Rural and Remote Health www.rrh.org.au
James Cook University ISSN 1445-6354

Review Article

A scoping review of the healthcare needs of older community-dwelling adults living in rural areas

AUTHORS


Pauletta Irwin[1], Associate Professor of Nursing [https://orcid.org/0000-0003-3242-4273]


Larissa Bamberry[2] [https://orcid.org/0000-0003-1013-5286]

Rui Bi[2], Senior Lecturer in Management [https://orcid.org/0000-0001-7016-9168]

Oliver Burmeister[3], Professor in Information Systems [https://orcid.org/0000-0002-1800-9551]


Gabrielle Drake[4], Professor of Social Work and Community Welfare [https://orcid.org/0000-0002-5237-0762]

Nicole Mahara[5], Lecturer in Nursing [https://orcid.org/0000-0001-5094-7495]

Teddy Nagaddya[4] [https://orcid.org/0000-0001-8812-139X]

Sharlotte Tusasiirwe[4], Lecturer in Social Work [https://orcid.org/0000-0002-3565-2477]

Deborah Magee[1], Scholarly Teaching Fellow * [https://orcid.org/0000-0002-7408-4062]

CORRESPONDENCE

*Ms Deborah Magee dmagee@csu.edu.au

AFFILIATIONS

[1] School of Nursing, Paramedicine and Healthcare Science, Charles Sturt University, Bathurst, NSW 2795, Australia

[2] School of Business, Charles Sturt University, Albury, NSW 2640, Australia

[3] School of Computing, Mathematics and Engineering, Charles Sturt University, Orange, NSW 2800, Australia

[4] School of Social Sciences, Western Sydney University, Parramatta, NSW 2150, Australia

[5] School of Nursing, Paramedicine and Healthcare Science, Charles Sturt University, Port Macquarie, NSW 2444, Australia

PUBLISHED

1 July 2026 Volume 26 Issue 3

HISTORY

RECEIVED: 25 April 2025

REVISED: 1 April 2026

ACCEPTED: 7 April 2026

CITATION

Irwin P, Bamberry L, Bi R, Burmeister O, Drake G, Mahara N, Nagaddya T, Tusasiirwe S, Magee D. A scoping review of the healthcare needs of older community-dwelling adults living in rural areas . Rural and Remote Health 2026; 26: 9972. https://doi.org/10.22605/RRH9972

Abstract

Introduction: The aim of this review was to explore the unmet healthcare needs of community-dwelling older adults living in rural areas, to identify barriers and facilitators in accessing services and examine the supply and demand of community-based care.
Methods: A scoping review was conducted following the Arksey and O'Malley framework and adhering to PRISMA-ScR guidelines. A systematic search and selection process identified peer-reviewed articles and grey literature published from 2014 to 2025. Data were extracted, organised and analysed using Covidence to map key findings and identify thematic patterns. Ovid MEDLINE, CINAHL Plus with Full Text, Scopus, Informit, and ProQuest Health and Medicine databases were searched for primary research studies. A search specifically for grey literature focusing on the current Australian context was undertaken separately.
Results: The 23 resources included in the review highlight significant rural healthcare disparities, including workforce shortages, high service costs and limited availability of aged care resources. While family and community networks remain vital sources of support, they are increasingly strained due to demographic shifts, such as the outmigration of younger populations. Older people consistently expressed a strong preference for home-based care; however, environmental and systemic barriers, such as inadequate transportation and service fragmentation, hinder their ability to age in place. Social participation was found to be linked to wellbeing, yet many older adults in rural communities experience isolation due to geographic, infrastructure and service-related constraints.
Conclusion: This review identified persistent and multifaceted inequities in healthcare services available to community-dwelling older adults. Rural health workforce shortages, limited community support service availability, transport barriers, fragmented care systems and reliance on informal caregiving were key factors influencing the capacity to age in place. These findings highlight the need for more coordinated, context and culturally responsive rural health services and support systems.

Keywords

age-friendly communities, ageing in place, community-based care, healthcare access, health workforce, healthy ageing, older people, rural health, social determinants of health.

Introduction

The world is experiencing unprecedented demographic transition. WHO estimates that by 2050 the global population aged over 60 years will double to 2.1 billion, with those aged over 80 years projected to triple to 426 million[1]. These shifts are most pronounced in low- and middle-income countries, which by 2050 will be home to 66% of the world's older population. As Khan observed, the present century represents 'the first era in human history when the world will no longer be young'[2]. This demographic transformation is irreversible, country specific, and shaped by intersecting forces such as migration, climate change, and shifting mortality and life expectancy patterns, necessitating nationally led responses informed by global strategies[2,3].

Population ageing has far-reaching implications for labour markets, financial systems, housing, transport social security and health care[3,4]. A narrative literature review by Khan et al identified a broad range of associated public health challenges including rising chronic disease burden, increasing disability, caregiving shortages and deficiencies in long-term care[5]. These challenges are particularly acute in regional areas, where access to health care is constrained by workforce shortages, geographic isolation and socioeconomic disadvantage[5]. Addressing these challenges requires collaborative, multisectoral policy responses, grounded in high-quality evidence and meaningful stakeholder engagement[4,5].

Healthy ageing, an overarching goal of the UN Decade of Healthy Ageing (2021–2030[4], emphasises maintaining functional ability, defined by WHO as an individual's sustained ability to function effectively in daily life. Functional ability reflects a dynamic interplay between intrinsic capacity – encompassing physiological and psychological health, health behaviours and disease status – and the physical, social and policy environments in which people live[4].

Closely related to healthy ageing is the concept of ageing in place: the ability of older people to remain in their own homes and communities for as long as possible, with or without support[6]. A scoping review by Pani-Harreman et al identified five foundational elements of ageing in place: 'place' (the home environment and sense of belonging), social networks, formal and informal support, technology, and personal characteristics such as adaptability and resilience[6]. Access to transport, home maintenance, personal care and health care are critical enabling conditions[6], while inadequate

infrastructure and service fragmentation constitute barriers. Older people with stronger adaptive capacities and support networks are more likely to age in place successfully[6].

For rural-dwelling older adults, these enabling conditions are frequently absent or compromised[7,8]. Compared with their metropolitan counterparts, rural older adults experience greater health vulnerabilities and poorer health outcomes driven by disadvantage and elevated health risk factors[9]. Barriers to ageing in place are particularly pronounced in rural settings and include workforce shortages, limited availability of community-based services, inadequate public transport, changing family structures driven by the out-migration of younger generations, and reduced awareness of available supports among older people and their carers[7,8,10]. Social isolation further compounds these challenges as community-based programs that promote engagement and wellbeing remain limited in both availability and design scope[11,12].

There is growing recognition that effectively meeting the needs of ageing rural populations requires multi-dimensional, person-centred strategies that prioritise autonomy, respond to diversity and strengthen independence among the ageing[13,14]. Participatory co-design approaches that engage older adults in the development and evaluation of services offer promise in improving program relevance, uptake and resource efficiency[11,15,16]. However, the evidence base underpinning such approaches is rural aged care contexts remains underdeveloped.

To address this gap and inform future research and policy development, this scoping review was conducted to map the existing literature on the care needs of community-dwelling older adults in rural areas. Scoping reviews are appropriate when the purpose is to systematically chart the scope, range and nature of evidence on a topic, identify key concepts and research gaps and generate an agenda for future inquiry, rather than to synthesise evidence for clinical decision-making[17,18]. This review was guided by the question 'What are the healthcare needs for community-dwelling older people in rural areas?' Distinct from prior reviews, it integrates three specific dimensions: a focus on community-dwelling older adults, attention to diverse ethnic and cultural contexts, and an explicit focus on rural settings. The findings are presented thematically, organised around five research focus areas identified in the included studies, and discussed in relation to implications for workforce development, service design and policy.

Methods

The first purpose of this scoping review was to comprehensively examine the extent and characteristics of primary research studies and grey literature focused on the care needs of community-dwelling older people in rural areas. The second purpose was to develop a summary of the current evidence to inform a research agenda[19]. Close attention was paid to the systematic approach to undertaking scoping reviews detailed in the JBI Manual for Evidence Synthesis, and a completed PRISMA-ScR checklist was included as an appendix to the submission[20,21]. This scoping review was originally registered on Open Science Framework in January 2024 and was re-registered in January 2025 (project number osf.io/8nerf). The design, inclusion and exclusion criteria have not been altered from the original registration.

A benefit of using a systematic approach to the scoping review process was the provision of clear guidance to a large interdisciplinary team from nursing, social work, business, and computing and mathematics backgrounds. During the scoping review process the team met every 2 weeks and freely communicated between meetings to ensure queries were addressed.

The topic that was the focus of the review was decided in a team meeting along with draft inclusion and exclusion criteria. A key team member was a specialist librarian who assisted in the development of search terms. A preliminary search of Ovid MEDLINE and CINAHL Plus with Full Text databases was undertaken. Draft search strings for Scopus, Informit, ProQuest Health and Medicine were then developed, trialled and refined by the research assistant and librarian.

After the search strings and inclusion and exclusion criteria were finalised, a search of Ovid MEDLINE, CINAHL Plus with Full Text, Scopus, Informit, and ProQuest Health and Medicine databases was undertaken on 3 May 2024. The full search string for Ovid MEDLINE is shown in Table 1.

This search located 631 studies, which were imported into Covidence for screening. Articles were included if they focused on people with the following characteristics: adults aged 60 years or older or Aboriginal or Torres Strait Islander people 45 years or older living in a rural area; people residing in accommodation in the community in a residence owned by the older person, in private rental accommodation or in the independent living section of a retirement village; people living independently; people who access services provided by government or private agencies; and people living with a formal or informal carer. The conceptualisation of an older person in the inclusion criteria comprises varying cultural, social and geographical contexts. The definition of a rural area was determined by individual articles included in the review. Team members were also encouraged to include articles where the participants were identified as older people by the researchers conducting the respective studies[22]. The parameters of 'health services' for older people were also wide in order to 'generate breadth of coverage'[19]. Additional inclusion criteria were articles published from 2014 to April 2025, were published in English, were peer-reviewed articles or conference presentations, and were qualitative, quantitative or mixed-methods studies. The articles that contained data from both rural and metropolitan areas were excluded if data were not disaggregated.

Covidence enabled all team members to participate in the screening process. The PRISMA flow chart (Fig1) shows that 101 duplicates were identified by Covidence. Title and abstract screening were performed on 530 articles, and 374 articles were excluded. Full-text screening of 156 articles excluded a further 138 articles. This resulted in 18 studies included at the conclusion of this process. An additional three peer-reviewed articles were located during manual searches, for a total of 21 included articles at this stage.

The scoping review process was iterative in nature[19]. This is highlighted by the decision to conduct a separate grey literature search. The purpose of including grey literature with an Australian focus was to capture literature reflective of recent changes in policy and practice in the aged care sector in Australia. A grey

literature search was conducted on 14 October 2024. Following discussion, one additional key government document was included in the review, bringing the number of included articles to 22.

A second search of all databases was conducted using the same search terms on 1 April 2025 with the aim of identifying articles published between October 2024 and April 2025. This yielded one additional article. Therefore, the total number of articles included in the review was 23.

The data charting of peer-reviewed articles was done within Covidence, with a custom data extraction tool developed and trialled by the team. Five articles were trialled and the results compared to ensure consistency of responses. The Mixed Methods Appraisal Tool informed the data appraisal questions[23]. While a critical appraisal of bias or methodological limitations is not recommended for a scoping review, the utilisation of the tool provided an additional depth of understanding of the included articles[17,19,20]. The reviewers performed data extraction independently and other team members completed the comparison phase. No studies were excluded from the review following the appraisal process.

Table 1: Ovid MEDLINE search strings

#	Query
1	exp Rural Health/ or exp Rural Health Services/ or exp Rural Population/ or Regional Health Planning/ or Regional Medical Programs/ or (rural or regional).ti,ab.
2	exp Aged/ or exp geriatrics/ OR (aged OR older OR elder* OR geriatric OR gerontolog* OR senior* OR old age).ti,ab.
3	exp "Health Services Needs and Demand"/ or exp Health Services Accessibility/ or ((health* or care) adj3 (needs or need or service* or plan*)).ti,ab.
4	exp Independent Living/ or (community dwelling or (living adj3 home) or unsupported living or independent living or community living or independence or home based or home dwelling or age in place or aging in place or community residing).ti,ab.

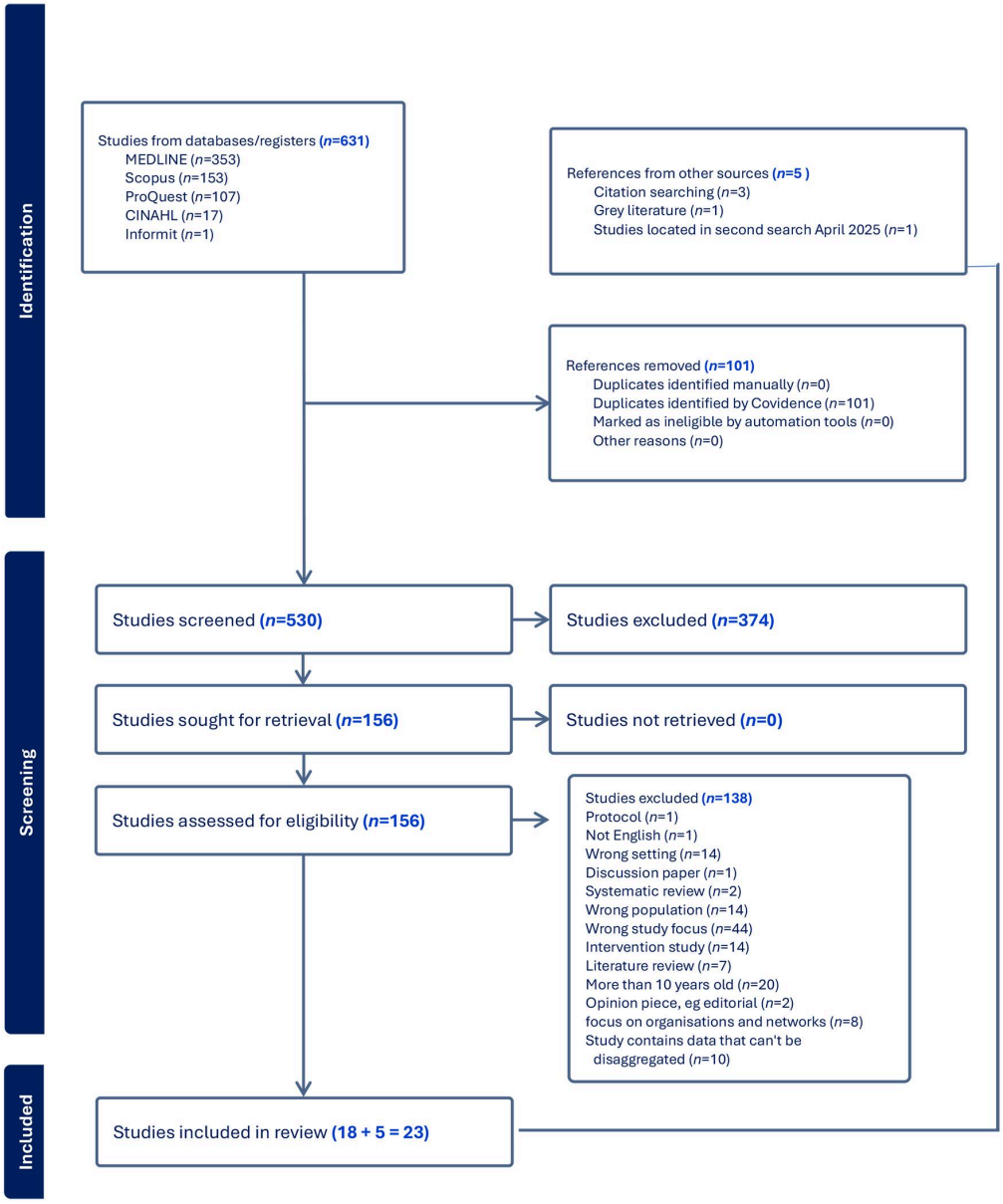

Figure 1: PRISMA flowchart.

Ethics approval

This is a review of previously published literature. Therefore, no ethics approval was required[24].

Results

Research focus

As shown in Supplementary table 1, the 23 included sources were grouped into five categories:

- Seven primary research studies explored the unmet care and health needs of older adults living in rural areas[25-31].
- One report by the Australian Government Office of the Inspector-General of Aged Care[32] also explored unmet care and health needs, focusing on the implementation of recommendations from a Royal Commission conducted in Australia.
- Three studies focused on determining the demand and supply of care services, both institutional and community-based care[33-35].
- Six primary research studies focused on older adults' experiences with formal and informal services and supports available (these identified the facilitators and barriers of accessing and utilising services in rural areas)[36-41].
- One study focused on older adults' caregiving experiences[42].
- Two studies focused on older adults' experiences and perspectives of ageing in place and ageing well/healthy ageing[43-47].

Characteristics of included research studies

In this scoping review, 22 studies were primary data sources, including qualitative, quantitative studies and mixed-methods approaches. Sixteen studies were qualitative, with a variety of research designs used. Six studies used thematic analysis[26,27,37,41,46,47]. An ethnographic approach was used in four studies[25,31,39,40]. Two studies used a variation of ethnography: Farrar et al[42] used both ethnography and phenomenology, and Anderson et al[47] used an ethnographic case study design. One study used descriptive questionnaire[28]. Neville et al used narrative gerontology[38]. Two studies used content analysis[43,44]. Five studies were quantitative, and all utilised a cross-sectional design[29,30,33-35]. In one study, Melchiorre et al used a mixed-methods design[45]. There was one item of grey literature from the Australian Government Office of the Inspector-General of Aged Care[32].

Participant description

Participants in the included studies in this scoping review were primarily community-dwelling older adults aged 60 years and over. For Aboriginal and Torres Strait Islander people, an inclusion age of 45 years and over was applied, reflecting earlier onset of health inequities and lower life expectancy reported in the literature[48]. Across all studies, participants represented a diverse demographic across selected countries and study settings in terms of health conditions, living arrangements, having an informal or formal carer and access to healthcare resources. Additionally, participants were recruited from rural geographies where they lived in communities. This range of participant contexts was important to ensure a comprehensive understanding of older people's health experiences, barriers and challenges to accessing aged care services and identification of potential enablers of good health and wellbeing.

Barriers, supports and services identified across the literature

Across the included literature, several recurring barriers to meeting the healthcare needs of older adults in rural areas were identified. Workforce shortages were frequently reported and affected access to primary care, specialist care, allied health and aged care services[25,27,32,36,38,41]. Limited service availability was compounded by high costs, transport difficulties, long travel distances and fragmented service systems[27,32,36,38,39,41]. Several studies also identified reduced mobility, cognitive decline, inadequate housing and poor transport infrastructure as barriers to ageing in place[31,35,37,39,41,44,46].

At the same time, the review identified a number of supports that enabled older adults to remain at home. Informal caregiving by family members, neighbours and community networks was commonly described as essential, particularly where formal services were limited[25,26,29,39,40,45]. Social participation and community connectedness were also identified as important supports for wellbeing[29,37,38,41,46,47]. Several studies reported that older adults preferred home-based or family-provided care over institutional care, although this preference was often shaped by cultural values, financial constraints, and concern about separation, abandonment or relocation[26,31,34,39-41,45]. Technology-based options such as telehealth and digital monitoring were discussed as potential supports, but concerns were raised about digital access, internet reliability and the suitability of technology for socially isolated older adults[34,38,44,45].

Discussion

This scoping review mapped the extent and nature of evidence relating to the healthcare needs of community-dwelling older adults in rural areas and showed persistent disparities in access to services, supports and resources required for ageing in place. The prominence of health workforce shortages across the literature suggests that access problems in rural ageing are not simply individual or geographic but are embedded in broader structural inequities in rural service systems.

Informal caregiving and community support emerged as a critical mechanism to compensate for the absence or inadequacy of formal services in areas[28]. Family members and community networks often provided essential support that enabled older adults to remain at home, particularly those with chronic illness, mobility challenges or increasing care needs[29,30,34,40]. The review further suggests that caregiving in rural areas is shaped by more than service availability alone. In particular the literature highlights the complexity of dementia care, where cultural expectations, caregiver knowledge and the limited availability of trained professionals influence the use of home- and community-based services[26]. At the same time, these informal support systems appear to be under increasing strain due to changing family dynamics, including the out-migration of younger generations, leading to increased caregiving demands[25,33,45]. Together, these findings suggest the need for service models that do not rely

solely on family caregiving, instead re-imagining care systems that enable older adults to age in place independently or with targeted formal support.

The review also highlights the importance of social participation and community integration in promoting mental health and wellbeing of rural older adults[29,37]. Social participation is closely linked to improved mental and physical health and overall quality of life. Lester et al also identified mobility as a central determinant of rural ageing experiences[35], linking reduced mobility to decreased access to services, heightened social isolation, and increased reliance on both formal and informal care. Nevertheless, some studies highlighted a discrepancy between this assumed value and the actual prioritisation of mental health support by older adults themselves. For example, Zhou et al found that only 2.4% of rural residents place value on mental health supports[33]. This finding aligns with a study by Henning-Smith et al [41], which noted stigma and cultural norms around self-reliance in rural communities, and with studies by Anderson et al[47] and Detthippornpong et al[40], whose participants tended to rely on internal or family-based coping strategies rather than formal mental health support. This suggests a need for more nuanced investigation of how rural older adults perceive, prioritise and engage with mental health support, rather than assuming formal mental health services will be universally valued or sought.

The preference for home-based and family-provided care across the literature reinforces the importance of ageing in place as both a practical and values-based goal for rural older adults. This preference is driven by cultural values, financial constraints and concerns of abandonment in institutional settings[34,40]. However, this review identified that ageing in place is not supported by preference alone. Cognitive decline, mobility limitations, and environmental limiters such as inadequate housing and transportation infrastructure can substantially constrain the ability of older adults to remain safely and meaningfully connected within their communities[39,41]. In many rural areas, limited or non-existent public transport and high-cost alternatives such as taxis affect not only access to health care and social services but also access to groceries, social activities and other basic supports for everyday living[39,41]. These findings suggest that ageing in place should be understood as dependent on broader social and environmental infrastructure, not simply an individual choice.

In rural areas, these challenges are compounded by fragmented care systems and a lack of resources. Several studies pointed to the need for stronger links between health and social services as well as more consistent care coordination[36,37,45]. The literature also suggests that engagement with formal services is shaped by cultural values, spiritual beliefs and social norms, with many older adults continuing to prefer family-based, informal care where possible[31,39,40]. The adoption of technology such as telehealth and digital monitoring tools was frequently proposed as a solution; however, concerns remain about its suitability for socially isolated populations, particularly when access to reliable internet is limited or when some older adults express ambivalence toward technological care[34,38,44].

Importantly, some studies challenged any assumption that rural ageing is a homogenous experience. Karlin[43] and Anderson et al[47] emphasised that ageing trajectories and coping strategies vary widely between individuals, even within the same geographical regions. These findings point to the importance of designing services that are flexible and responsive to individual needs rather than assuming homogeneity among rural adults.

Limitations

Scoping reviews provide a broad overview of the literature and are useful to inform future research. However, they have limitations, including a lack of critical appraisal, making it difficult to assess the quality of included studies[19,20]. A critical appraisal of studies was conducted using the Mixed Methods Appraisal Tool[23] and the findings presented; however, the ensuing discussion is descriptive rather than interpretive[18]. Given this review has identified 23 studies, as recommended by Tricco et al[21] the research team will now consider conducting a systematic review to examine the topic in greater depth.

Conclusion

This scoping review has provided a comprehensive examination of the healthcare needs for community-dwelling older people in rural areas, revealing persistent disparities in healthcare access, workforce shortages and service coordination. Future research should explore sustainable and scalable models of care that address these challenges while considering the unique sociocultural contexts of rural ageing populations. The implications for health providers, government and policymakers are the prioritisation of investment in research with a focus on rural healthcare infrastructure, workforce development and community-based interventions to support the evolving needs of older adults. Addressing these issues through targeted, evidence-informed and contextually relevant strategies will be essential to ensuring equitable and high-quality care for older people in rural areas.

Acknowledgements

The authors acknowledge Ms Lorraine Rose, Faculty Librarian (Science and Health), Charles Sturt University, and thank her most sincerely for her assistance throughout the review process.

Funding

The scoping review was conducted as part of a research project funded by the Rural Health Research Institute. The Rural Health Research Institute played no role in the design, execution, analysis or interpretation of the scoping review beyond providing financial support. The research team independently conducted all aspects of the review, including study selection, data extraction, collating, summarising and reporting of findings.

Conflicts of interest

The authors declare that they have no known competing financial interests or personal relationships that could have influenced the work reported in this article.

AI disclosure statement

The authors did not use AI or AI-assisted tools in any aspect of the development of this article.

References

1 World Health Organization. Ageing and health. *World Health Organization* 2024.
https://www.who.int/news-room/fact-sheets/detail/ageing-and-health
(Accessed 16 November 2025).

2 Khan HTA. Population ageing in a globalized world: risks and dilemmas? *Journal of Evaluation in Clinical Practice* 2019; **25(5):** 754–760.
https://doi.org/10.1111/jep.13071
https://www.ncbi.nlm.nih.gov/pubmed/30485597

3 Gu D, Andreev K, Dupre ME. Major trends in population growth around the world. *China CDC Weekly* 2021; **3(28):** 604–613.
https://doi.org/10.46234/ccdcw2021.160
https://www.ncbi.nlm.nih.gov/pubmed/34594946

4 World Health Organization (WHO). *UN decade of healthy ageing: plan of action 2021–2030.* WHO, 2020.
https://www.who.int/publications/m/item/decade-of-healthy-ageing-plan-of-action
(Accessed 14 May 2026).

5 Khan HTA, Addo KM, Findlay H. Public health challenges and responses to the growing ageing populations. *Public Health Challenges* 2024; **3(3).** e213.
https://doi.org/10.1002/puh2.213
https://www.ncbi.nlm.nih.gov/pubmed/40496520

6 Pani-Harreman KE, Bours GJJW, Zander I, Kempen GIJM, van Duren JMA. Definitions, key themes and aspects of 'ageing in place': a scoping review. *Ageing & Society* 2021; **41(9):** 2026–2059.
https://doi.org/10.1017/S0144686X20000094

7 O'Sullivan S, Buckley M, Desmond E, Bantry-White E, Cassarino M. *Agency and ageing in place in rural Ireland.* Cork City, Ireland: University College Cork and Age Action, 2022.

8 Augere-Granier M-L, McEldowney J. *Older people in the European Union's rural areas: issues and challenges.* Belgium: European Parliamentary Research Service, 2020.

9 Hodgkin S, Mnatzaganian G, Warburton J, Winterton R. Networks of care in Australian rural ageing populations. *Journal of Rural Studies* 2022; **92:** 17–25.
https://doi.org/10.22605/RRH4547
https://www.ncbi.nlm.nih.gov/pubmed/30068213

10 Miller KEM, Ornstein KA, Coe NB. Rural disparities in use of family and formal caregiving for older adults with disabilities. *Journal of the American Geriatrics Society* 2023; **71(9):** 2865–2870.
https://doi.org/10.1111/jgs.18376
https://www.ncbi.nlm.nih.gov/pubmed/37081828

11 Robson K, Nott MT, Cuming T, Murphy K, Curtin M, Pope R. Understanding what older people value in the design of a community-based healthy ageing program, a qualitative study. *Health and Social Care in the Community* 2024; **1.** 6438553.
https://doi.org/10.1155/2024/6438553

12 Radermacher H, Feldman S. 'Health is their heart, their legs, their back': understanding ageing well in ethnically diverse older men in rural Australia. *Ageing & Society* 2015; **35(5):** 1011–1031.
https://doi.org/10.1017/S0144686X14001226

13 Seah B, Kowitlawakul Y, Jiang Y, Ang E, Chokkanathan S, Wang W. A review on healthy ageing interventions addressing physical, mental and social health of independent community-dwelling older adults. *Geriatric Nursing* 2019; **40(1):** 37–50.
https://doi.org/10.1016/j.gerinurse.2018.06.002
https://www.ncbi.nlm.nih.gov/pubmed/29909022

14 Villar F. Successful ageing and development: the contribution of generativity in older age. *Ageing & Society* 2012; **32(7):** 1087–1105.
https://doi.org/10.1017/S0144686X11000973

15 James H, Buffel T. Co-research with older people: a systematic literature review. *Ageing & Society* 2023; **43(12):** 2930–2956.
https://doi.org/10.1017/S0144686X21002014

16 Slattery P, Saeri AK, Bragge P. Research co-design in health: a rapid overview of reviews. *Health Research Policy and Systems* 2020; **18(17):** 17.
https://doi.org/10.1186/s12961-020-0528-9
https://www.ncbi.nlm.nih.gov/pubmed/32046728

17 Peters MDJ, Marnie C, Tricco AC, Pollock D, Munn Z, Alexander L, et al. Updated methodological guidance for the conduct of scoping reviews. *International Journal of Evidence-Based Healthcare* 2021; **19(1):** 3–10.
https://doi.org/10.1097/XEB.0000000000000277
https://www.ncbi.nlm.nih.gov/pubmed/33570328

18 Munn Z, Peters MDJ, Stern C, Tufanaru C, McArthur A, Aromataris E. Systematic review or scoping review? Guidance for authors when choosing between a systematic or scoping review approach. *BMC Medical Research Methodology* 2018; **18(1):** 143.
https://doi.org/10.1186/s12874-018-0611-x
https://www.ncbi.nlm.nih.gov/pubmed/30453902

19 Arksey H, O'Malley L. Scoping studies: towards a methodological framework. *International Journal of Social Research Methodology* 2005; **8(1):** 19–32.
https://doi.org/10.1080/1364557032000119616

20 Aromatis E, Lockwood C, Porritt K, Pilla B, Jordan Z. *JBI manual for evidence synthesis.* JBI, 2024.
https://doi.org/10.46658/JBIMES-24-01

21 Tricco AC, Lillie E, Zarin W, O'Brien KK, Colquhoun H, Levac D, et al. PRISMA extension for scoping reviews (PRISMA-ScR): checklist and explanation. *Annals of Internal Medicine* 2018; **169(7):** 467–473.
https://doi.org/10.7326/M18-0850
https://www.ncbi.nlm.nih.gov/pubmed/30178033

22 Joshi M, Finney N, Hale JM. Loneliness and social isolation of ethnic minority/immigrant older adults: a scoping review. *Ageing & Society* 2024; **45(7):** 1395–1425.
https://doi.org/10.1017/S0144686X24000205

23 Hong QN, Pluye P, Fabregues S, Bartlett G, Boardman F, Cargo M, et al. *Mixed methods appraisal tool (MMAT).* Montreal, Canada: Canadian Intellectual Property Office, Industry Canada, 2018.

24 National Health and Medical Research Council (NHMRC). Australian Research Council (ARC). Universities Australia. *National statement on ethical conduct in human research.* Canberra, Australia: NHMRC, ARC, Universities Australia, 2023.

25 Goris ED, Schutte DL, Rivard JL, Schutte BC. Community leader perceptions of the health needs of older adults. *Western Journal of Nursing Research* 2015; **37(5):** 599.
https://doi.org/10.1177/0193945914530046

https://www.ncbi.nlm.nih.gov/pubmed/24757048

26 Russell D, Miyawaki CE, Reckrey JM, Bouldin ED. Unmet needs and factors impacting home- and community-based service use among rural Appalachian caregivers of people with Alzheimer's and dementia. *Journal of Applied Gerontology* 2025; **44(4):** 628–637.
https://doi.org/10.1177/07334648241280041
https://www.ncbi.nlm.nih.gov/pubmed/39263814

27 Asante D, McLachlan CS, Pickles D, Isaac V. Understanding unmet care needs of rural older adults with chronic health conditions: a qualitative study. *International Journal of Environmental Research and Public Health* 2023; **20(4):** 3298.
https://doi.org/10.3390/ijerph20043298
https://www.ncbi.nlm.nih.gov/pubmed/36833993

28 Hamazaki Y, Nagai M. Worries of independent older people regarding health and daily life: a survey of residents of a rural town in Japan. *Journal of Community Health Nursing* 2012; **29(4):** 225–235.
https://doi.org/10.1080/07370016.2012.724291
https://www.ncbi.nlm.nih.gov/pubmed/23136862

29 Fu L, Wang Y, He L. Factors associated with healthy ageing, healthy status and community nursing needs among the rural elderly in an empty nest family: results from the China Health and Retirement Longitudinal Study. *Healthcare* 2020; **8(3):** 317.
https://doi.org/10.3390/healthcare8030317
https://www.ncbi.nlm.nih.gov/pubmed/32899266

30 Miao X, Bai W, Zhao Y, Yang LN, Yuan W, Zhang A, et al. Unmet health needs and associated factors among 1727 rural community-dwelling older adults: a cross-sectional study. *Geriatric Nursing* 2021; **42(3):** 772–725.
https://doi.org/10.1016/j.gerinurse.2021.04.003
https://www.ncbi.nlm.nih.gov/pubmed/33906085

31 Eisenhauer CM, Pullen CH, Hunter JL, Nelson T. The influence of cognitive decline on rural identity: perspectives of older women. *Journal of Holistic Nursing* 2015; **33(2):** 134–145.
https://doi.org/10.1177/0898010114544218
https://www.ncbi.nlm.nih.gov/pubmed/25098734

32 Australian Government Office of the Inspector-General of Aged Care. *Progress report on implementation of Aged Care Royal Commission recommendations.* Canberra, Australia: Australian Government Office of the Inspector-General of Aged Care, 2024.

33 Zhou W, Jiang B, Yu L, Dai W. Measuring demand and supply of community care services for older people healthy ageing in rural Zhejiang Province. *BMC Geriatrics* 2022; **22(1):** 286.
https://doi.org/10.1186/s12877-022-02906-x
https://www.ncbi.nlm.nih.gov/pubmed/35387605

34 Liu Z-W, Yu Y, Fang L, Hu M, Zhou L, Xiao S-Y. Willingness to receive institutional and community-based eldercare among the rural elderly in China. *PLOS One* 2019; **14(11):** e0225314.
https://doi.org/10.1371/journal.pone.0225314
https://www.ncbi.nlm.nih.gov/pubmed/31756228

35 Lester D, Tiedemann A, Sherrington C. Objectively measured mobility of rural community-dwelling people aged 80 and over is strongly associated with greater use of services for community integration and social support: an observational study. *The Australian Journal of Rural Health* 2019; **27(1):** 6–13.
https://doi.org/10.1111/ajr.12438
https://www.ncbi.nlm.nih.gov/pubmed/30693997

36 Lafortune C, Huson K, Santi S, Stolee P. Community-based primary health care for older adults: a qualitative study of the perceptions of clients, caregivers and health care providers. *BMC Geriatrics* 2015; **15(1):** 57.
https://doi.org/10.1186/s12877-015-0052-x
https://www.ncbi.nlm.nih.gov/pubmed/25925552

37 Bosch-Farré C, Malagón-Aguilera MC, Ballester-Ferrando D, Bertran-Noguer C, Bonmatí-Tomàs A, Gelabert-Vilella S, et al. Healthy ageing in place: enablers and barriers from the perspective of the elderly. A qualitative study. *International Journal of Environmental Research and Public Health* 2020; **17(18).**
https://doi.org/10.3390/ijerph17186451
https://www.ncbi.nlm.nih.gov/pubmed/32899744

38 Neville S, Adams J, Napier S, Shannon K, Jackson D. 'Engaging in my rural community': perceptions of people aged 85 years and over. *International Journal of Qualitative Studies on Health and Well-Being* 2018; **13(1):** 1503908.
https://doi.org/10.1080/17482631.2018.1503908
https://www.ncbi.nlm.nih.gov/pubmed/30102138

39 Evans N, Allotey P, Imelda JD, Reidpath DD, Pool R. Social support and care arrangements of older people living alone in rural Malaysia. *Ageing & Society* 2018; **38(10):** 2061–2081.
https://doi.org/10.1017/S0144686X17000472

40 Detthippornpong S, Songwathana P, Bourbonnais A. Holistic health practices of rural Thai homebound older adults: a focused ethnographic study. *Journal of Transcultural Nursing* 2022; **33(4):** 521–528.
https://doi.org/10.1177/10436596221090270
https://www.ncbi.nlm.nih.gov/pubmed/35506516

41 Henning-Smith C, Lahr M, Tanem J. 'They're not leaving their home; this is where they were born, this is where they will die.': Key informant perspectives from the U.S. counties with the greatest concentration of the oldest old. *Research on Aging* 2022; **44(3-4):** 312–322.
https://doi.org/10.1177/01640275211032387
https://www.ncbi.nlm.nih.gov/pubmed/34259090

42 Farrar HM, Kulig J, Sullivan-Wilson J. Older adult caregiving in an Amish community. *Research in Gerontological Nursing* 2018; **11(1):** 29–38.
https://doi.org/10.3928/19404921-20171128-02
https://www.ncbi.nlm.nih.gov/pubmed/29370444

43 Karlin NJ. Divergent experiences reported by rural and frontier older adults aging in place. *Journal of Aging & Social Policy* 2024; **36(2):** 262–281.
https://doi.org/10.1080/08959420.2023.2197562
https://www.ncbi.nlm.nih.gov/pubmed/37011130

44 Allen JC, Rickards TS, Roberts CLH, Baird ES. Aging in place and 'the little things': prioritizing mobile health and social care in rural communities. *Journal of Aging & Social Policy* 2020. 1302–1318.
https://doi.org/10.1080/08959420.2024.2323880
https://www.ncbi.nlm.nih.gov/pubmed/38564337

45 Melchiorre MG, Quattrini S, Lamura G, Socci M. A mixed-methods analysis of care arrangements of older people with limited physical abilities living alone in Italy. *International Journal of Environmental Research and Public Health* 2021; **18(24):** 12996.
https://doi.org/10.3390/ijerph182412996

https://www.ncbi.nlm.nih.gov/pubmed/34948603

46 Hancock S, Winterton R, Wilding C, Blackberry I. Understanding ageing well in Australian rural and regional settings: applying an age-friendly lens. *The Australian Journal Of Rural Health* 2019; **27(4):** 298–303.
https://doi.org/10.1111/ajr.12497
https://www.ncbi.nlm.nih.gov/pubmed/31429143

47 Anderson EM, Larkins S, Beaney S, Ray RA. Coping with ageing in rural Australia. *The Australian Journal of Rural Health* 2020; **28(5):** 469–479.
https://doi.org/10.1111/ajr.12647
https://www.ncbi.nlm.nih.gov/pubmed/32989901

48 Ogbeide AE, Nash S, Ghaju S, Dune T. Ageing in Indigenous Australians. *Aging across cultures: growing old in the non-Western world*. Cham, Switzerland: Springer International Publishing, 2021. 259–283.
https://doi.org/10.1007/978-3-030-76501-9_17

Supplementary material is available on the live site https://www.rrh.org.au/journal/article/9972/#supplementary