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Promoting and Highlighting Research in Assisted Living to Inform Practice and Policy



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A B S T R A C T

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Although assisted living has become the largest residential provider of long-term care, the amount of research conducted in nursing homes far surpasses that conducted in assisted living; therefore, it is important to both increase the amount of assisted living research and to highlight research findings that can inform practice and policy. This article presents a summary of 10 academic articles published in 2024 considered to be the most innovative, methodologically rigorous, and relevant to assisted living practice and policy, as determined by experts in the field. All were recognized as finalists for the 2025 CEAL@UNC Research Award of the National Center for Excellence in Assisted Living, whose mission is to advance the well-being of the people who live and work in assisted living through research, practice, and policy. Together, the 10 articles address resident care and outcomes, caregivers, and assisted living in the context of other supportive and long-term care services and settings (ie, memory care, hospice, and nursing homes). They highlight the importance of data to inform practice and policy in assisted living and present research findings across numerous areas related to modifiable components of practice and policy.

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Assisted Living Research in 2024

A PubMed search of academic articles written in English identified through the search terms “nursing + home” and “2024” yields 5864 articles, whereas a search using “assisted + living” and “2024” yields a minuscule fraction of that number—232 articles, of which many refer not to residential assisted living settings but rather to technologies designed to enable “assisted living” independently within the home. Given that assisted living is now the largest provider of residential long-term care in the country, serving nearly one million older adults,¹ and that assisted living communities are highly variable in terms of size, services, and regulatory standards, the paucity of research in this area is of concern. More so, even the research that does exist is neither often readily available nor translated for those who would most benefit from the findings, thereby limiting its impact beyond academic circles—and even then, some within

academia are unable to access valuable research because of publication paywalls. This article has a 3-fold purpose: to bring awareness to the limited research in assisted living, to demonstrate the promise and impact of that research, and to highlight findings to inform practice and policy in modifiable areas.

Since its founding in 2003, the national Center for Excellence in Assisted Living (CEAL) has been dedicated to advancing the well-being of the people who live and work in assisted living.² Now located at the University of North Carolina at Chapel Hill, CEAL@UNC continues to embrace this mission and the importance of research in promoting evidence-based and evidence-informed practice and policy. As part of a focus to bridge the divide between academia and assisted living practices and policies, CEAL@UNC maintains a publicly accessible listing of the academic articles published since 2022 relevant to assisted living.³ To further promote awareness of especially impactful research, in 2025, CEAL@UNC launched a new initiative, the CEAL@UNC Research Award. This article summarizes the content of the 10 academic articles published in 2024 that were finalists for the award, which together address resident care and outcomes, caregivers, and other supportive and long-term care services and settings (ie, memory care, hospice, and nursing homes). The articles demonstrate the importance of secondary data to inform practice and policy in assisted living as well as focus on care for persons with dementia.

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Selecting and Evaluating Impactful Assisted Living Research

To identify academic articles published in 2024, a PubMed search using the term “assisted + living” (title/abstract) as well as a search of the UNC Libraries’ Articles + platform using the same term was conducted. Eligible articles included those published or otherwise publicly available in a peer-reviewed journal in 2024, written in English, and focused on and having promise to inform assisted living practice and policy in North America (because non-nursing home residential options in other countries often differ from assisted living in the United States and Canada). Also, nominees were included as affiliates in the CEAL@UNC Research Core. Following initial review and outreach to authors, 34 eligible articles went through a dual-phase review process.

In phase one, articles were independently scored by 2 senior members of CEAL@UNC on a scale of 1 (low) to 10 (high) based on their innovation, methodologic rigor, and alignment with the CEAL@UNC mission. Following independent scoring, reviewers met and came to a consensus rank ordering of the articles. The top 10 articles were reviewed by faculty affiliated with CEAL@UNC, who similarly rated them highly.

To determine the recipient, members of the CEAL@UNC Research Core (a group of ≈60 researchers conducting research in or related to assisted living) and the CEAL@UNC Advisory Board (12 national leaders representing the Alzheimer’s Association, American Assisted Living Nurses Association, LeadingAge, National Center for Assisted Living, PHI, Post-Acute and Long-Term Care Medical Association, Workforce Quality Innovations, and other organizations) were invited to review and rate each finalist article; reviewers were not eligible to review an article for which they were an author.

In total, articles were scored by 20 researchers and experts in the field of assisted living from 1 (low) to 5 (high) across 3 categories:

innovation (ie, the research introduces novel approaches, methodologies, or insights), methodological rigor (ie, the research employs a systematic approach using transparent methods to ensure accuracy and thoroughness and minimize bias), and relevance to practice or policy (ie, findings have the potential to be actionable and inform assisted living practice and/or policy).

Following this review, CEAL@UNC presented the 2025 CEAL@UNC Research Award to Hua et al for their work *Changes in nursing levels and injury-related emergency department visits among assisted living residents with Alzheimer’s disease and related dementias*, published in JAMDA.⁴ Their work, and that of the other finalists, can be organized into one of 3 overarching research topics: resident care and outcomes; caregivers; and assisted living in the context of other supportive and long-term care services and settings. Each article is listed in Table 1 and summarized below.

Ten Most Impactful Research Articles Published in 2024

Resident Care and Outcomes

Three finalists—including Hua et al—focused on resident care and outcomes specific to residents living with dementia in relation to nurse staffing, antipsychotic use, and the availability of mental health services. One other finalist studied the impact of natural disaster-related evacuations on all residents.

- *Changes in nursing levels and injury-related emergency department visits among assisted living residents with Alzheimer’s disease and related dementias*. In this award-winning article, Hua et al⁴ addressed injury-related emergency department (ED) visits for assisted living residents with dementia, which result in adverse events, including functional decline,

Table 1
Ten Articles Published in 2024 Related to Assisted Living Considered to Be Most Impactful

Title	Lead Author	Key Focus	Data Type
Resident care and outcomes			
Prevalence and correlates of antipsychotic medication use in Oregon assisted living ⁵	Dys	Overall use and risk of use of antipsychotic medications for residents with dementia	Secondary
Changes in nursing levels and injury-related emergency department visits among assisted living residents with Alzheimer’s disease and related dementias ⁴	Hua	Relationship of nurse staffing to outcomes for residents with dementia	Secondary
Evacuation and health care outcomes among assisted living residents after Hurricane Irma ⁶	Hua	ED and nursing home use following emergency evacuation	Secondary
Assisted living residents with dementia: Disparities in mental health services pre and during COVID-19 ⁷	Temkin-Greener	Well-being and mental health of residents with dementia	Secondary
Caregivers			
The prevalence and benefits of self-compassion among professional caregivers ⁸	Lathren	Well-being of professional caregivers	Primary
A collaborative approach to improving care outcomes for residents in assisted living ⁹	Morgan	Clear shared care goals and communication between residents and caregivers	Primary
Family involvement among Oregon adult foster home residents, 2018-2023 ¹⁰	Tunalilar	The role of family in providing emotional and instrumental support vs for complex care needs	Secondary
Other supportive and long-term care services and settings			
Hospice providers serving assisted living residents: Association of higher volume with lower quality ¹¹	Guo	Hospice intensity in relation to processes, such as team communication and assessment and treatment	Secondary
Transitions to nursing homes among residents of assisted living and community-dwelling home care recipients ¹²	Manis	Benefit of assisted living compared with community care in relation to nursing home placement	Secondary
Do end-of-life outcomes differ by assisted living memory-care designation? ¹³	Wang	Hospice use in memory care compared with general assisted living	Secondary

*This article was determined to be most impactful and so named the 2025 CEAL@UNC Research Award recipient.

delirium, and mortality. While research in skilled nursing homes has shown promising relationships between nurse staffing levels and injury rates, studies have not yet examined the relationship between nurse staffing levels and injury-related ED visits in assisted living. This article used estimated Poisson regression models in a retrospective cohort study design to explore the relationship between nurse staffing levels and injury-related ED visits among 12,144 assisted living residents with dementia in Ohio from 2007 to 2015; findings indicated that an increase of 1 registered nurse hour per resident day was associated with a 53% decrease in injury-related ED visits. The importance of nurse staffing aligns with recommendations that endorse the presence of registered nurse staff in assisted living.¹⁴

- *Prevalence and correlates of antipsychotic medication use in Oregon assisted living.* While antipsychotic medications may be necessary for some assisted living residents with dementia, their use conveys risks, including falls, sedation, and mortality; and, although antipsychotic medication use in long-term care has received growing attention, research specific to assisted living remains limited. To explore this issue, Dys et al⁵ used random intercept regression models to analyze organizational and resident population characteristics from 463 assisted living communities in Oregon from 2017 to 2019. Their findings make the use of antipsychotic medications in assisted living more transparent, finding an average 90-day prevalence of antipsychotic use at 31%, with higher use in for-profit communities, those providing memory care, and those with higher proportions of residents using public funding (ie, Medicaid). Together, their findings offer valuable insights in relation to the types of communities in which to focus efforts to reduce the use of antipsychotic medications.
- *Assisted living residents with dementia: Disparities in mental health services pre and during COVID-19.* Assisted living communities are often under-resourced with regard to providing mental health services, particularly for residents with dementia who are more likely to have depression, anxiety, and behavioral expressions. To explore the use of mental health in assisted living, Temkin-Greener et al⁷ examined mental health service use among 102,758 residents with dementia across 13,400 communities from 2019 to 2020 using a linear probability model with random effects. They found that, on average, only one in 5 residents with dementia had a mental health visit prior to COVID-19, and that prior to and during the pandemic, Black residents and those with dual Medicare/Medicaid eligibility were less likely to receive mental health services compared with white, Medicare-only residents. These disparities were not evident when examining telemedicine visits alone, which increased during the pandemic. Their findings suggest future avenues of exploration related to telemedicine and racial and ethnic disparities in mental health access.
- *Evacuation and health care outcomes among assisted living residents after Hurricane Irma.* Hurricanes are increasing in frequency and intensity, forcing assisted living owners and operators to make difficult decisions about whether to evacuate their communities in the face of an approaching storm. These decisions are further complicated by limited evidence on the health impacts of evacuations on assisted living residents, despite previously reported adverse effects among nursing home residents. Following Hurricane Irma in 2017, Hua et al⁶ used a retrospective cohort design to study 25,130 assisted living residents in Florida, comparing outcomes between those who evacuated and those who sheltered in place via logistic regression models. They found that residents who

evacuated experienced 16% greater odds of ED visits and 51% greater odds of nursing home stays within 30 days of evacuation, although no difference in mortality was noted. Their findings emphasize the importance of considering immediate health risks in emergency preparedness planning.

Caregivers

Three impactful articles focused on outcomes related to family or professional caregivers; 1 study focused on self-compassion in relation to professional caregiver well-being, and 2 examined interactions between residents and caregivers.

- *The prevalence and benefits of self-compassion among professional caregivers.* Professional caregivers (also referred to as direct care workers, nursing assistants, personal care assistants, and by other names) are the backbone of long-term care, providing essential services while facing challenges, including low compensation and related personal financial strain, verbal and physical aggression from residents, and demanding work schedules. Research has shown that self-compassion may improve psychological health, but little is known about how it varies by professional caregiver characteristics. To address gaps in knowledge, Lathren et al⁸ studied 391 professional caregivers from 3 assisted living communities and 10 nursing homes. Using analysis of variance and correlation coefficients, they found that self-compassion was less common among younger, US-born, white staff, and that it related to less anxiety and depression and greater job satisfaction. As workforce shortages persist and communities seek to retain valuable employees, these findings support the development of targeted training and interventions to bolster self-compassion.
- *A collaborative approach to improving care outcomes for residents in assisted living.* As the number of assisted living residents with multiple chronic conditions, functional limitations, and cognitive decline increases, understanding the relationship between residents, health care providers, professional caregivers, and family caregivers is important to quality care. Using grounded theory and the *convoys of care* model to shape their qualitative analysis, Morgan et al⁹ studied the care networks and outcomes of 50 assisted living residents across 8 communities for 2 years, revealing the important role of physicians and midlevel providers. Their work indicated the need for clear, shared care goals and ongoing and effective communication between residents and care convoy members. To support this need, Morgan et al introduced the Provider Assessment of Care Convoy, a tool to assist health care providers in identifying care convoy members, assessing the convoy's functionality, and improving collaboration in care delivery.
- *Family involvement among Oregon adult foster home residents, 2018-2023.* The adverse impact of lockdowns and visitor restrictions on residents' health during the COVID-19 pandemic made clear the importance of family involvement in supporting the well-being of assisted living residents. While much of the existing research on this topic has focused on nursing homes and larger assisted living settings, smaller settings (known as adult foster homes in Oregon) received less attention. In an analysis of 7649 residents across 2027 such communities from 2018 to 2023, Tunalilar¹⁰ used bivariate analysis and multivariate linear regression models to study the dynamics of, and factors associated with, family involvement before, during, and after the COVID-19 pandemic. Findings revealed that family involvement in small communities tended to focus on emotional and instrumental support rather

than complex care needs. Together, the findings suggest the need for targeted interventions to support family involvement, such as transportation assistance and expanded accessibility of virtual visits, particularly for communities in rural settings or housing a high number of residents receiving Medicaid.

Assisted living in the context of other supportive and long-term care services and settings

Three impactful articles examined assisted living in relation to other types of supportive and long-term care services and settings—namely, memory care, hospice, and nursing homes.

- *Do end-of-life outcomes differ by assisted living memory-care designation?* Assisted living communities have become a major provider of long-term residential dementia care, with nearly a quarter offering specialized memory care. While evidence suggests that memory care promotes aging in place, little research has examined end-of-life outcomes for these residents, an important consideration for consumers, policy-makers, and owner/operators. To bolster this knowledge, Wang et al¹³ used inverse probability treatment weighting and 2-part models to study mortality rates and hospice use among 15,152 assisted living residents with dementia from 2016 to 2018. They found that residents in memory care experienced higher mortality rates and greater hospice utilization (often an indicator of quality care at the end of life) compared with residents in general assisted living, suggesting that memory care may serve residents closer to the end of life and that memory care communities may emphasize quality at the end of life over prolongment. This study provides important considerations for those seeking services that align with their end-of-life care needs and preferences.
- *Hospice providers serving assisted living residents: Association of higher volume with lower quality.* Hospice care provides essential comfort and support to residents at the end of life and to those who care for them. However, previous research has questioned the quality of hospice in assisted living, with residents and caregivers reporting lower quality care relative to other long-term care settings. To better understand the nature of hospice providers serving assisted living residents, Guo et al¹¹ analyzed Centers for Medicare and Medicaid and Medicare-related data related to 2877 hospice providers across the United States from 2017 to 2018 using linear probability models. They found that hospice providers serving a higher number of assisted living residents tended to perform worse on quality indicators, such as team communication and assessment and treatment. Findings may explain previously reported quality of care concerns and underscore the need for targeted quality improvement interventions and further research into the nature of hospice providers serving assisted living residents.
- *Transitions to nursing homes among residents of assisted living and community-dwelling home care recipients.* Assisted living communities occupy an important role in long-term care, in part to reduce nursing home transitions for residents with dementia. Manis et al¹² used inverse probability-weighted pooled logistic regression models to examine the likelihood of nursing home transition for nursing home–eligible assisted living (n = 10,012) and community-dwelling home care recipients (n = 131,679) in Ontario, Canada, from 2014 to 2019. They found that assisted living residence was related to a 13% relative decrease in the 5-year risk of transition to a nursing home, affirming the benefits of assisted living.

Implications for Practice, Policy, and Research

In addition to noting the 3 foci that encapsulated all the research articles—resident care and outcomes, caregivers, and assisted living in the context of other supportive and long-term care services and settings—the research presents findings to inform practice and policy in numerous modifiable areas: nurse staffing relates to ED visits¹⁴; characteristics of assisted living communities relate to antipsychotic prescribing⁵; telemedicine may be a platform to reach underserved residents⁷; evacuation policies may have unintended consequences⁵; assisted living staff may benefit from augmented self-compassion⁸; new communication models with health care providers may be beneficial⁹; and family involvement in assisted living may benefit from support such as transportation assistance and virtual visits.¹⁰

The methodologies of the various research also make clear the importance of data to inform practice and policy in assisted living. Primary data provide nuanced and contextual information, as exemplified by 2 of the 3 articles related to the dynamic interactions of caregivers and caregiver self-compassion^{8,9}; however, primary data are costly to obtain, especially for large and generalizable populations. In contrast, secondary data were used in 80% of articles,^{4,6,7,8,11–14} offering a more macro but less context-specific understanding.

While both methodologies present opportunities and challenges, the availability and quality of secondary data related to assisted living remains limited. Medicare data do not comprehensively represent all assisted living residents, and data sets may contain incomplete, biased, or sparse information for those enrolled in Medicare Advantage.^{4,15} Another limitation of Medicare data is its lack of information related to resident-level functional status and symptomatic severity, which is important to better interpret findings, as well as the lack of community-level context, such as staff characteristics, that may explain observed differences.

In addition to data collected by the federal government, several state-specific initiatives have developed data collection efforts focused on assisted living. Examples include the Ohio Biennial Survey of Long-Term Care Facilities, conducted with the Scripps Gerontology Center at Miami University,⁴ and the Oregon Community–Based Care Study, conducted with the Institute on Aging at Portland State University.^{5,10} Such efforts allow researchers to better contextualize health care outcomes and practices with community-level characteristics. However, because of variability in state regulations and licensure categories, the generalizability of these data is limited without comparable data sets from other states and information about the accompanying regulatory context. In addition, many such efforts rely on self-reported data from communities, which, while representing a practical limitation of large-scale data collection, may introduce measurement error absent accompanying auditing and validation.⁴

Other nongovernmental data sources exist, such as the Long-Term Care Data Cooperative, funded by the National Institute on Aging. This provider-led initiative links assisted living electronic health record data with Medicare claims and other data.¹⁶ However, as of January 2026, data from only 806 assisted living communities (less than 3% of the over 30,000 communities operating in the United States¹⁷) were included in the database,¹⁸ although this number will likely increase over time. Another national effort to provide information on assisted living is that of the National Dementia Workforce Study. Funded by the National Institute on Aging, this annual, large-scale study collects data relevant to community practitioners, nursing homes, assisted living, and home care to understand the well-being of, and needs and supports provided to, the workforce, enabling cross-sector comparisons to identify strengths and areas for improvement.¹⁹

Due in part to the previously described limitations, other efforts to generate national assisted living data have been proposed but not yet enacted. One such effort is that of the Assisted Living Disclosure Collaborative, a federally funded project that developed a consensus-based disclosure tool (questionnaire) for communities to inform prospective residents and families about their practices and policies.²⁰ Although the Assisted Living Disclosure Collaborative tool has not been formally disseminated, interest continues to grow at both the state and federal levels in providing consumers with relevant and accessible information about assisted living services and policies.²⁰

In closing, the importance of data in advancing well-being in assisted living cannot be overstated—as described by the National Center for Assisted Living, assisted living is “at the precipice of a new era where data play a critical role in driving quality improvement and enhancing care.”²¹ Indeed, as the assisted living landscape continues to evolve, research will be increasingly invaluable in informing practice and policies using new and existing data to address gaps related to such topics as the impact of staffing and training on resident outcomes and of public and organizational policy initiatives on the quality of care. To disseminate and support such research, CEAL@UNC will continue its efforts to make research accessible to those who most need it and to highlight impactful work through initiatives such as the CEAL@UNC Research Award.

Disclosure

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