


REVIEW ARTICLE

# Older adults without care partners: a scoping review of their precarities, outcomes and interventions

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## Abstract

Demographic changes in rates of living alone, migration, and having no living partner, spouse, or children are leaving more older adults without the typical uncompensated familial and non-familial care partners that are the backbone of long-term care provision. We aimed to understand the precarities and outcomes specifically experienced by older adults without care partners to inform future intervention development. Using the Joanna Briggs Institute guidelines and PRISMA-ScR protocol, we conducted a scoping review of nine databases to map the current peer-reviewed evidence regarding these individuals' precarities, outcomes, and interventions using the Health Equity Promotion Model (HEPM) as our guiding framework. Our comprehensive search strategy resulted in 5,100 unique articles, 33 of which met our inclusion criteria. Three independent reviewers screened and extracted data, and the first author used deductive content analysis with the pre-specified HEPM framework. Fifteen studies reported precarities related to environmental/structural forces, and psychological, social, behavioral, and biological processes. Twenty-four studies reported adverse health and well-being outcomes with more focus on health than well-being outcomes (19 versus 8). Four studies tested interventions, and reported environmental/structural, social, and behavioral processes and health and well-being outcomes. Only 13 of the 33 reviewed studies set out to explicitly study older adults without care partners, and no studies focused on marginalized sub-groups. This scoping review highlights our lack of understanding of older adults without care partners' distinctive precarities and outcomes, and the vital research needed to develop and test interventions that effectively address their unique needs.

**Keywords:** access to care; isolation; no care partner

## Introduction

We live in a demographically ageing society (Majmundar and Hayward 2018), with a rising number of individuals ageing into or with disability (Guzman-Castillo et al. 2017) who will require assistance in self-care, mobility, or daily living activities in the coming decades. Most societies assume spouses, children, extended kin, or other social network members (typically called ‘informal’ or unpaid caregivers or care partners) will shoulder most of the care required for those ageing into and with disability (Feinberg and Spillman 2019). And yet around the world, structural, cultural, and social factors are leading to a growing, understudied population of older adults without access to this type of support (Fredriksen Goldsen et al. 2025; Freedman et al. 2024) whom we call older adults without care partners. Based on existing literature (Blackburn et al. 2018; Shah et al. 2022) we define this population as lacking an available person to provide support or assistance if they are not fully able to meet their self-care, mobility, or daily living activity needs, now or in the future. To date, there is little scholarship specifically related to this population.

We used the Health Equity Promotion Model (HEPM) (Fredriksen-Goldsen et al. 2014), a life course, health equity model, as a guiding framework to explore the current state of knowledge, and any gaps in that knowledge, of older adults without care partners. Originally developed to address the health and well-being of underserved communities, particularly sexual and gender minorities, the HEPM situates these issues within a life course developmental perspective. It considers both social position and environmental/structural factors as determinants of health and well-being along with individual-level psychological, social, behavioral, and biological risks and resiliencies. This framework is valuable for exploring the multidimensional and intersecting influences on the health and well-being of health-disparate populations (Fredriksen-Goldsen and Kim 2017). We applied the HEPM in our review of the literature, looking for risks, insecurities, and vulnerabilities (precarities) that may affect older adults without care partners’ outcomes across the model’s constructs: environmental/structural context, social location, and psychological, social, behavioral, and biological processes. Additionally, we sought literature regarding any known health and well-being outcomes for this population and any peer-reviewed interventions addressing the populations’ precarities and outcomes.

## Background

Public health systems rely on uncompensated family and non-family care partners for vital care support (Roth et al. 2015). For example, among older adults with dementia in the United States (U.S.), 83 percent of help comes from family members, friends, and other unpaid care partners (Friedman et al. 2015), whose labor is valued at \$339.5 billion annually (Alzheimer’s Association 2023). These care partners help with self-care (bathing, dressing, toileting, etc.), activities of daily living (medication management, transportation, paying bills, shopping, etc.), and also do the difficult work of coordinating care from complex health systems and advocating for the needs of those who require care (Reinhard et al. 2023).

Their care support not only reduces the overall cost of care nationally for public health (Pitkala et al. 2021) but may mitigate precarities and adverse outcomes for those in need of care. Scholars have examined the outcomes of individuals whose social structure or living arrangement may put them at risk of having no care partner. They identified a higher risk of mortality for those with no partner or children (Patterson et al. 2020), and for those living alone (Renwick et al. 2020). Living alone and kinlessness (having no living partner, spouse, or children) have also been associated with elevated risks of loneliness and decreased social activity (Patterson and Margolis 2023), mental health distress (Margolis et al. 2021), and institutionalization (Pimouguet et al. 2017; Plick et al. 2021).

The presumption of, and reliance on, the availability of care partners is problematic because future demographic changes will likely reduce the typical network of individuals to fill these roles, even as the number of older adults ageing into and with disability continues to rise. Around the world, changing rates of living alone (Esteve et al. 2020; Reher and Requena 2019) and kinlessness (Margolis and Verdery 2017; Verdery et al. 2019) are leaving more older adults without the conventional network of individuals relied on for care support (Friedman et al. 2015; Roth et al. 2015). Kinlessness, an imperfect proxy for lacking a care partner, has been studied worldwide (Verdery et al. 2019), and projected to increase substantially over the next 50 years in nearly all regions of the world, with differences by country income-level and demographic trends (Mair and Anderson 2024; Verdery et al. 2019). In some countries and contexts, migration of younger generations away from their families for economic opportunity (Amurwon 2019; Cojocari and Cupcea 2018) and declines in norms around filial piety and caregiving (Okah et al. 2023) are also contributing to changing access to care networks. Depending upon the sample and conceptualization of the population, the resulting gap between the need for care and availability of care from these changes is anywhere from 2.62 percent (Roofeh et al. 2020) to much higher estimates, including 30 percent (Abrahamson et al. 2017), 38 percent (Shah et al. 2022), and 41.8 percent (Burchardt et al. 2018) of the older adult population.

As the number of older adults without care partners continues to grow, they are more likely to rely on paid or publicly provided care to meet their needs (Stafford and Kuh 2018). However, waning, underdeveloped, or insufficient publicly funded care from government institutions and a care workforce shortage (OECD 2024; Spillman et al. 2020) put those without a care partner in an uncertain position, with limited access to both paid/publicly funded care and care partner support (Polivka and Baozhen 2020). In addition, older adults from marginalized populations without a care partner may be reluctant to seek paid/publicly funded healthcare and supportive services due to experiences of discrimination (Hamed et al. 2022; Romanelli and Hudson 2017).

Guided by the HEPM, we must also consider how social location affects the likelihood of having care partner support and any associated health equity outcomes of not having this support. Members of racially minoritized groups (Odlum et al. 2020) and sexual and gender diverse (SGD) older adults (Fredriksen-Goldsen et al. 2017) are more likely to live with multiple chronic conditions and disability, and yet are at greater risk of not having access to care. SGD older adults, for example, who have historically not had access to legal marriage, are less likely to be married or have children

(Croghan et al. 2014), and more likely to live alone (Fredriksen-Goldsen et al. 2013). There are also projected demographic disparities by race. Among Black older adults in the U.S., the percentage of those with no living partner, children, parents, or siblings is projected to triple by 2060, compared to whites, for whom it will double (Verdery and Margolis 2017). Marginalized communities may therefore be more likely to need care and less likely to receive it, putting them at even greater risk for adverse outcomes.

### *Current knowledge*

The literature to date on older adults without a care partner has been semantically complicated (Brenner et al. 2023; Montayre et al. 2020). Scholars frequently reference the definition of the population provided by Carney et al. (2016): ‘Aged, community-dwelling individuals who are socially and/or physically isolated, without an available known family member or designated surrogate or caregiver’ (p.1). However, there is a lack of consensus on terminology—the population has been called elder orphans, solo agers, kinless, unattached older adults, and older adults without advocates (Brenner et al. 2023; Kervin et al. 2022). Furthermore, research has variably conceptualized the population by relying on different proxies for the absence of a care partner, such as living alone, lack of immediate kin, having no legal surrogate, and physical and social isolation (Kervin et al. 2022). Narrowing in on the population of older adults without care partners is an important step in understanding the independent adverse risks and outcomes among older adults and for developing targeted interventions.

Living alone or lacking family/kin does not necessarily mean one does not have access to care (Perissinotto and Covinsky 2014), as evidenced in the care configurations of SGD older adults, who are more likely to rely on friends, neighbors, ex-partners, and extended kin for care support (Shiu et al. 2016). Previous scholarship demonstrated some older adults living alone are actually well supported, meaning differentiating between those who live alone and those who live alone without support is important for understanding the population’s risks (Renwick et al. 2020). Similarly, kinless older adults in contexts where nontraditional family forms are increasing report having more diverse networks and may actually score higher on measures of social connectedness (Mair 2019). It is also not just the existence of kin that matters to the availability of care partners, but also the quality of the relationship that must be considered. Many older adults may have living kin, but are disconnected from them (Patterson and Margolis 2023).

There have been a few previous efforts to map the literature related to this population. Earlier work focused largely on grey literature, and was either informal (Carney et al. 2016) or an ‘integrative’ review (Montayre et al. 2019). More recently, Roofeh, Smith et al. (Roofeh et al. 2022b) published an umbrella review exclusively focused on physical health outcomes where they combined key words for social and physical isolation with one of the following four terms: ‘lack of caregiver,’ ‘lack of surrogate,’ ‘kinless,’ or ‘unbefriended.’ They struggled to find any literature directly focused on older adults without care partners, and changed their methodology from an umbrella review to a scoping review mid-analysis, with a result of only five included studies. Kervin et al. (2023) also conducted a scoping review related to this population (which they called older adults without advocates). This review utilized more search terms to get at the

population and specifically focused on barriers and facilitating factors in health and social care access.

Given the potential consequences of insufficient caregiving support for the growing population of older adults who will require such assistance in the future, a vital next step is expanding our knowledge *specific* to those older adults without care partners. This knowledge needs to be distinct from other characteristics such as social isolation, living alone, or kinlessness. We must understand the risks, vulnerabilities, and insecurities (precarities) that older adults without care partners face, and the outcomes they may encounter. With this grounding in the literature, we can then more efficiently and effectively design and implement interventions that respond to their experiences and care needs.

## Methods

We utilized a scoping review to map the literature related to this population. For an emerging area of interest without an established evidence base, a scoping review is useful to those seeking to understand how research has been conducted, knowledge gaps in the field, and next best steps (Lely et al. 2023; Levac et al. 2010). Our review was guided by the most recent methodological guidelines outlined by the Joanna Briggs Institute (JBI) Manual for Evidence Synthesis (Khalil et al. 2021; Peters et al. 2020a, 2020b; Pollock et al. 2023). We registered the review with the Open Science Framework ([https://osf.io/v6453/?view\\_only=b97ebd35cc3843e59d2265e945495988](https://osf.io/v6453/?view_only=b97ebd35cc3843e59d2265e945495988)) and complied with the PRISMA extension for scoping reviews (Tricco et al. 2018). See Supplementary file 1 PRISMA Checklist.

## Review questions

1. What precarities (risks, insecurities, vulnerabilities) do older adults without care partners face related to environmental/structural context, social location, and psychological, social, behavioral, and biological processes?
2. What health and well-being outcomes do they experience?
3. What is known about available interventions for older adults with no care partner?

## Inclusion/exclusion criteria

We utilized the ‘PCC’ mnemonic (population, concept, and context) to clearly identify the focus and context of our review (Peters et al. 2020b).

## Population

Given the semantic and conceptual ambiguity around the population without care partners, we revisited our population inclusion/exclusion criteria throughout the review process to refine our focus on literature most relevant to these individuals. Early in the process, we decided our primary population inclusion/exclusion criteria was whether an article described part of their population as not having a care partner. We allowed for various conceptualizations of this, meaning authors may have simply

inquired ‘do you have a care partner?’ Or, they might have asked a more detailed question such as, ‘If you had a serious illness or became disabled, do you have someone who would be able to provide care for you on an on-going basis?’ (Blackburn et al. 2018). We did not incorporate social and physical isolation in our criteria, despite its inclusion in the widely cited definition by Carney et al. (2016). By focusing on care partner status, we allowed for individuals who are socially connected, have living kin, or live with others, but still lack network members who can provide caregiving. This approach allowed us to narrow in on the unique vulnerabilities and outcomes associated with the absence of care partner support. We felt this was important as previous research with populations who are isolated, kinless, or live alone has found some of these individuals are well supported (e.g. Mair 2019; Renwick et al. 2020). Furthermore, this choice is aligned with Freedman et al.’s (2024) recent research agenda aimed at understanding late-life care networks, which argues for a focus on understanding older adults’ available and actual care networks, and the implications of these networks.

Among the population without care partners, we excluded articles focused on older adults without decisional capacity, those often termed ‘unbefriended,’ a choice consistent with other literature on the population (e.g. Farrell et al. 2021; Kervin et al. 2023). We revised our original inclusion criteria of adults 65 or older to allow for studies where the mean age was 65. This shift allowed for the fact that older adulthood does not begin at a set chronological age. Rather, ageing may begin earlier for those who experience social adversity, discrimination (Mutambudzi et al. 2024), or psychosocial stress (Simons et al. 2021). We included articles whose samples comprised at least some older adults who did not have an available care partner if they provided separate analyses for those without care partners.

### Concept

Guided by the HEPM, we looked for three concepts in the literature that provided us a broad picture of the health and well-being of this population. First, we included literature related to precarity. The term precarity has been used in ageing scholarship to refer to a sense of insecurity and uncertainty due to systemic and cumulative disadvantage and lack of resources (Grenier and Phillipson 2018). Based on gerontological literature (e.g. Grenier and Phillipson 2018; Grenier et al. 2017; Portacolone 2020) we operationalized precarity to mean risks, insecurities, or vulnerabilities that may impede an older adults’ ability to age as they desire. We examined precarities within the framework of the HEPM—looking for risks, insecurities or vulnerabilities related to environmental/structural context, social location, and psychological, social, behavioral, and biological processes.

We also examined health or well-being outcomes experienced by the population. Aligned with HEPM framework, we operationalized health outcomes as any morbidity, mortality, or hospitalization/institutionalization-related outcome, and well-being as any outcome related to psychological well-being, meaning and purpose, or quality of life/life satisfaction.

For our third concept we searched within the identified literature related to these first two concepts (precarities and outcomes) for articles that specifically tested interventions for this population or reported results of an intervention for at least a sub-sample of the overall sample that met our population criteria. We operationalized

interventions broadly, inclusive of any strategy or treatment designed to influence a particular outcome for older adults with no care partner. We did not limit the type of intervention or intervention study (e.g. qualitative, quantitative, clinical trial, etc.) as we hoped to understand the current state of the field related to interventions for this population.

### *Context*

We limited our review to articles focused on community-dwelling older adults, aligned with the conceptualization of the population in previous scholarship (Carney et al. 2016; Roofeh et al. 2022a). Older adults without care partners living in residential settings may face different challenges and generally have access to more professional care supports compared to their community-dwelling counterparts. By focusing exclusively on community-dwelling individuals, we were also able to explore potential differences in outcomes related to transitions to residential or institutional care for older adults with versus without care partners.

### *Types of evidence sources*

We only included articles published in English, in peer-reviewed journals. Grey literature sources and sources that did not report the results of a primary or secondary quantitative, qualitative, or mixed-methods study were excluded. As part of our pre-specified strategy, we searched the references of all published literature reviews related to older adults without care partners during the search and study selection process. This decision aligned with our aim to ensure our review was as comprehensive as possible, a recommendation of JBI guidance (Peters et al. 2020b).

### *Search strategy*

We worked in close consultation with an expert systematic and scoping review librarian to design our search strategy. Using an iterative process of testing and refinement, we developed a search string based on our PCC format and inclusion/exclusion criteria to produce the most sensitive and specific results. Our priority was to ensure the search returned all relevant articles related to the population and research questions. We searched PubMed, Embase, CINAHL, PsycInfo, Social Work Abstracts, Social Service Abstracts, Global Index Medicus, WOS, and SciELO with no start date and an end-date of 18 December 2023. We did not update our search given our short timeline for conducting the review process. The full search strategy is provided for each database in Supplementary file 2.

### *Study selection*

We uploaded search results into Covidence, a web-based collaboration software platform that streamlines the production of systematic and other literature reviews (Covidence systematic review software n.d.). After removal of duplicates, three independent reviewers conducted title and abstract screening. Each reviewer pilot tested screening based on the inclusion/exclusion criteria with an initial 20 and then a subsequent 100 titles/abstracts. We compared results and further refined our understanding



of inclusion/exclusion criteria. An inter-rater reliability (IRR) score of 80 percent was required to proceed beyond pilot testing (Belur et al. 2021). IRR is automatically tracked by Covidence. Articles where we recorded uncertain eligibility were carried forward to full-text review. Following title/abstract screening, all full texts were reviewed by at least two of the three reviewers, with weekly meetings to further clarify the screening process and discuss disagreements until consensus was reached. The first author searched the reference lists of included articles and all recent published literature reviews related to the population to identify further relevant articles. In addition, the first author maintained notes and an audit trail throughout the screening process.

### *Data extraction*

The first author pilot tested data extraction using a predetermined extraction table based on recommendations from JBI (Peters et al. 2020b; Pollock et al. 2023) and further refined the table in consensus meetings with a second reviewer to ensure it reflected the research questions, and alignment with the HEPM framework. The first author read all included articles and extracted data with a second person reviewing a random selection (determined using a web-based randomization tool) of 10 percent of included articles to ensure data extraction was accurate and complete (Peters et al. 2020a).

### *Data analysis*

According to the most updated JBI guidance on analyzing and reporting results (Peters et al. 2020b; Pollock et al. 2023), scoping reviews ‘should not involve anything more than basic descriptive analysis’ (Peters et al. 2020b). Per this guidance, for each of our three research questions (precarity, outcomes, and interventions), we utilized deductive content analysis according to our pre-specified HEPM framework. We stayed purposefully ‘data near,’ without an attempt to discern deeper meaning in the findings (Sandelowski 2010). The first author deductively open coded the extracted data and allocated concepts and characteristics of the studies into categories (Pollock et al. 2023) aligned with the HEPM (environmental/structural context; social location; psychological, social, behavioral, and biological processes; or health and well-being outcomes) (Fredriksen-Goldsen et al. 2014). For qualitative studies, we coded at the level of the primary themes presented by researchers in their findings to avoid further interpretive analysis (Pollock et al. 2023). The first author then summarized the results and reviewed and refined them in consultation with the second and third reviewers.

## **Results**

Our thorough search strategy captured 10,250 articles. After removal of duplicates, we screened 5,100 titles/abstracts. Thirty-three met inclusion criteria after our full-text review and citation and related review search. [Figure 1](#) displays the PRISMA flow diagram of the search strategy and selection process. The details of the included articles and their extracted data are summarized below and presented in Supplementary file 3: Study Characteristics. See [Table 1](#) for a summary of the findings outlined by research question and HEPM construct.



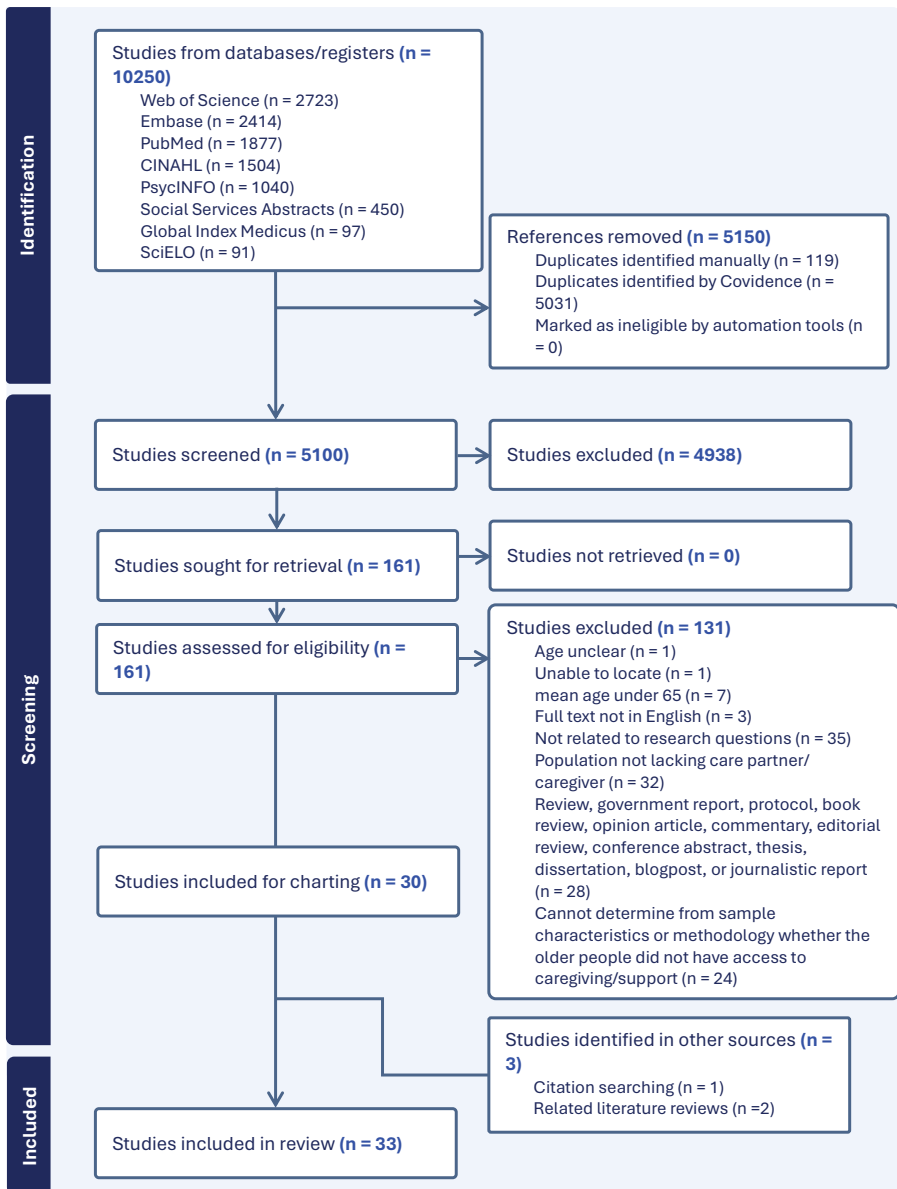


Figure 1. PRISMA flow diagram.

Table 1. Summary of studies by research question and HEPM construct

HEPM Construct		Precarities (15)		Outcomes (24)		Interventions (4)
Social Location	0	No studies		N/A	0	No studies

(Continued)

**Table 1.** (Continued.)

HEPM Construct		Precarities (15)	Outcomes (24)		Interventions (4)
Environmental Structural Process	5	Cohen et al. <a href="#">2021</a> Enguidanos et al. <a href="#">2015*</a> Prizer et al. <a href="#">2020</a> Sheehan et al. <a href="#">2021</a> Thaggard and Montayre <a href="#">2019*</a>	N/A	3	Aoun et al. <a href="#">2012*</a> Machielse <a href="#">2022*</a>  Sheehan et al. <a href="#">2021*</a>
Psychological Process	4	Dubois et al. <a href="#">2008</a> Enguidanos et al. <a href="#">2015*</a> High <a href="#">1990*</a> Machielse <a href="#">2022*</a>	N/A	3	Aoun et al. <a href="#">2012*</a> Machielse <a href="#">2022*</a>  Sheehan et al. <a href="#">2021*</a>
Social Process	6	Adachi et al. <a href="#">2022</a> Cohen et al. <a href="#">2021</a> Dahlberg and McKee <a href="#">2016</a> Eichler et al. <a href="#">2016</a> Machielse <a href="#">2022*</a> Roofeh et al. <a href="#">2022a</a>	N/A	3	Aoun et al. <a href="#">2012*</a> Machielse <a href="#">2022*</a>  Sheehan et al. <a href="#">2021*</a>
Behavioral Process	5	Calero-Molina et al. <a href="#">2022</a> Enguidanos et al. <a href="#">2015*</a> High <a href="#">1990*</a> Machielse <a href="#">2022*</a> Thaggard and Montayre <a href="#">2019*</a>	N/A	3	Aoun et al. <a href="#">2012*</a>  Machielse <a href="#">2022*</a>  Sheehan et al. <a href="#">2021*</a>
Biological Process	4	Aoun et al. <a href="#">2007</a> Cho et al. <a href="#">2013</a> Eichler et al. <a href="#">2016</a> Machielse <a href="#">2022*</a>	N/A	0	No studies
Health Outcome		N/A	19	1	Friedman et al. <a href="#">2006</a>  Adachi et al. <a href="#">2022</a> Andel et al. <a href="#">2007</a> Aoun et al. <a href="#">2007</a> Blackburn et al. <a href="#">2018</a> Bradshaw <a href="#">1993</a> Chen et al. <a href="#">2013</a> Enguidanos et al. <a href="#">2015*</a> Giunta et al. <a href="#">2023</a> Fujino and Matsuda <a href="#">2009</a> Kim et al. <a href="#">2019</a> Magidson et al. <a href="#">2020</a> Naseer et al. <a href="#">2023</a> Peace et al. <a href="#">2023</a>

(Continued)

Table 1. (Continued.)

HEPM Construct	Precarities (15)	Outcomes (24)	Interventions (4)
		Rockwood et al. 1996 Roofeh et al. 2022a Shah et al. 2022 Wang et al. 2023	
Well-Being Outcome	N/A	8 Bilotta et al. 2012 Cations et al. 2023 Clare et al. 2020 Cohen et al. 2021 Dahlberg and McKee 2016 Machielse 2022* Prizer et al. 2020 Shah et al. 2022	3 Aoun et al. 2012* Machielse 2022*      Sheehan et al. 2021*

\*Indicates the study was qualitative.

### Study characteristics

Twenty-six studies used quantitative methodology, six qualitative, and one mixed-methods. Most studies were conducted with samples in North America (U.S.: 13; Canada: 2), followed by Western Europe (Italy: 2; Germany: 1; Netherlands: 1; Spain: 1; Sweden: 1; United Kingdom: 2), Oceania (Australia: 4; New Zealand: 1), East Asia (China: 1; Japan: 2; South Korea: 1), and Southeast Asia (Singapore: 1). See Table 2 for regional differences in study findings by research question. Three studies were population-based, two from the U.S. (Roofeh et al. 2022a; Shah et al. 2022), and one from China (Wang et al. 2023). Only 14 studies reported the race and/or ethnicity of participants, and only eight reported an indicator of income or poverty. Most studies (19) were samples with 55 percent or more women. Fourteen studies' samples were less than 90 percent white and/or not from a high-income/Western country. No studies reported sexual orientation or gender identity outside the woman/man binary.

Studies variably operationalized their population's lack of a care partner and need for a care partner. Ten studies asked about the presence of a care partner with a yes/no outcome, 17 inquired (in various ways) about the presence of someone who was available now or in the future to respond to care needs, and six had unclear operationalization (see Table 3). Most studies (18) asked whether participants had someone providing care *now*, six asked about care availability *now or in the future*, three asked about care in the *future*, and for six, this was not clearly specified.

In most studies (22), there was no indication of whether participants received paid or publicly funded care support. The need for care among participants was also inconsistently reported. In thirteen the entire sample had a demonstrated need for care (they had ADL/IADL limitations or a chronic condition likely requiring care such as dementia, terminal illness, cancer, etc.), and another 13 provided no clear indication of demonstrated need for care. (See Fig. 2).

**Table 2.** Regional differences in study findings by research question

World Region	Precarities	Outcomes	Interventions
North America	Cho et al. 2013	Andel et al. 2007	Friedman et al. 2006
	Cohen et al. 2021	Blackburn et al. 2018	Sheehan et al. 2021
	Dubois et al. 2008	Cohen et al. 2021	
	Enguidanos et al. 2015	Enguidanos et al. 2015	
	High 1990	Magidson et al. 2020	
	Prizer et al. 2020	Peace et al. 2023	
	Roofeh et al. 2022a	Rockwood et al. 1996	
	Sheehan et al. 2021	Roofeh et al. 2022a	
		Shah et al. 2022	
Western Europe	Calero-Molina et al. 2022	Bilotta et al. 2012	Machielse 2022
	Dahlberg and McKee 2016	Clare et al. 2020	
	Eichler et al. 2016	Dahlberg and McKee 2016	
	Machielse 2022	Giunta et al. 2023	
		Machielse 2022	
		Naseer et al. 2023	
Oceania	Aoun et al. 2007	Aoun et al. 2007	Aoun et al. 2012
	Thaggard and Montayre 2019	Bradshaw 1993	
		Cations et al. 2023	
East Asia	Adachi et al. 2022	Adachi et al. 2022	
		Fujino and Matsuda 2009	
		Kim et al. 2019	
		Wang et al. 2023	
Southeast Asia		Chen et al. 2013	

**Table 3.** Operationalization of care partner availability

Assessment criteria/question ( <i>current or future care partner availability</i> )	Article(s)
Caregiver available? ( <i>current</i> )	Andel et al. (2007) Bradshaw (1993) Calero-Molina et al. (2022) Chen et al. (2013) Giunta et al. (2023) Kim et al. (2019) Rockwood et al. (1996)
Caregiver available who could help with disease management after discharge? ( <i>current</i> )	Adachi et al. (2022)
Clinical record search for availability of caregiver. ( <i>current</i> )	Aoun et al. (2007)
Caregiver available if present on a regular basis or accessible in case of need. ( <i>current or future</i> )	Bilotta et al. (2012)
'If you had a serious illness or became disabled, do you have someone who would be able to provide care for you on an on-going basis?' ( <i>current or future</i> )	Blackburn et al. (2018)

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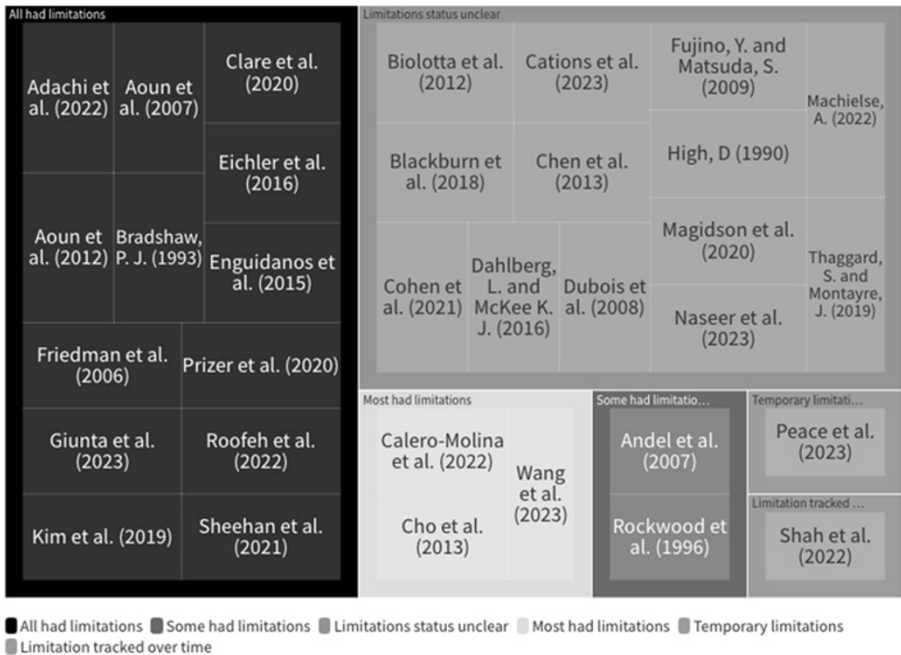
Table 3. (Continued.)

Assessment criteria/question ( <i>current or future care partner availability</i> )	Article(s)
Person available to take lead responsibility for providing or managing patient's care? ( <i>current</i> )	Cho et al. (2013)
Received no help at all or less than one hour of help in the past week related to personal care, finances, housework or laundry, attending appointments, medication, safety, or other. ( <i>current</i> )	Clare et al. (2020)
'Do you have someone who you would like to make medical decisions for you if you were unable, as for example if you were seriously injured or very sick?' ( <i>future</i> )	Cohen et al. (2021)
'Do you rely on a friend or relative (including your partner or other people in your household) to provide you with care or support for four hours per week or more?' If no, then asked, 'Do you have someone who looks in on you to see if "everything is all right"?' ( <i>current or future</i> )	Dahlberg et al. (2016)
Someone available to take care of them on a regular basis. ( <i>current</i> )	Eichler et al. (2016)
No caregiver = no household caregiver or non-household caregiver. ( <i>current</i> )	Friedman et al. (2006)
No caregiver = Living alone without support from family or friends or living with others who cannot provide sufficient care. ( <i>current or future</i> )	Fujino and Matsuda (2009)
"Is there someone who knows you well enough that you would trust him or her to make health care decisions on your behalf in the event you could not make them for yourself" and "If you were too sick to make an important decision about your health care, who would you want to make the final decision for you." ( <i>future</i> )	High (1990)
No caregiver = absence of social contacts with family members, friends or acquaintances; absence of supportive relationships (no practical, emotional or companionship support) for at least five years. ( <i>current</i> )	Machielse (2022)
'Do you receive any assistance with instrumental services (e.g., grocery shopping, cleaning) or with personal care (e.g., dressing, bathing) from relatives, friends, neighbors or volunteer/non-profit organizations?' ( <i>current</i> )	Naseer et al. (2023)
No caregiver = no one in the home or no visitor who could help with at least one support function. ( <i>current care partner</i> )	Peace et al. (2023)
"Could you please tell us the one person who helps you the most with your PD outside of clinic? (No caregiver = no one person) ( <i>current care partner</i> )	Prizer et al. (2020)
No caregiver based on participant household composition, level of social and physical isolation, independent activity of daily living (IADL) and basic activity of daily living (ADL) assistance needs, and unpaid caregiver availability. Social isolation = two or fewer social contacts; physical isolation = four or fewer days per week leaving home for any reason; caregiving need = required assistance with a minimum number of IADLs and ADLs for self-care and household function, including cooking, grocery shopping, laundry, banking, dressing, and personal hygiene, including washing and toileting; caregiver availability = number of unpaid caregivers recorded, regardless of their relationship with the participant. ( <i>current care partner</i> )	Roofeh et al. (2022a)

(Continued)

**Table 3.** (Continued.)

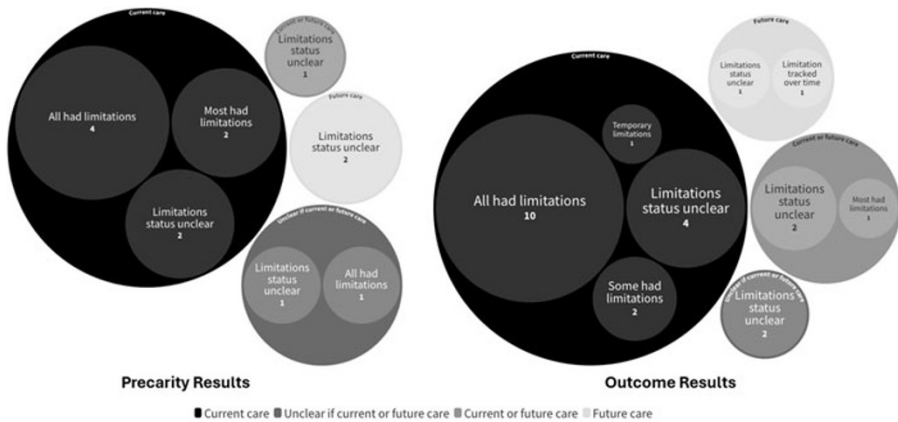
Assessment criteria/question ( <i>current or future care partner availability</i> )	Article(s)
'Suppose in the future, you needed help with basic personal care activities like eating or dressing. Do you have relatives or friends besides your spouse/partner who would be willing and able to help you over a long period of time?' ( <i>future</i> )	Shah et al. (2022)
Do not have an available close family member or designated surrogate or caregiver. ( <i>current or future</i> )	Thaggard and Montayre (2019)
No caregiver = no one who primarily takes care of them when sick. ( <i>current or future</i> )	Wang et al. (2023)
Unclear; only discussed in results section as having a caregiver or not.	Aoun et al. (2012) Cations et al. (2023) Dubois et al. (2008) Enguidanos et al. (2015) Magidson et al. (2020) Sheehan et al. (2021)



**Figure 2.** Demonstrated need for care among study participants.

### Precarity

Fifteen of the included studies reported outcomes related to the precarities research question. Eight of these studies reported whether participants had *current* care partners, two *future* care partners, one *current or future*, and in two, this was not clearly



**Figure 3.** Precarity and outcome results by care partner status and demonstrated need for care.

*Note:* For articles that discussed either precarity results ( $n = 15$ ) or health and well-being outcome results ( $n = 24$ ), this figure depicts the proportion of articles where care partner status was either current, future, current and future, or unclear (bubble size and color). And, within those, the number of articles where participants had limitations/impairments that likely required care.

specified. In five of these 15 studies all participants had a demonstrated need for care (they had ADL/IADL limitations or a limiting disease), in two more than 50 percent had a demonstrated need for care, and in six this was not clearly indicated or was not assessed. See Fig. 3 for a visualization of the number of studies by care partner status (current, future, etc.) and need for care status. Within the HEPM framework, the included studies reported precarities related to environmental/structural context, and psychological, social, behavioral, and biological processes. (See Table 1).

### *Environmental/structural (five studies)*

We identified environment/structural precarities for older adults without care partners in five studies related to travel to appointments, access to information and services, and socioeconomic disadvantage. In qualitative findings, participants without care partners reported being unable to get to medical appointments without assistance (Sheehan et al. 2021). They found themselves reliant on informal networks, including the ‘kindness of strangers’ such as bus drivers, bank tellers, and other members of the public to get what they needed (Thaggard and Montayre 2019). Older, seriously ill veterans reported lack of access to care including information, medications, and medical care were reasons for hospital readmission (Enguidanos et al. 2015). In cross-sectional quantitative studies in the U.S., those without care partners compared to those with care partners were also more likely to be socioeconomically disadvantaged and therefore less able to access paid care in the absence of a care partner (Cohen et al. 2021; Prizer et al. 2020).

### *Psychological (four studies)*

We found psychological precarities for older adults without care partners in four studies related to sense of agency and fears about future dependence/institutionalization. Qualitatively, older adults without care partners in the U.S. described feeling as if they



had no motivation to care for themselves (Enguidanos et al. 2015) and were resigned ‘to their destinies as old, alone, and without families’ (High 1990, p. 287). In interviews with Machielse (2022), this population reported a desire to remain healthy, but described fearing sickness and dependence (Machielse 2022). And in a Canadian cross-sectional sample, not having a care partner was independently associated with the perceived need for institutionalization (Dubois et al. 2008).

### *Social (six studies)*

Across six studies, we identified older adults without care partners had social precarities related to social isolation, social integration, social engagement, social support, and social network composition. In a cross-sectional sample in England, Dahlberg and McKee (2016) found older adults without care partners who needed care assistance had significantly lower contact with family, friends, and neighbors; lower social engagement; and lower levels of perceived community integration, trust, and security compared to those with care partners *and* compared to those without care partners without care needs. In a cross-sectional sample living alone in Germany, older adults without versus with a care partner were significantly less likely to have someone they could call on in case of emergency and had significantly lower self-perceived social support (Eichler et al. 2016). In a retrospective cohort study in Japan, Adachi et al. (2022) found 80 percent of those without a care partner had ‘social frailty,’ or were at risk of ‘losing or having lost sufficient social support, activities, or resources’ (p. 82). In a cross-sectional U.S. sample, participants without versus with a desired surrogate had smaller social networks and lower network density, community engagement, and socialization (Cohen et al. 2021). Roofeh and colleagues (Roofeh et al. 2022a), in a nationally representative study, used assessed social or physical isolation as an indicator for whether people were in the population of ‘elder orphans.’ Finally, Machielse (2022) reported many participants in their qualitative sample had no need for social contact, either due to deliberate choice or resignation to the absence of social contact.

### *Behavioral (five studies)*

We identified older adults without care partners experienced behavioral precarities including in self-care, perception of future risks, and future planning across five studies. Two studies reported self-care behavioral precarities. Participants from a qualitative sample in Kentucky had impaired ability to perceive their needs—they denied future potential risk to themselves (High 1990). A group of seriously ill older male veterans in the U.S. discussed difficulty caring for themselves (Enguidanos et al. 2015). In a prospective cohort study in Spain, one of the strongest determinants of impairment in overall self-care was lack of a care partner, controlling for age, sex, and other psychosocial variables (Calero-Molina et al. 2022). This was also the case across three domains of self-care: autonomy-based adherence (e.g. daily self-care and preventative behaviors like medication management), consulting behavior (e.g. making healthcare appointments when needed), and provider-based adherence (e.g. compliance with healthcare professionals’ advice).

We found a dearth of future planning reported in three qualitative studies. Machielse (2022), in the Netherlands, reported many participants preferred not to think about or arrange for the future. Few participants in a Kentucky sample reported

either formal or informal planning for the future (High 1990) and few participants in a New Zealand sample reported having advance plans or directives for their health-care or finances (Thaggard and Montayre 2019). This same sample had divided views regarding the right time to engage in future planning, and whether future planning was even necessary or desired (Thaggard and Montayre 2019).

### *Biological (five studies)*

Across five studies, we found older adults without care partners experienced biological precarities related to increased need for professional healthcare support services and functional dependence. Among a cross-sectional sample of Australian palliative service users with no care partner, health professionals reported they spent more time per home-visit on things like symptom control, medications, mobility, transport, social support, care needs, housekeeping, and emotional support, compared with users who had a care partner (Aoun et al. 2007). After discharge from the hospital and receipt of 60 days of home health care, participants with no care partner in a cross-sectional U.S. sample showed greater functional dependence compared to those with care partners, even when controlling for confounders (Cho et al. 2013). This population also utilized professional services more often than those with care partners, as evident in the findings from Eichler et al. (2016) and Machielse (2022).

### *Outcomes*

Among the included studies in this review, 24 discussed health (19) and well-being (eight) outcomes for older adults without care partners (see Table 1), all of which were adverse in nature. Within these, 17 reported whether participants had *current* care partners, two *future*, three *current or future*, and in two, this was not clearly specified. In terms of demonstrated need for care—all participants had demonstrated need for care (they had ADL/IADL limitations or a limiting disease) in 10 studies, less than 50 percent of participants in two studies, more than 50 percent in one study, only temporary need for care in one study, and in nine studies this was not clearly indicated or was not assessed (see Fig. 3).

### *Health outcomes (19 studies)*

We found mixed results in 19 studies related to adverse health outcomes including in health and functioning and hospitalization. However, we identified 11 studies that consistently reported older adults without care partners are at increased risk of institutionalization. Five studies reported mixed evidence regarding physical health outcomes. A nationally representative study from the U.S. reported older adults who lived alone and had no care partner more often reported their health as fair or poor and had worse health and function compared to those with a care partner (Shah et al. 2022). However, that same study found those without a care partner were not more likely to develop a new ADL dependency over time. Qualitatively, seriously ill older veterans without care partners reported their lack of support directly contributed to decline and readmission to the hospital (Enguidanos et al. 2015). An increased risk of unplanned hospitalization was found in a retrospective cohort study in Japan among those without care partners and cardiovascular disease (Adachi et al. 2022). However,

two studies, one prospective cohort design in Sweden (Naseer et al. 2023) and another survival analysis based in the U.S. (Magidson et al. 2020), found no association between increased rates of emergency room visits and lacking a care partner. Both studies listed limitations that may have confounded their results, including limited statistical power due to the small sample size of those without a care partner, and the sample characteristics of those without a care partner (older age and more complicated medical conditions).

Four studies reported mixed outcomes related to mortality. Evidence from Japan showed higher risk of all-cause mortality after discharge from the hospital for a cross-sectional sample with cardiovascular disease and no care partner support (versus having a care partner) (Adachi et al. 2022), and a higher mortality over a five-year period for older men without versus with caregiving support (Fujino and Matsuda 2009). This increased mortality was heightened in men with less mobility and was not found in those living alone who had support (Fujino and Matsuda 2009). In contrast, Shah et al. (2022) found those living alone without care support were *not* more likely to die compared to those with care support in their population-based study. Giunta et al.'s prospective observational trial (Giunta et al. 2023) found those with cancer in Italy without a care partner had longer survival than those with a care partner. However, they cautioned this finding could be explained by the older age and higher frailty of the study sample group who had a care partner.

Across all 11 studies that examined institutionalization as an outcome, not having a care partner was associated with higher likelihood of institutionalization. Specifically, those without versus with care partners being discharged from the hospital were more likely to discharge to a nursing home in cross sectional samples (Chen et al. 2013; Peace et al. 2023). In fact, it was the strongest predictor of nursing home discharge in one study (Chen et al. 2013). Older adults living alone without versus with care support in a population-based sample in the U.S. were also more likely to have a prolonged nursing home stay in the next two years (Shah et al. 2022). For those at the end of life, not having a care partner was associated with being referred to inpatient hospice (Bradshaw 1993) or dying in hospital/in-patient hospice (Aoun et al. 2007) in cross-sectional samples. Notably, not having a care partner was related to higher risk of nursing home placement over time in the U.S. (Andel et al. 2007; Blackburn et al. 2018; Roofeh et al. 2022a), South Korea (Kim et al. 2019), China (YC Wang et al. 2023), and Canada (Rockwood et al. 1996), including in two population-based studies (Roofeh et al. 2022a; Wang et al. 2023). Blackburn et al. (2018), in their nested cohort study, found lacking a care partner was a stronger predictor of nursing home placement than marital status, living alone, or not having relatives or close friends.

### *Well-being outcomes (eight studies)*

Across eight studies, we identified older adults without care partners experienced increased loneliness, depression, and suicide risk and lower quality of life and satisfaction with life. In a cross-sectional sample in England (Dahlberg and McKee 2016), a unit increase in loneliness corresponded with a 1.39 increased likelihood of being an older adult who needed help, but did not have a care partner. An increased likelihood of loneliness was also found in cross-sectional samples in Spain (Bilotta et al. 2012) and the U.S. (Cohen et al. 2021) of older adults who had no care partner. In their qualitative

interviews, Machielse (2022) reported high levels of emotional loneliness and a desire for someone with whom to share one's deepest wishes. In the United Kingdom, Clare et al. (2020) reported a cross-sectional population of older adults living alone without care support versus with care support had significantly lower satisfaction with life. And Prizer et al. (2020) found older adults in their cross-sectional sample in the U.S. with Parkinson's disease and no care partner, compared to those with a care partner, had lower quality of life and more spiritual distress. In addition, older adults living alone who could not identify a care partner, compared with those who could, were significantly more likely to be depressed in a nationally representative cohort study in the U.S. (Shah et al. 2022). There was also evidence older adults without a care partner in a cross-sectional Australian sample had higher odds of suicide mortality (Cations et al. 2023).

### *Intervention*

Only four of the included articles discussed intervention findings. Three (Aoun et al. 2012; Machielse 2022; Sheehan et al. 2021) reported qualitative findings that we collated into environmental/structural, social, and behavioral processes, according to the HEPM. Those same three studies also reported well-being outcomes. Health outcomes were reported by the single quantitative study, Friedman et al. (2006). Two studies reported whether participants had *current* care partners, and for two this was not clearly indicated. In three studies, all participants had a demonstrated need for care, and for one this was not clearly indicated or not assessed. See Table 4 for intervention descriptions.

#### *Environmental/structural processes (three studies)*

We identified environment/structural processes in the three qualitative intervention studies related to transportation access, problem solving support, and ability to remain in one's home longer. Participants in a volunteer ride intervention reported greater access to medical care because of the intervention—whereas prior to the intervention some would skip appointments because they did not have transportation (Sheehan et al. 2021). They also avoided fees associated with missed appointments and the long waits for mobility transportation services. Machielse (2022) reported social worker intervention participants felt this support helped them navigate acute problems they may not have been able to solve for themselves. And finally, terminally ill participants in a care-aide intervention felt they could remain in their home environment longer with this intervention (Aoun et al. 2012).

#### *Social processes (three studies)*

We found social processes in three intervention studies related to isolation, access to socialization, and relational attunement. Both a 30-hour care aide and personal alarm intervention reduced participants' sense of isolation by increasing their security in leaving the home (alarm intervention) or giving them greater access to engage with their social networks with aide support (Aoun et al. 2012). Some participants in a volunteer ride intervention saw their rides as social outings and looked forward to socializing with their volunteer (Sheehan et al. 2021). In contrast, a small number of participants

**Table 4.** Tested interventions

Intervention Name	Intervention Description	Population
Personal alarm (Aoun et al. 2012)	Personal alarm pendant linking individual to nurse in case of emergency	26 terminally ill patients in Western Australia who lived alone without care support randomly assigned to one of two interventions
Care aide (Aoun et al. 2012)	Additional 30 hours of care/month including transportation, laundry, meal preparation, social support, and personal care	
Intensive social work (Machielse 2022)	Social worker support 1-2 hrs/week. Aimed to reduce problems by finding and developing effective individually tailored interventions	25 severely isolated individuals in the Netherlands with no social contact with family, friends, or acquaintances; no practical or emotional support; for at least 5 years
Volunteer ride Sheehan et al. 2021.	Volunteer Medical Visit Companions program. Volunteers provided transportation to and from medical appointments and waited at the providers' locations during the appointments	14 individuals in the U.S. who did not have sufficient support to reach medical appointments.
PACE (Friedman et al. 2006)	The Program of All-Inclusive Care for the Elderly provides tailored professional services including day care, home care, meal support, and care from interdisciplinary team of nurses, social workers, physicians, recreational & physical therapists, and social workers	4,809 dually eligible (Medicare/Medicaid) who qualify for nursing home care in the U.S.; at least 2-years enrolled in PACE

in the intensive social worker intervention did not experience positive results, largely because they did not get along with their social worker and reported lack of relational attunement (Machielse 2022).

### *Behavioral processes (three studies)*

We identified behavioral processes in three intervention studies related to health promotion, help with everyday tasks, and coordinated decision-making. Aoun et al. (2012) reported participants in their 30-hour care aide intervention experienced a health promoting influence on everyday routines, in particular the presence of the care aid helped them eat more regularly. Many of the participants who received volunteer rides were also helped to engage in tasks that supported their well-being including help with paperwork, and the ability to accomplish tasks like going to the grocery store with their volunteer companion (Sheehan et al. 2021). Finally, participants in the social worker intervention reported it was particularly important that coordinated decision making occurred around problem solving and accomplishing tasks—nothing happened if the older adult did not want it to happen (Machielse 2022).

### *Well-being outcomes (three studies)*

We found well-being outcomes in three intervention studies related to enhanced sense of security, well-being, quality of life, and dignity/respect. Participants without a care partner in the personal alarm (Aoun et al. 2012) and intensive social worker interventions (Machielse 2022) reported an increased sense of security and peace of mind with the greater access to emergency (personal alarm) and problem-solving support (social worker). Similarly, a volunteer medical ride intervention relieved anxiety for participants without a care partner, giving them a sense of security about their ability to access medical care (Sheehan et al. 2021). And, a 30-hour care aid intervention (Aoun et al. 2012) helped ease the burden of everyday living for terminally ill participants and allowed them to retain a degree of control over their lives. It also supported participants' well-being, enhanced quality of life, and helped preserve a sense of dignity (Aoun et al. 2012). Machielse (2022) reported most participants with social worker support felt acknowledged, seen, and respected.

### *Biological outcomes (one study)*

In their Program for All-Inclusive Care for the Elderly (PACE) Friedman et al. (2006) found the availability of a care partner did not predict time to nursing home admission in their survival analysis, adjusting for multiple measures of frailty and disability. The authors hypothesized PACE's tailored professional services 'compensate for the presence or absence of informal care' (p.462).

## **Discussion**

The primary goal of this scoping review was to identify the state of peer-reviewed scholarship related to older adults without care partners, and current knowledge gaps related to precarities, outcomes, and interventions as framed through the HEPM. Of the 33 included studies, three reported intervention findings related to environmental/structural, social, and behavioral processes, and well-being outcomes; one intervention

study reported a health outcome. Fifteen of the included studies had findings related to precarities with environmental/structural forces, and psychological, social, behavioral, and biological processes identified across a similar number of studies. Twenty-four studies related to health and well-being outcomes (all adverse in nature) with more focus on health (19) versus well-being outcomes (8). Remarkably, nearly a third of all included studies reported an increased likelihood of institutionalization for older adults without care partners.

The included studies lacked a shared conceptualization for having no care partner (Table 3). Rather, definitions ranged from unclear/unspecified, to simple yes/no 'do you have a care partner?' inquiries, to more detailed assessments about the availability of someone either providing care now, or available to provide care in the future. This absence of semantic clarity is noteworthy given that in some cultural contexts family members may assume responsibility for care activities without necessarily considering themselves 'caregivers' because of filial piety norms (Wang et al. 2023). In such situations assessing care partner status with simple yes/no questions regarding care partner availability may inaccurately represent an individual's access to care support. There were also inconsistencies in whether the sample populations had a demonstrated need for care support. Only 13 studies had an entire sample population with limitations or a chronic condition (e.g. dementia, terminal illness, etc.) that required care. In addition, most studies (22) did *not* report assessing whether those without a care partner were receiving paid or publicly funded care support. Based on the above findings, we outline proposed future directions for research, guided by gaps we observed across the multilevel dimensions identified using the HEPM framework.

### *Future research directions*

Despite our comprehensive search strategy for identifying studies focused on older adults without care partners, only 13 of our 33 included studies set out to specifically study this population. And, in some of these 13 studies, participants without a care partner were a subgroup compared with a group who had a care partner. In 19 of the 24 studies describing health and well-being outcomes, not having a care partner was only one of several covariates examined related to the outcome of interest. Clare et al. (2020), Naseer et al. (2023), and Prizer et al. (2020) named the lack of specific focus on this population as a limitation in their findings, stating the small sub-sample among their participants without a care partner limited their statistical power. Furthermore, it is evident from the studies included in this review that lacking a care partner is a distinct risk factor, above and beyond proxies such as living alone or not having kin. To address this gap, future research must be clear about how they define 'no care partner' to both identify the population being studied and to clarify the mechanisms that account for their precarities and outcomes. Future research needs to operationalize care partner status with attention to whether the population requires care due to limitations/disabilities, whether the focus is on current or future care, if paid or publicly funded care support is available, and how cultural context may impact whether someone sees themselves as a care partner.

More foundational, basic science research (Onken et al. 2014) that explicitly focuses on this population is also needed. We found mixed results in hospitalization and



mortality outcomes in our studies, however in each of these cases the authors point to potential confounders, including lack of power due to the small sample size of those without care partners (Naseer et al. 2023) and age and frailty differences between those with and without care partners (Giunta et al. 2023; Magidson et al. 2020). This highlights the need for more rigorous studies controlling for group differences and utilizing larger sample sizes. Population-based studies are also warranted as the majority (30) of the included studies' findings cannot be generalized beyond their sample. To understand the culturally-specific experience of older adults without care partners, population-based studies are needed across countries/cultural contexts—the experiences of the population will likely vary as countries and cultures differ in their demographic trends, attitudes towards older adults, and in the provision of publicly funded services and supports. In addition, clearly identifying and testing mechanistic pathways from precarities to outcomes for this population, guided by a multidimensional framework such as the HEPM, would help identify future intervention targets (Nielsen et al. 2018; Onken et al. 2014). For example, empirically testing whether greater physical need for assistance (a biological precarity identified in our review), when modified through increased access to paid or publicly funded care, changes adverse outcomes for older adults without care partners.

Further research is needed related to environmental/structural precarities for older adults without care partners. Examples include service eligibility criteria, service accessibility and awareness, and local/national policies related to public benefits that increase the vulnerability and uncertainty facing this population (Portacolone 2020). Access factors such as lack of transportation, digital literacy, and awareness of services are known barriers among isolated, vulnerable older adult populations (Kervin et al. 2023). Racially minoritized and SGD older adults face discrimination when accessing services and may therefore avoid seeking help (Hamed et al. 2022; Romanelli and Hudson 2017) or receive subpar support when they do seek it. For those without a care partner to help navigate these issues, coordinating their care and getting the support they need may be unfeasible.

Environmental/structural precarities should also be examined within heterogeneous local/national contexts as the generosity of public benefits and services for older adults varies by country—for example, less than 10% of home care costs are covered in the U.S., but in Northern Europe and Canada, public systems cover nearly the full cost of in-home care (OECD 2024). Furthermore, in countries that have traditionally relied on familial care support due to norms around filial piety, long-term services and supports for older adults are still in development (Wang et al. 2023). Older adults without care partners who do not qualify for publicly funded in-home support, live in local or national contexts where such public supports are limited (Chen et al. 2022), and/or cannot afford to pay for the rising cost of private care (Spillman et al. 2020), are in a challenging environmental and structural context, without access to either paid, publicly funded, or care partner support.

There is also a clear gap in the research related to older adults without care partners from minoritized and marginalized social locations. No studies focused on these populations met our inclusion/exclusion criteria, and none of our included studies reported differences in precarities, outcomes, or interventions by sub-groups for these populations. In addition, the current evidence base, as represented by our included

studies, does not adequately report demographics. Nineteen of our 33 studies did not report the race or ethnicity of their sample, only eight reported the sample's income, and none reported sexual orientation or diverse gender identities. This is highly concerning as evidence from our included studies indicates these populations are more likely to lack care partner support. In the U.S. context, Peace et al. (2023) reported Black participants in their sample were more likely than white to report not having a care partner. Cohen et al. (2021) found non-white participants were more likely than white to report they did not have a desired surrogate. Beyond our included studies, we know from qualitative (King and Dabelko-Schoeny 2009) and quantitative (Croghan et al. 2014; Fredriksen-Goldsen et al. 2011) evidence SGD populations are likely to lack care partner support in older adulthood. Additional research is needed with these under-researched populations who also lack a care partner to discern how they may experience disparate precarities and outcomes and to further the development of culturally responsive interventions.

### *Future research directions: interventions*

This scoping review highlights gaps in the peer-reviewed research related to interventions for older adults without care partners. Two of the four intervention studies in our review (Friedman et al. 2006; Sheehan et al. 2021) were not designed specifically for individuals without care partners, but rather a segment of the intervention participants identified as part of that population. We found no randomized controlled trials or other clinical trials in our review. Future qualitative and quantitative intervention research for this population should aim to understand the perspective of older adults themselves regarding their intervention needs, empirically test the efficacy of interventions for both the broader population and for marginalized populations, and build on existing community-based work (Fredriksen Goldsen et al. 2025). Current on-the-ground interventions via social service agencies and older adults themselves such as grassroots co-housing communities (Durrett 2023), mutual-aid 'Villages' (Scharlach et al. 2012), and 'Backup Plan' groups focused on advanced planning and development of social capital (Camp 2023) are ripe for efficacy and implementation testing.

Future intervention research would benefit from focusing on practical instrumental and care support, as demonstrated in the interventions in this review. Even among included studies that did *not* specifically study interventions, authors made recommendations for the population related to tangible support. Clare et al. (2020), Eichler et al. (2016), and Enguidanos et al. (2015) emphasized the importance of increasing targeted, comprehensive health and social care services and Cho et al. (2013) recommended more publicly funded home-based care. These recommendations are aligned with work by Machielse and Duyndam (2021) who found interventions focused on enhancing social participation (as most social isolation-related interventions typically do (Holt-Lunstad et al. 2020)) are not realistic for some isolated older adults and solving practical problems is more urgently needed. In the future, research should focus on the impact of publicly funded and subsidized instrumental and care services for older adults without care partners. Such studies could help clarify the importance of different types of funded care support within each country's context, including medical care, personal care, instrumental supports, and assistive devices (Blackburn et al. 2018).

Finally, research is needed concerning how to support non-kin care configurations. SGD individuals have long relied on chosen family for support given differences in their social networks including decreased likelihood of available biological family, spouse, or children (Breder and Bockting 2022; Muraco and Fredriksen-Goldsen 2011). Among the broader population who will be more likely to lack 'traditional' care partners in the future (i.e. kinless older adults), there is some evidence of a shift towards more heterogeneous networks, including friends and neighbors (Lowers et al. 2022; Wu et al. 2023). However, many older adults may not access these potential sources of support due to feelings of embarrassment or worries of being a burden (Allen and Wiles 2014). Researchers and policy makers need to investigate how policies and programs that materially support care partners can recognize the diversity of potential care partners and ease the burden for care partners and the older adults needing assistance (Lowers et al. 2022; Wu et al. 2023).

### *Limitations*

Our search was complicated by the lack of semantic clarity regarding this population. For example, we excluded Francis (2022), who examined the relationship between Facebook use and loneliness and perceived mattering among what they called 'elder orphans.' However, their population was comprised of unmarried individuals without children who lived alone, with no indication of individuals' access to care partner support. We had difficulty distinguishing between the conceptualization of social support in some studies and the availability of a care partner. Berglund et al. (2019), another excluded study, asked participants about 'perceived instrumental social support' by asking if they could get help from someone if they had practical problems or were ill. This approach did not distinguish between those who had no care partner on the one hand, and those who perhaps had a care partner yet perceived a lack of social support on the other. In addition, in our examination of the recent literature reviews related to this population (Carney et al. 2016; Kervin et al. 2023; Montayre et al. 2019; Roofeh et al. 2022b), we retained only three of the studies these other publications included. While this was largely due to our exclusion of grey-literature and different research questions, we found some of the studies these authors chose to include did not clearly identify if the population had a care partner. They may have focused on kinlessness, social isolation, or an aspect of care, but we could not determine from the methods or results if the population had care partner support.

Our choice of method and inclusion/exclusion criteria may have also limited our findings. By choosing to focus on peer-reviewed literature and exclude grey literature we likely missed some of the more recent, community-driven work related to interventions for this population. Other countries around the world are also facing an increase in older adults at risk of having no care partner (e.g. Bao et al. 2022; Verdery et al. 2019) and may be publishing relevant literature addressing this population's precarities, outcomes, and interventions that we missed due to our limitation to English publications. Some literature relevant to marginalized populations may also have been missed due to our age exclusion criteria, as disability and physical limitations may surface at younger ages for these groups. While we attempted to allow for different ageing trajectories by using a mean of 65 years rather than a hard cut-off, it could be this did not capture

the diverse ageing process of some groups. Because we did not constrain our results to a particular geographic region, we caution against interpreting our findings for any one country/context. For example, the social and political context of the U.S. is very different from the Netherlands, or China. Finally, scoping reviews are not designed to appraise or synthesize results, therefore we cannot speak to the quality of current research or make conclusive statements about findings in the literature (Munn et al. 2018).

## Conclusion

Despite considerable gaps in the research, this scoping review highlights the precarity and adverse outcomes facing older adults without care partners through the framework of the HEPM and points to promising directions for intervention development. However, much work is needed to support this growing population. A recently published research agenda related to the changing demography of late-life caregiving (Freedman et al. (2024)), argued, as we do, that typical proxies for lack of a care partner—such as the absence of kin or living alone—are insufficient for assessing the adequacy of an individual's care network. Both this agenda and our review emphasize the need for future research to specifically identify those without access to care. Identifying these individuals, along with their precarities and outcomes, is crucial for developing and implementing effective interventions.

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## References

- Abrahamson K, Hass Z and Sands L (2017) Likelihood that expectations of informal care will be met at onset of caregiving need: A retrospective study of older adults in the USA. *BMJ Open* 7, e017791. doi:10.1136/bmjopen-2017-017791
- Adachi T, Tsunekawa Y and Tanimura D (2022) Association among mild cognitive impairment, social frailty, and clinical events in elderly patients with cardiovascular disease. *Heart & Lung* 55, 82–88. doi:10.1016/j.hrtlng.2022.04.011
- Allen RE and Wiles JL (2014) Receiving support when older: What makes it ok? *Gerontologist* 54, 670–682. doi:10.1093/geront/gnt047
- Alzheimer's Association (2023) Alzheimer's Disease Facts and Figures. *Alzheimer & Dementia*. doi:10.1002/alz.13016
- Amurwon J (2019) "It's Like I Never Had a Child of My Own": Care and Support for the Elderly in a Changing Socioeconomic Context in Rural Uganda. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences* 74, 1483–1491. doi:10.1093/geronb/gby094
- Andel R, Hyer K and Slack A (2007) Risk Factors for Nursing Home Placement in Older Adults With and Without Dementia. *Journal of Aging and Health* 19, 213–228. doi:10.1177/0898264307299359

- Aoun S, Kristjansson LJ, Currow D, Skett K, Oldham I and Yates P (2007) Terminally-ill people living alone without a caregiver: An Australian national scoping study of palliative care needs. *Palliative Medicine* 21, 29–34. doi:[10.1177/02692163060073198](https://doi.org/10.1177/02692163060073198)
- Aoun S, O'Connor M, Skett K, Deas K and Smith J (2012) Do models of care designed for terminally ill 'home alone' people improve their end-of-life experience? A patient perspective. *Health and Social Care in the Community* 20, 599–606. doi:[10.1111/j.1365-2524.2012.01074.x](https://doi.org/10.1111/j.1365-2524.2012.01074.x)
- Bao J, Zhou L, Liu G, Tang J, Lu X, Cheng C, Jin Y and Bai J (2022) Current state of care for the elderly in China in the context of an aging population. *Bioscience Trends* 16, 107–118. doi:[10.5582/bst.2022.01068](https://doi.org/10.5582/bst.2022.01068)
- Belur J, Tompson L, Thornton A and Simon M (2021) Interrater reliability in systematic review methodology: Exploring variation in coder decision-making. *Sociological Methods & Research* 50, 837–865. doi:[10.1177/0049124118799372](https://doi.org/10.1177/0049124118799372)
- Berglund E, Lytys P and Westerling R (2019) Living environment, social support, and informal caregiving are associated with healthcare seeking behaviour and adherence to medication treatment: A cross-sectional population study. *Health and Social Care in the Community* 27, 1260–1270. doi:[10.1111/hsc.12758](https://doi.org/10.1111/hsc.12758)
- Biłotta C, Bowling A, Nicolini P, Case A and Vergani C (2012) Quality of life in older outpatients living alone in the community in Italy. *Health and Social Care in the Community* 20, 32–41. doi:[10.1111/j.1365-2524.2011.01011.x](https://doi.org/10.1111/j.1365-2524.2011.01011.x)
- Blackburn J, Albright KC, Haley WE, Howard VJ, Roth DL, Safford MM and Kilgore ML (2018) Men lacking a caregiver have greater risk of long-term nursing home placement after stroke. *Journal of the American Geriatrics Society* 66, 133–139. doi:[10.1111/jgs.15166](https://doi.org/10.1111/jgs.15166)
- Bradshaw PJ (1993) Characteristics of clients referred to home, hospice and hospital palliative care services in Western Australia. *Palliative Medicine* 7, 101–107.
- Breder K and Bockting W (2022) Social networks of LGBT older adults: An integrative review. *Psychology of Sexual Orientation and Gender Diversity*. doi:[10.1037/sgd0000552](https://doi.org/10.1037/sgd0000552)
- Brenner R, Cole L, Towsley GL and Farrell TW (2023) Adults without advocates and the unrepresented: A narrative review of terminology and settings. *Gerontology and Geriatric Medicine* 9, 233372142211429. doi:[10.1177/23337214221142936](https://doi.org/10.1177/23337214221142936)
- Burchardt T, Jones E and Obolenskaya P (2018) Formal and informal long-term care in the community: Interlocking or incoherent systems? *Journal of Social Policy* 47, 479–503. doi:[10.1017/s0047279417000903](https://doi.org/10.1017/s0047279417000903)
- Calero-Molina E, Moliner P, Hidalgo E, Rosenfeld L, Verdú-Rotellar JM, Verdú-Soriano J, Yun S, Garay A, Alcobarro L, Jiménez-Marrero S, Jose N, Calvo E, Ruiz M, Garcimartin P, Alcaide-Aldeano A, Delso C, Alcobarro L, Enjuanes C and Comin-Colet J (2022) Interplay between psychosocial and heart failure related factors may partially explain limitations in self-efficacy in patients with heart failure: Insights from a real-world cohort of 1,123 patients. *International Journal of Nursing Studies* 129, 104233. doi:[10.1016/j.ijnurstu.2022.104233](https://doi.org/10.1016/j.ijnurstu.2022.104233)
- Camp LJ (2023) The Backup Plan—A New Planning Model that Keeps Solo Agers in Mind. *Generations: Journal of the American Society on Aging* 47, 1–6.
- Carney MT, Fujiwara J, Emmert BE, Liberman TA and Paris B (2016) Elder orphans hiding in plain sight: A growing vulnerable population. *Current Gerontology and Geriatrics Research* 2016, 1–11. doi:[10.1155/2016/4723250](https://doi.org/10.1155/2016/4723250)
- Cations M, Lang C, Draper B, Caughey GE, Evans K, Wesselingh S, Crotty M, Whitehead C and Inacio MC (2023) Death by suicide among aged care recipients in Australia 2008–2017. *International Psychogeriatrics* 35, 724–735. doi:[10.1017/s104161022300008x](https://doi.org/10.1017/s104161022300008x)
- Chen C, Naidoo N, Er B, Cheong A, Fong NP, Tay CY, Chan KM, Tan BY, Menon E, Ee CH, Lee KK, Ng YS, Teo YY and Koh GC (2013) Factors associated with nursing home placement of all patients admitted for inpatient rehabilitation in Singapore community hospitals from 1996 to 2005: A disease stratified analysis. *PloS One* 8, e82697. doi:[10.1371/journal.pone.0082697](https://doi.org/10.1371/journal.pone.0082697)
- Chen X, Su D, Chen X and Chen Y (2022) Effect of informal care on health care utilisation for the elderly in urban and rural China: Evidence from China health and retirement longitudinal study (CHARLS). *BMC Health Services Research* 22. doi:[10.1186/s12913-022-07675-2](https://doi.org/10.1186/s12913-022-07675-2)
- Cho E, Kim EY and Lee NJ (2013) Effects of informal caregivers on function of older adults in home health care. *Western Journal of Nursing Research* 35, 57–75. doi:[10.1177/0193945911402847](https://doi.org/10.1177/0193945911402847)

- Clare L, Martyr A, Henderson C, Gamble L, Matthews FE, Quinn C, Nelis SM, Rusted J, Thom J, Knapp M, Hart N and Victor C (2020) Living alone with mild-to-moderate dementia: Findings from the IDEAL Cohort. *Journal of Alzheimer's Disease* **78**, 1207–1216. doi:[10.3233/JAD-200638](https://doi.org/10.3233/JAD-200638)
- Cohen AB, Costello DM, JR O and Fried TR (2021) Older adults without desired surrogates in a nationally representative sample. *Journal of the American Geriatrics Society* **69**, 114–121. doi:[10.1111/jgs.16813](https://doi.org/10.1111/jgs.16813)
- Cojocari T and Cupcea R (2018) Aging in Moldova: A Country With Orphan Older Adults. *The Gerontologist* **58**, 797–804. doi:[10.1093/geront/gny055](https://doi.org/10.1093/geront/gny055)
- Croghan CF, Moore RP and Olson AM (2014) Friends, family, and caregiving among midlife and older lesbian, gay, bisexual, and transgender adults. *Journal of Homosexuality* **61**, 79–102. doi:[10.1080/00918369.2013.835238](https://doi.org/10.1080/00918369.2013.835238)
- Dahlberg L and McKee KJ (2016) Living on the edge: Social exclusion and the receipt of informal care in older people. *Journal of Aging Research* **2016**, 6373101. doi:[10.1155/2016/6373101](https://doi.org/10.1155/2016/6373101)
- Dubois M-F, Dubuc N, Raiche M, Caron CD and Hébert R (2008) Correlates of the perceived need for institutionalisation among older adults without cognitive impairment. *Gerontology* **54**, 244–251. doi:[10.1159/000131887](https://doi.org/10.1159/000131887)
- Durrett C (2023) Cohousing- A way for solo agers to build and maintain community. *Generations* **47**, 1-8.
- Eichler T, Hoffmann W, Hertel J, Richter S, Wucherer D, Michalowsky B, Dreier A and Thyrian JR (2016) Living alone with dementia: Prevalence, correlates and the utilization of health and nursing care services. *Journal of Alzheimer's Disease* **5**, 619–629. doi:[10.3233/JAD-151058](https://doi.org/10.3233/JAD-151058)
- Enguidanos S, Coulourides Kogan AM, Schreibeis-Baum H, Lendon J and Lorenz K (2015) “Because I Was Sick”: Seriously Ill Veterans’ Perspectives on Reason for 30-Day Readmissions. *Journal of the American Geriatrics Society* **63**, 537–542. doi:[10.1111/jgs.13238](https://doi.org/10.1111/jgs.13238)
- Esteve A, Reher DS, Treviño R, Zueras P and Turu A (2020) Living alone over the life course: Cross-national variations on an emerging issue. *Population and Development Review* **46**, 169–189. doi:[10.1111/padr.12311](https://doi.org/10.1111/padr.12311)
- Farrell TW, Catlin C, Chodos AH, Naik AD, Widera E and Moye J (2021) Caring for unbefriended older adults and adult orphans: A clinician survey. *Clinical Gerontologist* **44**, 494–503. doi:[10.1080/07317115.2019.1640332](https://doi.org/10.1080/07317115.2019.1640332)
- Feinberg LF and Spillman BC (2019) Shifts in Family Caregiving—and a Growing Care Gap. *Generations: Journal of the American Society on Aging* **43**, 73–77.
- Francis J (2022) Elder orphans on Facebook: Implications for mattering and social isolation. *Computers in Human Behavior*, 127. doi:[10.1016/j.chb.2021.107023](https://doi.org/10.1016/j.chb.2021.107023)
- Fredriksen-Goldsen KI and Kim HJ (2017) The Science of Conducting Research With LGBT Older Adults- An Introduction to Aging with Pride: National Health, Aging, and Sexuality/Gender Study (NHAS). *Gerontologist* **57**, S1–S14. doi:[10.1093/geront/gnw212](https://doi.org/10.1093/geront/gnw212)
- Fredriksen-Goldsen KI, Kim HJ, Barkan SE, Muraco A and Hoy-Ellis CP (2013) Health disparities among lesbian, gay, and bisexual older adults: Results from a population-based study. *American Journal of Public Health* **103**, 1802–1809. doi:[10.2105/ajph.2012.301110](https://doi.org/10.2105/ajph.2012.301110)
- Fredriksen-Goldsen KI, Kim HJ, Shui C and Bryan AEB (2017) Chronic Health Conditions and Key Health Indicators Among Lesbian, Gay, and Bisexual Older US Adults, 2013-2014. *American Journal of Public Health* **107**, 1332–1338. doi:[10.2105/AJPH.2017.303922](https://doi.org/10.2105/AJPH.2017.303922)
- Fredriksen-Goldsen KI, Simoni JM, Kim H-J, Lehavot K, Walters KL, Yang J, Hoy-Ellis CP and Muraco A (2014) The health equity promotion model: Reconceptualization of lesbian, gay, bisexual, and transgender (LGBT) health disparities. *American Journal of Orthopsychiatry* **84**, 653–663. doi:[10.1037/ort0000030](https://doi.org/10.1037/ort0000030)
- Fredriksen-Goldsen K, Kim H-J, Emlet C, Muraco A, Erosheva E, Hoy-Ellis C, Goldsen J and Petry H (2011) The Aging and Health Report: Disparities and resilience among lesbian, gay, bisexual, and transgender older adults. *Institute for Multigenerational Health*.
- Fredriksen Goldsen K, Kim H-J, Teri L, Jones-Cobb BR, La Frazia D, Petros R, Berridge C, Prasad A, Oswald A and Emlet CA (2025) Older adults living with Alzheimer's Disease, dementia or mild cognitive impairment with no informal caregiver or care partner: IDEA Café, the first pilot randomized trial intervention for this underserved populations. *Aging & Mental Health* **29**, 1398–1406. doi:[10.1080/13607863.2025.2468893](https://doi.org/10.1080/13607863.2025.2468893)
- Freedman VA, Agree EM, Seltzer JA, Birditt KS, Fingerma KL, Friedman EM, Lin IF, Margolis R, Park SS, Patterson SE, Polenick CA, Reczek R, Reyes AM, Truskinovsky Y, Wiemers EE, Wu H, Wolf DA, Wolff JL and Zarit SH (2024) The changing demography of late-life family caregiving:



- A research agenda to understand future care networks for an aging U.S. Population. *Gerontologist*, 64. doi:[10.1093/geront/gnad036](https://doi.org/10.1093/geront/gnad036)
- Friedman EM, Shih RA, Langa KM and Hurd MD (2015) US prevalence and predictors of informal caregiving for dementia. *Health Affairs* 34, 1637–1641. doi:[10.1377/hlthaff.2015.0510](https://doi.org/10.1377/hlthaff.2015.0510)
- Friedman SM, Steinwachs DM, Temkin-Greener H and Mukamel DB (2006) Informal caregivers and the risk of nursing home admission among individuals enrolled in the program of all-inclusive care for the elderly. *The Gerontologist* 46, 456–463. doi:[10.1093/geront/46.4.456](https://doi.org/10.1093/geront/46.4.456)
- Fujino Y and Matsuda S (2009) Prospective study of living arrangement by the ability to receive informal care and survival among Japanese elderly. *Preventive Medicine* 48, 79–85. doi:[10.1016/j.ypmed.2008.10.014](https://doi.org/10.1016/j.ypmed.2008.10.014)
- Giunta EF, De Padova S, Anpalakhan S, De Giorgi U, Maruzzo M, Rebuzzi SE, Cinausero M, Fratino L, Lipari H, Gamba T, Bimbatti D, Dri A, Ermacora P, Vignani F, Basso U, Buti S, Gandini A, Cremante M, Fornarini G, Rescigno P and Banna GL (2023) The role of the caregiver in older patients with advanced prostate cancer: Results from the ADHERE Prospective Study of the Meet-URO network. *Supportive Care in Cancer* 31, 425. doi:[10.1007/s00520-023-07867-4](https://doi.org/10.1007/s00520-023-07867-4)
- Grenier A and Phillipson C (2018) Precarious aging: Insecurity and risk in late life. *Hastings Center Report* 48, S15–S18. doi:[10.1002/hast.907](https://doi.org/10.1002/hast.907)
- Grenier A, Phillipson C, Laliberte Rudman D, Hatzifilalithis S, Kobayashi K and Marier P (2017) Precarity in late life: Understanding new forms of risk and insecurity. *Journal of Aging Studies* 43, 9–14. doi:[10.1016/j.jaging.2017.08.002](https://doi.org/10.1016/j.jaging.2017.08.002)
- Guzman-Castillo M, Ahmadi-Abhari S, Bandosz P, Capewell S, Steptoe A, Singh-Manoux A, Kivimaki M, Shipley MJ, Brunner EJ and M O (2017) Forecasted trends in disability and life expectancy in England and Wales up to 2025: A modelling study. *The Lancet Public Health* 2, e307–e313. doi:[10.1016/s2468-2667\(17\)30091-9](https://doi.org/10.1016/s2468-2667(17)30091-9)
- Hamed S, Bradby H, Ahlberg BM and Thapar-Björkert S (2022) Racism in healthcare: A scoping review. *BMC Public Health* 22. doi:[10.1186/s12889-022-13122-y](https://doi.org/10.1186/s12889-022-13122-y)
- Hight DM (1990) Old and alone: Surrogate health care decision-making for the elderly without families. *Journal of Aging Studies* 4, 277–288. doi:[10.1016/0890-4065\(90\)90027-6](https://doi.org/10.1016/0890-4065(90)90027-6)
- Holt-Lunstad J, Layton R, Barton B and Smith TB (2020) Science into practice- effective solutions for social isolation and loneliness. *Generations: Journal of the American Society on Aging* 44, 1–10.
- Covidence systematic review software (n.d.). In: Innovation VH (ed.). Melbourne, Australia.
- Kervin LM, Chamberlain SA, Wister AV and Cosco TD (2022) (Older) Adults without advocates: Support for alternative terminology to “elder orphan” in research and clinical contexts. *Journal of the American Geriatrics Society* 70, 3329–3333. doi:[10.1111/jgs.17960](https://doi.org/10.1111/jgs.17960)
- Kervin LM, Riadi I, Chamberlain SA, Teo K, Churchill R, Beleno R, Hung L and Cosco TD (2023) Barriers in Health and Social Care Access and Systems Navigation among Older Adults without Advocates: A Scoping Literature Review and Framework Synthesis. *Journal of Population Ageing*. doi:[10.1007/s12062-023-09430-9](https://doi.org/10.1007/s12062-023-09430-9)
- Khalil H, Peters MD, Tricco AC, Pollock D, Alexander L, McInerney P, Godfrey CM and Munn Z (2021) Conducting high quality scoping reviews-challenges and solutions. *Journal of Clinical Epidemiology* 130, 156–160. doi:[10.1016/j.jclinepi.2020.10.009](https://doi.org/10.1016/j.jclinepi.2020.10.009)
- Kim W, Chun SY, Lee JE, Lee TH and Park EC (2019) Factors related to the institutionalization of older aged individuals using home- and community-based care services: Data from the South Korea long-term care insurance program, 2008–2013. *Journal of Aging & Social Policy* 31, 321–337. doi:[10.1080/08959420.2019.1589890](https://doi.org/10.1080/08959420.2019.1589890)
- King S and Dabelko-Schoeny H (2009) “Quite Frankly, I Have Doubts About Remaining”: Aging-In-Place and Health Care Access for Rural Midlife and Older Lesbian, Gay, and Bisexual Individuals. *Journal of LGBT Health Research* 5, 10–21. doi:[10.1080/15574090903392830](https://doi.org/10.1080/15574090903392830)
- Lely J, Morris HC, Sasson N, Camarillo ND, Livinski AA, Butera G and Wickstrom J (30 May, 2023) How to write a scoping review protocol: Guidance and template. doi:[10.17605/OSF.IO/YM65X](https://doi.org/10.17605/OSF.IO/YM65X)
- Levac D, Colquhoun H and O'Brien KK (2010) Scoping studies: Advancing the methodology. *Implementation Science* 5, 69.
- Lowers J, Zhao D, Bollens-Lund E, Kavalieratos D and Ornstein KA (2022) Solo but Not Alone: An Examination of Social and Help Networks among Community-Dwelling Older Adults without Close Family. *Journal of Applied Gerontology*, 7334648221135588. doi:[10.1177/07334648221135588](https://doi.org/10.1177/07334648221135588)



- Machielse A** (2022) 'She shouldn't cross the line': Experiential effectivity of social guidance trajectories for socially isolated older adults with complex problems. *Ageing & Society* **42**, 1686–1709. doi:[10.1017/S0144686X20001725](https://doi.org/10.1017/S0144686X20001725)
- Machielse A and Duyndam J** (2021) Attuning to the needs of structural socially isolated older adults with complex problems: The experiences of social workers with personal guidance trajectories for a less-researched group. *Health and Social Care in the Community* **29**, 800–808. doi:[10.1111/hsc.13319](https://doi.org/10.1111/hsc.13319)
- Magidson PD, Huang J, Levitan EB, Westfall AO, Sheehan OC and Roth DL** (2020) Prompt Outpatient Care For Older Adults Discharged From The Emergency Department Reduces Recidivism. *Western Journal of Emergency Medicine* **21**, 198–204. doi:[10.5811/westjem.2020.8.47276](https://doi.org/10.5811/westjem.2020.8.47276)
- Mair CA** (2019) Alternatives to Aging Alone?: "Kinlessness" and the Importance of Friends Across European Contexts. *The Journals of Gerontology: Series B* **74**, 1416–1428. doi:[10.1093/geronb/gbz029](https://doi.org/10.1093/geronb/gbz029)
- Mair C and Anderson R** (2024) Global demographic-cultural shifts and 'kinlessness': Reconsidering intergenerational theories. *Innovation in Aging* **8**, 1315–1315. doi:[10.1093/geroni/igae098.4201](https://doi.org/10.1093/geroni/igae098.4201)
- Margolis R, Chai X, Verdery AM and Newmyer L** (2021) The Physical, Mental, and Social Health of Middle-Aged and Older Adults Without Close Kin in Canada. *The Journals of Gerontology: Series B*. doi:[10.1093/geronb/gbab222](https://doi.org/10.1093/geronb/gbab222)
- Margolis R and Verdery AM** (2017) Older Adults Without Close Kin in the United States. *The Journals of Gerontology: Series B* **72**, 688–693. doi:[10.1093/geronb/gbx068](https://doi.org/10.1093/geronb/gbx068)
- Montayre J, Montayre J and Thaggard S** (2019) The Elder Orphan in Healthcare Settings: An Integrative Review. *Journal of Population Ageing* **12**, 515–532. doi:[10.1007/s12062-018-9222-x](https://doi.org/10.1007/s12062-018-9222-x)
- Montayre J, Thaggard S and Carney M** (2020) Views on the use of the term 'elder orphans': A qualitative study. *Health and Social Care in the Community* **28**, 341–346. doi:[10.1111/hsc.12865](https://doi.org/10.1111/hsc.12865)
- Munn Z, Peters MDJ, Stern C, Tufanaru C, McArthur A and Aromataris E** (2018) Systematic review or scoping review? Guidance for authors when choosing between a systematic or scoping review approach. *BMC Medical Research Methodology* **18**, 143. doi:[10.1186/s12874-018-0611-x](https://doi.org/10.1186/s12874-018-0611-x)
- Muraco A and Fredriksen-Goldsen K** (2011) "That's what friends do": Informal caregiving for chronically ill midlife and older lesbian, gay, and bisexual adults. *Journal Of Social & Personal Relationships* **28**, 1073–1092. doi:[10.1177/0265407511402419](https://doi.org/10.1177/0265407511402419)
- Mutambudzi M, Brown MT and Chen N-W** (2024) Association of epigenetic age and everyday discrimination with longitudinal trajectories of chronic health conditions in older adults. *The Journals of Gerontology Series A, Biological Sciences and Medical Sciences*, 79. doi:[10.1093/gerona/glac005](https://doi.org/10.1093/gerona/glac005)
- Naseer M, Dahlberg L, Ehrenberg A, Schon P and Calderon-Larranaga A** (2023) The role of social connections and support in the use of emergency care among older adults. *Archives of Gerontology and Geriatrics*. **111**, 105010. doi:[10.1016/j.archger.2023.105010](https://doi.org/10.1016/j.archger.2023.105010)
- National Academies of Sciences, Engineering and Medicine** (2018) Future Directions for the Demography of Aging Proceedings of a Workshop. Washington, DC: The National Academies Press. doi:[10.17226/25064](https://doi.org/10.17226/25064)
- Nielsen L, Riddle M, King JW, Aklin WM, Chen W, Clark D, Collier E, Czajkowski S, Esposito L, Ferrer R, Green P, Hunter C, Kehl K, King R, Onken L, Simmons JM, Stoeckel L, Stoney C, Tully L and Weber W** (2018) The NIH Science of Behavior Change Program: Transforming the science through a focus on mechanisms of change. *Behaviour Research and Therapy* **101**, 3–11. doi:[10.1016/j.brat.2017.07.002](https://doi.org/10.1016/j.brat.2017.07.002)
- Odlum M, Moise N, Kronish IM, Broadwell P, Alcántara C, Davis NJ, Cheung YKK, Perotte A and Yoon S** (2020) Trends in poor health indicators among black and hispanic middle-aged and older adults in the United States, 1999–2018. *JAMA Network Open* **3**, e2025134. doi:[10.1001/jamanetworkopen.2020.25134](https://doi.org/10.1001/jamanetworkopen.2020.25134)
- OECD** (2024) Is care affordable for older people? OECD Health Policy Studies, OECD Publishing, Paris. doi:[10.1787/450ea778-en](https://doi.org/10.1787/450ea778-en)
- Okah PS, Okwor RO, Aghedo GU, Iyiani CC, Onalu CE, Abonyi SE and Chukwu NE** (2023) Perceived Factors Influencing Younger Adults' Rural-Urban Migration and its Implications on Left Behind Older Parents in Nsukka LGA: Practice Considerations for Gerontological Social Workers. *Journal of Population Ageing*. doi:[10.1007/s12062-023-09414-9](https://doi.org/10.1007/s12062-023-09414-9)
- Onken LS, Carroll KM, Shoham V, Cuthbert BN and Riddle M** (2014) Reenvisioning Clinical Science. *Clinical Psychological Science* **2**, 22–34. doi:[10.1177/2167702613497932](https://doi.org/10.1177/2167702613497932)
- Patterson SE and Margolis R** (2023) Family ties and older adult well-being: Incorporating social networks and proximity. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences*. doi:[10.1093/geronb/gbad139](https://doi.org/10.1093/geronb/gbad139)

- Patterson SE, Margolis R and Verdery AM** (2020) Family embeddedness and older adult mortality in the United States. *Population Studies* **74**, 415–435. doi:[10.1080/00324728.2020.1817529](https://doi.org/10.1080/00324728.2020.1817529)
- Peace AJ, Srivastava AK, Willson SE, Telehowski PM, Wodarek JA and Atkinson TS** (2023) Why do patients choose skilled nursing facilities after total hip and knee arthroplasty? *Journal of Arthroplasty* **38**, 2556–2560e2552. doi:[10.1016/j.arth.2023.05.080](https://doi.org/10.1016/j.arth.2023.05.080)
- Perissinotto CM and Covinsky KE** (2014) Living Alone, Socially Isolated or Lonely—What are We Measuring? *Journal of General Internal Medicine* **29**, 1429–1431. doi:[10.1007/s11606-014-2977-8](https://doi.org/10.1007/s11606-014-2977-8)
- Peters MDJ, Godfrey CM, McInerney P, Munn Z, Tricco AC and Khalil H** (2020a) *JBIManual for Evidence Synthesis*. Aromataris E, Lockwood C, Porritt K, Pilla B and Jordan Z (eds), JBI.
- Peters MDJ, Marnie C, Tricco AC, Pollock D, Munn Z, Alexander L, McInerney P, Godfrey CM and Khalil H** (2020b) Updated methodological guidance for the conduct of scoping reviews. *Joanna Briggs Institute Evidence Synthesis* **18**, 2119–2126. doi:[10.11124/JBIES-20-00167](https://doi.org/10.11124/JBIES-20-00167)
- Pimouguet C, Rizzuto D, Lagergren M, Fratiglioni L and Xu W** (2017) Living alone and unplanned hospitalizations among older adults: A population-based longitudinal study. *European Journal of Public Health* **27**(2), 251–256. doi:[10.1093/eurpub/ckw150](https://doi.org/10.1093/eurpub/ckw150)
- Pitkala KH, Laakkonen ML, Kallio EL, Kautiainen H, Raivio MM, Tilvis RS, Strandberg TE and Ohman H** (2021) Monetary value of informal caregiving in dementia from a societal perspective. *Age and Ageing* **50**, 861–867. doi:[10.1093/ageing/afaa196](https://doi.org/10.1093/ageing/afaa196)
- Plick NP, Ankuda CK, Mair CA, Husain M and Ornstein KA** (2021) A national profile of kinlessness at the end of life among older adults: Findings from the Health and Retirement Study. *Journal of the American Geriatrics Society* **69**, 2143–2151. doi:[10.1111/jgs.17171](https://doi.org/10.1111/jgs.17171)
- Polivka L and Baozhen L** (2020) From precarious employment to precarious retirement: Neoliberal health and long-term care in the United States. In Grenier A, Phillipson C and Settersten Jr Richard A. (eds), *Precarity and Ageing, Understanding Insecurity and Risk in Later Life*. Chicago, IL: Policy Press, 191–213.
- Pollock D, Peters MDJ, Khalil H, McInerney P, Alexander L, Tricco AC, Evans C, de Moraes EB, Godfrey CM, Pieper D, Saran A, Stern C and Munn Z** (2023) Recommendations for the extraction, analysis, and presentation of results in scoping reviews. *JBIM Evidence Synthesis* **21**, 520–532. doi:[10.11124/JBIES-22-00123](https://doi.org/10.11124/JBIES-22-00123)
- Portacolone E** (2020) A framework to identify precarity in the social sciences: Insights from qualitative research. In Grenier Amanda, Phillipson Chris and Settersten Jr Richard A. (eds), *Precarity in Ageing: Understanding Insecurity and Risk in Later Life*. Chicago, IL: Policy Press, pp. 147–166.
- Prizer LP, Kluger BM, Sillau S, Katz M, Galifianakis NB and Miyasaki JM** (2020) The presence of a caregiver is associated with patient outcomes in patients with Parkinson's disease and atypical parkinsonisms. *Parkinsonism & Related Disorders* **78**, 61–65. doi:[10.1016/j.parkreldis.2020.07.003](https://doi.org/10.1016/j.parkreldis.2020.07.003)
- Reher D and Requena M** (2019) Long-term trends in living alone in later life in the United States, 1850–2015. *The History of the Family* **25**, 455–483. doi:[10.1080/1081602x.2019.1696217](https://doi.org/10.1080/1081602x.2019.1696217)
- Reinhard SC, Caldera S, Houser A and Choula RB** (2023) Valuing the Invaluable: 2023 Update Strengthening Supports for Family Caregivers. Washington DC: AARP Public Policy Institute. doi:[10.26419/ppi.00082.006](https://doi.org/10.26419/ppi.00082.006)
- Renwick KA, Sanmartin C, Dasgupta K, Berrang-Ford L and Ross N** (2020) The influence of low social support and living alone on premature mortality among aging Canadians. *Canadian Journal of Public Health* **111**, 594–605. doi:[10.17269/s41997-020-00310-9](https://doi.org/10.17269/s41997-020-00310-9)
- Rockwood K, Stolee P and McDowell I** (1996) Factors associated with institutionalization of older people in Canada: Testing a multifactorial definition of frailty. *Journal of the American Geriatrics Society* **44**, 578–582. doi:[10.1111/j.1532-5415.1996.tb01446.x](https://doi.org/10.1111/j.1532-5415.1996.tb01446.x)
- Romanelli M and Hudson KD** (2017) Individual and Systemic Barriers to Health Care: Perspectives of Lesbian, Gay, Bisexual, and Transgender Adults. *American Journal of Orthopsychiatry* **87**, 714–728. doi:[10.1037/ort0000306](https://doi.org/10.1037/ort0000306)
- Roofeh R, Clouston SAP and Smith DM** (2022a) Competing risk analysis of time to communal residence for elder orphans. *Journal of Applied Gerontology*, 073346482210989. doi:[10.1177/07334648221098994](https://doi.org/10.1177/07334648221098994)
- Roofeh R, Smith DM and Clouston SAP** (2020) Estimated prevalence of elder orphans using National Health and Aging Trends Study. *Journal of Aging and Health* **32**, 1443–1449. doi:[10.1177/0898264320932382](https://doi.org/10.1177/0898264320932382)
- Roofeh R, Smith DM, Hale L and Clouston SAP** (2022b) Health Outcomes of Elder Orphans- an Umbrella and Scoping Review of the Literature. *Journal of Population Ageing*. doi:[10.1007/s12062-022-09387-1](https://doi.org/10.1007/s12062-022-09387-1)

- Roth DL, Fredman L and Haley WE** (2015) Informal Caregiving and Its Impact on Health: A Reappraisal From Population-Based Studies. *The Gerontologist* **55**, 309–319. doi:[10.1093/geront/gnu177](https://doi.org/10.1093/geront/gnu177)
- Sandelowski M** (2010) What's in a name? Qualitative description revisited. *Research in Nursing and Health* **33**, 77–84. doi:[10.1002/nur.20362](https://doi.org/10.1002/nur.20362)
- Scharlach A, Graham C and Lehning A** (2012) The “Village” Model: A Consumer-Driven Approach for Aging in Place. *The Gerontologist* **52**, 418–427. doi:[10.1093/geront/gnr083](https://doi.org/10.1093/geront/gnr083)
- Shah SJ, Fang MC, Wannier SR, Steinman MA and Covinsky KE** (2022) Association of Social Support With Functional Outcomes in Older Adults Who Live Alone. *JAMA Internal Medicine* **182**, 26–32. doi:[10.1001/jamainternmed.2021.6588](https://doi.org/10.1001/jamainternmed.2021.6588)
- Sheehan OC, Blinka MD and Roth DL** (2021) Can volunteer medical visit companions support older adults in the United States? *BMC Geriatrics* **21**. doi:[10.1186/s12877-021-02162-5](https://doi.org/10.1186/s12877-021-02162-5)
- Shiu C, Muraco A and Fredriksen-Goldsen K** (2016) Invisible Care: Friend and Partner Care Among Older Lesbian, Gay, Bisexual, and Transgender (LGBT) Adults. *Journal of the Society for Social Work and Research* **7**, 527–546. doi:[10.1086/687325](https://doi.org/10.1086/687325)
- Simons RL, Lei MK, Klopach E, Beach SRH, Gibbons FX and Philibert RA** (2021) The effects of social adversity, discrimination, and health risk behaviors on the accelerated aging of African Americans: Further support for the weathering hypothesis. *Social Science & Medicine* **282**, 113169. doi:[10.1016/j.socscimed.2020.113169](https://doi.org/10.1016/j.socscimed.2020.113169)
- Spillman BC, Allen EH and Favreault M** (2020) *Informal Caregiver Supply and Demographic Changes: Review of the Literature*. Washington, DC: Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services. <https://aspe.hhs.gov/reports/informal-caregiver-supply-demographic-changes-review-literature-0>.
- Stafford M and Kuh D** (2018) Expectations for future care provision in a population-based cohort of baby-boomers. *Maturitas* **116**, 116–122. doi:[10.1016/j.maturitas.2018.08.004](https://doi.org/10.1016/j.maturitas.2018.08.004)
- Thaggard S and Montayre J** (2019) Elder Orphans' Experiences of Advance Planning and Informal Support Network. *Sage Open* **9**. doi:[10.1177/2158244019865371](https://doi.org/10.1177/2158244019865371)
- Tricco AC, Lillie E, Zarin W, KK O, Colquhoun H, Levac D, Moher D, Peters MDJ, Horsley T, Weeks L, Hempel S, Akl EA, Chang C, McGowan J, Stewart L, Hartling L, Aldcroft A, Wilson MG, Garritty C, Lewin S, Godfrey CM, Macdonald MT, Langlois EV, Soares-Weiser K, Moriarty J, Clifford T, Tuncalp O and Straus SE** (2018) PRISMA Extension for Scoping Reviews (PRISMA-ScR): Checklist and Explanation. *Annals of Internal Medicine* **169**, 467–473. doi:[10.7326/M18-0850](https://doi.org/10.7326/M18-0850)
- Verdery AM and Margolis R** (2017) Projections of white and black older adults without living kin in the United States, 2015 to 2060. *Proceedings of the National Academy of Sciences* **114**, 11109–11114. doi:[10.1073/pnas.1710341114](https://doi.org/10.1073/pnas.1710341114)
- Verdery AM, Margolis R, Zhou Z, Chai X and Rittirong J** (2019) Kinlessness Around the World. *The Journals of Gerontology: Series B* **74**, 1394–1405. doi:[10.1093/geronb/gby138](https://doi.org/10.1093/geronb/gby138)
- Wang J, Yang Q and Wu B** (2023) Effects of Care Arrangement on the Age of Institutionalization among Community-dwelling Chinese Older Adults. *Journal of Aging & Social Policy* **35**, 595–610. doi:[10.1080/08959420.2020.1726720](https://doi.org/10.1080/08959420.2020.1726720)
- Wu H, Margolis R, Sheftel MG and Verdery AM** (2023) The Care Gap in Later Life Across European Countries. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences* **78**, 1935–1946. doi:[10.1093/geronb/gbad118](https://doi.org/10.1093/geronb/gbad118)