

SYSTEMATIC REVIEW

What influences decisions to transfer older care-home residents to the emergency department? A synthesis of qualitative reviews

CARL MARINCOWITZ¹, LOUISE PRESTON², ANNA CANTRELL², MICHAEL TONKINS¹, LISA SABIR¹, SUZANNE MASON¹

¹Centre for Urgent and Emergency Care Research (CURE), School of Health and Related Research (SchHARR), University of Sheffield, Sheffield, S1 4DA, UK

²Health Economics and Decision Science, Health Services Research School of Health and Related Research, University of Sheffield, Sheffield, S1 4DA, UK

Address correspondence to: Carl Marincowitz, Centre for Urgent and Emergency Care Research (CURE), School of Health and Related Research (SchHARR), University of Sheffield, Regent Court, 30 Regent Street, Sheffield S1 4DA, UK.

Email: c.marincowitz@sheffield.ac.uk

Abstract

Background: care home residents aged over 65 have disproportionate rates of emergency department (ED) attendance and hospitalisation. Around 40% attendances may be avoidable, and hospitalisation is associated with harms. We synthesised the evidence available in qualitative systematic reviews of different stakeholders' experiences of decisions to transfer residents to the ED.

Methods: six electronic databases, references and citations of included reviews and relevant policy documents were searched. Reviews of qualitative studies exploring factors that influenced care home staff, medical practitioners, residents' family or residents' experiences and factors influencing decisions to transfer residents to the ED were included. Thematic analysis was used to synthesise findings.

Results: six previous reviews were included, which synthesised the findings of 34 primary studies encompassing 152 care home residents, 283 resident family members or carers and 447 care home staff. Of the primary studies, 19 were conducted in the North America, seven in Australia, five were conducted in Scandinavia, two in the United Kingdom and one in Holland. Three themes were identified: (i) power dynamics between residents, family members, care home staff and health care professionals (external to the care home) influence decisions; (ii) admission can be necessary; however, (iii) some decisions may be driven by factors other than clinical need.

Conclusion: transfer decisions are complex and are determined not just by changes in health status interventions aimed at reducing avoidable transfers need to address the key role family members have in transfer decisions, the medical legal fears of care home staff and barriers to accessing community services.

Keywords: care homes, systematic review, qualitative research, older people

Key Points

- Decisions to transfer care home residents to hospital are complex and involve a hierarchy of decision-makers.
 - Transfers of residents to hospital can occur with the expectation that treatment in hospital will improve outcomes.
 - Some transfer decisions may be driven by factors other than clinical need.
-

Background

The proportion of the population aged over 65 and particularly aged over 85 is rapidly increasing in the United Kingdom and other European countries with ~30% of Europeans projected to be aged over 65 and 12% aged over 80 by 2060 [1]. Currently, around 2.8% of all patients aged over 65 live in care home in the United Kingdom, but they account for 6.5% of emergency department (ED) attendances and 8% of emergency admissions in this age group [2]. Around 66% of residents are cognitively impaired and residents with advanced dementia have an average life expectancy of 18 months, when admitted to a care home [3, 4]. An estimated 40% of emergency admissions for care home residents may be avoidable [2]. It has been argued that given the high mortality rate and harms associated with hospital admission in care home residents urgent care pathways should focus on managing care home residents in the community [5, 6]. Despite this, once care home residents attend the ED, they are more likely to undergo diagnostic investigations and have prolonged inpatient admissions compared with other older patients [7].

Significant variability between ED attendance and hospital admission rates from different care homes has been previously identified using routine data in the United Kingdom [6]. Decisions to transfer residents to the ED are complex with residents, family and care home staff all potentially involved in decision-making [8]. Although there may be a preference to manage deteriorating residents in the care home, this may be prevented by fears of the consequences of not transferring residents professionally and on their relationships with family members [9]. Understanding what factors influence decision-making and how residents, family and care home staff interact to decide on ED transfer is important if interventions aimed at reducing unnecessary ED transfers are to be successful. Previous reviews of qualitative evidence focus on care home staff or family members' perspectives on transfer decisions [10–12].

We aimed to synthesise the evidence available in existing qualitative systematic reviews of residents' and key stakeholders' experiences of decisions to transfer residents to the ED and factors that influence decision-making.

Methods

We undertook a review of qualitative systematic reviews, which is reported in accordance with enhancing transparency in reporting the synthesis of qualitative research (ENTREQ) guidance (Supplementary Material 1) [13]. The review was registered with the PROSPERO prospective register of systematic reviews and protocol is available at https://www.crd.york.ac.uk/prospero/display_record.php?RecordID=213068.

Search strategy

The full search strategy is available in [Supplementary Material 2](#). Six electronic databases were searched: MEDLINE via OVIP-SP, EMBASE via OVID-SP, CINAHL via EBSCO, PsycINFO via OVID-SP, Science and Social Science Citation Indices via the Web of Science and Scopus. Reviews published before 2000 were excluded as they were conducted prior to the publication of key guidance regarding the management of care home residents in the acute hospital setting, including identifying which residents should be transferred to hospital [14]. Our search included the terms 'qualitative research', 'mixed methods', 'Emergency Department', 'care homes' and 'nursing homes'. A search for factors that quantitatively predicted transfers from the ED was completed concurrently, as part of a wider project, the results of which are reported elsewhere [15].

Searches were also conducted to retrieve clinical guidelines, policy documents and reports related to transitions between hospital and care home settings from relevant websites that included National Institute for Health and Care Excellence, Health Foundation and Nuffield Trust. Reference checking and citation searches of several national guidelines, reports and reviews included: UK NICE quality standard 136 on transitions between hospital and care homes settings, The Health Foundation report on hospital use by care home residents, a Nuffield Trust report on inpatient admissions of care home residents and four previous relevant reviews [2, 6, 16–20]. All included studies' references and citations were searched.

Selection criteria

Reviews of primary qualitative studies explored factors that influenced care home staff, medical practitioners, residents' family or residents' decisions to transfer residents aged 65 or over to the ED in both facilities with and without on-site nursing were included. Qualitative study designs were defined as follows: interviews, focus groups, ethnographic studies and mixed method studies. Reviews that explored transfer decision-making in patients with specific conditions or in specific circumstances (e.g. dementia and decision-making in end-of-life care) were excluded as the experience and influences on decision-making may differ in these specific circumstances. Previously published systematic reviews reporting on studies written in languages other than English were also excluded to be included reviews needed to report systematic review methods including search strategies of multiple electronic databases and explicit inclusion and exclusion criteria of primary studies.

Identified studies were stored in EndNote X9. Following removal of duplicates two independent reviewers (C.M., M.T. or L.S. or A.C.) completed title and abstract screening. Full texts of all reviews that met the title and abstract inclusion criteria were retrieved. These were screened, and studies that were not systematic reviews addressing the topic of

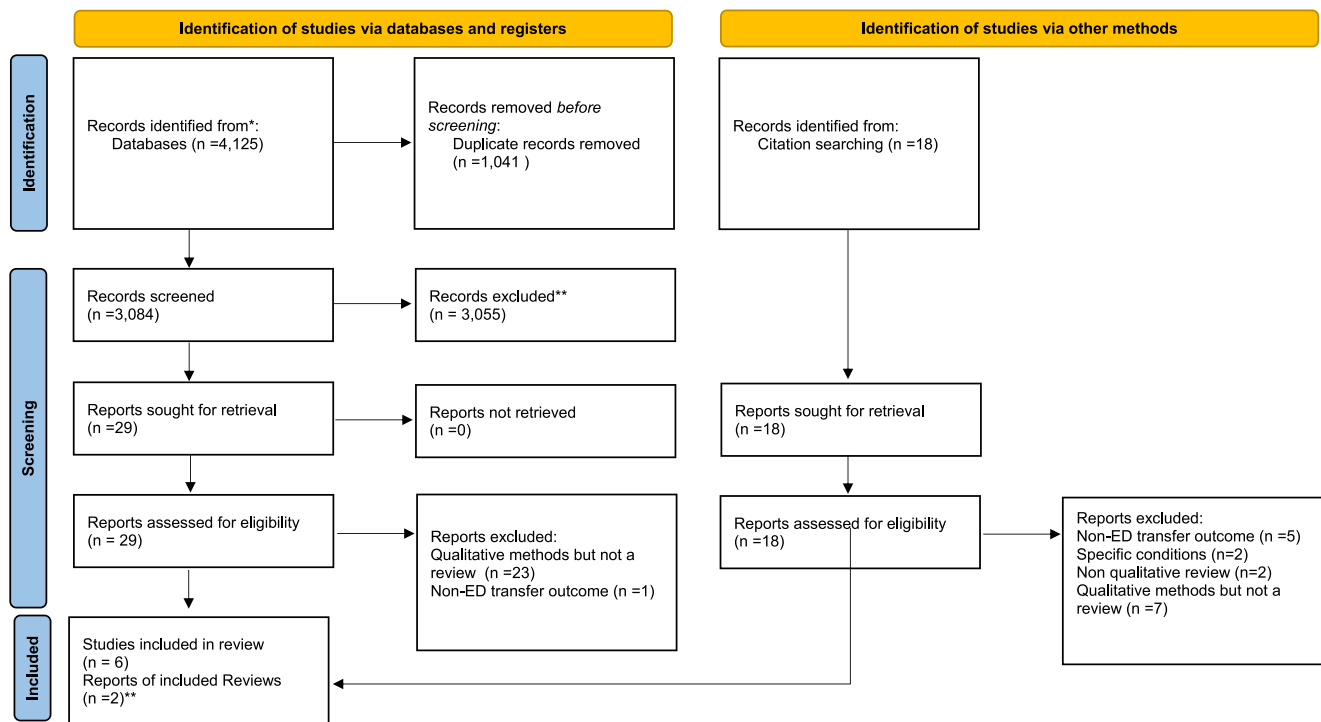


Figure 1. PRISMA 2020 flow diagram for new systematic reviews that included searches of databases, registers and other sources. *The number of records identified from each database and search is reported in [Supplementary Material 2](#). **Includes PhD thesis incorporating included review not identified by search strategy.

interest were excluded with documented reasons. Disagreements were resolved through discussion.

Data extraction, quality assessment and analysis

Data were extracted from included reviews with key characteristics summarised using a data extraction tool independently by two reviewers (C.M. and L.P.). As there are no specific quality assessment tools for quality appraisal of qualitative reviews, we used the Joanna Briggs Institute Critical Appraisal Tool for Systematic Reviews [21].

A thematic analysis was used to synthesise the evidence presented across the included reviews [22, 23]. This was performed by C.M. and L.P. The choice of thematic synthesis was to provide an insight into experiences of transfers and factors that influence transfer decisions. A summary of themes identified from primary studies was extracted from included reviews along with supporting direct quotes. Hierarchical coding was used to identify common and divergent descriptive themes across included reviews. From these descriptive themes, a synthesis of analytical themes between studies was generated relating to the experience of decisions to transfer residents to the ED and factors that influence decision-making.

Results

Search results

Our searches retrieved 4,125 records of which 1,041 were duplicates (Figure 1). Of these, 29 studies that met our title

and abstract inclusion criteria were retrieved and assessed for inclusion [8, 10–12, 24–48]. Five systematic reviews were included following full-text screening [8, 10–12, 24]. Citation and reference searching of included reviews and relevant literature identified a further 18 studies for retrieval and assessment for inclusion [49–66]. Of these 18 studies, 2 further systematic reviews met the inclusion criteria [56, 58]. One review represented an abbreviated publication of a previously retrieved full report [10, 56]. The accompanying PhD thesis of an included review was also retrieved [11]. The reasons for exclusion of fully retrieved studies are documented in [Supplementary Material 3](#). In total, six published reviews and accompanying full reports (not peer reviewed) of two of these reviews were included [8, 10–12, 24, 56, 58, 67].

Summary of included studies

The six included reviews and two accompanying full reports (published between 2012 and 2021) collectively synthesised the findings of 34 previous unique primary qualitative studies. Across the reviews of primary studies, two primary studies were referenced in five reviews, one primary study in four reviews, five studies in three reviews, eight studies in two reviews and 19 studies in one review. Of the unique primary studies: 13 were conducted in the USA, seven in Australia, six in Canada, five were conducted in Scandinavia, two in the United Kingdom and one in Holland. Two reviews included primary studies assessing the decision-making of care home

staff, residents and/or family members [8, 12]. Two reviews focused solely on staff decision-making [11, 56], one review focused on residents, family members or carers [58] and one review focused solely on family members' experiences [24]. The unique primary studies from the included reviews encompassed interviews, focus groups and qualitative surveys encompassing 152 care home residents, 283 resident family members or carers and 447 care home staff (including directors, nursing staff, care assistants and clinical staff).

Table 1 summarises the included reviews aims and main findings. A more detailed summary is presented in Supplementary Material 4.

Quality

Supplementary Material 4 presents the quality assessment using the JBI tool. No reviews were excluded on the basis of quality; however, we were less confident in the findings of Trahan *et al.* [12] due to the identification of methodological weaknesses.

Synthesis

The qualitative synthesis of themes developed in the included reviews identified factors that influence decisions to transfer care home residents to hospital from the perspectives of residents, family members and care home staff. We explored factors that influence these decisions and lead to transfer. Three central themes were identified:

Theme 1: Transfer power dynamics. Transfer decisions involve negotiation with unequal power dynamics between residents, family members, care home staff and clinical practitioners.

All six reviews identified a hierarchy of decision-makers when determining if a resident should be transferred to hospital with care home staff and residents subordinate to family members and healthcare professionals. This was acknowledged from the perspective of care home staff: 'there is a hierarchy amongst decision-makers and that this resulted in the exclusion of some key players . . . particularly the resident and . . . the RACF staff' (Residential Aged Care Facilities) [10], there could be 'conflicting stakeholder preferences' in which family member could 'force the hand' of care home staff and 'Families maintain a position of power and this underlies nurses' actions and interactions' [8] [11].

Residents could feel excluded from decision-making, providing information to staff, family members and healthcare professionals who would make the final transfer decision; 'Occasionally residents were asked to provide information during transfers but were not able to provide sufficiently detailed information. Sometimes residents felt ignored, or even described facilitating communication between professionals' [58]. Nursing home nurses could use communication strategies to manage the power dynamics between different parties involved in transfer decisions to achieve the outcome they thought was needed. This was characterised

as meta-synthesises including 'Negotiating hierarchies of control: communicating with other key decision-makers' [10] and 'Nursing home nurses use persuasive and targeted communication techniques to manage and direct possible transfer situations' [11]. Referenced primary studies outlined that care home staff may select information communicated to other health care professionals (external to the care home) or use targeted and persuasive communication techniques with family members in order to achieve transfers [11].

Despite their position of power, family members could be uncomfortable in their decision-making role especially when transfer decisions were made in the context of end-of-life planning. This was identified in the meta syntheses 'knowing, accepting and upholding resident wishes are challenges for family members', 'the extent of family members' involvement in treatment and transfer decisions vary' and 'legal, regulatory and ethical concerns' [24, 58]. Family members found being made responsible for do not resuscitate disorders emotionally distressing: 'family members described the end-of-life choices as a particularly challenging aspect of their role . . . family members reported being upset about having to make life and death decisions' [58]. Therefore despite their important position in decision-making family members could find decisions difficult and this could lead to delegation of decisions to others. Pulst *et al.* [24] explained in the synthesis 'the extent of family members' involvement in treatment and transfer decisions vary' that due to feeling uncomfortable with such decision-making some family members 'ceded/delegated decisions' to care home staff or other healthcare professionals. However, particularly when family members were remote and only contacted during periods of deterioration their default could be transfer residents to hospital as a perceived place of safety: 'family members at a geographic distance ...wanted everything done' [24], and 'family members also perceived EDs to be safer' [58].

Theme 2: Admission can be necessary. Some transfer decisions occur with the expectation that treatment in hospital is appropriate and will lead to improved quality of life or other outcomes.

Transfer decisions made positively with the expectation and aim of improving health comes for residents were characterised as being 'resident dominant' by Arendts *et al.* [8] Some situations or types of resident illness were regarded as being better treated in a hospital setting, especially following an acute deterioration. This was described in the 'supporting clinical outcomes' domain in Arendts *et al.* [8] that cited excerpts from primary studies including: 'participants suggested they would always transfer a resident who needed immediate, acute care that was only available in a hospital setting'. In the synthesis 'perceived severity of clinical situation effects the transfer decision' Pulst *et al.* [24] cite primary studies that indicate family members perceive 'Hospital care is clearly necessary for some conditions (e.g. fainting, broken bones, operations and heart problems)' or 'a dramatic change occurred'.

Transfer decisions with the aim of improving resident outcomes occurred irrespective of advance directives or

Table 1. Summary of included reviews

Author, year, number studies included	Aim	Population	Summary of key findings
Laing <i>et al.</i> (2012, 17)	To report a meta-synthesis of qualitative research studies exploring the role of nursing home staff in decisions to transfer residents to hospital To produce a meta-synthesis of nursing home staff role in decisions to transfer deteriorating residents	Nursing and care staff involved in decisions to transfer residents	Five key synthesised findings: (i) If staffing capacity to manage residents on-site is limited, more likely to feel medically vulnerable and convey to ED (ii) If staff experience isolation from multidisciplinary input and other health care resources their ability to provide care on site will be compromised (iii) Staff felt that had to negotiate with other key decision-makers (physicians, family members and residents) and their views could be lower on the hierarchy than the views of these decision-makers, despite having a broader perspective on the situation. (iv) Despite planning and protocols regarding when to transfer residents they cannot be relied upon to guide decision-making when residents deteriorate. (v) Variable perceptions regarding the complexity of care that can be provided in a care home setting, with studies finding staffs' willingness to initiate and implement end of life care or more complex care in a care home setting to differ and this to vary depending on the current situation in the care home and specifics of individual residents.
Arends <i>et al.</i> (2013, 11)	Systematically review qualitative literature regarding decisions to transfer people from care home to the ED, and examine the major influences on decision-making	Residents, family and care home staff.	Theme 1: the authors describe 'resident dominant' transfers, which occur because decision-makers believe hospital treatment will yield better resident outcomes or quality of life. Theme 2: the authors characterise 'resident subordinate' transfers, which occur due to external influences that decision-makers acquiesce, despite believing transfer will not improve resident outcomes or the quality of life. This occurs due to the lack of facility resources, lack of confidence in care provided in the facility, inadequate planning and communication, bureaucratic and legal constraints and conflicting stakeholder preferences.
O'Neill <i>et al.</i> (2015, 7)	A systematic review of qualitative studies to obtain a greater understanding of the perspectives of the nurses involved with resident transfers, and describing nursing home nurses' experiences and overall perceptions around ED transfers	Care home nursing staff	Meta-synthesis 1: the decision to transfer is complex. Nursing home nurses require clinical knowledge, skills and resources to assess and manage the deteriorating resident. Meta-synthesis 2: families maintain a position of power and this underlies nurses' actions and interactions. Communication issues can cause delays and problems. Nursing home nurses use persuasive and targeted communication techniques to manage and direct possible transfer situations. Meta-synthesis 3: ambiguity, strained relationships and nursing home nurses' negative perceptions of residents' experiences around hospitalisation create conflict and uncertainty. Nurses are more decisive and confident when a 'plan' is in place, such as advance directives.
Trahan <i>et al.</i> (2016, 8) qualitative studies	A mixed methods scoping review that aimed to identify characteristics of avoidable/unnecessary transfers of residents to the ED, and identify factors that influence decision-making by care home clinicians (including nurses and physicians), residents and family members, to transfer residents to the ED	Residents, family and care home staff	Five categories: Nursing: limitations in skills, knowledge, staffing and perceptions regarding medicolegal constraints led to transfers even when staff felt might not be beneficial. Staff also felt preferences of residents/family more important than other considerations. Physician/nurse practitioner (NP): support from specialist community practitioners could help avoid unnecessary transfers, but when unavailable or advanced planning had not been put in place, staff transferred deteriorating residents. Care home/facility factors: individual care homes had different policies that mandated transfer in specific situations, even if it was perceived may not be beneficial for residents. Limited staff and other resources available in the care home led to avoidable transfers. Resident/family: staff felt resident/family wishes had to be prioritised over other considerations. A lack of end-of-life planning or a lack of confidence in following advance directives led to transfers at the end of life. Health system factors: Medicolegal framework and barriers to accessing community health care resources led to transfers.
Pulst (2019, 10)	A qualitative review aiming to summarise resident family members' experience and perceptions of involvement in decisions to transfer nursing home residents to hospital	Family members	Five synthesises: (i) Transfer decision is affected by family members' judgement of quality of NH care. (ii) Transfer decision is affected by family members' judgement on the quality of hospital care. (iii) Perceived severity of clinical situation affects the transfer decision. (iv) Knowing and acting on resident wishes is challenging for family members. (v) Extent of family members' involvement in treatment and transfer decisions vary.
Curtis (2021, 10)	A review of qualitative primary studies aimed at synthesising care home residents' and family members' perceptions and experiences of medical emergencies in a care home setting	Care home residents and family members	Five themes (i) Infrastructure and processes in care homes to prevent and address emergencies (ii) The decision to transfer to hospital (iii) Experiences of transfer and hospitalisation (iv) Good communication is vital for acceptable outcomes (v) Legal, regulatory and ethical concerns

planning. Laging *et al.*'s meta synthesis, 'early planning and protocols cannot be relied upon', outlines this [10]. Another study indicated that if transfer 'was viewed as nonlife threatening', the staff thought advanced directives were less relevant to the goal improving resident quality of life [24]. Both resident and family members regarded the ED and hospital as a place of safety and the more appropriate setting for urgent care [58]. However, this was weighed up against the ED setting being 'busy, chaotic and demanding' and not necessarily appropriate for the care of older patients, particularly with cognitive impairment [58].

Theme 3: Decisions to transfer to acute care may not be driven by the clinical and medical needs of the patient but due to care home staff workload, medicolegal fears and other structural factors.

Transfers that were to some degree forced by factors unrelated to improving care or outcomes for the resident were characterised as 'resident subordinate' by Arendts *et al.* [8] A reason for such transfers identified across reviews was shortage of facility staff or perceived availability of resources necessary to manage a deteriorating patient [8, 10, 12, 58]. In response to staffing constraints staff may actively seek to transfer residents. This was highlighted in Arendts *et al.* [8] in this included quote from a primary study: 'I can see the workload is going to be not manageable. .. so I have sent a couple [of residents] to hospital'. Residents also perceived the available resources in facilities to be inadequate to treat acute deteriorations: 'residents lacked faith in medical care provided in the care home, highlighting concerns about access to clinical assessment and care' [58]. This was further characterised in the theme 'lack of confidence in care provided in the facility' presented by Arendts *et al.*, [8] where a perception of poor staffing and inadequate resources by staff, residents and family members led to hasty transfers to hospital, without a consideration of overall resident best interests.

The medico-legal framework and fear of potential consequences if a deteriorating patient was not transferred, even if transfer was felt not to be beneficial, was highlighted across reviews as leading to resident subordinate transfers [8, 10, 11, 24]. This was most explicitly explored in the synthesis 'bureaucratic and legal', which outlines the constraints and fear facility staff felt when making transfer decisions [8]. Two reviews explored this in other syntheses, with O'Neill [11] highlighting 'nurses were also worried about being sued for their decisions regarding transfers' and another review explaining that staff feared 'care for a resident who has deteriorated may not be legally defensible', if they were not transferred [10].

Resident subordinate transfers could be prevented by adequate inter-disciplinary support in the facility, but this was not always available. This is best characterised in the synthesis: 'Isolation from multidisciplinary input and health care resources limits the ability to provide care on-site' [10]. This outlined that staff at times would seek a medical review or other resources potentially available in the facility to attempt to avoid a transfer of deteriorating residents but

if these were not forthcoming would default to hospitalisation. Laging *et al.* further described that different health care professionals and different institutions differed in their perception of the level care deliverable in a care home setting. Most included studies reported care homes had the resources to provide palliative care, but staff uncertainty regarding needed treatment, due to a lack of medical support, led to transfers at the end of life [10]. Staff, family members and residents were all concerned that necessary investigations could be always be achieved quickly enough in the care home setting leading to transfer: 'The most frequently mentioned benefits of hospital care were available medical equipment and infrastructure' [24].

Discussion

We have synthesised the findings of six previous qualitative reviews encompassing 34 unique primary studies and the perspectives of care home staff, carers, residents and medical professionals involved in decisions to transfer residents to the ED. We have developed three key themes relating to the power dynamics amongst decision-makers, when decisions are made with the positive expectation of improving resident health and when factors unrelated to the health care needs of residents take precedence in decision making. The decision to appropriately transfer residents is challenging for care home staff. Decisions may reflect family wishes, the ability of care to be delivered in the facility and community health care resources available at the time of decision-making, as opposed to the actual change in health status of the resident. These factors along with perceptions regarding medicolegal consequences of not transferring acutely unwell residents can lead to transfers that are felt to be futile.

Context of previous literature

This is the first synthesis of qualitative reviews to explore decision-making around the transfer of residents to the ED and synthesises the perspectives of the stakeholder groups included in the reviews. A 2018 systematic review found that up to 55% of care home resident transfers to the ED were inappropriate [57]. The review highlighted lack of advanced planning, inability to access community health care resources and a desire for active management, especially by family members, when end-of-life care was more appropriate. Our synthesis supports these findings but also highlights that although family members maintain a position of power in decisions to transfer residents, they can be uncomfortable with decision-making, especially with end-of-life decisions, and can be willing to follow the advice of clinicians [24, 58]. A previous systematic review found advanced care planning can reduce hospitalisation rates of residents by 9–26% and increase the number of residents dying in their care home by 29–40% (without an associated increase in overall mortality) [68]. Our findings suggest that communication with family members maybe key in ensuring advanced care planning is successful in helping prevent avoidable transfers to the

ED. Our synthesis found that expectations and levels of multidisciplinary care to support care of residents in community varied between care homes and even within care homes when different transfer decisions were made. Isolation from additional support contributed to transfers of residents with no expectation of improving outcomes.

Although the included reviews pre-dated the COVID pandemic, qualitative primary studies assessing the impact of the pandemic found staff had to rapidly adapt to changing guidelines, an increased workload and increased responsibility due to isolation from both family members and health care professionals [69–71]. This may have altered the power dynamics and increased the influence care home staff had in transfer decisions whilst reducing the clarity of when transfers were needed or likely to be beneficial to residents. However, changes in transfer decision-making necessitated by the pandemic probably do not reflect normal or ideal practice. Advanced planning and access to health care resources in the community with appropriate consultation with family members remains important in avoiding transfers to the ED that may not be beneficial for residents.

Strengths and limitations

Our synthesis has allowed transfer decision-making to be understood from the perspectives of multiple stakeholders involved and assessed a broad range of existing qualitative evidence identified by a comprehensive search strategy.

Our thematic analysis only incorporated what was reported in the included reviews and this limited the depth of analysis compared with that which would have been achieved from directly reviewing the primary studies. However, this allowed us to assess the convergence of previous reviews' conclusions and themes and identify key themes that were supported with high levels of data saturation and credibility. In the absence of family members, friends of residents may also be important stakeholders in transfer decisions, and they were not assessed in any of the included reviews. Although there was degree of overlap of primary studies in the included reviews our synthesis allowed the inclusion of evidence from at least twice the number of primary studies than had been appraised in any of the previous reviews. The included reviews were published before the pandemic and therefore did not assess the impact of the pandemic on decisions to transfer residents to the ED. Some limitations in the methodological quality of the included reviews were identified (Supplementary Material 4), particularly Trahan *et al.* [12]. Although we did not exclude reviews on the basis of quality, less credibility was given to the findings of such lower quality reviews.

Implications

Our review highlights the complexity in decision-making to transfer residents and challenges in managing appropriate referrals to the ED. Avoiding transfers to hospital where there is no expectation of improving outcomes for residents has clear benefits for both the health care service and,

importantly, residents themselves. Robust advanced care planning may be one means to achieve this but as highlighted by our findings, this needs to occur in a way that negotiates the power dynamics of stakeholders and directly involves family members. The medicolegal concerns that care home staff have of not transferring acutely unwell residents needs to be addressed by interventions aimed at reducing hospitalisations. Given the nature of the care home workforce and staffing levels, particularly in the UK settings, decisions regarding transfer may be better made by health care professionals able to robustly justify decision-making and accept such medico-legal risk. As highlighted by the Health Foundation report this may require increased access from care homes to community and multi-disciplinary health care services [2]. Strategies are needed to ensure advanced care plans are developed and implemented by all stakeholders, particularly family members. Research is needed to identify acceptable ways to develop, implement and evaluate these strategies.

The convergent nature of our findings across reviews indicates that additional primary research may not be required. Future research is needed to characterise the extent of avoidable and potentially detrimental resident subordinate transfers and identify measures that can support decision-making to prevent them. This may include the estimation of variability in transfer rates between care homes to identify good practice particularly regarding advance decision-making. Different models for the use of remote and computerised decision supports for various aspects of health care in care homes have been proposed [72–74]. However, there is limited evaluation of the extent to which such technologies have the ability to support hospital transfer decisions from care homes. Ultimately, the complexity of decision-making means that a single model of decision-support and in-reach may not be successful in the context of different care homes.

Conclusion

Transfer decisions are complex and involve multiple stakeholders in decision-making relationships where there are unequal power dynamics. Our review found a variety of factors influenced transfers including care home staff workload, medicolegal fears and other structural factors. Critically, these decisions were sometimes taken with no expectation that hospital treatment would be beneficial to residents. Interventions aimed at reducing avoidable hospitalisations of residents need to address the key role family members have in transfer decisions, the medical legal fears of care home staff and barriers to accessing community services.

Supplementary Data: Supplementary data mentioned in the text are available to subscribers in *Age and Ageing* online.

Declaration of Conflicts of Interest: None.

Declaration of Sources of Funding: C.M. is a National Institute for Health Research (NIHR) Clinical Lecturer in Emergency Medicine (grant number not applicable/NA).

M.T. is an NIHR Academic Clinical Fellow in Emergency Medicine (grant number not applicable). This report is independent research part funded by the National Institute for Health Research, Yorkshire and Humber Applied Research Collaborations. This publication presents independent research funded by the National Institute for Health Research and University of Sheffield. The views expressed are those of the author(s) and not necessarily those of the University of Sheffield, the NHS the NIHR or the Department of Health and Social Care.

References

1. Creighton H. Europe's ageing demography. London, UK: International Longevity Centre, 2014.
2. Wolters A, Santos F, Lloyd T, Lilburne C, Steventon A. Emergency admissions to hospital from care homes: how often and what for? Health Foundation: Improvement Analytics Unit briefing July 2017. Available at: <https://www.health.org.uk/publications/reports/emergency-admissions-to-hospital-from-care-homes>.
3. Björk S, Juthberg C, Lindkvist M *et al*. Exploring the prevalence and variance of cognitive impairment, pain, neuropsychiatric symptoms and ADL dependency among persons living in nursing homes; a cross-sectional study. *BMC Geriatr* 2016; 16: 1–8. <https://doi.org/10.1186/s12877-016-0328-9>.
4. Mitchell SL, Teno JM, Kiely DK *et al*. The clinical course of advanced dementia. *N Engl J Med* 2009; 361: 1529–38.
5. Oliver D. David Oliver: Reducing emergency admissions from care homes. *BMJ* 2019; 367: l6149.
6. <https://www.nuffieldtrust.org.uk/files/2018-10/qualitywatch-hospital-admissions-from-care-homes.pdf>.
7. Brewster M, O'Keeffe C, Mason S. 027 The utilisation of urgent emergency care services by older care home residents in the UK and the subsequent impact on emergency departments. *Emergency Medicine Journal* 2019; 36: 791.
8. Arendts G, Quine S, Howard K. Decision to transfer to an emergency department from residential aged care: a systematic review of qualitative research. *Geriatr Gerontol Int* 2013; 13: 825–33.
9. Harrad-Hyde F, Armstrong N, Williams C. Using advance and emergency care plans during transfer decisions: a grounded theory interview study with care home staff. *Palliat Med* 2022; 36: 200–7. (7 November 2021, date last accessed).
10. Laging B, Bauer M, Nay R, Ford R. A systematic review on the experiences of residential aged care facility staff decision making regarding the transfer of residents to emergency departments. *JBHI Database Syst Rev Implement Rep* 2012; 10: 1–15.
11. O'Neill B, Parkinson L, Dwyer T, Reid-Searl K. Nursing home nurses' perceptions of emergency transfers from nursing homes to hospital: a review of qualitative studies using systematic methods. *Geriatric nursing (New York, NY)* 2015; 36: 423–30.
12. Trahan LM, Spiers JA, Cummings GG. Decisions to transfer nursing home residents to emergency departments: a scoping review of contributing factors and staff perspectives. *J Am Med Dir Assoc* 2016; 17: 994–1005.
13. Tong A, Flemming K, McInnes E, Oliver S, Craig J. Enhancing transparency in reporting the synthesis of qualitative research: ENTREQ. *BMC Med Res Methodol* 2012; 12: 1–8. <https://doi.org/10.1186/1471-2288-12-181>.
14. Royal College of Nursing (Great Britain), and British Geriatrics Society. The Health and Care of Older People in Care Homes: A Comprehensive Interdisciplinary Approach: a Report of a Joint Working Party. Royal College of Physicians 2000.
15. Marincowitz C, Preston L, Cantrell A, Tonkins M, Sabir L, Mason S. Factors associated with increased emergency department transfer in older long-term care residents: a systematic review. *Lancet Healthy Longevity* 2022; 3: e437–47.
16. NICE Quality standard [QS136] Transition between inpatient hospital settings and community or care home settings for adults with social care needs. Available at: <https://www.nice.org.uk/guidance/qs136>.
17. 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: 759–66.
18. Brucksch A, Hoffmann F, Allers K. Age and sex differences in emergency department visits of nursing home residents: a systematic review. *BMC Geriatr* 2018; 18: 151. <https://doi.org/10.1186/s12877-018-0848-6>.
19. Wang KN, Bell JS, Chen EYH, Gilmartin-Thomas JFM, Iloäki J. Medications and prescribing patterns as factors associated with hospitalizations from long-term care facilities: a systematic review. *Drugs Aging* 2018; 35: 423–57.
20. Arendts G, Howard K. The interface between residential aged care and the emergency department: a systematic review. *Age Ageing* 2010; 39: 306–12.
21. Aromataris E, Fernandez R, Godfrey CM *et al*. Summarizing systematic reviews: methodological development, conduct and reporting of an umbrella review approach. *JBHI Evid Implement* 2015; 13: 132–40.
22. Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol* 2006; 3: 77–101.
23. Thomas J, Harden A. Methods for the thematic synthesis of qualitative research in systematic reviews. *BMC Med Res Methodol* 2008; 8: 45. <https://doi.org/10.1186/1471-2288-8-45>.
24. 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: 155. <https://doi.org/10.1186/s12877-019-1170-7>.
25. Terrell KM, Miller DK. Critical review of transitional care between nursing homes and emergency departments. *Ann Long-Term Care* 2007; 15: 33–8.
26. Jablonski RA. Making the decision to transfer an elder from the nursing home to the emergency department: the experience of key decision makers. University of Virginia, 2003. <https://www.proquest.com/openview/4855df4b7f49846a5ccf8cc76f1b885/1?pq-origsite=gscholar&cbl=18750&diss=y>.
27. McCloskey R, van den Hoonaard D. Nursing home residents in emergency departments: a Foucauldian analysis. *J Adv Nurs* 2007; 59: 186–94.
28. McCloskey R, Campo M, Savage R, Mandville-Anstey SA. A conceptual framework for understanding interorganizational

- relationships between nursing homes and emergency departments: examples from the Canadian setting. *Policy Polit Nurs Pract* 2009; 10: 285–94.
29. Arendts G, Reibel T, Codde J, Frankel J. Can transfers from residential aged care facilities to the emergency department be avoided through improved primary care services? Data from qualitative interviews. *Australas J Ageing* 2010; 29: 61–5.
 30. McCloskey R. The ‘mindless’ relationship between nursing homes and emergency departments: what do Bourdieu and Freire have to offer? *Nurs Inq* 2011; 18: 154–64.
 31. Jablonski RA, Utz SW, Steeves R, Gray DP. Decisions about transfer from nursing home to emergency department. *J Nurs Scholarsh* 2007; 39: 266–72.
 32. Williams J. What factors influence decisions to transfer elderly patients? *J Paramed Pract* 2011; 3: 458–8.
 33. O’Connell B, Hawkin M, Considine J *et al.* Referrals to hospital emergency departments from residential aged care facilities: stuck in a time warp. *Contemp Nurse* 2013; 45: 228–33.
 34. Arendts G, Popescu A, Howting D, Quine S, Howard K. ‘They never talked to me about...’: perspectives on aged care resident transfer to emergency departments. *Australas J Ageing* 2015; 34: 95–102.
 35. Stephens C, Halifax E, Bui N *et al.* Provider perspectives on the influence of family on nursing home resident transfers to the emergency department: crises at the end of life. *Curr Gerontol Geriatr Res* 2015; 2015: 893062–10.
 36. Stephens CE, Halifax E, David D *et al.* “They Don’t Trust Us”: the influence of perceptions of inadequate nursing home care on emergency department transfers and the potential role for telehealth. *Clin Nurs Res* 2020; 29: 157–68.
 37. Stokoe A, HULLICK C, Higgins I, Hewitt J, Armitage D, O’Dea I. Caring for acutely unwell older residents in residential aged-care facilities: perspectives of staff and general practitioners. *Australas J Ageing* 2016; 35: 127–32.
 38. Arendts G, Jan S, Beck MJ, Howard K. Preferences for the emergency department or alternatives for older people in aged care: a discrete choice experiment. *Age Ageing* 2017; 46: 124–9.
 39. Brewster M, O’Keeffe C, Mason S. The utilisation of urgent emergency care services by older care home residents in the UK and the subsequent impact on emergency departments. *Emerg Med J* 2019; 36: 791.
 40. Nemiroff L, Marshall EG, Jensen JL, Clarke B, Andrew MK. Adherence to “No Transfer to Hospital” advance directives among nursing home residents. *J Am Med Dir Assoc* 2019; 20: 1373–81.
 41. Stephens C, Halifax E, Bui N *et al.* “they don’t trust us”: The influence of perceptions of inadequate nursing home care on er transfers and potential role for emerging health technologies. *J Am Geriatr Soc* 2015; 63: S125–6.
 42. Fassmer AM, Pulst A, Spreckelsen O, Hoffmann F. Perspectives of general practitioners and nursing staff on acute hospital transfers of nursing home residents in Germany: results of two cross-sectional studies. *BMC Fam Pract* 2020; 21: 29. <https://doi.org/10.1186/s12875-020-01108-x>.
 43. Pulst A, Fassmer AM, Hoffmann F, Schmiemann G. Paramedics’ perspectives on the hospital transfers of nursing home residents – a qualitative focus group study. *Int J Environ Res Public Health* 2020; 17. <https://doi.org/10.3390/ijerph17113778>.
 44. Cummings GG, McLane P, Reid RC *et al.* Fractured care: a window into emergency transitions in care for LTC residents with complex health needs. *J Aging Health* 2020; 32: 119–33.
 45. Robinson CA, Bottorff JL, Lilly MB *et al.* Stakeholder perspectives on transitions of nursing home residents to hospital emergency departments and back in two Canadian provinces. *J Aging Studies* 2012; 26: 419–27.
 46. Terrell KM, Miller DK. Challenges in transitional care between nursing homes and emergency departments. *J Am Med Dir Assoc* 2006; 7: 499–505.
 47. Tsai H-H, Tsai Y-F, Huang H-L. Nursing home nurses’ experiences of resident transfers to the emergency department: no empathy for our work environment difficulties. *J Clin Nurs* 2016; 25: 610–8.
 48. Washton D, Jeanmonod R. Adequacy and source of history of present illness in nursing home patients in the emergency department. *Ann Emerg Med* 2012; 60: S95. <https://doi.org/10.1016/j.annemergmed.2012.06.242>.
 49. Shidler S. A systemic perspective of life-prolonging treatment decision making. *Qual Health Res* 1998; 8: 254–69. (11 November 1999, date last accessed).
 50. Gamborg ML, Mehlsen M, Paltved C, Tramm G, Musaeus P. Conceptualizations of clinical decision-making: a scoping review in geriatric emergency medicine. *BMC Emerg Med* 2020; 20: 1–12. <https://doi.org/10.1186/s12873-020-00367-2>.
 51. Decker FH. The relationship of nursing staff to the hospitalization of nursing home residents. *Res Nurs Health* 2008; 31: 238–51. (30 January 2008, date last accessed).
 52. Gruneir A, Miller SC, Intrator O, Mor V. Hospitalization of nursing home residents with cognitive impairments: the influence of organizational features and state policies. *Gerontologist* 2007; 47: 447–56. (4 September 2007, date last accessed).
 53. Cohen-Mansfield J, Lipson S. Medical staff’s decision-making process in the nursing home. *J Gerontol A Biol Sci Med Sci* 2003; 58: 271–8. (14 March 2003, date last accessed).
 54. Oliver DP, Porock D, Zweig S. End-of-life care in U.S. nursing homes: a review of the evidence. *J Am Med Dir Assoc* 2005; 6: S21–30. <https://doi.org/10.1016/j.jamda.2005.03.017> (14 May 2005, date last accessed).
 55. Kihlgren AL, Fagerberg I, Skovdahl K, Kihlgren M. Referrals from home care to emergency hospital care: basis for decisions. *J Clin Nurs* 2003; 12: 28–36. (10 January 2003, date last accessed).
 56. Laging B, Ford R, Bauer M, Nay R. A meta-synthesis of factors influencing nursing home staff decisions to transfer residents to hospital. *J Adv Nurs* 2015; 71: 2224–36. (31 March 2015, date last accessed).
 57. Lemoyne SE, Herbots HH, De Blick D *et al.* Appropriateness of transferring nursing home residents to emergency departments: a systematic review. *BMC Geriatr* 2019; 19: 17. <https://doi.org/10.1186/s12877-019-1028-z>.
 58. Curtis F, Jayawickrama WIU, Lapididou D *et al.* Perceptions and experiences of residents and relatives of emergencies in care homes: a systematic review and metasynthesis of qualitative research. *Age Ageing* 2021; 50: 1925–34.
 59. Lopez RP. Decision-making for acutely ill nursing home residents: nurses in the middle. *J Adv Nurs* 2009; 65: 1001–9. (18 March 2009, date last accessed).
 60. Tate K, Spiers J, El-Bialy R *et al.* Long-term care health care aides’ perceptions of decision-making processes in transferring

- residents to acute care services. *J Appl Gerontol* 2020; 39: 846–54. (6 June 2018, date last accessed).
61. Cummings GG, MacGregor T, Davey M *et al.* Leadership styles and outcome patterns for the nursing workforce and work environment: a systematic review. *Int J Nurs Stud* 2010; 47: 363–85. (29 September 2009, date last accessed).
 62. Christian R, Baker K. Effectiveness of nurse practitioners in nursing homes: a systematic review. *JBI Evid Synth* 2009; 7: 1333–52.
 63. Pulst A, Fassmer AM, Schmiemann G. Unplanned hospital transfers from nursing homes: who is involved in the transfer decision? Results from the HOMERN study. *Aging Clin Exp Res* 2021; 33: 2231–41.
 64. Grabowski DC, Stewart KA, Broderick SM, Coots LA. Predictors of nursing home hospitalization: a review of the literature. *Med Care Res Rev* 2007; 65: 3–39.
 65. Petriwskyj A, Gibson A, Parker D, Banks S, Andrews S, Robinson A. A qualitative metasynthesis: family involvement in decision making for people with dementia in residential aged care. *Int J Evid Based Healthc* 2014; 12: 87–104. (20 June 2014, date last accessed).
 66. Davies SL, Goodman C, Bunn F *et al.* A systematic review of integrated working between care homes and health care services. *BMC Health Serv Res* 2011; 11: 320. <https://doi.org/10.1186/1472-6963-11-320> (26 November 2011, date last accessed).
 67. O'Neill BJ. Aged care nursing staff management of the deteriorating resident and hospital avoidance: A Theory of Planned Behaviour study (Doctoral dissertation, Central Queensland University). https://acquire.cqu.edu.au/articles/thesis/Aged_care_nursing_staff_management_of_the_deteriorating_resident_and_hospital_avoidance_A_theory_of_planned_behaviour_study/13444760?file=25839005.
 68. Martin RS, Hayes B, Gregorevic K, Lim WK. The effects of advance care planning interventions on nursing home residents: a systematic review. *J Am Med Dir Assoc* 2016; 17: 284–93.
 69. Hanna K, Giebel C, Cannon J *et al.* Working in a care home during the COVID-19 pandemic: how has the pandemic changed working practices? A qualitative study. *BMC Geriatr* 2022; 22: 129. <https://doi.org/10.1186/s12877-022-02822-0>.
 70. Snyder RL, Anderson LE, White KA *et al.* A qualitative assessment of factors affecting nursing home caregiving staff experiences during the COVID-19 pandemic. *PLoS One* 2021; 16: e0260055. <https://doi.org/10.1371/journal.pone.0260055>.
 71. Marshall F, Gordon A, Gladman JRF, Bishop S. Care homes, their communities, and resilience in the face of the COVID-19 pandemic: interim findings from a qualitative study. *BMC Geriatr* 2021; 21: 102. <https://doi.org/10.1186/s12877-021-02053-9>.
 72. Barken TL, Thygesen E, Söderhamn U. Advancing beyond the system: telemedicine nurses' clinical reasoning using a computerised decision support system for patients with COPD—an ethnographic study. *BMC Med Inform Decis Mak* 2017; 17: 1–11.
 73. Marasinghe KM. Computerised clinical decision support systems to improve medication safety in long-term care homes: a systematic review. *BMJ Open* 2015; 5: e006539. <https://doi.org/10.1136/bmjopen-2014-006539>.
 74. Abdellatif A, Bouaud J, Lafuente-Lafuente C, Belmin J, Séroussi B. Computerized decision support systems for nursing homes: a scoping review. *J Am Med Dir Assoc* 2021; 22: 984–94.
- Received 9 February 2022; editorial decision 18 September 2022**