



Acute Care Transfers

PALLIATIVE CARE & END OF LIFE

This evidence theme on acute care transfers near the end of life is a summary of one of the key topics identified by a scoping review of the palliative care research.

Key points

- Emergency department visits and hospital admissions are common for people in residential aged care nearing the end of their life. This may not always be in their best interests, necessary, or in line with their preferences for end-of-life care.
- The reasons why people are transferred to acute care settings at the end of life are complex but often reflect family wishes and the availability of clinical staff with the skills to assess if an escalation of medical care is needed.
- Acute care transfers can result in adverse outcomes for people such as hospital-acquired infections, pressure ulcers, delirium, and further functional decline. People living with advanced dementia often find transfers from the familiar home or residential aged care setting to a hospital distressing.
- The rate of acute care transfers might be reduced by increasing the number of residents with advance care plans, providing care staff with improved access to nurse practitioners skilled in palliative care, having specialist palliative care consultations and geriatrician assessments, and implementing regular medication reviews by clinical pharmacists.

What are acute care transfers near the end of life?

People nearing the end of life may be transferred between their home setting—which may be a residential aged care facility—and an emergency department or hospital ward. [1] Although the rates of acute care transfers vary across countries, [2, 3] the hospitalisation rate at the end of life for residents in an aged care facility is estimated to be between 25% and 70%. [1] The frequency of acute care transfers often increases closer to death, [2, 4] with one-third of residents being hospitalised within the last month of life. [3] Transfers may be a necessary response to a medical crisis such as a cardiovascular event, a fall, an infection or an uncontrolled pain or symptom burden. [2, 4] However, it may be more appropriate at times for people to be treated by nurses and general practitioners in their familiar home setting.

What do we know about acute care transfers near the end of life in aged care?

We identified 11 systematic reviews on this topic. These examined rates of transfers near the end of life, [3, 5] the factors influencing decisions to transfer a resident, [2, 6-8] likely outcomes of transfers, [9, 10] and strategies that have been trialled by facilities to reduce the number of inappropriate, non-beneficial patient transfers. [1, 11, 12]

Why do acute care transfers occur at the end of life?

Decisions to transfer people to an emergency department near the end of their life can be difficult to make and may be influenced by a range of personal, organisational, and policy factors. [2, 4] Firstly, people nearing the end of life generally have more complex care needs due to increased frailty, multimorbidity, and the use of multiple medications. [2] This complexity can make hospitalisation, or an emergency department visit unavoidable when expected benefits outweigh the potential burden on the resident. [3] Residential aged care facilities in Australia are mostly staffed by direct care workers with few registered nurses on hand to provide a clinical assessment of a person's needs. Staff on duty may not have the skills to determine if a resident is near to the end of life or if care might be provided in the home. They may also lack timely access to doctors or palliative care specialists to help with decision-making, especially after hours. The decision to transfer to acute care is, therefore, often considered the safest course of action when a person's care needs exceed the facility's treatment resources and the capabilities of its staff. [6] Family members might also request a higher level of medical care for their loved ones when they notice signs of deterioration or if they have concerns about the quality of medical care at hand. [2]

Common reasons for acute care transfers include:

- Respiratory or urinary tract infections
- Falls, particularly when leading to fractures
- Cardiovascular illnesses such as heart failure
- Altered mental states such as delirium
- Complications with permanent indwelling devices (e.g., percutaneous endoscopic gastrostomy tube or catheter)
- Chronic pain
- Drug-related complications. [8, 9]

Why are acute care transfers sometimes best avoided?

High demand on emergency departments can mean older people experience long wait times to receive care past that provided by paramedics. [12] Residents of aged care facilities appear to wait longer for medical attention in emergency departments than community-dwelling older people with over 37% waiting for over eight hours. [9] Those residents most unwell on arrival tend to wait the longest of all. [9] A small proportion of people (1-5%) will end up dying in the emergency department. [9]

Residents of aged care facilities also experience higher rates of invasive and uncomfortable diagnostic and treatment interventions in the emergency department compared to community-dwelling older people. [9] This can include blood tests and the insertion of an intravenous cannula or indwelling urinary catheter. [9] Around 85% of people transferred near the end of life will have diagnostic imaging that involves them moving between beds and departments. A majority will also be given medications with the potential of causing adverse drug reactions. [9]

People nearing the end of life are also at increased risk of developing problems based on being in an acute care setting. These include problems of undernutrition, skin tears, hospital-acquired infections, pressure ulcers, delirium, and further functional decline. [1, 6, 9] They also have a high risk of dying in these settings, [3, 9, 13] which will often not be in line with their wishes. [11] Most deaths occur within one week of admission to the hospital and up to 50% within the first three days. [9] People with dementia can experience a high level of distress when transferred to an emergency department or after admission to hospital; however, it appears that aged care residents with dementia are often less likely to be hospitalised and receive aggressive treatment at the end of life than people not living with dementia. [7]

When might a transfer be inappropriate?

Transferring someone from their home environment to an acute care facility may be inappropriate:

- When a problem can be adequately treated or prevented from occurring in the aged care setting [10]
- When the person has an advance care plan or advance directive in place that requests limited treatment at the end of life [10]
- When the level of personal discomfort or confusion likely to be caused by a transfer outweighs the probable benefits of the move to acute care [10]
- When the person is unlikely to benefit from any further active treatment. [10]

Reducing acute care transfers near the end of life

Most reviews reported an association between residential aged care facilities with staff competent in palliative care, or able to access specialist nurse expertise, and reduced rates of transfers to acute care settings near the end of life. [3, 5-7, 12] One review found that late transfers and hospital admissions were reduced by seven per cent when facility staff had access to the expertise of a palliative care nurse who modelled good end-of-life care to other staff. [12] For people living with advanced dementia, consultations by nurse practitioners with palliative care expertise reduced transfers when goals of care and symptom management were addressed. [12] Earlier consultations also appear effective than later ones, with consultations taking place one to two months before the resident's death nearly halving the rate of emergency visits. [12] Hospitalisation rates were also reduced for residents with advance care plans or advance directives in place. [1, 3, 8] Educational programs providing aged care staff with training in how to discuss and document end-of-life care wishes might therefore make an effective indirect contribution to reducing unnecessary transfers. [11]

Several other factors capable of reducing transfers to hospital were identified across the reviews. These include:

- Higher staff to patient ratios [8]
- Greater availability of, or access to, skilled residential aged care nursing and medical staff, including nurse practitioners, general practitioners, and specialist geriatricians [3, 8, 11]
- Substitute decision makers with a high level of understanding of the clinical course of advanced dementia [8]
- Regular residential care medication reviews by clinical pharmacists. [11]

Some reviews, however, highlighted concerns about the methods used in some studies. For example:

- The quality of the evidence was generally weak for interventions aimed at reducing transfers, which may undermine confidence in some of the findings [11]
- The effect of facility size and therefore staffing numbers was often unclear. This is important as there is some evidence that facilities with more nursing staff and access to doctors have lower rates of hospitalisations. [1]

What can an individual do?

- Nurses and doctors working in home or residential aged care can proactively discuss hospitalisation preferences with residents and their families.

- Be informed about advance care planning and open to opportunities to discuss these plans with aged care recipients.
- Aged care workers with little or no palliative care experience might undertake a short course or complete an online learning module in how to recognise people who are deteriorating and approaching the end of life. Learn more about ways to provide quality care for the dying within the residential aged care facility.

What can the organisation do?

Aged care staff require skills in assessing and managing residents onsite. Organisations should therefore:

- Provide or facilitate education and training for all aged care staff on recognising and effectively reporting deterioration, as well as how to provide care to residents approaching the end of life.
- Plan and implement processes such as management protocols for reducing unplanned acute care transfers for people who may be approaching the end of life. This may include greater involvement of palliative care consultants or the introduction of Palliative Care Needs Rounds which have been shown to reduce hospital transfers.
- Consider implementing a system application, such as the ELDAC digital dashboard, which tracks the end-of-life care needs of residents, flags signs of deterioration, and uses prompts to guide the care of the dying person.
- Ensure residents have access to routine medication reviews which have been shown to reduce transfers for medication-related problems.

References

1. Pimsen A, Kao C-Y, Hsu S-T, Shu B-C. The effect of advance care planning intervention on hospitalization among nursing home residents: A systematic review and meta-analysis. *J Am Med Dir Assoc.* 2022 Sep;23(9):1448-1460.e1.
2. Pulst A, Fassmer AM, Schmiemann G. Experiences and involvement of family members in transfer decisions from nursing home to hospital: A systematic review of qualitative research. *BMC Geriatr.* 2019;19(1):155.
3. Allers K, Hoffmann F, Schnakenberg R. Hospitalizations of nursing home residents at the end of life: A systematic review. *Palliat Med.* 2019;33(10):1282-98.
4. Wilson DM, Birch S. A scoping review of research to assess the frequency, types, and reasons for end-of-life care setting transitions. *Scand J Public Health.* 2020;48(4):376-81.
5. Hoffmann F, Strautmann A, Allers K. Hospitalization at the end of life among nursing home residents with dementia: A systematic review. *BMC Palliat Care.* 2019;18(1):77.

6. Laging B, Bauer M, Ford R, Nay R. Decision to transfer to hospital from the residential aged care setting: A systematic review of qualitative evidence exploring residential aged care staff experiences. *JBHI Database System Rev Implement Rep.* 2014;12(2):263-388.
7. Williamson LE, Evans CJ, Cripps RL, Leniz J, Yorganci E, Sleeman KE. Factors associated with emergency department visits by people with dementia near the end of life: A systematic review. *J Am Med Dir Assoc.* 2021;22(10):2046-55.e35.
8. Dwyer R, Stoelwinder J, Gabbe B, Lowthian J. Unplanned transfer to emergency departments for frail elderly residents of aged care facilities: A review of patient and organizational factors. *J Am Med Dir Assoc.* 2015;16(7):551-62.
9. Dwyer R, Gabbe B, Stoelwinder JU, Lowthian J. A systematic review of outcomes following emergency transfer to hospital for residents of aged care facilities. *Age Ageing.* 2014;43(6):759-66.
10. Cardona-Morrell M, Kim JCH, Brabrand M, Gallego-Luxan B, Hillman K. What is inappropriate hospital use for elderly people near the end of life? A systematic review. *Eur J Intern Med.* 2017;42:39-50.
11. Buck D, Tucker S, Roe B, Hughes J, Challis D. Hospital admissions and place of death of residents of care homes receiving specialist healthcare services: A systematic review without meta-analysis. *J Adv Nurs.* 2022;78(3):666-97.
12. Leduc S, Cantor Z, Kelly P, Thiruganasambandamoorthy V, Wells G, Vaillancourt C. The safety and effectiveness of on-site paramedic and allied health treatment interventions targeting the reduction of emergency department visits by long-term care patients: Systematic review. *Prehosp Emerg Care.* 2021;25(4):556-65.
13. Bone AE, Evans CJ, Etkind SN, Sleeman KE, Gomes B, Aldridge M, et al. Factors associated with older people's emergency department attendance towards the end of life: A systematic review. *Eur J Public Health.* 2019;29(1):67-74.

Cite as: ARIIA Knowledge & Implementation Hub. Acute Care Transfers: Palliative Care & End of Life. Evidence Theme. Adelaide, SA: ARIIA; 2022.

www.ariia.org.au

For more information email ariia@ariia.org.au or call 08 7421 9134

ARIIA - Level 2, Tonsley Hub, South Rd, Tonsley SA 5042

ARIIA was established as an independent, not-for-profit organisation, set up to lead the advancement of the aged care workforce capability by promoting and facilitating innovation and research to improve the quality of aged care for all Australians.

ariia Aged Care Research
& Industry Innovation
Australia

 **Flinders
University**

 **Australian Government
Department of Health
and Aged Care**