


REVIEW ARTICLE OPEN ACCESS

Models of Care for Older People: A Scoping Review

Ann Dadich¹  | Angela Lan² | Suhasini Shanmugarajan² | Sarah Childs³ | Jennifer Alford¹ | Danielle Ní Chróinín^{2,3}

¹School of Business, Western Sydney University, Sydney, Australia | ²University of New South Wales, Sydney, Australia | ³South Western Sydney Local Health District, Sydney, Australia

Correspondence: Ann Dadich (a.dadich@westernsydney.edu.au)

Received: 21 June 2024 | **Revised:** 19 November 2024 | **Accepted:** 8 December 2024

Funding: This work was supported by Western Sydney University.

Keywords: care for older people | model of care | scoping review

ABSTRACT

Background: International recognition of the increasing importance of care for older people has seen growing interest in models of care for older people. Yet there is limited information about the scope and breadth of models of care for older people. This article clarifies what is known about models of care for older people by summarizing relevant publications, describing the models depicted in these publications, and synthesizing the outcomes and impact presented in the publications.

Method: A scoping review was conducted that involved searching multiple databases to identify relevant publications, published in English, which presented a model of care for older people—specifically, non-Indigenous people aged ≥ 65 years and/or Indigenous people aged ≥ 50 years; and included evidence, broadly defined, about the utility or otherwise of the model. Commentaries, narrative letters, editorials, and reviews were excluded.

Results: From 21,767 publications, 276 were deemed relevant. From these, four key findings are apparent. First, models of care for older people are understood in disparate ways and are typically devoid of clear stepwise guidance. Second, most of the publications reported on a multidisciplinary approach. Third, they generally failed to involve carers. Fourth, very few publications reported on studies conducted in a rural area, and none involved Indigenous people.

Conclusion: Given the heterogeneity and breadth of models of care for older people, further research is needed to establish: a definition of a model of care for older people; reporting standards; the factors that help or hinder their effectiveness; how to ensure carer involvement; and how to adapt models of care for older people for priority populations.

1 | Introduction

The increasing importance of care for older people worldwide [1, 2] has seen a burgeoning interest in models of care for older people [3, 4]. Yet there is limited clarity on what constitutes a model of care. This is apparent following an unsystematic consideration of recent articles (published since 2020). While some do not define a model of care [5], others define it as: “health-care delivery” [6]; “care organization and structures” [7]; or “an evidence-based intervention” [8]. As such, it is difficult to ascertain what distinguishes a model of care.

The limited clarity on models of care for older people is an issue for personal, social, organizational, and economic reasons [9–11]. At a personal level, unclear understandings can compromise the care of patients and carers, and health outcomes. At a social level, they can obscure the roles and responsibilities of multidisciplinary clinicians. At an organizational level, limited clarity can impair sustainability, effectiveness, and efficiency. And at an economic level, unclear understandings can: create duplicative effort; waste limited resources; or miss opportunities to promote patient and carer wellbeing.

See related Editorial by [Malone et al.](#) in this issue.

This is an open access article under the terms of the [Creative Commons Attribution-NonCommercial-NoDerivs](#) License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

© 2025 The Author(s). *Journal of the American Geriatrics Society* published by Wiley Periodicals LLC on behalf of The American Geriatrics Society.

Summary

- Key points
 - Models of care for older people are understood in disparate ways and often devoid of clear stepwise guidance.
 - Most of the publications reported on a multidisciplinary approach but generally failed to involve carers.
 - Very few publications reported on studies conducted in a rural area, and none involved Indigenous people.
- Why does this paper matter?
 - Further research should explore definitions, reporting standards, barriers and facilitators, as well as priority populations.

Despite the opacity that surrounds current understandings of models of care, one point is apparent—they are processual. That is, a model of care is not represented by a single assessment, treatment, or intervention, but rather, is progressive. As the Agency for Clinical Innovation [12] observed, “A ‘Model of Care’ broadly defines the way health services are delivered... for a person, population group or patient cohort as they progress through the stages of a condition, injury or event.”

Given the increasing importance of models of care for older people, and to expand previous research that focused on “care complexity in older adults” [8], the aim of this scoping review was to map the nature and extent of the literature on models of care for older people, as well as identify gaps and opportunities for further research. Clarifying the evidence based on models of care for older people has the potential to address the aforesaid personal, social, organizational, and economic implications.

A scoping review was appropriate because the concept of a model of care and the population of older people are ill-defined. Specifically, there is no universal understanding of what constitutes a model of care (as noted) or an older person [13]. For instance, while the World Health Organization referred to “people aged 60 years and older” [2], the Organization for Economic Co-operation and Development [14] suggested that “The elderly population is defined as people aged 65 and over.” As such, although relevant academic databases were systematically searched, a scoping review was deemed appropriate “to clarify working definitions and conceptual boundaries of a topic or field... [given the] complex, or heterogeneous nature” of the focus [15]. Furthermore, a preliminary search of PubMed verified that a scoping review had not been published that addressed the aim of this scoping review.

2 | Methods

Guided by Butler, and colleagues [16] as well as the preferred reporting items for systematic reviews and meta-analyses extension for scoping reviews (PRISMA-ScR) checklist [17], a protocol was registered with the Open Science Framework (osf.io/c3mfk). A search strategy was developed and tested to identify publications on models of care for older people (see

Supporting Information: File 1). This strategy encompassed terms that denoted: the concept of a model of care; the population of older people; and the contexts in which care for older people is delivered. As such, the search strategy did not include terms that denoted particular models of care—for instance, the Bridge model, the care transitions intervention, and the Eden alternative model, among others [8]—but rather, the search strategy served to identify publications that pertained to models of care (without such specificity) to optimize inclusiveness. For the purpose of this review, a model of care was defined as per the aforementioned definition of the Agency for Clinical Innovation [12]. Reflecting international understandings [14], which recognize health inequities among Indigenous people [18], older people were defined as non-Indigenous people aged 65 years and older, and Indigenous people aged 50 years and older [19]. While other populations experience health inequities, including people who are economically marginalized [20] and people who reside in rural and remote areas [21], to the authors’ knowledge, Indigenous people are the only underserved population for which older people are defined differently from non-Indigenous older people [22]; for this reason, the aforesaid definitions of older people were used. Given the different settings in which care for older people can be delivered, context was broadly defined to include acute, secondary, tertiary, and community-based care.

To optimize the relevance of the publications, particularly given the nebulousness of the concept and population, the search was limited to the title or abstract fields. Although potentially limiting, alternative approaches largely served to identify irrelevant publications—this might be partly due to the nebulous nature of the terms, model of care and older people, as noted. As such, a focused and strategic search strategy was used. In September 2021, the search strategy was deployed across nine academic databases, given their relevance, via the OVID (EMBASE and Medline) and EBSCO platforms (Business Source Complete, CINAHL Plus with Full Text, Health Business Elite, Health Source: Nursing/Academic Edition, APA PsycINFO, Psychology and Behavioral Sciences Collection, and SocINDEX with Full Text). Although conducted in September 2021, the search identified publications that were in press and therefore published after this date.

Publications were eligible for inclusion in this review if they: presented a model of care for non-Indigenous people aged 65 years and older, and/or Indigenous people aged 50 years and older; included evidence, broadly defined, about the utility or otherwise of the model, so as to exclude mere descriptions of a model; were published in English, given the translations offered by freely available translation services (e.g., Google Translate) could not be verified; did not represent a narrative letter, a commentary, an editorial, or a protocol; did not represent a review of literature, given the limited detail typically included about specific studies; and were not anonymously authored. As such, to optimize inclusiveness, publications were included, irrespective of publication date, study design, participant numbers, and outcome measure(s). A timeframe-free approach offered: comprehensive coverage; the opportunity to identify trends and gaps over time; the prospect of capturing different models of care and study designs; and an approach to minimize bias through the inadvertent exclusion of significant contributions to the field.

Six reviewers contributed to this scoping review. To optimize the veracity of the review, the reviewers were trained in the conduct of scoping reviews and scheduled weekly meetings to: discuss exemplars of titles, abstracts, and full-texts; resolve queries; as well as cross-screen and cross-review titles, abstracts, and full-texts. These discussions served to refine the review—for instance, when publications did not specify the age of the older participants, they were included if the older participants' mean age and standard deviation aligned with the definitions adopted in this review. Additionally, when publications did not indicate the type of geographical setting the study was conducted in, they were categorized if the site was named (e.g., a major city was classified as metropolitan). When the content of a publication was vague, it was classified as unclear and when content was absent, it was classified as unspecified.

Using Covidence, the reviewers singly screened the titles and abstracts of the identified publications, given the large corpus of publications (see Figure 1), noting that a portion was cross-screened to optimize veracity—this involved comparing the text against the inclusion criteria. Following this, the reviewers singly reviewed the full-text of select publications using Covidence, again noting that a portion was cross-reviewed—this also involved comparing the text against the inclusion criteria. The first author developed a data extraction tool using Microsoft Excel, which the reviewers tested with reference to the full-text of included publications and approved, following minor modifications. The tool included pertinent information to address the aim of this review, including: publication details; the study aim; participant details; the study setting; the aim, description of, who was involved in, and the duration of the model of care; the study design; the outcome measures; and the key findings. Following data extraction, simple descriptive

statistics were used to describe proportions. Statistical analyses were performed using Microsoft Excel and Stata v13.0 (StataCorp, TX, USA).

2.1 | Funding Source

A grant from Western Sydney University supported the conduct of this review.

3 | Results

3.1 | Publication Details

Of the 21,767 publications that were identified, 12,374 were removed, largely because they were duplicates—this likely follows the use of nine academic databases. As such, the titles and abstracts of 9393 publications were screened using the previously noted inclusion criteria. Of these, 8456 were excluded because they did not meet all the inclusion criteria. The full-text of 926 accessible publications was then reviewed using the previously noted inclusion criteria. Following this, 650 publications were excluded with reason, leaving 276 for inclusion (see Supporting Information: File 2 and File 3).

Of the 276 publications included in this review, the greatest proportion was published in 2021 (10.1%, $n = 28$), with more publications published in this field over time (see Figure 2). The largest proportion of studies reported in the publications was conducted in the United States of America (33.0%, $n = 91$), followed by Australia (12.0%, $n = 33$). The top 10 nations represented were all high-income nations (see Figure 3). Increasing publications from nations such as The Netherlands

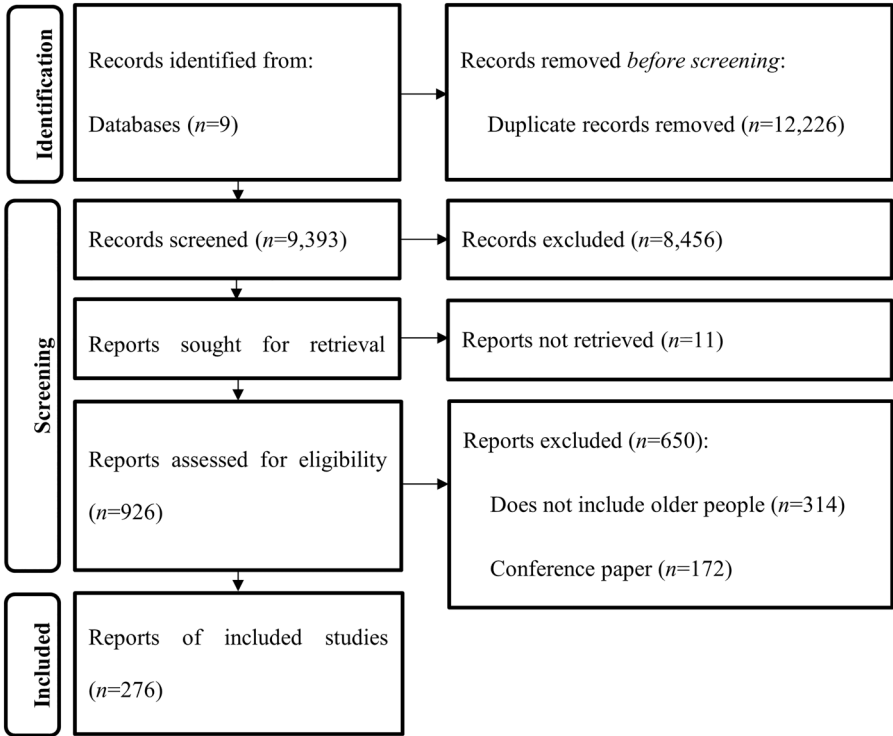


FIGURE 1 | PRISMA flowchart of screening and selection [23].

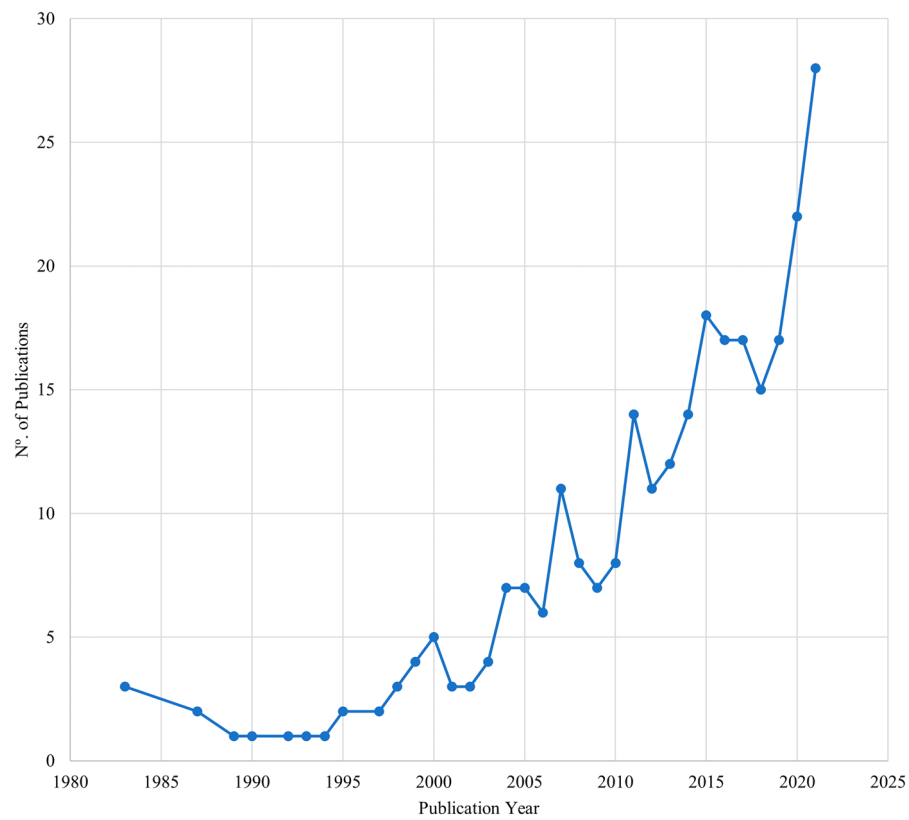


FIGURE 2 | Publications on models of care for older people by year ($n = 276$).

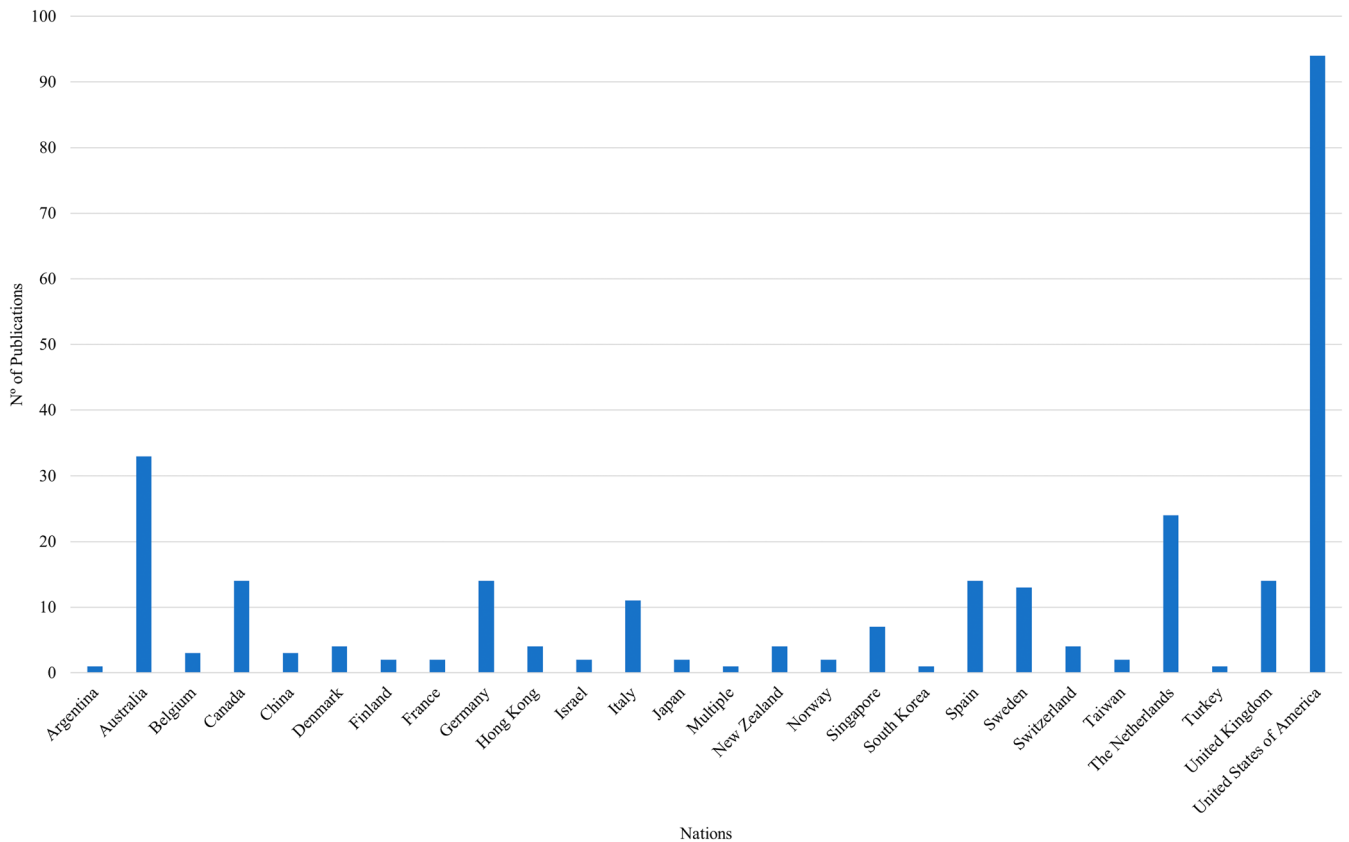


FIGURE 3 | Publications on models of care for older people by nation ($n = 276$).

(no publications before 2000, and 22 from 2000) and Spain (nil before 2000, and 14 thereafter) were evident, with publications in English from several nations in Asia emerging in later years (since 2010: China $n=3$, Hong Kong $n=3$, Singapore $n=7$, and Taiwan $n=2$).

3.2 | Participants

When reported, the total number of participants across the publications exceeded 3.7 million ($n=3,787,353$), with study sizes ranging from 3 to 3,181,909 participants. The reported age range was 65 to 106 years; however, some publications did not report participants' maximum age. For the publications that indicated a mean age, the mean of the means was 81 years (range of mean ages reported: 71.3 to 92.0 years).

None of the publications explicitly focused on Indigenous older people—furthermore, none of the publications explicitly reported on the demographic characteristics of Indigenous older people as a separate cohort. While some publications specifically focused on older people with complex morbidity [24–26] or frailty [27, 28], over 40% (42.4%, $n=117$) of included publications focused on patients with a single condition or affected system (e.g., hip fracture, dementia, cardiac disease, and surgical trauma), with many focusing on older people with hip fracture (15.9%, $n=44$).

In some publications, nonclinical characteristics determined patient eligibility. These included veteran [29] or income status [30], presence in a particular setting, such as a community setting [31], or access to a particular service, such as a residential facility [32, 33] or hospital [34].

3.3 | Study Designs

Approximately three-quarters of the publications specified the geographical setting of the study (78.6%, $n=217$). Of these, the largest proportion reported a study conducted in a metropolitan area (61.2%, $n=169$). While few reported findings from a rural or remote setting (5.1%, $n=14$), some reported findings from a mixed setting (12.3%, $n=34$).

In terms of setting, hospitals were most featured (38.4%, $n=106$), with an additional five publications specifically reporting findings from the emergency department (1.8%). The remaining settings included the patient home (12.0%, $n=33$), residential facilities (9.8%, $n=27$), community services (4.7%, $n=13$), other settings (16.3%, $n=45$), or multiple settings (12.3%, $n=34$). However, the setting included in the remaining studies was unspecified (3.6%, $n=10$) or unclear (1.1%, $n=3$). The absolute proportion of publications that reported on studies conducted in a hospital did not significantly change, decade on decade (1980 to 1990: 38.1%, $n=8/21$; 2020–2022: 41.2%, $n=21/51$; $p=0.6$ for trend).

The publications—most of which reported prospective studies (81.5%, $n=225$)—presented diverse study designs. They chiefly included randomized controlled trials (27.2%, $n=75$), cohort

studies (25.7%, $n=71$), and pre-post evaluations (22.5%, $n=62$). While not as common, the publications also featured quasi-experimental studies (6.5%, $n=18$), cluster randomized controlled trials (5.4%, $n=15$), and case studies (2.9%, $n=8$). The remaining publications featured other designs (9.8%, $n=27$), including an audit [35] and a comparative nonrandomized study [36].

3.4 | Aims

Most publications (81.5%, $n=225$) aimed to assess clinical efficacy or effectiveness, be it in terms of clinical, cost, healthcare, or other outcomes. The remaining publications aimed to: determine the experiences of staff members, patients, and/or carers (4.7%, $n=13$); assess feasibility (2.5%, $n=7$); or pilot-test a model of care for older people, which excluded testing feasibility (1.1%, $n=3$). The remaining publications pursued multiple aims (7.3%, $n=20$), with some assessing feasibility among other aims (2.5%, $n=7$), or examining trends and/or relationships between different variables (2.9%, $n=8$).

3.5 | People Involved in the Models of Care

Most of the publications reported on a multidisciplinary model of care (80.4%, $n=222$), with references to interdisciplinary (7.6%, $n=21$), multidisciplinary, (6.9%, $n=19$), and comprehensive (4.0%, $n=11$) in some of the titles. Oft-cited team members included nurses (71.7%, $n=198$) and geriatricians (37.7%, $n=104$), with other medic involvement comprising non-geriatrician specialists (20.0%, $n=58$) and general practitioners (19.2%, $n=53$). The most common allied health disciplines represented in the models of care included physiotherapy (29.4%, $n=81$) and occupational therapy (20.3%, $n=56$), with pharmacists assuming a specified role in relatively few models (10.1%, $n=28$). Team members served myriad roles—for instance, they assessed patients, delivered clinical care, coordinated care, and/or provided consultation services to their peers, offering advice. Sometimes team members assumed multiple roles within the model of care. For instance, geriatricians assumed more than one role in 38.5% ($n=40/104$) of the publications that reported on geriatrician involvement. Similarly, nurses assumed more than one role in 34.3% ($n=68/198$) of the publications that reported on nurse involvement. Despite the recognized importance of informal carers [37], very few publications reported on a model of care that involved them (5.8%, $n=16$). Of these, informal carers were involved in social care or clinical care, or held more than one role. The extent of their involvement varied—for instance, as part of “a multi-sectoral comprehensive intervention for elderly Alzheimer Disease patients and their caregivers” [38], caregivers received “systematic training about self-health knowledge and problem behavior processing skills, combined with the mental behavior problems treatment... to reduce the pressure of caregivers and improve their nursing ability”; these caregivers contributed data on quality of life, care burden, care ability, and functional social support ability. Conversely, while “family members” were part of a person-centered care model in a nursing home, their activities were merely described [39].

3.6 | Description of the Model of Care Structures

Most of the publications failed to present the model of care in a clear stepwise manner to aid understanding and facilitate use elsewhere (68.1%, 188 out of 276). For example, in their randomized controlled trial to evaluate an outpatient rehabilitation program, Zusman et al. [40] noted that, “Participants in the intervention group received usual care plus they received comprehensive assessment and management by the geriatrician, physiotherapist (PT), and occupational therapist (OT). Referrals to other health professionals were on an as needed basis”—however, there was no additional detail on how the model was structured and delivered. Others however, provided detailed stepwise descriptions of team members, intervention, follow-up, and assessment [41].

3.7 | Outcomes

Fewer than half of the publications suggested that the model of care under consideration was beneficial (39.5%, $n=109$). Forty-four percent (43.8%, $n=121$) reported mixed effects, while a minority reported no benefit (16.3%, $n=45$). Benefits included: clinical health outcomes (e.g., adverse reactions, functional decline, and death); patient and/or carer experiences and quality of life; healthcare use (e.g., emergency department presentations, hospital admissions, length of hospital stay, delays to surgery, use of a clinic or community service); as well as the associated costs. Reported outcomes did not always echo the stated aims. While 14 publications indicated the assessment of feasibility as an aim either alone ($n=7$) or with other aims ($n=7$), as previously noted, some, whose stated aim was primarily to assess efficacy, also reported that the described model was feasible [42, 43]. As such, a careful review of each publication was required to accurately map stated aims and outcomes.

3.8 | Models of Care by Key Settings

As noted, the key settings represented among the 276 publications included: hospitals, including emergency departments; patient homes; residential facilities; and community services. The hospital-based models of care largely reflected the importance of specialized, coordinated care, tailored to the complex needs of older people, improving outcomes and quality of life. They included, for instance: acute care for elders (ACE) [44]—a program “designed to help patients maintain or achieve independence in basic activities of daily living” [45]; comprehensive geriatric assessment units [46] to “meet the needs of frail elderly through interdisciplinary assessment and intervention with broad focus on physiological, psychological and social needs” [47]; and KORINNA [48, 49], which involved nurse-based case management for older people who experienced acute myocardial infarction. Of the 111 publications that reported on hospital-based models of care, most were multidisciplinary (85.6%, $n=95$), most were devoid of clear stepwise guidance (62.2%, $n=69$), and approximately half reported mixed effects (50.5%, $n=56$).

The home-based models of care chiefly focused on efforts to prevent and/or manage health and/or mental health issues,

enabling older people to reside at home. Examples included: falls prevention programs [50, 51]; dementia management initiatives [52, 53]; and geriatric resources for assessment and care of elders (GRACE) [54] – “a model of care that works in collaboration with primary care providers... and patient-centered medical homes to provide home-based geriatric care management” [55]. Of the 33 publications that reported on home-based models of care, most were multidisciplinary (81.8%, $n=27$), most were devoid of clear stepwise guidance (66.7%, $n=22$), and the greatest proportion reported benefits (42.4%, $n=14$).

The models of care based in residential facilities collectively highlighted a range of approaches to enhance care quality, promote independence, and address specific health needs among older people in residential facilities. Consider, for instance: green care farms, which “combine agricultural with care activities” [56]; residential in-reach (RIR) models to “provide acute care... as a substitute for emergency presentation or hospitalization” [57]; and the WHELD intervention, “which combined staff training, social interaction, and guidance on use of antipsychotic medications” [58]. Of the 27 publications that reported on models of care in residential facilities, most were multidisciplinary (59.3%, $n=16$), most were devoid of clear stepwise guidance (63.0%, $n=17$), and the greatest proportion reported benefits (63.0%, $n=17$).

The models of care based on community services represented diverse approaches to improve care coordination, access to services, and overall health outcomes for older people in community settings. They included: the community connections program (CCP)—“a short-term, intensive, team-based intervention that links health care and community service providers by developing active partnerships” [59]; Embrace—“a community-based integrated primary care service” [60]; and the Healthy Aging Brain Center (HABC)—“a clinical program providing care... to the patients and family caregiver with concerns about the emotional and cognitive health of the aging brain” [61]. Of the 13 publications that reported on models of care in community services, most were multidisciplinary (92.3%, $n=12$), approximately half included clear stepwise guidance (53.8%, $n=7$), and less than half reported benefits (46.2%, $n=6$).

4 | Discussion

Given the growing importance of and need for models of care for older people [1, 2], this review mapped the nature and extent of the literature on models of care for older people, as well as identified gaps and opportunities for further research. This was achieved by scoping the literature to: summarize publications about models of care for older people; describe the models depicted in these publications; and synthesize the outcomes and impact presented in the publications.

From an initial collection of 21,767 publications, 276 were deemed relevant. From these, five key findings are apparent over the publication period, 1983–2021. First, as the publications largely reported on studies conducted in high-income nations, relatively little is known about models of care for older people in middle- and low-income nations—as such, caution is warranted when considering whether and how the models of

care represented in this review might be adapted for middle- and low-income nations. The reasons for the relative dearth of publications from these nations were beyond the scope of this review—nevertheless, this might be partly due to differences in: the ways that models of care are conceptualized, referred to, resourced, or studied in these nations; and/or the populations' life expectancy.

Second, models of care for older people are understood, examined, and reported in disparate ways—furthermore, the publications were typically devoid of clear stepwise guidance on how to implement them. For instance, in assessing the impact of a model of care on clinical and healthcare outcomes, one publication reported on the impact of geriatric assessment units via an examination of overarching dimensions of quality of care (e.g., comprehensiveness, informal continuity of care, and patient-centered care) across multiple sites [62]. Another reported on a specific structured intervention at a single site—namely the introduction of a discrete novel nurse-led case management approach, without an in-depth exploration of the quality of care processes underpinning this [49]. Even in terms of study design, the terminology varied, and different authors might have had slightly different understandings of particular terms. For example, pre-post might denote: the pre- and post-evaluation of same person following an intervention [63]; or an evaluation of outcomes in two different temporal groups—one before an intervention and one afterward [64]. These issues limit the replicability and scalability of such models, and their potential utility to clinicians and health service managers. Similarly, while few publications reported on the feasibility of a model, definitions of feasibility and assessment thereof varied [65, 66]. Additionally, some publications described the membership of the care team and the delivery of care in replicable detail [41, 67], while others painted the picture in broader strokes [40]. Such diversity and limited instructional advice are likely to cloud how models of care for older people are collectively understood. Tools, such as the template for intervention description and replication (TIDieR) checklist and guide, might facilitate clinician interpretation and implementation of the models [68]. Notwithstanding this first key finding, of the 109 publications that reported benefits, four notable patterns were apparent—first, the largest proportion: was hospital-based (34.9%, $n = 38$); was multidisciplinary (82.6%, $n = 90$); assessed clinical efficacy or effectiveness (78.9%, $n = 86$); and involved a prospective study design (80.7%, $n = 88$). These patterns signal clinical and research matters that might warrant consideration.

Third, most of the publications reported on a multidisciplinary model of care. Although current definitions do not explicitly require models of care to be multidisciplinary, this finding might be expected if a model of care is understood to encompass health services for people as they “progress through the stages of a condition, injury, or event” [12]. This is because different disciplines are likely to be required to support progress, especially in older people with complex multimorbidities and biopsychosocial needs.

Fourth, although most of the publications recognized the importance of multidisciplinary care, they generally failed to harness carer expertise. This potentially compromises the quality of care

offered by the models reported in the publications, given the recognized value of carers and their involvement in many aspects of health and social care [14].

Fifth, although people who reside in rural settings and/or identify as Indigenous typically experience poor health [69–71], very few publications reported on studies conducted in a rural area, and none explicitly involved Indigenous people. Limited scholarly attention on these priority populations does not bode well for the prospect of improving health and social outcomes and addressing longstanding health inequities [72].

Despite the importance of the aforesaid findings, five methodological limitations warrant mention. First, although comprehensive, the search strategy is unlikely to have identified all relevant publications, given: the varied terms used to describe older people and models of care; and that the search was limited to the title or abstract fields—consider, for instance, the “models of care” that McNabney and colleagues [8] identified, including the Eden alternative model and HOMEMEDS, among others [8]. Second, because the publications were limited to those published in English, the review failed to report on publications in other languages. Third, although a reasonable minority of the publications indicated that the model of care examined was not beneficial, journal interest in positive outcomes [73] might bias the findings reported in this review. Fourth, the use of a single screening and review process might have compromised the findings, despite the strategies introduced to reduce, if not avert the associated limitations of this approach. Fifth, given the limited guidance available [74], this scoping review might include different publications that reported on the same studies, particularly because publications: did not always include study identifiers (e.g., ethics approval number); and were sometimes authored by a similar, but not identical team of authors.

Despite the aforesaid limitations, the strengths of this review include the use of multiple databases and regular team discussion of queries and uncertainties. Furthermore, its broad search strategy served to map the nature and extent of the literature on models of care for older people across time and context—the findings from this review might have been constrained, had the search been restricted to a particular timeframe or a particular setting in which older people are cared for.

The findings reported in this review have clear implications for scholars interested in the care of older people and/or models of care, generally. Specifically, they offer fertile ground for future research to clarify: what constitutes a model of care and whether a standardized definition would helpfully guide the development and evaluation of the models; the potential benefits of minimum reporting criteria to improve usefulness for clinicians and managers in term of interpretation and implementation; the factors that help or hinder their positive effects—for instance, the preferred organizational culture(s) and leadership style(s); how carers can be meaningfully involved; and the models that are likely to benefit priority populations, including people who reside in rural settings and/or identify as Indigenous.

Author Contributions

All authors meet the ICJME criteria for authorship. A.D. and D.N.C. conceived and developed the review. All authors contributed to the review process and reviewed the article.

Acknowledgments

This work was supported by Western Sydney University. Open access publishing facilitated by Western Sydney University, as part of the Wiley - Western Sydney University agreement via the Council of Australian University Librarians.

Conflicts of Interest

The authors declare no conflicts of interest.

References

1. E. Rudnicka, P. Napierała, A. Podfigurna, B. Męczekalski, R. Smolarczyk, and M. Grymowicz, "The World Health Organization (WHO) Approach to Healthy Ageing," *Maturitas* 139 (2020): 6–11.
2. WHO (World Health Organization), "Ageing and Health," accessed October 22, 2020, <https://www.who.int/news-room/fact-sheets/detail/ageing-and-health>.
3. F. Harrad-Hyde, N. Armstrong, and C. D. Williams, "Weighing Up Risks: A Model of Care Home Staff Decision-Making About Potential Resident Hospital Transfers," *Age and Ageing* 51, no. 7 (2022): afac171.
4. L. Testa, R. Seah, K. Ludlow, J. Braithwaite, and R. J. Mitchell, "Models of Care That Avoid or Improve Transitions to Hospital Services for Residential Aged Care Facility Residents: An Integrative Review," *Geriatric Nursing* 41, no. 4 (2020): 360–372.
5. R. P. Murphy, K. A. Dennehy, M. M. Costello, et al., "Virtual Geriatric Clinics and the COVID-19 Catalyst: A Rapid Review," *Age and Ageing* 49, no. 6 (2020): 907–914.
6. Y. L. Huang, M. McGonagle, R. Shaw, et al., "Models of Care for Frail Older Persons Who Present to the Emergency Department: A Scoping Review of the Literature," *International Emergency Nursing* 66 (2023): 101250.
7. T. Wissanji, M. F. Forget, J. Muscedere, D. Beaudin, R. Coveney, and H. T. Wang, "Models of Care in Geriatric Intensive Care—A Scoping Review on the Optimal Structure of Care for Critically Ill Older Adults Admitted in an ICU," *Critical Care Explorations* 4, no. 4 (2022): e0661.
8. M. K. McNabney, A. R. Green, M. Burke, et al., "Complexities of Care: Common Components of Models of Care in Geriatrics," *Journal of the American Geriatrics Society* 70, no. 7 (2022): 1960–1972.
9. A. Recio-Saucedo, C. Dall'Ora, A. Maruotti, et al., "What Impact Does Nursing Care Left Undone Have on Patient Outcomes? Review of the Literature," *Journal of Clinical Nursing* 27, no. 11–12 (2018): 2248–2259.
10. S. Cullati, N. Bochatay, F. Maitre, et al., "When Team Conflicts Threaten Quality of Care: A Study of Health Care professionals' Experiences and Perceptions," *Mayo Clinic Proceedings: Innovations, Quality & Outcomes* 3, no. 1 (2019): 43–51.
11. P. Davidson, E. Halcomb, L. Hickman, J. Phillips, and B. Graham, "Beyond the Rhetoric: What Do We Mean by a 'Model of Care'?", *Australian Journal of Advanced Nursing* 23, no. 3 (2006): 47–55.
12. NSW Agency for Clinical Innovation, *Understanding the Process to Develop a Model of Care: An ACI Framework* (Sydney, Australia: NSW Agency for Clinical Innovation, 2013).
13. S. Sabharwal, H. Wilson, P. Reilly, and C. M. Gupte, "Heterogeneity of the Definition of Elderly Age in Current Orthopaedic Research," *Springerplus* 4 (2015): 516.
14. OECD (Organization for Economic Co-operation and Development), "Elderly Population," accessed May 25, 2023, <https://data.oecd.org/pop/elderly-population.htm>.
15. M. D. J. Peters, C. M. Godfrey, H. Khalil, P. McInerney, D. Parker, and C. B. Soares, "Guidance for Conducting Systematic Scoping Reviews," *International Journal of Evidence-Based Healthcare* 13, no. 3 (2015): 141–146.
16. A. Butler, H. Hall, and B. Copnell, "A Guide to Writing a Qualitative Systematic Review Protocol to Enhance Evidence-Based Practice in Nursing and Health Care," *Worldviews on Evidence-Based Nursing* 13, no. 3 (2016): 241–249.
17. A. C. Tricco, E. Lillie, W. Zarin, et al., "PRISMA Extension for Scoping Reviews (PRISMA-ScR): Checklist and Explanation," *Annals of Internal Medicine* 169, no. 7 (2018): 467–473.
18. K. Griffiths, A. Diaz, L. J. Whop, and J. Cunningham, "The Health and Wellbeing of Indigenous and Tribal Peoples Around the Globe: Ensuring and Promoting Best Practice in Research," *International Journal of Environmental Research and Public Health* 19, no. 1 (2021): 1–9.
19. AIHW (Australian Institute of Health and Welfare), "Older Australians: Older Aboriginal and Torres Strait Islander People," updated November 30, accessed May 25, 2023, <https://www.aihw.gov.au/reports/older-people/older-australia-at-a-glance/contents/diverse-groups-of-older-australians/aboriginal-and-torres-strait-islander-people>.
20. E. d'Orsi, A. J. Xavier, A. Steptoe, et al., "Socioeconomic and Lifestyle Factors Related to Instrumental Activity of Daily Living Dynamics: Results From the English Longitudinal Study of Ageing," *Journal of the American Geriatrics Society* 62, no. 9 (2014): 1630–1639.
21. K. E. M. Miller, K. A. Ornstein, and N. B. Coe, "Rural Disparities in Use of Family and Formal Caregiving for Older Adults With Disabilities," *Journal of the American Geriatrics Society* 71, no. 9 (2023): 2865–2870.
22. S. Webkamigad, R. Rowe, S. Peltier, A. Froehlich Chow, K. S. McGilton, and J. D. Walker, "Identifying and Understanding the Health and Social Care Needs of Indigenous Older Adults With Multiple Chronic Conditions and Their Caregivers: A Scoping Review," *BMC Geriatrics* 20, no. 1 (2020): 145.
23. D. Moher, A. Liberati, J. Tetzlaff, D. G. Altman, and PRISMA Group, "Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement," *Public Library of Science Medicine* 6, no. 7 (2009): e1000097.
24. I. H. J. Everink, J. C. M. van Haastregt, F. E. S. Tan, J. M. G. A. Schols, and G. I. J. M. Kempen, "The Effectiveness of an Integrated Care Pathway in Geriatric Rehabilitation Among Older Patients With Complex Health Problems and Their Informal Caregivers: A Prospective Cohort Study," *BMC Geriatrics* 18, no. 1 (2018): 1–13.
25. K. Fisher, M. Markle-Reid, J. Ploeg, et al., "Self-Management Program Versus Usual Care for Community-Dwelling Older Adults With Multimorbidity: A Pragmatic Randomized Controlled Trial in Ontario, Canada," *Journal of Comorbidity* 10 (2020): 1–18.
26. M. À. Mas, S. J. Santaegúenia, F. J. Tarazona-Santabalbina, S. Gámez, and M. Inzitari, "Effectiveness of a Hospital-at-Home Integrated Care Program as Alternative Resource for Medical Crises Care in Older Adults With Complex Chronic Conditions," *Journal of the American Medical Directors Association* 19, no. 10 (2018): 860–863.
27. L. Romera-Liebana, F. Orfila, J. M. Segura, et al., "Effects of a Primary Care-Based Multifactorial Intervention on Physical and Cognitive Function in Frail, Elderly Individuals: A Randomized Controlled Trial," *Journals of Gerontology, Series A: Biological Sciences and Medical Sciences* 73, no. 12 (2018): 1668–1674.
28. F. C. Bakker, A. Persoon, S. J. H. Bredie, et al., "The Carewell in Hospital Program to Improve the Quality of Care for Frail Elderly Inpatients: Results of a Before-After Study With Focus on Surgical Patients," *American Journal of Surgery* 208, no. 5 (2014): 735–746.

29. L. Z. Rubenstein, C. A. Alessi, K. R. Josephson, M. Trinidad Hoyl, J. O. Harker, and F. M. Pietruszka, "A Randomized Trial of a Screening, Case Finding, and Referral System for Older Veterans in Primary Care," *Journal of the American Geriatrics Society* 55, no. 2 (2007): 166–174.
30. S. R. Counsell, C. M. Callahan, D. O. Clark, et al., "Geriatric Care Management for Low-Income Seniors: A Randomized Controlled Trial," *Journal of the American Medical Association* 298, no. 22 (2007): 2623–2633.
31. R. Bernabei, F. Landi, G. Gambassi, et al., "Randomised Trial of Impact of Model of Integrated Care and Case Management for Older People Living in the Community," *British Medical Journal* 316, no. 7141 (1998): 1348–1351.
32. R. T. Barker, C. J. Hullick, A. E. Hall, et al., "Reducing Hospital Transfers From Aged Care Facilities: A Large-Scale Stepped Wedge Evaluation," *Journal of the American Geriatrics Society* 69, no. 1 (2021): 201–209.
33. M. Boersma, D. H. M. Frijters, D. L. Knol, M. E. Ribbe, G. Nijpels, and H. P. J. van Hout, "Effects of Multidisciplinary Integrated Care on Quality of Care in Residential Care Facilities for Elderly People: A Cluster Randomized Trial," *Canadian Medical Association Journal* 183, no. 11 (2011): E724–E732.
34. E. Chang, K. Hancock, L. Hickman, J. Glasson, and P. Davidson, "Outcomes of Acutely Ill Older Hospitalized Patients Following Implementation of Tailored Models of Care: A Repeated Measures (Pre- and Post-Intervention) Design," *International Journal of Nursing Studies* 44, no. 7 (2007): 1079–1092.
35. D. M. Wong Tin Niam, J. A. A. Geddes, and C. A. Inderjeeth, "Innovations in Aged Care: Delirium Unit: Our Experience," *Australasian Journal on Ageing* 28, no. 4 (2009): 206–210.
36. S. K. Inouye, S. T. Bogardus, Jr., D. I. Baker, L. Leo-Summers, and L. M. Cooney, Jr., "The Hospital Elder Life Program: A Model of Care to Prevent Cognitive and Functional Decline in Older Hospitalized Patients. Hospital Elder Life Program," *Journal of the American Geriatrics Society* 48, no. 12 (2000): 1697–1706.
37. WHO (World Health Organization), *Integrated Care for Older People: Guidelines on Community-Level Interventions to Manage Declines in Intrinsic Capacity* (Geneva, Switzerland: World Health Organization, 2017).
38. X. Jin, J. Yan, L. Yang, P. Zheng, C. Xuan, and C. Yu, "Effects of Comprehensive Intervention on Life Quality Among the Elderly With Alzheimer Disease and Their Caregivers Based on Mixed Models," *Nursing Open* 9 (2021): 1412–1422.
39. P. Ho, R. C. Y. Cheong, S. P. Ong, C. Fusek, S. L. Wee, and P. L. K. Yap, "Person-Centred Care Transformation in a Nursing Home for Residents With Dementia," *Dementia and Geriatric Cognitive Disorders* 11, no. 1 (2021): 1–9.
40. E. Z. Zusman, M. Dawes, L. Fleig, et al., "Older Adults' Sedentary Behavior and Physical Activity After Hip Fracture: Results From an Outpatient Rehabilitation Randomized Controlled Trial," *Journal of Geriatric Physical Therapy* 42, no. 2 (2019): E32–E38.
41. A. I. Arbaje, D. D. Maron, Q. Yu, et al., "The Geriatric Floating Interdisciplinary Transition Team," *Journal of the American Geriatrics Society* 58, no. 2 (2010): 364–370.
42. G. Arendts, N. Leyte, S. Dumas, et al., "Efficiency Gains From a Standardised Approach to Older People Presenting to the Emergency Department After a Fall," *Australian Health Review* 44, no. 4 (2020): 576–581.
43. A. Tillou, L. Kelley-Quon, S. Burruss, et al., "Long-Term Postinjury Functional Recovery: Outcomes of Geriatric Consultation," *JAMA Surgery* 149, no. 1 (2014): 83–99.
44. K. E. Covinsky, R. M. Palmer, D. M. Kresevic, et al., "Improving Functional Outcomes in Older Patients: Lessons From an Acute Care for Elders Unit," *Joint Commission Journal on Quality Improvement* 24, no. 2 (1998): 63–76.
45. S. R. Counsell, C. M. Holder, L. L. Liebenauer, et al., "Effects of a Multicomponent Intervention on Functional Outcomes and Process of Care in Hospitalized Older Patients: A Randomized Controlled Trial of Acute Care for Elders (ACE) in a Community Hospital," *Journal of the American Geriatrics Society* 48, no. 12 (2000): 1572–1581.
46. N. Ekerstad, M. Husberg, J. Alwin, et al., "Is the Acute Care of Frail Elderly Patients in a Comprehensive Geriatric Assessment Unit Superior to Conventional Acute Medical Care?," *Clinical Interventions in Aging* 12 (2017): 1–9.
47. N. Ekerstad, G. Ostberg, M. Johansson, and B. W. Karlson, "Are Frail Elderly Patients Treated in a CGA Unit More Satisfied With Their Hospital Care Than Those Treated in Conventional Acute Medical Care?," *Patient Preference and Adherence* 12 (2018): 233–240.
48. I. Kirchberger, K. Burkhardt, C. Meisinger, et al., "Effects of a 3-Year Nurse-Based Case Management in Aged Patients With Acute Myocardial Infarction on Rehospitalisation, Mortality, Risk Factors, Physical Functioning and Mental Health. A Secondary Analysis of the Randomized Controlled KORINNA Study," *PLoS One* 10, no. 3 (2015): e0116693.
49. C. Meisinger, B. Stollenwerk, I. Kirchberger, et al., "Effects of a Nurse-Based Case Management Compared to Usual Care Among Aged Patients With Myocardial Infarction: Results From the Randomized Controlled KORINNA Study," *BMC Geriatrics* 13 (2013): 115.
50. M. Berggren, M. Stenvall, B. Olofsson, and Y. Gustafson, "Evaluation of a Fall-Prevention Program in Older People After Femoral Neck Fracture: A One-Year Follow-Up," *Osteoporosis International* 19, no. 6 (2008): 801–809.
51. M. R. C. Hendriks, M. H. C. Bleijlevens, J. C. M. van Haastregt, et al., "Lack of Effectiveness of a Multidisciplinary Fall-Prevention Program in Elderly People at Risk: A Randomized, Controlled Trial," *Journal of the American Geriatrics Society* 56, no. 8 (2008): 1390–1397.
52. A. P. D. Jansen, H. P. J. van Hout, G. Nijpels, et al., "Effectiveness of Case Management Among Older Adults With Early Symptoms of Dementia and Their Primary Informal Caregivers: A Randomized Clinical Trial," *International Journal of Nursing Studies* 48, no. 8 (2011): 933–943.
53. S. H. Lai, T. Tsoi, C. T. Tang, et al., "An Integrated, Collaborative Healthcare Model for the Early Diagnosis and Management of Dementia: Preliminary Audit Results From the First Transdisciplinary Service Integrating Family Medicine and Geriatric Psychiatry Services to the Heart of Patients' Homes," *BMC Psychiatry* 19 (2019): 1–9.
54. C. Bielaszka-DuVernay, "The 'Grace' Model: In-Home Assessments Lead to Better Care for Dual Eligibles," *Health Affairs* 30, no. 3 (2011): 431–434.
55. C. C. Schubert, L. J. Myers, K. Allen, and S. R. Counsell, "Implementing Geriatric Resources for Assessment and Care of Elders Team Care in a Veterans Affairs Medical Center: Lessons Learned and Effects Observed," *Journal of the American Geriatrics Society* 64, no. 7 (2016): 1503–1509.
56. B. de Boer, J. P. H. Hamers, S. M. G. Zwakhalen, F. E. S. Tan, H. C. Beerens, and H. Verbeek, "Green Care Farms as Innovative Nursing Homes, Promoting Activities and Social Interaction for People With Dementia," *Journal of the American Medical Directors Association* 18, no. 1 (2017): 40–46.
57. J.-M. Kwa, M. Storer, R. Ma, and P. Yates, "Integration of Inpatient and Residential Care In-Reach Service Model and Hospital Resource Utilization: A Retrospective Audit," *Journal of the American Medical Directors Association* 22, no. 3 (2021): 670–675.
58. C. Ballard, A. Corbett, M. Orrell, et al., "Impact of Person-Centred Care Training and Person-Centred Activities on Quality of Life, Agitation, and Antipsychotic Use in People With Dementia Living in Nursing Homes: A Cluster-Randomised Controlled Trial," *PLoS Medicine* 15, no. 2 (2018): 1–18.

59. C. E. Vanderboom, D. E. Holland, P. V. Targonski, and E. Madigan, "Developing a Community Care Team: Lessons Learned From the Community Connections Program, a Health Care Home-Community Care Team Partnership," *Care Management Journals* 14, no. 3 (2013): 150–157.
60. R. Uittenbroek, H. Kremer, S. Spoorenberg, et al., "Integrated Care for Older Adults Improves Perceived Quality of Care: Results of a Randomized Controlled Trial of Embrace," *Journal of General Internal Medicine* 32, no. 5 (2017): 516–523.
61. M. A. Boustani, G. A. Sachs, C. A. Alder, et al., "Implementing Innovative Models of Dementia Care: The Healthy Aging Brain Center," *Aging & Mental Health* 15, no. 1 (2011): 13–22.
62. M. J. Kergoat, J. Latour, P. Lebel, et al., "Quality-of-Care Processes in Geriatric Assessment Units: Principles, Practice, and Outcomes," *Journal of the American Medical Directors Association* 13, no. 5 (2012): 459–463.
63. S. Johnson, *Evaluation Design: Families and Children Expert Panel Project* (Southbank, Australia: Australian Institute of Family Studies, 2021).
64. Centre for Epidemiology and Evidence, "Study Design for Evaluating Population Health and Health Service Interventions: A Guide," 2023, Evidence and Evaluation Guidance Series.
65. D. O. Lawson, K. Mellor, S. Eddy, et al., "Pilot and Feasibility Studies in Rehabilitation Research: A Review and Educational Primer for the Physiatrist Researcher," *American Journal of Physical Medicine & Rehabilitation* 101, no. 4 (2022): 372–383.
66. S. M. Eldridge, G. A. Lancaster, M. J. Campbell, et al., "Defining Feasibility and Pilot Studies in Preparation for Randomised Controlled Trials: Development of a Conceptual Framework," *PLoS One* 11, no. 3 (2016): e0150205.
67. C. J. Evans, A. E. Bone, D. Yi, et al., "Community-Based Short-Term Integrated Palliative and Supportive Care Reduces Symptom Distress for Older People With Chronic Noncancer Conditions Compared With Usual Care: A Randomised Controlled Single-Blind Mixed Method Trial," *International Journal of Nursing Studies* 120 (2021): 1–13.
68. T. C. Hoffmann, P. P. Glasziou, I. Boutron, et al., "Better Reporting of Interventions: Template for Intervention Description and Replication (TIDieR) Checklist and Guide," *Collegian* 348 (2014): 1–12.
69. X. Rui, L. Qiufang, G. Feifei, Z. Maoni, and Z. Luyao, "Prevalence and Risk Factors of Frailty Among People in Rural Areas: A Systematic Review and Meta-Analysis," *BMJ Open* 11, no. 4 (2021): e043494.
70. C. Henning-Smith, "The Unique Impact of Covid-19 on Older Adults in Rural Areas," *Journal of Aging & Social Policy* 32, no. 4–5 (2020): 396–402.
71. A. Yashadhana, N. Pollard-Wharton, A. B. Zwi, and B. Biles, "Indigenous Australians at Increased Risk of COVID-19 due to Existing Health and Socioeconomic Inequities," *Lancet Regional Health – Western Pacific* 1 (2020): 100007.
72. WHO (World Health Organization), *Strengthening Primary Health Care to Tackle Racial Discrimination, Promote Intercultural Services and Reduce Health Inequities: Research Brief* (Geneva, Switzerland: World Health Organization, 2022).
73. A. Mlinarić, M. Horvat, and V. Šupak Smolčić, "Dealing With the Positive Publication Bias: Why You Should Really Publish Your Negative Results," *Biochemia Medica* 27, no. 3 (2017): 030201.
74. C. Lunny, D. Pieper, P. Thabet, and S. Kanji, "Managing Overlap of Primary Study Results Across Systematic Reviews: Practical Considerations for Authors of Overviews of Reviews," *BMC Medical Research Methodology* 21, no. 1 (2021): 140.

Supporting Information

Additional supporting information can be found online in the Supporting Information section.