residents, and; identified barriers to treatment. We also asked administrators about their agencies' ability to address clients' mental health needs through facility programs and services, and whether and how a mental health diagnosis contributes to residents' successful integration in the facility and his/her capacity to age in place. The research objectives and methods to accomplish each objective are detailed below.

Research Objectives & Methods

The primary purpose of this proposal was to examine whether the availability and use of mental health services affects the successful integration of residents in assisted living facilities. We developed five study objectives to facilitate answering this question. The study objectives and the methods to accomplish these objectives are listed in Table 1 below.

Table 1
Study Objectives and Methods to Accomplish

	Objectives	Methods to achieve
#1	Assess the need for and awareness of mental health services for older adults in assisted living facilities	Survey facility administrators; work group sessions
#2	Examine individual, institutional and community characteristics that facilitate or impede access to mental health services.	Reanalyze the longitudinal data set of ALs and RHCs; survey facility administrators
#3	Explore the relationship between mental health status and the ability to age in place.	Reanalyze the longitudinal data set of ALs and RHCs
#4	Identify strategies to increase access to needed mental health services.	Convene workgroup sessions to identify solutions
#5	Examine policy implications of the strategies identified.	Carefully analyze and interpret the data and literature; receive input from policymakers in workgroup

Consonant with these objectives, our study outcomes were to:

Outcome #1: Document the need for mental health services for older adults in assisted living and residential health care facilities in the state of Kansas and assess facility awareness of residents' need;

Outcome #2: Specify the individual, institutional and community factors that facilitate or impede older adults' access to mental health services;

Outcome #3: Explain whether and how mental health status influences the ability to age in place in AL/RHCs;

Outcome #4: Document workgroup participants' recommendations on how to increase access to needed mental health services and;

Outcome #5: Provide information to key policymakers, assisted living providers, CMHC providers, and mental health and aging advocates at the local, state, and national level.

Study Design

We surveyed facility administrators to: identify facility policies related to admission and discharge of people with mental health needs; document the percentage of residents with mental health diagnoses; assess administrators' awareness of available mental health services and referral patterns; determine whether facilities develop individualized treatment plans or specific programs to address the mental health needs of their residents, and; identify barriers to treatment (see Facility Mental Health Questionnaire, Appendix A). We also asked administrators about their ability to address clients' mental health needs and how a mental health diagnosis contributes to the residents' capacity to age in place.

Second, we reanalyzed aggregate data that was collected as part of a longitudinal study of assisted living (AL) and residential health care (RHCs) facilities and residents to examine the relationship between length of stay in the facility and mental health diagnosis. The data set included individual-level (e.g., medical diagnosis, functional level of care, cognitive level of care, medication use, service use, payor status, admission date, gender and age, date of discharge, reason for discharge and discharge destination)

and facility-level data (e.g., presence/absence of a social worker, facility size, occupancy rate, geographic location and discharge criteria) for 366 assisted living and residential health care facility residents from 37 representative facilities in Kansas. The data were collected at baseline, and again at 6 months and 12 months. Finally, we convened a workgroup session of four small groups to assist in identifying solutions to the issues raised in our survey of AL and RHC administrators. We engaged key actors from across the state to assist in identifying strategies to increase access to needed mental health services and to help in articulating the related policy implications.

Participants

Survey Component

All assisted living facilities and residential health care facilities (AL/RHCs) in the state of Kansas (N=200) were invited to participate in the study of which one hundred-four persons responded, which yielded a 52% response rate. Assisted living and residential health care facilities are licensed separately in Kansas. Both types of homes are considered assisted living settings in most states and in national research.

Reanalysis of resident and facility data

An existing sample of 366 residents from 37 representative assisted living and residential health care facilities in the state of Kansas who participated in a longitudinal study from March 2000 to March 2001 was used. We examined the relationship between a mental health diagnosis and length of stay in AL/RHC facilities. As stated earlier, about one-third of this sample was diagnosed as having depression, anxiety disorder or a combination of the two diagnoses.

Workgroup sessions

An all-day work group session (n=24) was convened at the University of Kansas in Lawrence, Kansas. Participants consisted of a combination of assisted living and residential health care facility administrators who participated in our study, AAA directors and case managers, Kansas Department on Aging staff and Community Mental Health Center aging specialists. We budgeted monies to ensure representation from our entire state, including Western Kansas, which is largely rural. We achieved strong representation of facility administrators on key variables found in the literature to be associated with access to mental health services such as geographic location (e.g., urban vs. rural areas), proximity to a Community Mental Health Center and/or aging specialist, facility size, proprietorship type and presence or absence of a social worker.

Data Collection Procedures

Survey Component

Administrators of licensed AL/RHC facilities in the state of Kansas (N=200) were mailed an informational letter and the Facility Mental Health Questionnaire (see Appendix A) to complete and return in a business reply envelope. The survey was pilot tested to four administrators and one CMHC aging specialist prior to mailing it to administrators. A data code was pre-written on each survey to assure participant confidentiality. A separate list was kept of facility administrators' contact information in the event that additional contact was needed to secure the survey or obtain missing data. Administrators who did not return the survey were phoned and asked to complete the survey by telephone instead. (Office of Aging and Long Term Care staff were trained on telephone interview methods to assure high inter-rater reliability).

Workgroup Sessions

Participants were mailed an informational letter inviting them to participate in a work group session. Sessions were tape-recorded and cassette tapes were stored in a locked file cabinet accessible to the researcher and members of her research team only.

Data Analysis

Survey component

Numeric and open-ended survey data were coded where applicable and entered into SPSS for Windows 10.0. Descriptive statistics were used to profile the following facility and resident characteristics: facility policies related to admission and discharge of people with mental health needs; the percentage of residents with mental health diagnoses; administrators' awareness of available mental health services and referral patterns; specific programs to address the mental health needs of residents, and; barriers to treatment.

Reanalysis of facility and resident data

Descriptive statistics were used to profile resident and facility characteristics. A discrete time hazard function (see Cox, 1972; Greene and Ondrich, 1990 or Miller et al., 1998) was estimated to determine the factors associated with residents' length of stay in assisted living. The following variables were included in the analysis: residents' mental health diagnosis, functional level of care, cognitive level of care, medication use, service use, payor status, gender and age, the presence/absence of a social worker in the facility, facility size, occupancy rate, geographic location and discharge criteria.

Workgroup sessions

Workgroup interview data were transcribed and analyzed for themes. The findings are presented in the next section, following the survey findings and results of the reanalysis of the longitudinal resident and facility data.

Study Findings

Survey Findings

One hundred-four administrators or their designees from licensed assisted living and residential health care facilities (AL/RHCs) completed the questionnaire, yielding a 52.0% response rate. Table 2 below indicates the response rate and the method facility staff selected to respond to the survey. A little over half of respondents completed the survey by phone, and about one-third returned it by mail. Follow-up phone calls were made to participants who did not return the survey (n=96). About one third (n=35) requested a fax upon follow-up but never returned the fax. Thirty-nine or 40% of these 96 persons did not respond via telephone after multiple follow-up phone calls. The remaining 22.9% declined to participate in the survey.

Table 2
AL/RHC Facilities Surveyed by Participation Status (N=200)

Participation Status of Facilities		n	Percent
Participated In Study	Method of Response	104	52%
	Phone	58	55.8%
	Mail	34	32.7%
	Fax	10	9.6%
	In person	2	1.9%
Did NOT Participate In Study	Failed to Respond	96	48%
	Declined participation	22	22.9%
	Requested a fax as follow-up, never returned fax	35	36.4%
	Unable to contact after six follow-up calls	39	40.6%

Of the 104 facilities that participated in our study, 60.2 percent (n= 62) were located in a rural area and 39.8 percent (n= 41) were located in an urban area. Almost one-third (29.2%) were connected to an NF, and the other 71.8%, were freestanding facilities. The years of operation for the participating facilities ranged from less than one

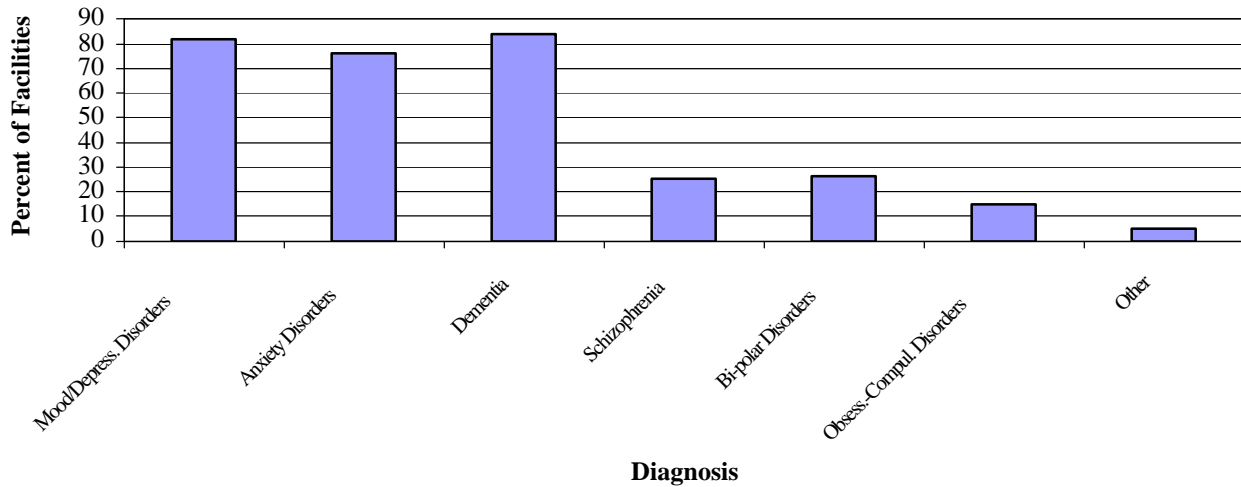
year up to 36 years, with the average length of time in operation 7.50. The facilities ranged in size between 6 and 100 units, with an average size of 38.34 units.

When comparing the size of participating facilities to the entire AL/RHC population in the state (N=200), the sample was representative in comparison to the entire population, which ranged between 6 and 113 units with an average size of 38.24. The percent of facilities in the entire state that were freestanding was 52.0%. Conversely, the percentage of facilities that were part of a nursing facility was 48.0%.

Prevalence of Mental Illness in Assisted Living Resident Population

The majority of the facilities in the sample reported that they had one or more residents with mood or depressive disorders (82%), anxiety disorders (76%), or dementia (84%) (See Chart 1). A much smaller percentage of facilities reported having residents with schizophrenia (25%) bi-polar disorder (26%), obsessive-compulsive disorder (15%) or any other mental health diagnosis (5%). Based on these findings, most facilities and their staff will encounter a resident with mental illness.

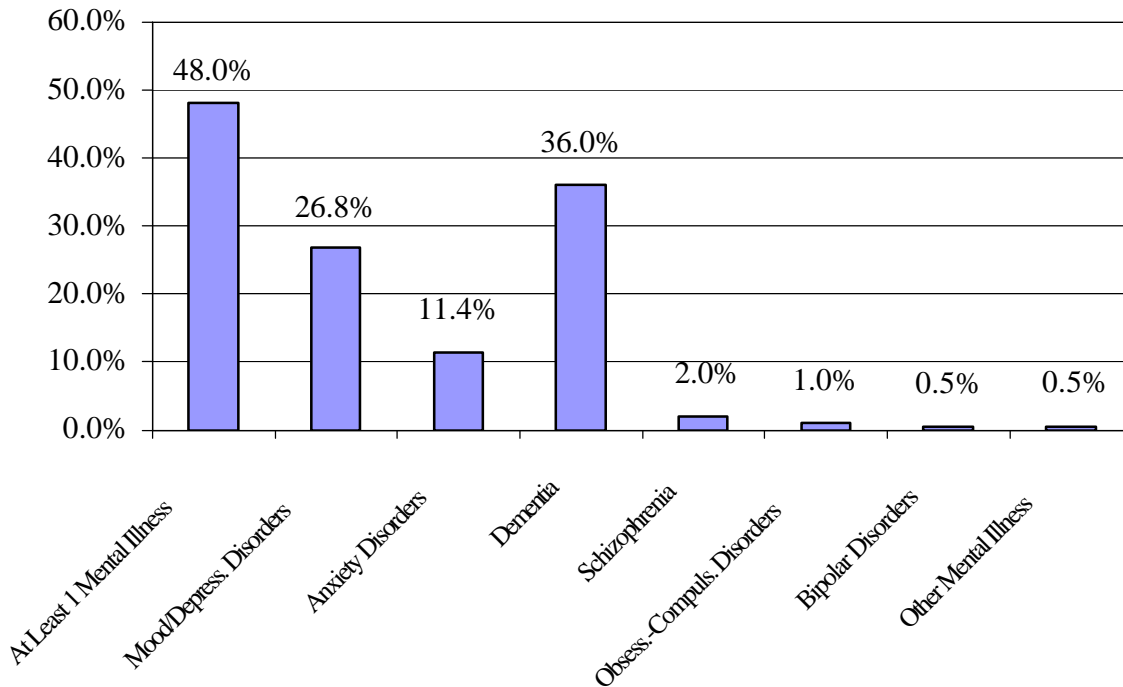
Chart 1: Percent of Facilities with Residents with a Mental Health Diagnosis (N=104)



Administrators reported that close to half of residents in AL/RHCs had at least one mental illness (48.0%). The most prevalent mental illnesses were mood or depressive disorders (26.8% of residents), anxiety disorders (11.4% of residents) and dementia (36.0% of residents). Very few residents had schizophrenic, obsessive-compulsive, or bipolar disorders (these data are presented in Chart 2, below). Almost two-thirds of residents with mood or depressive disorders also had dementia (60.8%). Conversely, about 10% of residents with mood or depressive disorders did not have dementia. (We did not ask participants to indicate the percentage of residents that had anxiety or other mood disorders in the absence of dementia; some of the 11.4% of residents noted above as having anxiety disorders may have also had dementia.) We also asked about psychotropic drug use for the mentally ill population in AL/RHCs. More

than half of residents with a mental health diagnosis were being treated with psychotropic drugs (54.7%) or 26.5% of the AL/RHC population sampled.

Chart 2: Prevalence of Residents in Facilities Surveyed with a Mental Health Diagnosis

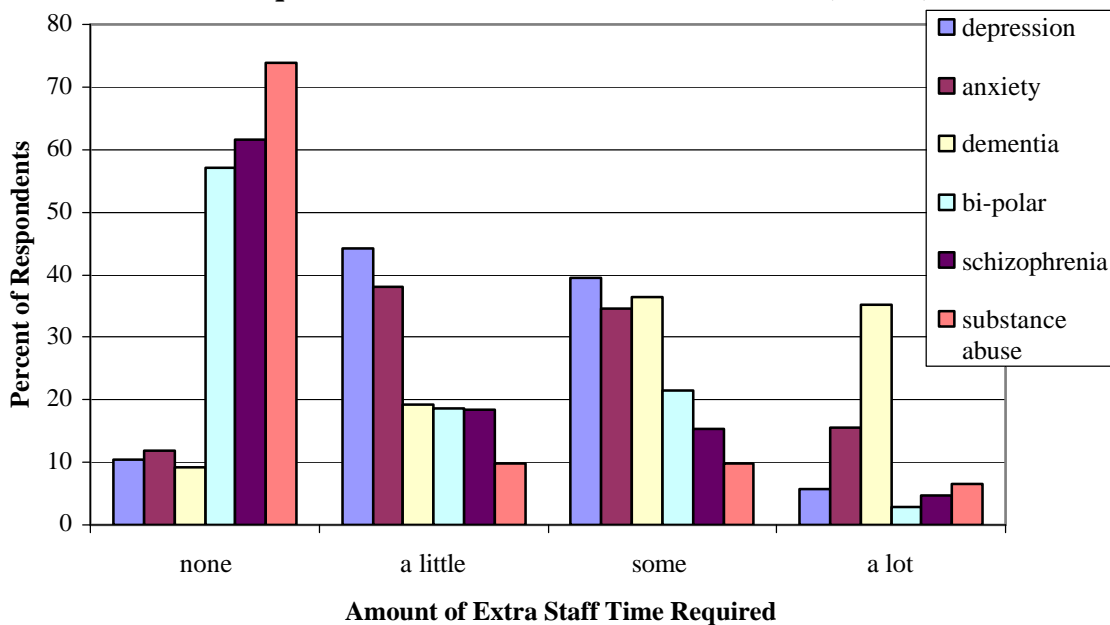


Issues Related to Staffing for the Assisted Living/Residential Health Care Population with Mental Health Needs

Participants were asked if residents with mental health needs required extra staff time and attention. A majority of facilities (with residents who had mood or depressive disorders, anxiety disorder or dementia) said these residents required extra time and attention (89.5%, 88.1% and 90.9% respectively) (these data are shown in the chart below). Conversely, only a small percentage of these facilities reported that residents

with these same disorders required no extra time (10.5%, 11.9% and 9.1%). Facilities with residents who had bi-polar, schizophrenia, or substance abuse problems consistently reported that these residents required less staff time and attention than other residents with other psychiatric disorders, such as depression, anxiety or dementia. Administrators reported that residents with bi-polar or schizophrenia did not require extra time and staff attention because their conditions were being controlled with medications and thus, behavioral problems did not occur.

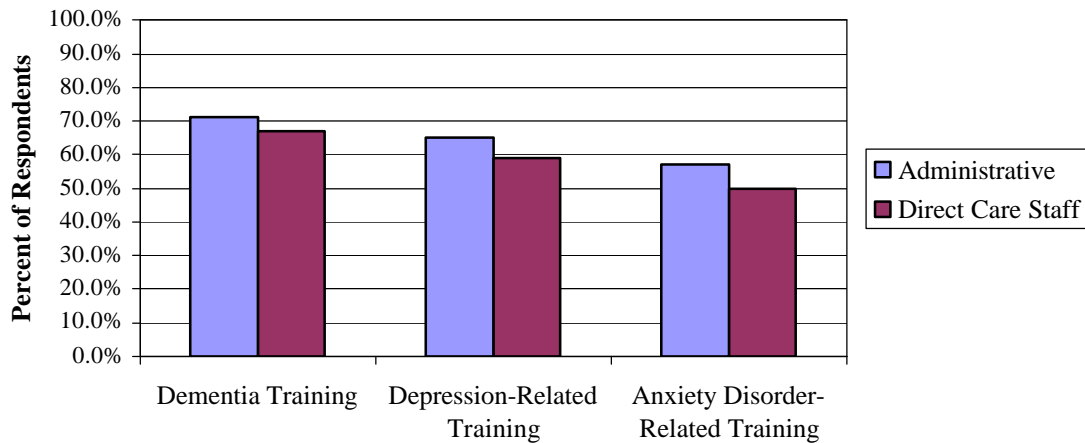
Chart 3: Staff Responses Regarding Amount of Extra Time Required for Residents with Mental Illness (N=104)



Mental Health Training for Staff – Frequency and Type

Administrators reported that dementia training was the most common type of training staff received compared to all other types of training for mental illness (71.2% of administrators and 67.0% of direct care staff). Almost two-thirds of both administrative and direct care staff reported that they had received training related to depression (65.0% and 58.9% respectively). A little more than one-half of administrative and direct care staff had received training related specifically to anxiety disorders (57.0% and 50.0% respectively). These data are depicted in Chart 4.

Chart 4: Percentage of Administrative and Direct Care Staff Who Have Received Mental Health Training (N=104)

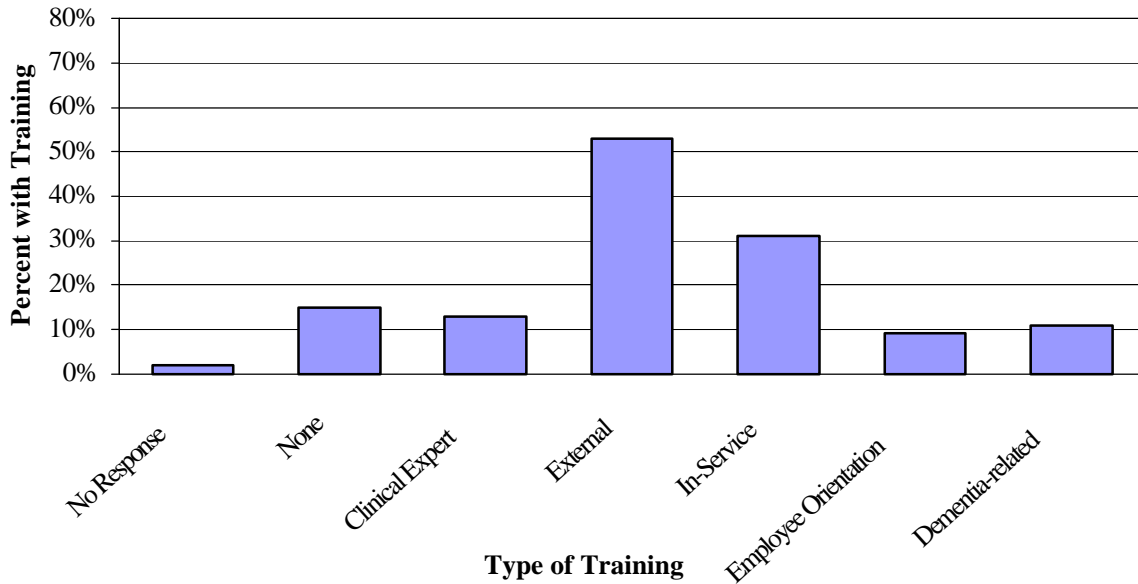


Administrators who reported that they and their direct care staff had received training were asked to describe the type of mental health training received. The open-ended responses were grouped into categories based upon the depth of focus the particular training/education format might entail³. The specific types of training mentioned by administrators and direct care staff are displayed in Charts 5 and 6. Comparison of these charts reveal that a higher percentage of direct care staff as opposed to administrative

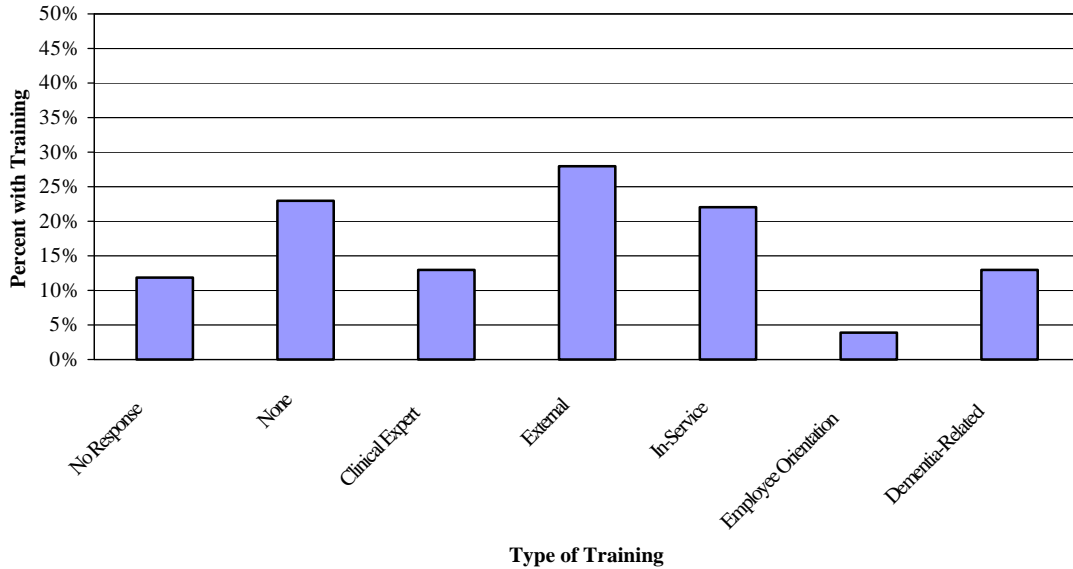
³ The depth of focus on any one disorder in a given training session cannot be determined. However, state training and seminars/workshop/CEUs were viewed as having more depth and accuracy, followed by in-services, and then new employee orientation.

staff received no mental health training (23% vs. 15%). These data also indicate that administrative staff were more likely than direct care staff to receive specialized training through workshops, seminars, continuing education and state training (53% vs. 28%). Administrative staff were also more likely than direct care staff to report that they received mental health training via in-services (31% vs. 22%). A small percentage of administrators and direct care staff (13%) reported having a mental health expert on-site that could provide one-on-one training with staff who needed it.

Chart 5: Administrative Staff Training Related to Mental Health (N=104)



**Chart 6: Direct Care Staff Training Related to Mental Health
(N=104)**



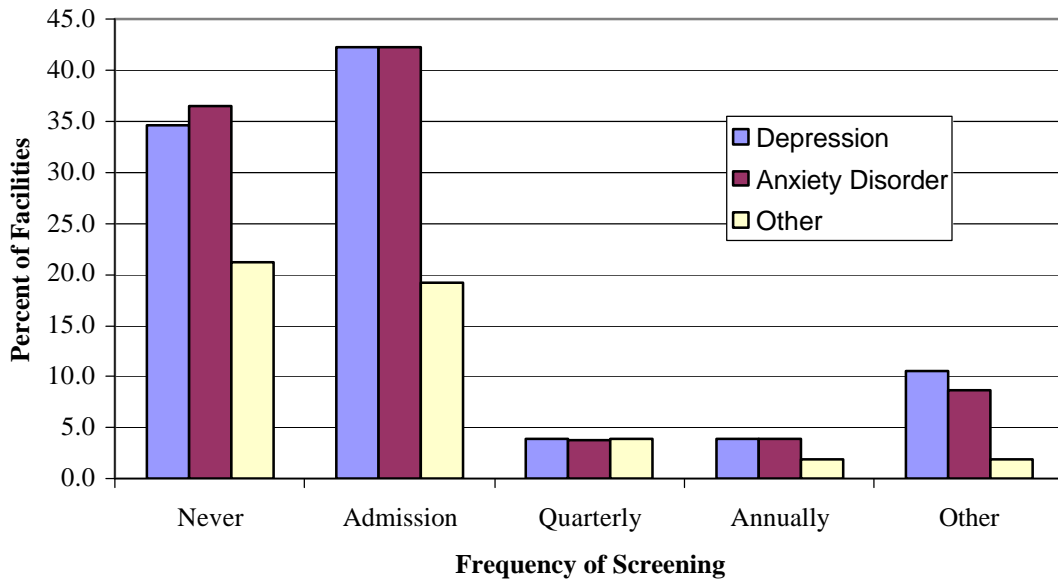
Frequency and Type of Mental Health Screening

Facility administrators were asked whether their facility screened for depression, anxiety disorder or other mental disorders, and to indicate the frequency of the screening – admission, annually, quarterly, other – and the type of screening method used.

Approximately one-third of facilities did not conduct mental health screenings for depression or anxiety disorder. About 42% of facilities reported that they screen for depression or anxiety disorder upon admission into the facility, and approximately 20% screen for “other” mental health disorders upon admission. Very few facilities reported that they follow-up quarterly or annually with screening for mental health disorders.

These results are displayed in Chart 7.

Chart 7: Frequency of Screening by Mental Health Disorder (N=104)



We also asked respondents to indicate the type of instrument/screening used. Table 3 below displays this information. Eight percent did not respond and thirty percent of respondents reported they do not conduct screenings. Twenty-five percent of facilities reported that they use the state required Resident Functional Capacity Screen (RFCS) to detect mental health disorders upon admission. Upon review of the RFCS, however, it was discovered that the only items related to a resident’s mental health condition have to do with cognitive impairment and functioning. Thus, these questions do not assess a resident’s emotional state for depression or anxiety disorder. The most reliable instrument would be a standardized measure such as the geriatric depression screen, which some facilities indicated they use upon admission or when a family member expresses concerns about depressive symptoms. Twenty-two percent of facilities reported that they use a standardized measure that has been tested for reliability and

validity. An alternative to a tested, standardized tool is an evaluation by a psychiatrist. However, only 3% of facilities reported that they conduct psychiatric evaluations. Eight percent of facilities reported that a physician conducts a medical examination and may detect mental health problems. However, research studies have found that doctors routinely under-diagnose depression and anxiety disorder in the elderly (Blazer 1996b; George, 1993). Therefore, sole reliance on doctors' reports and medical records may not be a reliable source of information regarding residents' mental health conditions.

Table 3: Type of Instrument/Screening Used by Facilities (N=104)

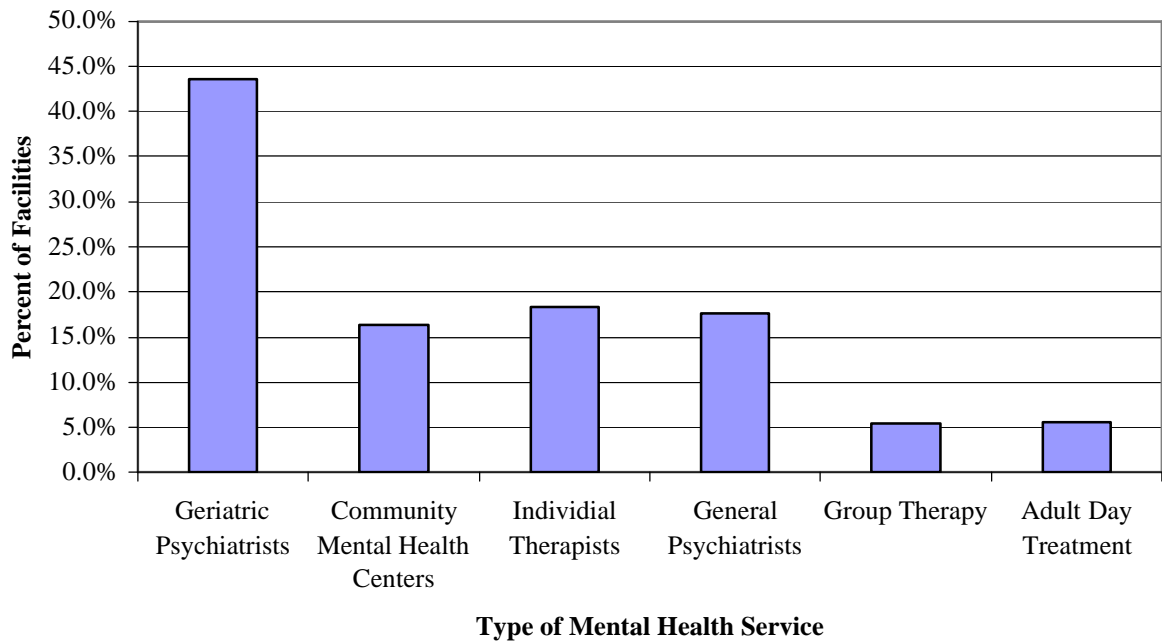
Instrument Type Used	Percent of Facilities
No Response	8%
Do Not Conduct Screening	30%
RFCS	25%
Standardized Measure	22%
Physician's Exam	8%
Psychiatric Evaluations	3%

Referral Rates to Community Mental Health Services

Administrators were asked how frequently they referred residents with either depression or anxiety disorder to a variety of community mental health settings. Surprisingly, only 16.4% of facilities with residents who have depression or anxiety disorder referred these residents to community mental health centers. The most common referral pattern for residents who had either depression or anxiety disorder was to a primary care physician, and three-fourths of facilities referred residents with these diagnoses frequently or very frequently. Slightly over forty percent (43.6%) of facilities that have residents with depression or anxiety disorder referred residents to a geriatric psychiatrist. About one-fifth of facilities (18.3%) referred residents with depression or

anxiety disorder to individual therapists. Close to one-fifth of facilities (17.6%) referred residents to general psychiatrists, while a much smaller percentage listed group therapy or adult day treatment (5.4% and 5.6% respectively). These data are shown in Chart 8.

Chart 8: Percentage of Facilities Referring Residents with Depression or Anxiety Disorder to Specific Services (N=104)



We were also interested in identifying community characteristics that may be associated with the rate at which facilities refer residents with mental illness to community mental health providers/settings. In order to answer this question, we conducted secondary analyses. Individual chi-square tests of significance were conducted to examine the relationship between the referral frequency to community mental health centers, primary care physicians, and geriatric psychiatrists and two

community characteristics that could potentially influence referral rates: 1) whether the facility was located in a rural setting, and 2) whether the facility had access to an aging specialist.

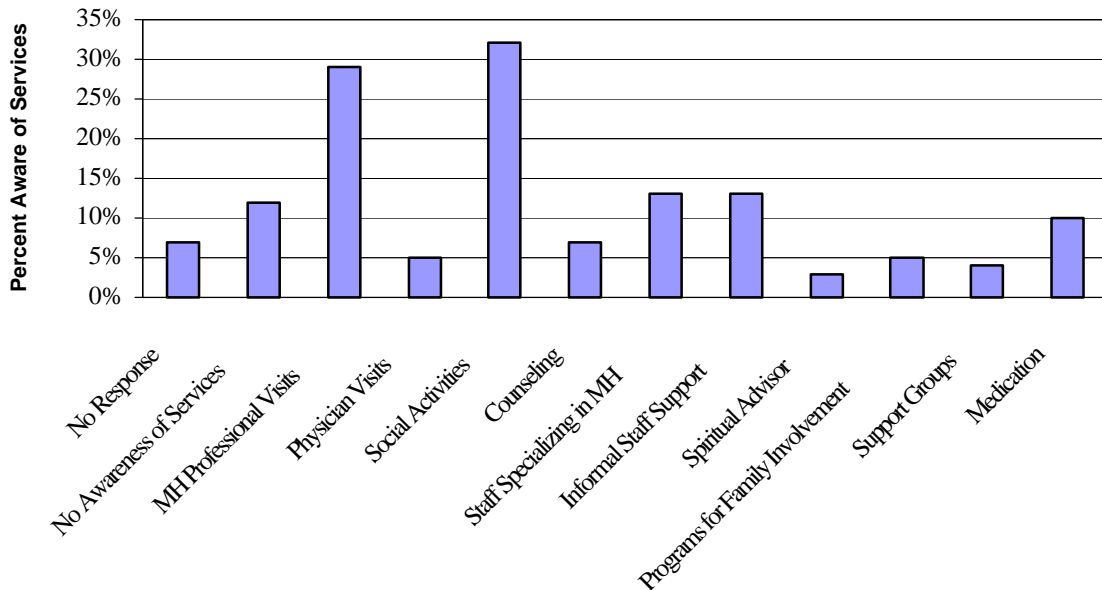
There were no significant differences in the frequency of referral rates to community mental health centers based on geographic location of the facility or having access to an aging specialist. There were also no significant differences in the frequency of referral rates to primary care physicians based on geographic location or access to an aging specialist. There were significant differences, however, in the frequency of referral rates to geriatric psychiatrists for facilities based on geographic location ($p < .05$). A significantly higher percentage of facilities in urban areas compared to rural areas reported that they frequently or very frequently refer residents with depression or anxiety disorder to a geriatric psychiatrist (52.8% versus 25.5%). There were also significant differences in the frequency of referral rates for residents with depression or anxiety disorder to a geriatric psychiatrist between facilities that had access to an aging specialist and facilities that did not have access ($p < .05$). A significantly higher percentage of facilities with access to an aging specialist reported that they frequently or very frequently refer residents with depression or anxiety disorder to a geriatric psychiatrist compared to facilities without access to an aging specialist (51.3% vs. 26.1%).

Mental Health Services Available in Facilities

Facility administrators were asked an open ended question about what mental health services were available within their facility for residents with MH needs. The responses were grouped into ten different categories, which are not mutually exclusive. The results are displayed in Chart 9. Respondents from twelve percent of facilities indicated that

they were not aware of mental health services for residents within their facilities. Close to one-third of respondents reported having mental health professionals visit. Thirteen percent of respondents indicated that their facility has staff that specializes in mental health issues. Nearly one-third of facilities reported activity programming as being an important service offered for residents' mental well being. Other services listed included family involvement, spiritual adviser, counseling, support groups, medication management and physician visits. Thus, the spectrum of services provided includes formal and informal services.

Chart 9: Mental Health Services Available in the Facility (N=104)

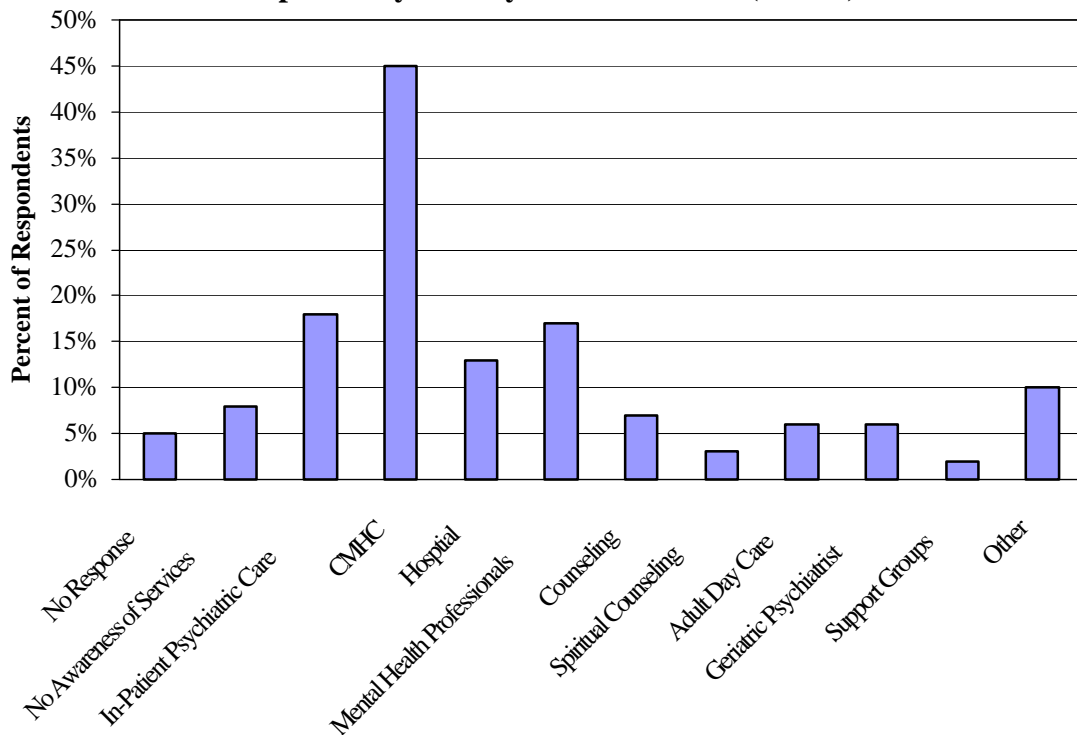


Mental Health Services Available in the Community

Facility administrators were asked to identify community mental health services available for residents. The responses to this open-ended question were grouped into ten different categories including: 1) In-patient psychiatric care; 2) community mental health

center (CMHCs); 3) hospital care; 4) visits by mental health professional; 5) counseling; 6) spiritual counseling; 7) adult day care; 8) geriatric psychiatrist; 9) support groups; and 10) other. The most frequently cited community service was the community mental health center, cited by 45% of facilities as an available service for their residents. The second most cited services were in-patient psychiatric care and mental health professionals (18% and 17% respectively). The third most frequently cited service was the hospital (13%). A small percentage of facilities cited the other categories as available services. Eight percent of facilities had no awareness of community mental health services available for residents.

Chart 10: Mental Health Services Available in the Community as Reported by Facility Administrators (N=104)



Admission and Retention Policies Related to Mental Health Diagnosis

We were also interested in knowing whether and how facility admission and retention policies can influence an older adult's ability to enter and remain in an AL/RHC facility. The survey findings indicating facilities' admission policies are shown in Table 4. The majority of assisted living facilities (95.2%) reported that they would admit an individual with a mood and/or depressive disorder, while 1% would not admit. The remaining 3.8% of facilities did not respond to this question. For residents with a diagnosis of an anxiety disorder, 96.2% of facilities would admit a prospective resident with an anxiety disorder, and 1.9% would not. The remaining 1.9% of facilities did not respond to this question. Further, 19.2% of facilities would admit an older adult who has a behavior problem as a result of a mental illness, but 55.8% would not admit him/her. The remaining 25% of facilities did not respond to this question.

The majority of assisted living facilities (74%) would admit a potential resident if he/she needs psychotropic medication monitoring by a registered nurse, while 21.2% would not. The remaining 4.8% of facilities did not respond to this question. The majority of the respondents (51%) would also admit an older adult if he/she required specialized services due to a mental illness, while 33.7% would not. The remaining 15.4% of facilities did not respond to this question. The majority (90.4%) of facilities would also admit someone with dementia, while 4.8% would not. The remaining 4.8% of facilities did not respond to this question. The majority of facilities (62.5%) indicated that they would admit older adults with any other mental illness, while 29.8% would not. The remaining 7.7% of facilities did not respond to this question.

Table 4: Percentage of Kansas Facilities In Study That Would Admit Older Adults with Mental Illness (N=104)

Potential Resident	Yes	No
Has a diagnosis of mood and/or depressive disorder	95.2%	1.0%
Has a diagnosis of anxiety disorder	96.2%	1.9%
Has a diagnosis of dementia	90.4%	4.8%
Has been diagnosed with any other form of mental illness	62.5%	29.8%
Has behavior problem as a result of a mental illness	19.2%	55.8%
Needs psychotropic medication monitoring by an RN	74.0%	21.2%
Requires specialized services due to a mental illness	51.0%	33.7%

We also asked if the facility would retain and/or discharge older adults with those same diagnoses. Very few facilities (1.9%) would discharge a resident if he/she had a diagnosis of a mood and/or a depressive disorder, while 84.6% would not discharge the resident. The remaining 13.5% of facilities did not respond to this question. Similarly, the majority of respondents indicated that they would not discharge a resident with an anxiety disorder (86.5%). One percent of participants indicated that they would discharge a resident with anxiety, and the remaining 12.5% of facilities did not respond to this question. In regard to the discharge of a potential resident with dementia or Alzheimer’s disease, 5.8% of facilities would discharge him/her, and 77.9% would not. The other 16.3% of facilities did not respond to this question. If a person had been diagnosed with some other mental illness, 11.5% would discharge him/her, and 65.4% would not. The remaining 23.1% of facilities did not respond to this question.

If a potential resident had a behavioral problem as result of a mental illness, 49% of the facilities would discharge him/her, while 18.3% would not. The other 32.7% of facilities did not answer this question. Most of the facilities (72.1%) would not discharge a resident if he/she needed psychotropic drug monitoring by a registered nurse, while 13.5% would. The other 14.4% of facilities did not respond to this question. Finally, if a

potential resident required specialized services due to a mental illness, 47.1% of facilities would not discharge him/her, and 31.7% would. The remaining 21.2% of facilities did not answer this question.

Staff Responsible for Identifying Residents' Mental Health Problems

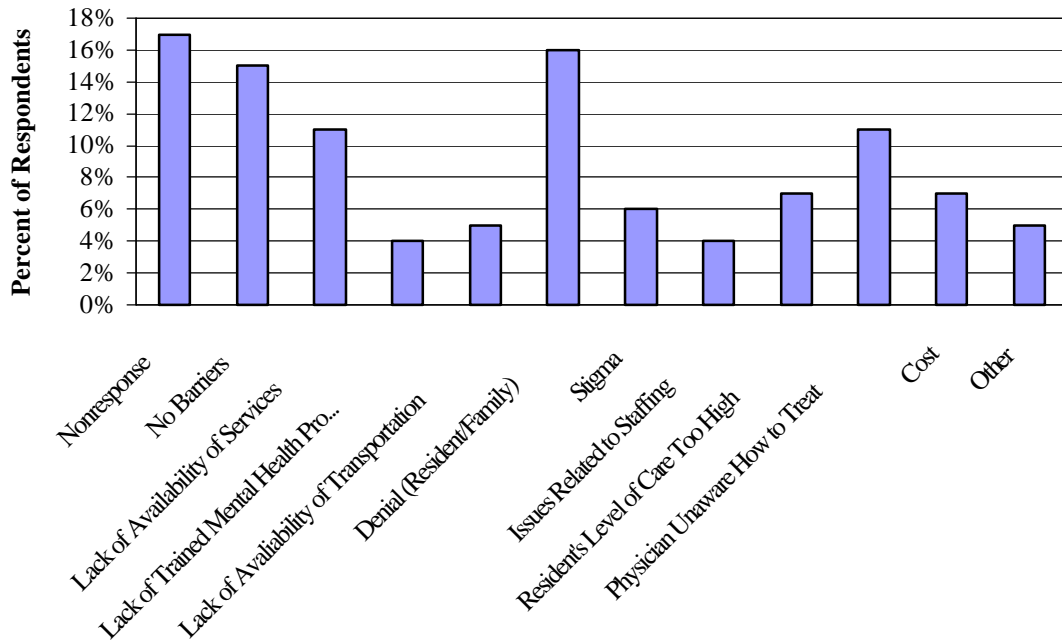
Respondents were also asked to indicate which staff person (e.g., an administrator, nurse, the social worker, nurses' assistant, and other designated staff person) was responsible for identifying and responding to residents' mental health needs in their facilities. The categories were not mutually exclusive. Eighty-eight percent of respondents reported that nurses were responsible for the residents' mental health needs, while 11.5% said that the nurses were not responsible. Fifty-three percent of respondents identified the administrator as responsible, while 46.2% said that the administrator was not responsible. Nearly all of the facilities that had a social worker present (n=33) identified him/her as responsible for residents' mental health needs. Approximately the same percentage as those who identified the social worker as responsible listed nurses' assistants and other designated staff people as responsible.

Barriers to Addressing the Mental Health Needs of Assisted Living Residents

A main objective of this study was to better understand barriers to meeting the mental health needs of residents in AL settings. Facility administrators were asked to identify barriers that prevented them from meeting residents mental health needs. The responses to this question were grouped into eleven categories as reported in Chart 11. Seventeen percent of facilities did not respond to this question. Fifteen percent of respondents reported that they did not experience barriers in meeting their residents' mental health needs. One-fifth or 20% of facilities reported that they experienced difficulty in

accessing services. They mentioned lack of available services, mental health providers and transportation services. Another 22% of facilities identified denial or stigma on the part of residents and/or families as a barrier to addressing mental illness. Eleven percent cited the physician’s inability to detect and treat mental illness as a barrier to meeting residents’ mental health needs.

**Chart 11: Barriers to Meeting Residents' MH Needs
(N=104)**

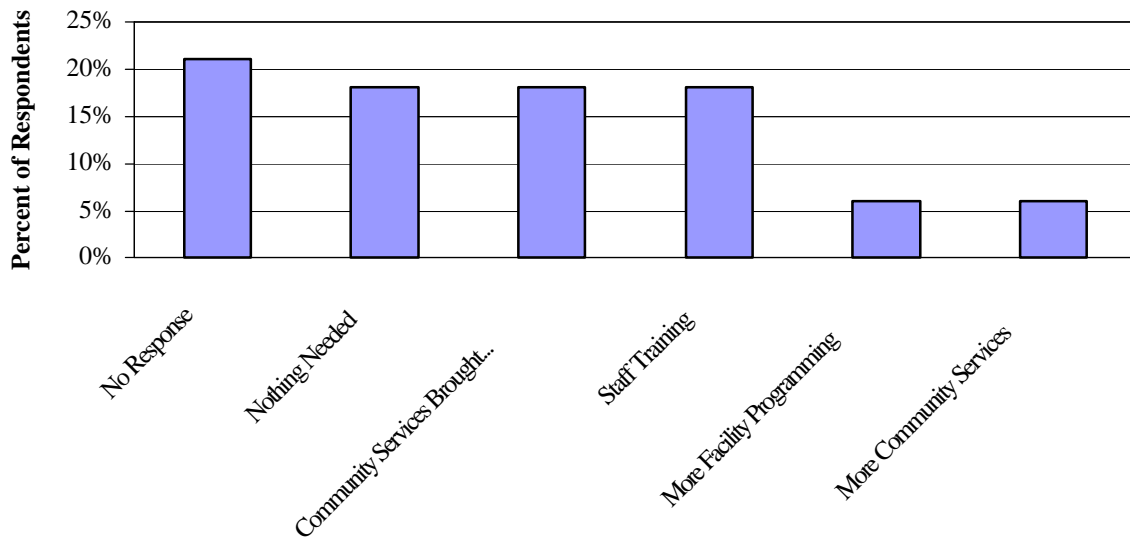


Recommendations for Supports Needed to Meet Resident’s Mental Health Needs

Facility administrators were asked what supports and resources they would need to more effectively meet the mental health needs of their residents. The administrators’ responses were grouped into five categories: 1) eighteen percent reported that additional

resources were not needed, which was categorized as “nothing needed;” 2) eighteen percent recommended bringing community services to the facility; 3) eighteen percent recommended “training for staff;” 4) “more programming” was recommended by 6% of administrators; and 5) “more services in the community” was also selected by 6%. Twenty-one percent did not respond to this open-ended question. These data are illustrated in the chart below.

Chart 12: Recommendations of Supports Needed to Meet Residents' Mental Health Needs (N=104)



Institutional and Community Characteristics that Impede Access to Mental Health Services

The second study objective was to examine the institutional and community characteristics that impede access to mental health services. In order to accomplish this

objective, we first asked facility administrators the open-ended question, “What barriers do you encounter in meeting the health needs of residents in your facility with specific attention to residents with depression and anxiety disorder?” The responses were organized into categories, which were reported in the survey findings section of this report (refer to Chart 11). We collapsed three of these categories--lack of available community mental health services, lack of trained mental health providers, and lack of available transportation services--into one overarching barrier, “lack of access”. After carefully analyzing the open-ended responses from the 104 facilities surveyed, we categorized facilities in terms of whether they indicated “lack of access” according to these criteria. Next, we examined the relationship between access to mental health services as delineated above and whether: 1) the facility had a social worker; 2) direct care staff had mental health training; 3) an aging specialist was located at the area CMHC; and 4) the facility was freestanding or a part of a Continuing Care Retirement Community (CCRC). We also examined the relationship between geographic location and access to mental health services.

Findings of The Relationship Between Institutional and Community Characteristics and Lack of Access to Mental Health Services

Social Worker Present

First, we compared the percentage of facilities that had a social worker and reported lack of access as a barrier to meeting the mental health needs of their residents to the facilities that did not have a social worker but also reported lack of access. Twenty-four percent of the facilities that reported lack of access as a barrier had a social worker (n=33), compared to 20% of the facilities that did not have a social worker present (n=71). These data suggest that respondents in facilities, which have a social worker on

staff, may be slightly more aware of residents' mental health needs. However, having a social worker on staff may not necessarily result in more referrals, and community-based resources may be scarce or non-existent.

Mental Health Training for Direct Care Staff

Twenty-four percent of facilities that had direct care staff with mental health training reported lack of access as a barrier (n=66), compared to 18% of facilities that did not have direct care training (n=38). Direct care staff who have received mental health training may be more aware of residents' mental health needs and therefore better able to identify barriers to access. For example, respondents from facilities with direct care staff trained in mental health were aware of community mental health centers and the services they offered but noted the distance between the facility and a mental health center as a barrier to meeting residents' mental health needs. As one administrator stated, "There is little available and [at] great expense." One administrator had expressed a desire for services to be brought into the facility, "I have really hoped for someone that would do group therapy for adjustment disorders and also grieving."

Facilities with Access to a CMHC Aging Specialist

Twenty-two percent of facilities that did not have access to an aging specialist experienced difficulty accessing mental health services (n=58), while slightly less than 20% of facilities that were able to access an aging specialist (n=46) reported difficulties accessing services. Difficulty obtaining transportation to and from mental health centers was a common complaint, as was attaining services at CMHCs. For example, one administrator complained that the facility would "refer to a mental health center, but they [the mental health center] are overworked." Some facilities with access to an aging

specialist were not aware that aging specialists in CMHCs were available in their community.

Freestanding or part of a CCRC

There was very little difference between the percentages of freestanding facilities that reported lack of access as a barrier (n=74) in comparison to facilities that are part of a CCRC (n=30) (22% and 20% respectively). Both types of facilities reported lack of transportation and low service availability as two major access barriers. As one facility connected to a CCRC stated, the barrier to obtaining needed mental health services stems from “access, distance, availability, [and] cost.”

Rural versus Urban Location

Twenty-one percent of facilities in rural counties (n=62) and 21% of facilities located in urban counties (n=42) reported that they experienced difficulty accessing needed mental health services for their residents. Lack of transportation and the distance that older adults must travel to obtain services were two common complaints among the facilities in both rural and urban counties. One urban facility also identified inadequate in-patient services in their area as a barrier.

Reanalysis of Longitudinal Data Set

The third study objective was to explore the relationship between mental health status and the ability to age in place. In order to accomplish this study objective, assisted living resident longitudinal data was reanalyzed to estimate the risk of discharging to a higher level of care. Mental health status was one of the risk factors examined in the analysis.

Resident Longitudinal Sample

The resident longitudinal sample consisted of 366 residents from 37 licensed assisted living and residential health care facilities in Kansas. The resident sample was selected from facilities that participated in the facility phase of the FY 2000 study. Of those facilities that participated in the FY 2000 study, 71 were licensed assisted living (AL) facilities (68% of all AL facilities in Kansas) and 57 were licensed residential health care (RHC) facilities (71% of all RHC facilities in Kansas). All 128 AL/RHC facilities were asked to distribute to their residents an informational study letter and consent form. If residents were not responsible for making their own decisions, the person(s) designated as being responsible for making decisions for the resident was sent the letter and consent form. We received 500 consent forms from residents or their designees for a facility response rate of 29%. The resident population from the 37 participating facilities totaled 835 residents, yielding a resident response rate within participating facilities of 60%. In order to have equal representation from both small and large facilities, we randomly selected and weighted the potential sample of resident participants to create an initial sample size of 370 residents. Four of the residents who had agreed to participate in the study had already been discharged when the first request for baseline information about residents was mailed. Therefore, our final sample size was 366 residents.

Data Collection

For the longitudinal study, data were collected at three points in time (baseline, six and twelve months) and any changes that had occurred in a resident's status (e.g., functional, cognitive, medical condition, payor status, hospitalizations and service use) were recorded. Resident information was collected from three different sources. The first was a two-page questionnaire constructed by the research team that included basic

demographic information, payor status, whether the resident was a Medicaid HCBS/FE recipient, the date HCBS/FE services started, the date the resident was admitted to the facility, where the resident was admitted from, the number of hospitalizations, and diagnosis and service use information (see Appendix B). The second source was the state-required Residential Functional Capacity Screen (RFCS) or comparable assessment that is completed by all facilities for all residents in AL/RHCs and updated annually. The RFCS includes functional and cognitive information about the resident and medication use (see Appendix C). The third source was the Resident Outcome Form constructed by the research team in collaboration with the Kansas Department on Aging (KDOA) that included the date of discharge, discharge destination and reason for discharge (see Appendix D).

Resident Characteristics

The majority of the resident baseline sample were female (73.2%), non-minority Caucasians (99.0%) who paid privately for their care in AL/RHC (90.0%). The average age of the resident baseline sample was 85.9 with a range from 52.2 to 102.9 years of age. In regards to marital status 18.0 % were married, 13.0 % were single, and the remainder were widowed. (See Dobbs-Kepper and Chapin’s report entitled, “Capacity to Age in Place in Assisted Living and Residential Health Care Facilities: Individual and Facility Factors”, available at the Office of Aging and Long Term Care website, www.ku.oaltc.edu for more information about this sample.)

Functional Status

Information was collected about residents’ activities of daily living (ADLs), instrumental activities of daily living (IADLs) and cognitive status. These items ranged

from 0 = “independent” to 3 = “unable to perform.” Individual ADLs and IADLs were recoded based on whether the resident needed help (coded 1=yes) or did not need help (coded 0=no). These items were then summed to derive composite indicators of ADL functioning (bathing, dressing, toileting, transfers, walking mobility, and eating) and IADL functioning (meal preparation, shopping, money management, use of telephone, transportation, housekeeping and medication management). At baseline, residents needed assistance, on average, with 1.42 ADLs and 4.62 IADLs (N=366).

An average sum for cognitive status was computed for the resident sample using the following four items: short-term memory problem, long-term memory problem, recall difficulty, and problem with decision-making, where 1= yes and 0 = no, resulting in a scale ranging from 0 to 4. The average sum for cognitive status at baseline was 1.10.

Medical Conditions

Of the 366 residents who participated in the study, we collected medical diagnosis information for 364 of them on the following types of medical conditions: neurological, heart and circulatory, endocrine/metabolic, pulmonary, psychiatric/mood conditions and other major conditions. An open-ended question was provided for the staff person filling out the form for each resident to document the conditions for each category. Our research team then categorized and numerically coded the written responses.

Administrators were asked to document only a confirmed diagnosis by a physician for each of these medical conditions. On average, the resident baseline sample had at least 2.2 of the six types of medical conditions listed above. In this study, we include information about those residents with a psychiatric/mood condition. The diagnoses for this category included depression, anxiety disorder, or other psychiatric/mood disorder.

The percentage of residents with these diagnoses is depicted in Table 5. The categories are not mutually exclusive.

Table 5: Number & Percentage of Residents in FY 2000 Longitudinal Study with a Psychiatric Diagnosis (N=364)

Psychiatric Disorder	Number with Diagnosis	Percent with Diagnosis
<i>Psychiatric/Mood Disorder</i>	119	32.5%
Depression	82	22.4%
Anxiety	33	9.0%
Other psychiatric/mood disorder	17	4.7%

Data Analysis

For this study we used a multivariate model known as the Cox Proportional Hazards Model to examine the risk factors associated with discharging to a higher level of care from assisted living (Cox, 1972). The Cox model was used to estimate how a person’s risk of discharge to a higher level of care varied according to individual and facility characteristics, including psychiatric/mood disorders. The lower the risk of discharge, the higher the chance of survival until the next period. We had two six-month periods for the analysis. We examined the risk of discharging to a nursing facility or to another

higher level of care (e.g., another AL/RHC), conditional on the person remaining alive. Therefore, residents who died during the study period were excluded from the analysis.

For the analysis, we included 308 of the 366 cases in our study. Of the 58 cases not included, 42 were deceased, six discharged to the community or to a lower level of care, two cases had an unknown discharge destination, and eight cases were missing too much data on key variables to include in the analysis. Of the 308 cases included in the data analysis, 74 were discharged to a higher level of care. The individual and facility factors included in the analysis are depicted in Table 6.

**Table 6:
Characteristics Included in the Cox Proportional Hazards Regression Model**

Individual Characteristics	Facility Characteristics
Age	Profit status
Marital status	Level of service (high, medium or low)
Gender	Presence or absence of a nurse
Psychiatric/mood disorder	Presence or absence of a social worker
Continence	Freestanding or part of an NF/CCRC
Average number of ADLs (range 0-6)	Occupancy rate
Average number of IADLS (range 0-7)	Capacity
Average cognitive status (range 0-4)	Average cost
Number of hospitalizations in six months	Geographic location (urban/rural)
Payor Status (Medicaid or other)	Accept Medicaid or not

Findings from the Cox Proportional Hazards Regression Analysis

The results of the hazards regression model are displayed in Table 7. The individual factors found to be associated with an increased risk of discharge from an AL/RHC to a higher level of care included: age (older), being married, a higher than average number of ADLs, higher cognitive impairment, having a mental health diagnosis and more hospitalizations within the two six month periods studied.

Two facility factors that were found to be associated with a slightly lower risk of discharge from an AL/RHC to a higher level of care included size and occupancy rate of the facility. Residents with mental health needs who resided in larger assisted living homes and homes with higher occupancy were slightly less likely to discharge to a higher level of care.

**Table 7:
Factors Found to Be Significant in the
Cox Proportional Hazards Model
(N=308)**

Factor	Probability Level	Relative Risk
Age at entry	.0012**	1.06
Resident is currently married	.0225*	1.87
Average Sum of ADLs	.0329*	1.09
Total cognitive score	.0431*	1.20
Psychiatric/mood disorder	.0143*	1.91
Number of hospitalizations in six months	.0363*	1.78
Capacity Size	.0196*	.98
Occupancy rate	.0270*	.98

** $p < .01$ * $p < .05$

The hazard ratio indicates the increase in risk of discharge for each unit increase in the explanatory variable. These data indicate that residents with a psychiatric/mood disorder were 91% or nearly twice as likely to discharge to a higher level of care. Other important factors identified included marital status, functional, and cognitive impairment,

and the number of prior hospitalizations. Residents that were married had an 87% higher risk of being discharged to a higher level of care. For every increase in the average number of ADLs that a customer needed help with, there was a nine percent higher risk of being discharged to a higher level of care. Residents that were cognitively impaired were 20% more likely to discharge to a higher level of care. Residents with more hospitalizations in the six months studied, had a 78% higher risk of being discharged to a higher level of care. Age was only of modest importance in this model. For each one-year increase in age, a resident's risk of discharging to a higher level of care increased six percent.

Findings and Recommendations from Work Group Sessions

The fourth study objective was to identify strategies to increase access to mental health services for older adults, and the fifth study objective was to examine policy implications of the strategies identified. In order to accomplish these two study objectives, our research team convened 24 participants in an all day work group session. The Office of Aging and Long Term Care (OALTC) has established a collaborative relationship with state agencies, assisted living (AL) and residential health care (RHC) providers, as well as mental health providers. A number of the workgroup participants have been involved in previous OALTC research projects. OALTC staff have also been active in the Kansas Mental Health and Aging Coalition. The OALTC works hard to ensure that the appropriate state agencies are informed of our research findings and that related policy implications are considered in planning state policies and programs.

Work group participants were presented the findings from the survey of facility administrators before dividing into four small groups. Each group consisted of a

moderator, a note taker from our research team and six participants that included assisted living and residential health care providers, community mental health center (CMHC) aging specialists, CMHC directors, members of advocacy groups, and state level policymakers from the Kansas Department on Aging (KDOA), and Social and Rehabilitative Services (SRS). The CMHC aging specialists, the KDOA, and SRS representatives were also members of the Kansas Mental Health and Aging Coalition. The assisted living providers who participated were representative of both rural and urban areas, as well as small and large assisted living facilities. The mental health providers and directors were representative of rural and urban areas and CMHCs with and without an aging specialist.

Each group was asked the same seven questions by the group moderator. Questions asked about strategies to increase access to mental health services and identify related policy implications. Several of the questions asked for work group participants' help in interpreting some of the results of the survey of assisted living/residential health care facilities (AL/RHC) (refer to Appendix E for work group questions). The responses were recorded and detailed notes were taken by each note taker from our research team. Each group was asked to report two key points and/or recommendations per question to the larger group, which reconvened after the small group sessions. The larger group of 24 reconvened after the break out sessions ended. A representative from each of the four groups reported recommendations. The larger group discussion was recorded and a representative from the research team documented all of the recommendations. Tapes from each of the four groups as well as the larger group discussion were transcribed and coded for: 1) barriers to accessing mental health services; 2) strategies to overcome

barriers; and 3) related policy implications. The following pages of this report summarize the findings and recommendations. They are organized around the key findings that emerged from the work group sessions.

1. Lack of Information about the Mental Health Needs of Older Adults and Community and Facility Resources

A key finding of the work group was that many of the participants lacked information about the mental health needs of older adults. Their need for information included greater understanding of the symptoms of mental illness and increased knowledge of facility and community resources. Participants reported that front-line staff, administrators, physicians, and social workers are not adequately trained to address the mental health issues specific to older adults. One AL provider approached residents who exhibited depressive symptoms, and they indicated their willingness to talk to AL staff. She reported:

I talked to a couple of residents about depression, and the residents told me, “We really want to talk to the staff. If they need to learn what depression is, we know what it is” (Table 4: AL provider).

An AL social worker at Table 3 suggested educating staff, including social workers. She explained:

There are a lot of social workers I know, they are excellent with children’s issues. I would be awful with children’s issues; I’m good with aging issues and they’re not as strong with aging issues.

An AL provider at Table 3 also suggested involving spiritual leaders in education efforts, as they often play an important role in the care of older adults with mental health needs. She explained:

I would like for us to do a better job of connecting with spiritual leaders too. I suspect that there is more involvement, maybe than we know because it is such an informal way of working.

A participant at Table 4 also recommended more education of families, who often deny that a problem exists when staff approach them, and may also prevent their relatives from receiving treatment for mental health needs. Assisted living (AL) and residential health care (RHC) providers at Tables 2 and 3 reported difficulty getting families to cooperate when staff approached them about seeking professional help for their loved ones. For example, an AL administrator at Table 2 stated, "...The family can say no, we're not going to see a psychiatrist...that's their decision, that's their right because they are the guardian." Finally, an AL provider at Table 2 suggested developing briefing sheets for the legislature to keep them informed of the mental health needs of older adults.

The work group sessions also revealed a need to educate AL/RHC providers about the location of and services specific to older adults provided by CMHCs. An AL provider from Table 4 stated that many administrators are not familiar with the services offered by CMHCs, thus their staff do not refer older adults to these centers. Assisted living administrators from Table 1 and 4 revealed that they were unaware of the CMHC in their area. An administrator from Table 4 stated, "I just found out today where [my CMHC] is."

Several AL administrators indicated during the large group discussion that they were unaware of the community mental health center in their area and had no information about the resources available to older adults, which can include free mental health screenings, as indicated by CMHC staff participants in the work group sessions. Screenings and a follow-up diagnosis are not conducted, according to numerous AL providers in the workgroup sessions, because the facility does not have a professional on

staff who is qualified to screen in-coming residents, or they do not have a primary care physician on staff who has adequate training specific to the mental health needs of older adults. Thus, many AL providers are not utilizing the services of their CMHC, including mental health screening. Work group participants conceded that if a screening is not conducted, residents with mental health problems could potentially go unnoticed and untreated. An AL provider from Table 3 stated, “I think...unless they manifest some symptom that gets recognized, they may fall between the cracks.” Facility administrators indicated that they were unaware of an appropriate mental health assessment tool to administer, and could not afford the additional expense that regular screenings could entail.

The following recommendations were made to address these issues:

- Education and training for assisted living staff, administrators, social workers, clergy, and physicians about mental health issues related to older adults is needed (e.g., how to detect mental health problems). Several strategies were suggested to accomplish this task;
 - Presentations by the Kansas Mental Health and Aging Coalition to staff in AL/RHC facilities about mental health issues;
 - Distribution of the Kansas Mental Health and Aging Coalition materials to AL/RHC facilities including *A Guide to Mental Health Services for Older Kansans and Their Families*, bookmarks and tear sheets;
 - Collaboration between AL/RHC providers and county extension offices in order to utilize the extension offices’ videos on mental health issues in their resource library;
- Education for AL/RHC administrators about CMHC screening services provided to older adults free of charge is needed to increase older adults’ access to mental health services;
- Education of the primary care physician on mental health services and treatment options available in the community for older adults is needed since PCPs are the initial point of contact and lack appropriate training;

- Education and outreach about older adults' mental health issues to family members is needed to decrease the stigma and denial that contribute to decreased service use;
- Briefing of state legislators about the lack of mental health services for older adults and the implications, including increased long-term care costs and decreased quality of life is needed to influence state aging policy related to mental health services for older adults;
- Location of an acceptable screening test for AL/RHC facilities to use is needed to facilitate screening and thereby increase referral of residents in need of mental health services. A user-friendly screening tool known as the Health and Lifestyle Review (HLR), was recommended by a participant at Table 4. The HLR includes the Geriatric Depression Screening short form of 15 items and the Mini Mental State Exam, as well as questions on the resident's lifestyle and relationships.

2. Long Term Care Work Force Issues that Impede Training Efforts

A number of work force issues emerged from the work group sessions. One issue involved a shortage of trained mental health providers and another issue involved a lack of training of AL staff. Participants at several tables identified a shortage of professionals that are trained to address the mental health needs of older adults. Assisted living and residential health care providers in the four groups expressed concern about the lack of resources to treat residents once they are diagnosed with mental health problems. In addition to educating AL/RHC staff, physicians, families, and clergy, an AL administrator at Table 2 stressed the need to train more mental health professionals. She explained that in order for broad-based education efforts to be successful, mental health services must be available:

I guess another piece for me is that making sure that if we were able to get everybody to address this then we're going to have to have people in the community who actually have the talent and the skill to provide mental health services for aging persons. And making sure that the school keeps an emphasis on the mental health piece, not just the aging piece.

Another work force issue is related to training AL/RHC staff to identify symptoms of mental illness among their residents. One administrator from Table 1 raised several issues related to recruiting and training AL/RHC staff, including the shortage of staff, high turn-over rates among staff, and the difficulty of re-orienting AL/RHC staff who have been trained in long-term care to adopt the perspective of the older adult:

Staff training, that opens up such a difficult can of worms ...everybody's having trouble getting staff, number one.... If you're getting "qualified" staff that you've already had on board beyond 90 days, then you're looking at...what Kansas has got a problem of. I'll break it down further from the nurses' aid and the CMA [standpoint]... they have been trained and worked mostly in long-term care, [when] you bring them into assisted living you've got to retrain...from the customer standpoint.

In addition, AL/RHC facilities often rely on the “universal employee” to cover all the bases of assisted living. For example, Certified Nurses’ Assistants (CNAs) in ALs and RHCs are trained in all aspects of the job, including food services, personal care, and activities, and this approach complicates efforts to provide specialized training in any one particular area, such as mental health. Assisted living and residential health care facilities must rely on the universal employee to cover all the bases of providing care in these facilities. A policy analyst from the Assisted Living Federation of America Kansas Chapter (ALFA-Kan) at Table 1 discussed the importance of the “universal employee” to AL/RHC facilities, and the difficulty that specialized training could entail:

...You've got a universal person that you need desperately, you then try to in-service and educate that person on a limited basis to be able to pick up on particular needs of the resident, and that's a problem.

Facilities are reluctant to invest in specialized training given the high staff turnover rates. Having more specialized training in mental health could be of benefit to employees, as they could better understand residents’ psychosocial needs and this could potentially

serve to reduce turnover. Administrators from Tables 1, 2 and 3 all commented that the high turnover rates are due, in part, to lack of understanding of mental health issues.

The following recommendations were made to address these issues:

- CMHCs, state agencies, and OALTC should explore ways to provide mental health training for MDs, clergy, and assisted living staff;
- Training needs to be available locally through workshops at annual conferences of provider organizations;
- The Kansas Mental Health and Aging Coalition's *A Guide to Mental Health Services for Older Kansans and Their Families* needs to be distributed more widely;
- State-sponsored facility administrator training should include a component on mental health needs of older adults;
- Case management training for CMHC staff should contain a component on older adult's mental health issues;

3. Lack of Information about the Referral and Reimbursement Process

Consonant with the survey findings, referral processes differed depending on the facility. Providers at Table 1 indicated that they used a registered nurse consultant, while Table 3 reported that they relied on staff nurses as the first step in the referral process:

I would say our nurses are very involved in seeing [residents with mental health problems] because they have access to the person [and] they see them more frequently (AL provider).

Another administrator stated that his/her facility has an in-house psychologist on staff for referrals.

There was also confusion among work group participants about how to access mental health services as well as concerns pertaining to reimbursement for services. Assisted living providers at several tables believed that the primary care physician must be consulted before seeking mental health services. For example, an AL provider from Table 2 felt as though a referral from the primary care physician was required prior to seeking mental health (MH) services from a Medicare qualified provider. She also raised

concerns about the effectiveness of consulting the primary care physician as a first step in seeking services if he/she was not trained to identify mental health issues among older adults:

It's kind of a double-edged sword in that I think it's really helpful to have one person [the primary care physician] kind of managing all this different care but then it also puts a lot of power in that one person's hands...the concern is that it doesn't stop at the primary care physician particularly if they're not trained (Table 2).

When asked what an administrator should do if they suspect one of their residents were depressed, a CMHC aging specialist at Table 1 suggested, "...Go to the mental health center...ask for a screener to come over. [In most cases] a screen is free." She also echoed concerns about referring residents to a primary care physician first. She stated, "If they're [physicians] not educated, they don't know, they haven't done it, then it's not [an] effective step" to accessing needed services for AL/RHC residents. Her comments underscore the need to provide mental health training for primary care physicians and staff education about the services provided by CMHCs, discussed above. An advocate from an AL professional organization at Table 1 suggested that the lower than expected referral rate to CMHCs discovered in the facility survey and presented to participants may be due, in part, to primary care physicians who treat residents. In reference to a more effective first step, this same aging specialist recommended referring them to the community health center first because it is free of charge to older adults. An AL provider at Table 4 stressed a team approach for referrals; involving the family, primary care physician, and administrator in the process. Participants from numerous tables agreed that, before a team approach can occur, all members of the team—the primary care physician, the family, the administrator, and the resident—need to be

educated about the reimbursement and referral process for older adults with mental health needs.

The following recommendations were made to address these issues:

- Education about the referral process, specifically related to whether a primary care physician's referral is mandated for Medicare to reimburse for mental health;
- Education also needs to be increased for AL/RHC administrators and primary care physicians about the referral process to CMHCs, funding and reimbursement for mental health services;
- A care team approach should be utilized in AL/RHC facilities involving primary care physicians, AL primary caregiver, family members, and the resident to discuss possible treatment options for mental illness, and if possible, include a provider from the CMHC in the meeting;
- Collaboration between CMHC and AL providers related to reimbursement, and payment of mental health services is needed. The funding of mental health services varies by payment source and depends on whether CMHCs have a qualified Medicare provider. Cost should not be a deterrent to services because each CMHC is mandated to serve all persons needing service.

In a follow-up interview with Kansas Department of Health and Environment surveyors, our research staff found that state regulations do not require a primary care physician's referral for mental health services. There is a widespread perception, however, and this held true among many work group participants, that a primary care physician is the point of entry for most health service use. Whether a physician's referral is required depends on the older adults health care plan. If the individual is part of a health maintenance organization, a physician's referral may be required. This may explain survey results indicating that administrators and AL/RHC staff refer most frequently to primary care physicians.

4. Lack of Facility and Community Resources

Another barrier reported by AL providers in the four work groups was the lack of resources available to treat residents' mental health problems if diagnosed, a point underscored above in the discussion of work force issues. Some facility administrators indicated that they might not be equipped to handle residents' needs if screenings were mandated, and would therefore have to deny admission to applicants with mental health needs. Other participants indicated that their facilities did not have the resources to cover the expense of regularly screening residents, and many participants were not aware of community mental health center resources available to AL/RHC residents, including screenings. AL/RHC administrators at Tables 1 and 3 were unaware of who pays for the initial screening and referral. Further, they noted that limited financial resources prevent them from hiring geriatric specialists. Assisted living administrators at Tables 1 and 2 suggested that small facilities in rural areas do not have the resources or appeal to hire and retain a mental health professional on staff. An administrator from Table 3 further elaborated the barriers faced by rural facilities. She explained:

...If somebody is in an area mental health center [catchment area but]...they're in a county that doesn't even have a satellite in it, that's a pretty big barrier to get[ting] them there, you know, especially if they don't drive themselves.

Another administrator from a rural facility at Table 4 reported that the closest psychiatrist was 60 miles away.

Participants also expressed concern that mental health services for older adults are reimbursed at a low rate because there is too little federal and state funding. One aging specialist at Table 1 expressed concerns related to funding mental health services at the CMHC where she is employed. A CMHC provider explained the lack of funding for mental health services for older adults in more detail:

The dollars [federal and state funding] are coming in a lump sum and they've divided it up for outpatient, community support services, or child and family. Those are the highest reimbursement areas. Aging services are reimbursed at the lowest rates. It's not cost effective for the center to provide mental health services for the aging population. That's it (Table 1: CMHC provider).

Each CMHC handles reimbursement differently. If an older adult is not on Medicare or Medicaid, then the CMHC decides how or if they will recoup payment for services. Two common methods include sliding fee scales and writing off the additional costs for services that consumers cannot afford. Having a qualified Medicare provider in a CMHC influences the cost of services. A qualified Medicare provider includes a physician, a clinical psychologist, a clinical social worker, a clinical nurse specialist, a nurse practitioner, or a physician's assistant. According to CMHC directors, approximately 50% of CMHC staff in Kansas are qualified Medicare providers, although some CMHCs have fewer Medicare providers than others.

The following recommendations were made to address these issues:

- Development of coordinated transportation services is needed to assist older adults in accessing community mental health services;
- Development of mobile screening and mental health services is needed to increase access to mental health services for older adults in AL/RHCs;
- Funding of mental health services for older adults and aging specialists at CMHCs needs to be prioritized, and a sufficient number of qualified Medicare providers located at CMHCs needs to be ensured.

5. The Need for Changes in State Policies and Programs

When asked about the policy changes that are needed to implement suggestions to overcoming specific barriers, an emphasis was placed on obtaining increased funding at the state and federal level. A policymaker from the Kansas Department on Aging suggested contacting state legislators to inform them about the lack of mental health

services available to older adults. One participant stressed the need to convey a positive orientation towards aging. She emphasized the need to educate the public about healthy aging. She stated, “You don’t just dry up...[when you]...age. You want quality of life!” (Table 1: AL provider).

Participants also expressed concern about vague state regulations and guidelines concerning the need to conduct mental health screenings. Several participants complained that vague state regulations make it impossible to decide whether they should do an initial screening. Most participants agreed, however, that a mental health screening was vitally important for the resident’s well being, and not doing a screening could “*potentially lower [the] quality of life for the independent living person*” (Table 3: AL provider).

The following recommendations were identified to address these issues:

- The amount of state regulation hours required for mental health training for direct care staff at AL/RHC facilities should be increased;
- Information about issues related to mental health among older adults should be included in the state required Board and Operator Course;
- Media campaigns and public service announcements are needed to bring attention to the mental health issues of the elderly in order to address the stigma that surrounds mental health.

Discussion & Conclusion

This section integrates important findings from the facility survey data, reanalysis of the resident data, and work group sessions. The facility survey, reanalysis of the resident data and work sessions were conducted to examine the prevalence of mental illness among AL/RHC residents in Kansas and the impact of a resident's mental health status on his/her capacity to age in place, as well as documenting AL/RHC administrators awareness and use of facility and community mental health services. Findings indicated that there are three general areas for discussion.

First, mental illness among assisted living (AL) and residential health care (RHC) residents is a problem faced by most assisted living facilities and their direct care staff. Over three-quarters of facilities reported that one or more residents had been diagnosed with a mental illness (depicted in Chart 1). Further, facility administrators reported that, on average, close to half of their resident population had one or more mental illness diagnoses; 26.8% of residents had a diagnosis of mood/or depressive disorder, and 11.4% had a diagnosis of anxiety disorder. Reanalysis of the longitudinal data set indicated that about one-third of residents had a diagnosis of mood and/or depressive disorder and anxiety disorder.

These figures are slightly higher than recent national figures, which documented the percentage of older adults that reside in AL/RHC settings that have mental health diagnoses between 10-27% (National Investment Conference, 1998), and higher than estimates of mental illness among community dwelling residents in general (Rogers, 1999). Rogers (1999), for example, reported that between 15-25% of community dwelling older adults have mental health impairments and require services.

A key question we had hoped to answer was whether residents with a mental health diagnosis faced an increased risk of discharge to a nursing facility. The majority of facility administrators reported that they were willing to admit and retain residents with depression and/or anxiety disorder as well as other mental illnesses. Findings from the Cox Proportional Hazards Model indicated that residents with a mental health diagnosis were nearly twice as likely to discharge to a higher level of care. One possible explanation for these findings is that facility administrators and their direct care staff were not adequately equipped or trained to address AL residents' mental health needs. The survey of facility administrators, for example, revealed that only about two-thirds of administrators and nearly sixty percent of direct care staff had received training related to depression, while a little over half received training specific to anxiety disorders (57% and 50%, respectively).

The survey of facility administrators also revealed that screening methods to detect mental illness are rarely performed on a regular, consistent and uniform basis, which would enable staff to better meet residents' mental health needs. For example, less than half of administrators (42%) reported that their facility screens for depression and/or anxiety disorders upon admission, and very few facilities conducted follow-up screenings (e.g., quarterly or annually). Over a third of administrators reported that their facility never conducts mental health screenings.

The work groups made several recommendations to address these challenges. Recommendations included increased education and outreach to AL/RHC staff and physicians, increased collaboration between AL/RHC providers and CMHCs, and innovative services such as mobile screening and mental health services for residents in

AL/RHC facilities. Additional recommendations were to add a mental health component to the state sponsored training of AL/RHC providers and clarify guidelines related to the need for mental health screening for older adults who reside in AL/RHC settings.

A second major area for discussion relates to awareness of and referral to community resources for residents in AL/RHC settings. This is especially important given that only about one-third of facility administrators reported that specialized mental health services of any type were available in their facilities (e.g., visits by mental health professionals, counseling, or trained staff). Awareness of community-based services is a precursor to service use. Chart 10 illustrates that less than 20% of respondents identified in-patient psychiatric services and mental health professionals based in the community, and less than one-sixth noted hospitalization as an option. Close to one-half of administrators were aware of services provided by their community mental health center. However, less than one-fifth of participants reported that they utilized services provided by community mental health centers. Facility administrators reported that residents with depression and/or anxiety disorder are most often referred to their primary care physician, whom, research demonstrates, have often not been trained to address the mental health needs of older adults (Bane, 1997). Work group participants were equally concerned that AL/RHC residents with mental health needs are typically referred to their primary care physicians, and they suggested that this referral pattern may explain low referral rates to community mental health centers. In addition, inadequate staff training and low awareness by facility staff of community resources may explain the low referral rates to community mental health centers.

Work group participants made several suggestions to address these issues, including increased education of AL/RHC administrators, staff, and physicians about mental health issues faced by older adults and community based mental health services. They also recommended providing increased information about the mental health referral process to AL administrators, staff, and physicians. Another recommendation was to add a mental health component to the state sponsored training of AL/RHC providers.

A third area for discussion relates to the availability and access of services for residents in AL/RHC settings. A disparity in access between urban and rural areas was an area of specific need identified in the survey of facilities administrators and discussed in the work group sessions. A significantly higher percentage of facilities in urban areas compared to rural areas reported that they frequently or very frequently refer residents with depression or anxiety disorder to a geriatric psychiatrist (52.8% versus 25.5%). Discussion at the work group sessions confirmed the disparity in access between rural and urban AL facilities. Further, facilities that had access to an aging specialist were also significantly more likely to refer residents with depression or anxiety disorder to a geriatric psychiatrist. Recommendations by the workgroup to address rural and urban disparities included improvement of transportation services in rural areas to mental health providers and geriatric specialists and the development of mobile screening and mental health services to increase older adults' access to these services. Additionally, work participants stressed the need to secure additional state and federal funding to pay for and increase access to mental health services for older adults.

In conclusion, this study found that the prevalence of mental illness among older adults who reside in assisted living facilities is higher than among community dwelling

older adults in general. According to facility administrators, participating facilities did not have sufficient training or knowledge of mental health issues pertaining to older adults. Further, awareness of community based mental health services and referral rates for these services were very low. Finally, access to community-based mental health services was a barrier for AL/RHC facilities in rural areas. These findings suggest there is a need for increased education and outreach to AL/RHC staff, and increased collaboration between AL/RHC staff, physicians, and community mental health center staff. Increased state interest and support of the mental health needs of older adults is warranted. The Retirement Research Foundation may want to explore these issues further. The design and testing of educational interventions for AL/RHC staff based on the recommendations of the work group sessions is a logical next step. Such a project would serve to assist older adults to age in place and be of great value to AL/RHC providers, and CMHC directors and staff.

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Appendices

Appendix A

Facility Mental Health Questionnaire

Assisted Living/Residential Health Care Facility Mental Health Questionnaire

We are interested in surveying facility administrators about their residents' mental health needs. Please respond to the mental health questionnaire below.

Resident Mental Health

1. How many of your current residents have the following mental health diagnoses?

	Number of Residents
a. Mood and/or Depressive Disorders	_____
b. Anxiety Disorders	_____
c. Dementia	_____
d. Schizophrenia	_____
e. Bi-Polar Disorder	_____
f. Obsessive-Compulsive Disorder	_____
g. Other (please specify)_____	_____

2. What is the total number of residents with any of the above mental health diagnoses (realizing that some residents listed above may have more than one diagnosis)? _____

3. Of the number of residents documented in question 2 above, how many use psychotropic drugs to treat their mental health condition? _____

4. Of the number of residents with mental health diagnoses that you identified in question #1a as having a mood and/or depressive disorder, how many also have dementia? _____

Facility Factors Related to Mental Health

5. Does any member of the facility's **administrative staff** have specialized training or continuing education in the following areas of mental health? If yes, please indicate whether such training/education is required by the facility for **administrative staff**.

	<u>Training</u>		<u>Required</u>
a. Depression	? Yes ? No		? Yes ? No
b. Anxiety Disorders	? Yes ? No		? Yes ? No
c. Dementia	? Yes ? No		? Yes ? No
d. Other (if yes, please specify)_____	? Yes ? No		? Yes ? No

6. If you responded yes to questions 5a-e please describe the training/education:

7. Does any member of the facility's **direct care staff** have specialized training or continuing education in the following areas of mental health? If yes, please indicate whether such training/education is required by the facility for **direct care staff**.

	<u>Training</u>		<u>Required</u>
a. Depression	? Yes ? No		? Yes ? No
b. Anxiety Disorders	? Yes ? No		? Yes ? No
c. Dementia	? Yes ? No		? Yes ? No
d. Other (if yes, please specify)_____	? Yes ? No		? Yes ? No

8. If you answered yes to questions 7a-e, please describe the training/education:

9. How much extra staff time and attention is required by residents with the following mental health conditions? (Place a ? in the appropriate box). Please use the following response categories where **0 =None, 1= A Little, 2 = Some, and 3=A Lot.**

	0 None	1 A Little	2 Some	3 A Lot
a. Anxiety				
b. Depression				
c. Dementia/Alzheimer's Disease				
d. Bi-Polar Disorder (Manic-Depression)				
e. Schizophrenia				
f. Substance Abuse				

10. Listed below are various mental health conditions and needs that a potential resident of assisted living may have. For each, please indicate whether your facility would typically admit a person with the specified mental health condition.

Resident Need or Condition

Admit?
(Circle one)

a. Has a diagnosis of mood and/or depressive disorder	Yes	No
b. Has a diagnosis of anxiety disorder	Yes	No
c. Has a diagnosis of dementia	Yes	No
d. Has been diagnosed with any other mental illness	Yes	No
e. Has a behavior problem as a result of a mental illness	Yes	No
f. Needs psychotropic medication monitoring by an RN	Yes	No
g. Requires specialized services due to a mental illness	Yes	No

11. Listed below are various needs and conditions that a resident of assisted living may develop after being admitted to an assisted living facility. For each, please indicate whether your facility would typically discharge a resident who develops a mental health condition or need.

Resident Need or Condition

Discharge?
(Circle one)

a. Has a diagnosis of mood and/or depressive disorder	Yes	No
b. Has a diagnosis of anxiety disorder	Yes	No
c. Has been diagnosed with dementia	Yes	No
c. Has been diagnosed with any other mental illness	Yes	No
d. Has a behavior problem as a result of a mental illness	Yes	No
e. Needs psychotropic medication monitoring by an RN	Yes	No
f. Requires specialized services due to a mental illness	Yes	No

Mental Health Services

12. Who is responsible for identifying and responding to resident mental health needs in your facility? Please check all that apply.

- Administrator Social worker
- Nurse Nurse assistant
- Other designated staff person (please specify) _____

13. If your facility conducts a diagnosis screening for any of the following mental health conditions, please indicate for each condition, when such diagnosis screening is conducted.

Screening Timing

Mental Health Condition	Pre-			
	Never	admission	Quarterly	Annually
Other				
a. Depression	?	?	?	? ? ?
b. Anxiety Disorder	?	?	?	? ? ?
c. Other (if yes, please specify) _____	?	?	?	? ? ?

14. If yes to questions 13a-c, please describe the type of screening method/instrument used.

15. What services are available *within your facility* for residents with the following mental health problems/illnesses?

- a. Depression _____
- b. Anxiety Disorder _____
- c. Other Mental Health Problems _____

16. What services are available in the *local community* for residents with the following mental health problems/illnesses?

- a. Depression _____
- b. Anxiety Disorder _____
- c. Other Mental Health Problems _____

17. Listed below are a variety of professionals and agency services that an older adult with depression may use. Please indicate how **frequently** your facility refers residents with depression to such professionals and agency services treatments **in the last 6 months** by placing a **check mark** in the appropriate box.

Professionals and Agency Services	Residents with Depression		
	Infrequently	Frequently	Very Frequently
Community mental health center outpatient services			
Primary care physician			
Geriatric psychiatrist			
General psychiatric care			
Individual therapy			
Group therapy			
Adult day treatment			
Other (please explain) _____			
None			
Not Applicable			

18. Listed below are a variety of professionals and agency services that an older adult with anxiety disorder may use. Please indicate how **frequently** your facility refers residents with anxiety disorder to such professionals and agency services treatments **in the last 6 months** by **marking** the appropriate box.

Professionals and Agency Services	Residents with Anxiety Disorder		
	Infrequently	Frequently	Very Frequently
Community mental health center outpatient services			
Primary care physician			
Geriatric psychiatrist			
General psychiatric care			
Individual therapy			
Group therapy			
Adult day treatment			
Other (please explain) _____			
None			
Not Applicable			

19. What barriers do you encounter in meeting the mental health needs of residents in your facility with mental health needs (with specific attention to depression and anxiety disorder)?

20. In the table below, **please indicate the number of residents** in your facility with either mood and/or depressive disorders or anxiety disorders that use the following services/treatments **in the last 6 months.**

Services and Treatments	Diagnosis	
	Mood and/or Depressive Disorders	Anxiety Disorders
Community mental health center outpatient services		
Geriatric psychiatrist		
General psychiatric care		
Individual therapy		
Group therapy		
Adult day treatment		
Drug therapy		
Other (please explain) _____		
None		
Not Applicable		

21. What types of supports or services would be useful to your facility's efforts to address residents' mental health needs?

Facility Characteristics

22. How many direct care staff full time equivalents (e.g., 40 hours a week) do you have working in a 24-hour day? _____
23. How many social worker full time equivalents do you have working in a 24 hour day? _____
24. How many licensed nurse full time equivalents do you have working in a 24 hour day? _____
25. What is the resident capacity of your assisted living/residential health care facility? _____
26. What is the current resident occupancy in your assisted living/residential health care facility? _____
27. How many years has your facility been in operation? _____ years _____ mos.

Appendix B

Resident Profile Form

Contact the OALTC office at roxanner@ukans.edu to request a copy of this appendix.

Appendix C

Resident Functional Capacity Screen

Contact the OALTC office at roxanner@ukans.edu to request a copy of this appendix.

Appendix D

Resident Outcome Form

Contact the OALTC office at roxanner@ukans.edu to request a copy of this appendix.

Appendix E
Questions for Work Group Break Out
Session

**Meeting the Mental Health Needs of Elders in Assisted Living:
Community and Facility Factors:**

Questions for Work Group Break Out Sessions

Question 1: Survey results indicated that 30% of facilities do not conduct any type of mental health screening and 25% only conduct a cognitive screening upon admission using the state mandated resident functional capacity screening. **What are the implications for diagnosis and treatment of residents' mental health needs?**

Probe – **What are some reasons why screening and diagnosis are not conducted?**

Question 1a. 45% of respondents to our survey are providing some type of mental health diagnosis and screening. **How is screening and diagnosis linked to intervention and treatment of mental health needs?**

Probe – **Are there any examples of how diagnosis has led to meeting the needs of older adults with mental health needs (e.g., successful integration of residents)?**

Question 2: In an initial analysis of the data, we noted that the majority of facilities have residents with depression or anxiety disorder and that 45% of respondents reported that they had access to a CMHC. Yet, we also noted that only 16.5% of respondents who had residents with a diagnosis of either depression or anxiety disorder actually referred their residents to a CMHC. **What factors explain a lower than expected referral rate to a CMHC?**

2.a. What is the referral process (e.g., who refers residents to agencies and professionals who provide mh services)?

Question 3: Approximately 75% of respondents who had residents with a diagnosis of either depression or an anxiety disorder indicated that they frequently or very frequently refer residents with mental health needs to the primary care physician, who, in general, is not trained to treat psychiatric needs. **What explains this referral pattern? Is this an effective first step to helping elders access mental health services?**

Question 4: We found that approximately 40% of respondents reported that residents have access to mental health professionals in their facilities (e.g., mental health professionals on staff or mental health professionals visit regularly), meaning half of the facilities do not. **What factors facilitate access to mental health professionals? What factors impede access to mental health professionals?**

Question 5: Approximately 20% of respondents recommended additional staff training to meet the mental health needs of residents. **If current training is not adequate, what additional mental health training is needed? What were the difficulties in meeting these training needs?**

Question 6: A number of barriers to accessing mental health services were identified (e.g., lack of availability, transportation, and trained mental health providers) by 20% of respondents. In addition, 22% of respondents indicated denial or stigma on behalf of family and/or residents was a barrier to meeting the mental health needs of their residents. **What are your recommendations for addressing these specific barriers?**

6a. Are there policy changes that are needed to implement these recommendations?

Question 7: Approximately 20% of respondents recommended bringing community mental health services to their facility. **What are some innovative ways to offer community mental health services to older adults living in assisted living environments?**

Question 8: **Is there anything that we have not asked about but that is important to consider in devising strategies to increase access and availability of mental health services for older adults? Are there other strategies to increase access and availability of mental health services for older adults?**

Appendix F
Excerpts from Grant Analysis Narrative

Next Steps

As a result of this study, made possible through funding by the Retirement Research Foundation (RRF), the OALTC submitted and has been granted, a contract with the Kansas Department on Aging and Social and Rehabilitation Services, to do research on the CMHC referral process and to pilot mental health training of AL direct care staff and Area Agency on Aging (AAA) case managers. The project is a three-year research study.

OALTC plans to submit a grant proposal to the RRF in February 2003, to design and test educational interventions for AL/RHC staff based on the recommendations of the work group sessions.

The OALTC also plans to submit an National Institute of Mental Health (NIMH) grant with researchers from other states to further examine individual, community and facility factors, including the diagnosis of mental illness, particularly depression and anxiety in the absence of dementia, that influences residents' health status and ability to age in place.

Dissemination Activities

A power point presentation and handout of the survey findings was disseminated at the 2002 workgroup session to the 24 participants. An additional 20 Kansas Mental Health and Aging Coalition members received the handout of the survey findings.

Three papers related to the RRF study were submitted as part of a symposium for the November 2002 annual meetings of the Gerontological Society of America (GSA). We plan to submit all three papers for publication in peer-reviewed journals. The first

manuscript will focus on the findings from the re-analysis of the longitudinal data. This manuscript will be submitted to the *Journals of Gerontology, Social Sciences*. Other journals of interest for article submission include: *The Gerontologist, The Journal of Mental Health and Aging, The Journal of Housing for the Elderly, The Journal of Aging and Social Policy*, and the *American Journal of Public Health*.

Additional Dissemination Activities Planned

A copy of the Final Report submitted to the Foundation will be distributed to all AL/RHC providers in Kansas (N=200), CMHC directors (N=30), the Kansas Mental Health and Aging Coalition members (N=30), as well as all work group participants (N=24). We also plan to prepare a policy brief for the state legislature to disseminate by January 2003. Both the final report and the policy brief will be downloadable on the OALTC website (www.oaltc.ku.edu) to facilitate use of the information by researchers, advocacy groups, aging professionals and older adults.

In addition, the report will be listed with the GSA Assisted Living Special Interest Group's (AL-SIG) compilation of available assisted living research. Having the RRF report on this list will give it wide exposure in the research and academic community, as the GSA AL-SIG has more than 500 members on the list serve.

We also plan to present the study findings at the Kansas Governor's Conference on Aging in May 2003, if the paper submission is accepted. In addition, we plan to contact Bob Mollica to request that he include our study in the policy brief he edits for the National Academy for State Health Policy.

Pending Grants and Contracts

There are no pending grants or contracts. However, see the section titled *Important Findings & Outcomes*, above, for information about grants received as of August 1, 2002, and the section above titled *Next Steps* for future projects related to this research.

New Organization Contacts

The OALTC research team has traditionally focused on direct collaboration with state policymakers and building relationships with these policymakers so as to implement policy based on our research findings. The RRF funding for this research project enabled our research group to continue building working relationships with the state and other key advocacy and policy organizations that serve older adults, such as the Mental Health and Aging Coalition and Assisted Living Federation of America-Kansas Chapter. In addition, we were able to build upon existing relationships with AL/RHC providers in the state by conducting survey research and hosting a statewide focus group. We also were able to make new connections with CMHCs in the state. These organizational connections will continue to expand during the next year, when we will facilitate mental health training in AL/RHCs and AAAs.

Financial Report

This information will be forthcoming when all the grant monies have been spent. The original budget, the amount actually spent and any variance or alterations will be explained.