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What happens behind closed doors? Investigating care practices in nursing home and assisted living memory care units

Amy E. Elliot[1,*], John R. Bowblis[1,2], Ian Nelson[1], Heather Menne[1,3]

[1]Scripps Gerontology Center, Miami University, Oxford, OH 45056, United States
[2]Department of Economics, Miami University, Oxford, OH 45056, United States
[3]Department of Sociology and Gerontology, Miami University, Oxford, OH 45056, United States
*Corresponding author: Scripps Gerontology Center, Miami University, Oxford, OH 45056, United States. Email: elliot57@miamioh.edu

Abstract

In the United States, long-term care providers, such as nursing homes and assisted living communities, are meeting consumer demand through housing and care options designed to support the growing population of people living with dementia. One approach to providing dementia care is the development of "memory care units" within existing nursing homes and assisted living communities. Memory care units provide a setting more tailored to the cognitive and functional abilities of these individuals. There is emerging evidence about the optimum strategies for memory care environments; however, little is known about the implementation, prevalence, and quality of practice—and environment-based strategies—in memory care units. This article provides insight into the prevalence of memory care unit practices using data from Ohio. The analysis points to policy and practice opportunities to address the quality of life and care for people living with dementia.

Key words: long-term care; dementia; nursing home; assisted living; memory care unit; memory care practices.

Introduction

Alzheimer's disease and related dementias are neurological conditions currently impacting an estimated 50 million people worldwide.[1] Symptoms of dementia include cognitive difficulties, such as issues with memory loss and communication, often advancing to agitation, depression, wandering, and anxiety that can significantly affect an individual's quality of life.[2] Whether from increased awareness,[3] diagnostic tools,[4] or screening,[5] more individuals are being diagnosed with dementia. As a result, family members and consumers are seeking services and supports tailored to individuals with cognitive impairment associated with dementia. Currently, many older Americans in the United States receive these services in nursing homes and assisted living communities, with at least 40% of the nursing home and assisted living population living with dementia or cognitive impairment.[6,7]

One approach that nursing homes and assisted living communities have adopted to provide specialized care for persons with dementia is to develop "memory care units." Memory care units are dedicated areas designed to focus on cognitively impaired individuals in a more specialized environment. Since the needs of residents with dementia may vary from other clinical concerns, memory care units provide a setting more tailored to the cognitive and functional abilities of these individuals. This could include modifications to the physical environment, specialized supportive practices, and additional training for staff, all with a primary goal of enhancing the quality of life and well-being of individuals living with dementia.[2]

Memory care units are common and growing in popularity. According to the National Investment Center (NIC), inventory of memory care units at any property type increased by over 46% from 2015 to 2020 based on the geographic markets tracked through NIC analytics.[8] And, memory care units are expensive, with an average private-pay annual price of $73 920.[9]

It is unclear whether memory care units provide any additional services or are better quality relative to being in a general long-term care setting.[10-12] Differences between assisted living and nursing home reimbursement could also impact memory care units. While the primary payment source for assisted living is "private pay" residents using out-of-pocket resources,[7] Medicaid is the primary payer for long-stay residents in nursing homes.[13] This could create an equity issue as environmental and staffing resources may be more abundant in assisted living communities where access could be determined by wealth. Differences in regulations and oversight could also impact variation in the policy and practices of memory care units, since only nursing homes are subject to federal oversight through the Centers for Medicaid and Medicare Services (CMS).

In recent years, national organizations have developed recommendations and guidelines to support effective implementation of memory care. For example, The Joint Commission, a nonprofit organization that accredits health care organizations and programs, has developed an optional Memory Care Certification to include requirements in areas such as the following: (1) individualized resident-centered programming, (2) advanced staff training in dementia care, (3)

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environmental recommendations to maximize abilities, (4) dementia care culture strategies (eg, assessing and prioritizing resident preferences), and the (5) provision of support groups.[14] In addition, the Alzheimer's Association has developed guidelines that include practices that encompass individualized care, including the need to "get to know the person," "maximize independence," and "personalize care to meet individual needs and preferences."[15]

In support of these recommendations, a number of person-centered care practices have been identified as positively affecting individuals living with dementia.[16] For example, consistent assignment of staff is an acknowledged person-centered care practice where staff can develop relationships with residents through consistent day-to-day interactions.[17] For people living with dementia, this can then help care partners to integrate person-centered care into each individual's daily routines, which can also support nonpharmacologic methods to address emotional distress and boredom.[18] In terms of environmental recommendations, innovative models such as the European Dementia Village model have been observed to provide environments supportive of residents' autonomy with full access to neighborhood amenities such as restaurants, gardens, and walks to foster a strengths-based vs deficit-based individualized care planning approach.[19]

While these tenets embody a more evolved system of knowing each person, emerging studies support a better understanding of care delivery,[6] including multiple facets of the physical and social environment that impact the well-being of people living with dementia.[20] Yet, nursing homes and assisted living communities are not typically required to report the practices that they use in memory care units. There are currently no federal nursing home regulations specific to memory care units, and state-level regulation varies considerably,[15] with some states having regulations that are not specific to memory care units but are targeted towards caring for people with dementia.[21] Therefore, little is known about the implementation, prevalence, and quality of practice- and environment-based strategies in memory care units. Using a unique survey of most of Ohio's nursing homes and assisted living communities, this study examines the practices that memory care units use to care for residents living with dementia.

Data and methods

To examine the care practices of memory care units, this study utilized data from the 2021 Biennial Survey of Ohio Long-Term Care Facilities.[22,23] For more than 30 years, the Biennial Survey was conducted on behalf of the Ohio Department of Aging every other year. As a common element of long-term care facilities, memory care units have been included in the survey since 2017. Each year's survey was developed with input from an advisory board of providers, state policymakers, and industry representatives, with oversight from academics who specialize in long-term care research. The survey and any additions/changes throughout the years have been field tested.

Participation in the survey was considered mandatory for all long-term care facilities based on section 173.44 of the Ohio Revised Code.[24] The survey was distributed to the administrator of every licensed nursing home and assisted living community in the state, who is responsible for providing self-reported responses with the help of other staff. Administrators completed the survey online. The survey provided instructions for responses, helpful tips, and had a helpline if they had any questions on how to complete the survey. For 2021, the Biennial Survey had a response rate of 83% for nursing homes and 81% for assisted living communities, which was historically lower than normal due to the COVID-19 pandemic.

For this study, we restricted our analysis to survey responses for providers that reported having a memory care unit. This was defined as having responded affirmatively to the facility having a "distinct unit, wing, or floor that is designated as a memory care unit? (A memory care unit could be called a dementia, Alzheimer's, or memory care unit)." Of the total 959 nursing home respondents, 207 reported having a memory care unit (of which 10 were excluded from the analysis for missing responses). Of the total 791 assisted living respondents, 170 reported having a memory care unit (of which 5 were excluded from the analysis for missing responses). This resulted in an analytic sample of 20.5% of Ohio nursing homes ($n = 197$) and 20.8% of assisted living communities ($n = 165$) with a memory care unit in the study.

Memory care unit care practices

The Biennial Survey asked nursing homes and assisted living communities identical questions related to their memory care units. These questions were broken into 3 main topics: (1) memory care unit care practices and policies, (2) training requirements for memory care unit staff, and (3) physician monitoring.

Among respondents with a memory care unit, the Biennial Survey asked respondents to indicate all care practices and policies (out of 14 care practices and policies included in the survey) that were used by the memory care unit. All care practices and policies that were checked by the respondent were coded as a "yes" response while all unchecked were coded as a "no" response. Care practices and policies included requirements for categories of admission, elopement policies (eg, locked unit, alarms), environment, staffing, and individualized approaches. We also examined the training of staff who are assigned to the memory care unit. These practices included whether special memory care training was required before working on a memory care unit, whether specialized memory care unit training was required within the first 14 days of working on the unit, and whether the provider required annual continuing education specific to memory care. Similar to the care practices and policies, all of these outcomes were coded as "yes" or "no" responses.

Finally, the Biennial Survey asked 2 questions regarding the monitoring of residents in the memory care unit by physicians for (1) psychotropic medication use and (2) behavioral symptoms. For the survey, the term "monitoring" indicated that nursing staff reviewed residents as needed and communicated with physician teams about the conditions of residents to determine whether care plans needed to change. Thus, monitoring did not indicate that the physician was physically in the building but instead referred to physicians' awareness and review of resident cases. Both questions asked for the frequency of monitoring by the physician, with response categories including the following: at least 2–3 times per week, weekly, monthly, quarterly, semi-annually, yearly, or no monitoring is done by a physician.

Analysis

To examine the prevalence of each care practice and policy, as well as training requirements, we calculated the proportion of providers in which the practice and training requirement was applicable. These proportions were calculated separately for nursing homes and assisted living communities. For monitoring by

physicians, the frequency of each response was calculated separately for nursing homes and assisted living communities. To test whether there was a difference in responses between nursing homes and assisted living communities, chi-square tests were conducted. If memory care units in nursing homes and assisted living units were adopting similar practices and policies, then these chi-square values would not be statistically significant.

Results

Memory care units are common in Ohio (Table 1), with 20.5% of nursing homes and 20.8% of assisted living communities reporting having a memory care unit. There were estimated to be over 5021 memory care beds in Ohio nursing homes, with an occupancy rate of 77.3%. Assisted living communities had 4222 memory care rooms, with an occupancy rate of 69.3%. Because census information was collected during the height of the pandemic, occupancy rates were lower than those found in earlier versions of the Biennial Survey.

Table 2 presents the proportion of nursing homes and assisted living communities that use specific care practices in their memory care units. Out of the 14 different care practices examined, only 3 were found to be statistically different between nursing homes and assisted living communities. These 3 practices are in the admissions and staffing categories. Assisted living communities were more likely to require a physician recommendation for admission (74.2% vs 58.2%; $P < .001$). For staffing, assisted living communities were less likely to consistently assign the same nursing staff to the memory care unit (87.9% vs 94.9%; $P = .066$) but had higher staffing levels within the memory care unit (78.8% vs 56.7%; $P < .001$). Approximately 50% of providers reported attempting to consistently assign the same staff members to the same residents in the memory care unit.

In the care practices areas of elopement, environment, and individualized approaches, there were no statistical differences in the adoption of care practices by nursing homes and assisted living communities. To deter elopement, the majority of memory care units were locked (89%) and used elopement alarms (73%). Memory care units in nursing homes and assisted living communities were most likely to create environments that are beneficial to residents by displaying meaningful objects (85.1% nursing home vs 83.6% assisted living community), having a secure outdoor area (79.4% vs 83.0%), having visual cues or landmarks to assist with wayfinding (73.2% vs 74.5%), and eliminating environmental triggers (68.0% vs 63.0%). Finally, the majority of memory care units had individualized therapeutic recreation plans (68.0% vs 65.5%), but less than half (37.1% vs 43.6%) adopted care approaches that focus on the strengths of the individual (as opposed to their deficits).

Training of nursing staff is important in caring for residents with dementia, and Table 3 reports the training policies in memory care units. Only 53.6% of nursing homes and 60.0% of assisted living communities required special memory care or dementia training, in addition to standard training, to start work on the unit. However, specialized training within the first 14 days (53.1% vs 75.8%; $P < .001$) and annually (84.0% vs 91.5%; $P = .002$) was more common in assisted living communities.

Finally, Table 4 reports on the monitoring of psychotropic medications and behavioral symptoms by physicians in memory care units at nursing home and assisted living communities. Monitoring occurred more frequently in nursing homes,

Table 1. Characteristics of Ohio nursing home and assisted living memory care, 2021.

Characteristics	Nursing home	Assisted living
Number of facilities in Ohio	959	791
Percentage with an MCU	20.5	20.8
Number of MCU beds/rooms	5021	4222
Average number of MCU beds/rooms per facility	25.5	22.8
Occupancy rate (%)	77.3	69.3

Staffing data were collected as part of the Biennial Survey and is reported in another publication.[25] Source: Authors' calculations of data from the 2021 Biennial Survey of Ohio Long-Term Care Facilities.
Abbreviation: MCU, memory care unit.

Table 2. Proportion of reported Ohio memory care practice by setting, 2021.

Practice type	Nursing home ($n = 197$)	Assisted living ($n = 165$)	*P*, chi-square
Admission			
Physician recommendation required for admission	58.2%	74.2%	<.001***
Elopement			
Locked unit	89.2%	89.1%	.875
Written procedures to follow in the event of resident elopement	93.3%	89.7%	.371
Elopement alarms	73.2%	73.3%	.792
Room/unit alarms	50.5%	45.5%	.388
Environment			
Visual cues or landmarks in the physical environment to assist with wayfinding	73.2%	74.5%	.690
Environmental triggers are studied and eliminated	68.0%	63.0%	.322
Display (or encouraging residents to display) meaningful objects in resident/patient personal areas	85.1%	83.6%	.688
Secured outdoor area	79.4%	83.0%	.193
Staffing			
Consistent nursing staff assigned to memory care unit	94.9%	87.9%	.066
Consistent nursing staff assigned for each resident within memory care unit	50.0%	53.3%	.365
Higher staffing levels within memory care	56.7%	78.8%	<.001***
Individualized approaches			
Individualized therapeutic recreation plan	68.0%	65.5%	.786
Strength-based vs deficit-based approaches	37.1%	43.6%	.188

Source: Authors' calculations of data from the 2021 Biennial Survey of Ohio Long-Term Care Facilities. *** <0.01

Table 3. Proportion of reported Ohio memory care training requirement by setting, 2021.

Training requirement	Nursing home ($n = 197$)	Assisted living ($n = 165$)	*P*, chi-square
Required special memory care training to start work on unit	53.6%	60.0%	.352
Special training is required in first 14 days	53.1%	75.8%	<.001***
Requires annual continuing education and training on best practices	84.0%	91.5%	.002**

Source: Authors' calculations of data from the 2021 Biennial Survey of Ohio Long-Term Care Facilities. ** <0.05; and *** <0.01 .

Table 4. Proportion of reported Ohio memory care timing of physician monitoring by setting, 2021.

	Nursing home ($n = 197$)	Assisted living ($n = 165$)	*P*, chi-square
Timing of physician monitoring of psychotropic medication use			
At least 2–3 times per week	9.4%	5.8%	<.001***
Weekly	31.8%	21.4%	
Monthly	51.0%	42.2%	
Quarterly	7.8%	21.4%	
Semi-annually	0.0%	2.0%	
Yearly	0.0%	2.0%	
No monitoring is done by a physician	0.0%	5.2%	
Timing of physician monitoring of behavioral symptoms			
At least 2–3 times per week	18.8%	8.5%	<.001***
Weekly	45.8%	43.8%	
Monthly	30.7%	27.5%	
Quarterly	3.7%	9.8%	
Semi-annually	0.0%	0.0%	
Yearly	0.0%	1.3%	
No monitoring is done by a physician	1.0%	9.2%	

Chi-square *P* values refer to all timing options for physician monitoring. *** <0.01 Source: Authors' calculations of data from the 2021 Biennial Survey of Ohio Long-Term Care Facilities.

with approximately 92% of nursing homes having a physician monitoring medications monthly or more frequently, compared to approximately 69% in assisted living communities. The same is true for physicians monitoring behavioral symptoms, with almost 95% of nursing homes having a physician monitoring behavioral symptoms monthly or more often, compared to approximately 80% of assisted living communities.

Discussion

As the number of older Americans with dementia continues to grow, residents and their family members have turned to memory care units in nursing homes and assisted living communities. One challenge with understanding the care provided in memory care units has been the dearth of existing data. Our study, which relied on a unique survey of most memory care units in Ohio nursing homes and assisted living communities, found that the practices and policies in these settings vary in some important dimensions, but there are also a number of similarities.

In terms of differences, assisted living communities were more likely than nursing homes to require physician approval for admission into a memory care unit, but once admitted, physician monitoring of residents for behavioral symptoms or psychoactive medication utilization was less frequent. This is highly relevant to daily care as behavioral symptoms associated with dementia are challenging and can require consistent observation to support each resident's quality of life. Additionally, the risks of prescribing psychotropic medications for people with dementia are well documented, and close monitoring is considered instrumental to mitigate the potential negative effects of these medications.[26] It is important to note that, while CMS collects data on antipsychotic use for nursing homes, there are no similar data collected for assisted living communities in Ohio.

An additional difference between nursing homes and assisted living communities was found around nursing staff. Assisted living communities were more likely than nursing homes to report having policies that require higher nursing staff levels in the memory care unit relative to the rest of the community. This policy is confirmed with data from a recent study, which found that there were more staff per resident in the overall nursing home compared to assisted living communities, but within the memory care unit, assisted living communities had more staff per resident.[25] Specialized dementia-based training is also known to have benefits that improve care provided to residents.[18,27,28] We found that memory care units in assisted living communities were more likely to require specialized training within the first 14 days of starting on the memory care unit and as part of continuing education and training on an annual basis. This could be due to assisted living communities investing more in staff training, or that nursing homes already incorporate this training into their general training and competency requirements for working anywhere in the facility. Regardless, our findings suggest that memory care units in assisted living communities are staffing in a manner that may warrant their higher private-pay prices.

Consistently assigned staffing was also adopted differently across settings. We found that assisted living communities were 7 percentage points less likely than nursing homes to have policies where the same staff members are consistently assigned to the memory care unit. Even so, about half of memory care units in both settings consistently assigned the same nursing staff member to the same residents. Clearly, more can be done to consistently assign staff to the same residents.

Outside of admissions policy, monitoring by physicians, and staffing, adoption rates of practices and policies in memory care units were similar in both settings. For example, the rate of adoption of individualized care approaches was similar in both nursing home and assisted living settings, but adoption could be higher. Only approximately two-thirds of memory care units in both settings used individualized therapeutic recreation plans, and only 4 out of 10 had individualized care approaches that focused on the strengths of the individuals as opposed to being built around their deficits or limitations. Most memory care units also displayed meaningful objects to residents, although approximately 1 out of 3 did not study and eliminate environmental triggers for residents. These individualized approaches to care and environmental components can have positive effects on individuals living with dementia[29-31] and, hence, are important practice considerations for memory care to maintain and enhance quality of life for residents.

Nursing homes and assisted living communities were also found to be similar in their adoption rates of practices and policies around elopement. Approximately 89% of memory care units were locked, with 73% using elopement alarms, the adoption of which would seem to indicate a high priority for implementation of practices related to safety. Yet, a growing number of studies have suggested that locked units, as a design strategy, do not support the physical and psychosocial well-being of individuals living with dementia.[16,32] This is important to note in conjunction with the practices that Ohio memory care units reported, as the practices that have been more frequently adopted do not always reflect the latest knowledge and understanding of beneficial supports for people living with dementia.

This study has several limitations. First, the 2021 Biennial Survey was self-reported and there may be some erroneous responses. However, the information in the Biennial Survey is only reported in aggregate format and is not used to assess individual providers; therefore, there is little incentive for respondents to not be truthful. Second, the outcomes were developed to be comparable across nursing homes and assisted living communities and only addressed whether certain practices were utilized and does not address the extent to which practices were followed or adhered to by all staff or were applicable to all residents. This limitation is heightened by the fact that the complexities of resident comorbidities and other organizational factors may confound our findings. For example, staffing instability at the nursing home or assisted living level is a prominent confounder that negatively impacts quality, with flow-down factors to memory care.[33] In addition, the 2021 Biennial Survey was conducted during the COVID-19 pandemic, which could have impacted practices and policies being implemented at that time.

Finally, the Biennial Survey is Ohio-based and assisted living communities are regulated at the state level. For example, there are estimated to be 350 unique types of licensures and certifications to oversee assisted living environments across states,[34] and this variation can lead to different prevalence rates of practice adoption in memory care units across states.[6] Ohio also only had regulations related to the training of staff caring for individuals with dementia, but did not have memory care–specific regulations at the time of the 2021 survey. The regulations related to the training of staff also only included guidelines on broad topics (ie, overview of dementia, foundations of effective communication in dementia care, current best practices in dementia care, and recommended behavior management techniques) without specific guidelines for the amount or types of training required. Therefore, our results may not be generalizable to memory care units in other states that have memory care–specific regulations or more detailed regulatory guidelines. Regardless, to our knowledge, the Biennial Survey is among the most comprehensive survey available regarding the care practices of memory care units for most nursing homes and assisted living communities operating in any state.

Conclusion

To ensure that residents of memory care units receive the best quality of care and life as possible, long-term care providers need adequately trained staff in sufficient numbers and to adopt care practices and policies that are person-centered. Regulation that explicitly focuses on memory care may be important to ensure that these practices and policies are adopted. Currently, assisted living communities are regulated at the state level, and these regulations vary significantly across states.[35] Nursing homes are regulated at the federal and state levels, but nursing home practices are primarily driven by the CMS. Yet, many states and CMS do not have regulations that are specific to memory care units.[36]

As the number of older individuals living with dementia grows, long-term care providers will continue to invest in memory care units or entire facilities devoted to memory care. Yet, the policies and practices that will assure the adequate support of these residents are unclear and the extreme variation in oversight and available data means that answers are not forthcoming. The path forward for memory care requires a better understanding of which practices and policies providers adopt and how those choices impact the care of residents living with dementia. Policies and systems that promote data collection from memory care units and the development of implementation and outcome measures would be instrumental. However, this type of intentional policy-driven growth would require states, or the federal government, to increase their oversight of assisted living communities.

Supplementary material

Supplementary material is available at *Health Affairs Scholar* online.

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Conflicts of interest

Please see ICMJE form(s) for author conflicts of interest. These have been provided as supplementary materials.

Data availability

The data used in this study contains identifiable information and is not publicly available.

Notes

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