

ARTICLE

Negotiating the care convoys for a diverse group of older Australians living in rural communities: a large qualitative study

Maree Petersen^{1*} , Rachel Winterton², Jeni Warburton² and Jill Wilson¹

¹School of Nursing, Midwifery and Social Work, University of Queensland, St Lucia, Australia and ²John Richards Centre for Rural Ageing Research, La Trobe Rural Health School, La Trobe University, Albury, Australia

*Corresponding author. Email: m.petersen@uq.edu.au

(Accepted 17 January 2022; first published online 17 October 2022)

Abstract

Whilst ageing in place is integral to international policy, there is less understanding of how individuals utilise formal services and informal supports in diverse rural environments to maintain their wellness and independence. Consequently, how older people negotiate their care within rural communities is subject to misconceptions. This paper draws on the convoy of care model to explore how older rural Australians negotiate their preferences and needs in the context of informal networks, availability of community resources, and the health and aged care system. The analysis draws on 60 in-depth interviews in six diverse rural communities across two Australian states. Three distinct care convoys are identified and demonstrate the interaction of multiple factors including individual preferences and needs, availability of family and community supports, and accessibility of local health and aged care services in the context of resource allocation. The findings highlight how families and communities compensate for a lack of accessible formal services. For older people without family and strong social networks, formal services are relied upon despite their inadequacy in some locales. This research has provided evidence that some Australian rural locales have limited resources resulting in challenges for older people to access home care and support. This results in many older people facing challenges to age in place. With aged care and health policy commonly designed for an urban context, our findings illustrate the importance of tailoring policy to respect the strengths and challenges existing in rural communities.

Keywords: informal supports; formal services; care convoys; rural; Australia

Introduction

This research considers how the growing numbers of older people ageing in rural communities manage their care networks and, in particular, how they negotiate the interaction between formal services and informal supports in order to maintain their wellness. Across the world, many rural communities are comprised of ageing

© The Author(s), 2022. Published by Cambridge University Press. This is an Open Access article, distributed under the terms of the Creative Commons Attribution licence (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted re-use, distribution and reproduction, provided the original article is properly cited.

populations due to demographic factors such as in-migration of retirees and out-migration of young people seeking education and employment (Winterton and Warburton, 2011; Glasgow and Brown, 2012; Inder *et al.*, 2012; United Nations, 2015). In this context, many of these regions struggle to provide adequate health and aged care services, as they may be sparsely populated and hence vulnerable to the tyranny of distance and threat of economic cutbacks (Skinner and Hanlon, 2016; Skinner and Winterton, 2018). By contrast, many of these communities are considered rich in social capital, with their older residents supported by a web of informal networks comprised of family, neighbours, friends and local volunteers (Wenger and Keating, 2008). However, recent evidence suggests that the capacity and willingness of rural older people to draw on informal supports varies across both communities and individuals (Savla *et al.*, 2018), with many rural older people experiencing social exclusion (Warburton *et al.*, 2017; Urbaniak *et al.*, 2020). Thus, while informal supports supplement self-care and enable older people to remain in their homes (Barken, 2017), there is clearly a need for formal services to support people experiencing health problems or requiring professional assistance. Negotiating an appropriate mix of informal supports and formal services is a challenge for all older people but presents particular challenges for those living in rural areas.

This paper draws on data from a large multistage research project exploring the wellness of older people living in diverse rural communities across Australia. Wellness is a multi-dimensional concept increasingly recognised in ageing policy both in Australia and internationally (Smith *et al.*, 2006; Department of Health, 2017). As a holistic model of health, it includes dimensions of physical resilience, emotional wellbeing, social connectedness and spirituality, with the focus on realising a person's full potential, rather than merely the absence of disease (Adams *et al.*, 1998). The literature suggests that many community-living older people manage their wellness independently, with some support from family, friends and neighbours, while others access professional services for support and care (Dahlbert *et al.*, 2018; Kjær and Siren, 2020). In rural communities, however, there is a greater focus on informal supports, often termed social capital (*e.g.* Glasgow and Doebler, 2021), in recognition of challenges associated with delivering formal services to isolated rural environments (Poulin *et al.*, 2020). However, there is limited understanding of the relationship between these systems of care and the realities of everyday life for older people at the centre of the care systems (Barken, 2017). Understanding this interaction is critical if the policy imperative of wellness for rural older people is to be realised. Thus, by drawing on a large qualitative study of six selected rural communities across two states of Australia, this paper aims to explore how older people living in diverse rural environments negotiate their care networks.

Background

A mix of informal support and formal services is fundamental to the successful implementation of health and social care policy for older people (Herron *et al.*, 2016; Savla *et al.*, 2018). In some countries, there is an expectation that families take on a considerable share of responsibility with little universal entitlement to social and health care (Geerts and Van den Bosch, 2012). Whilst the provision

of long-term aged care and health care varies across countries, in many developed countries, a public entitlement to care for older people is an established policy. Like many other developed nations (Wiles *et al.*, 2011; Vlachantoni *et al.*, 2015; Barken, 2019; Lambotte *et al.*, 2020), Australia's aged care policy has historically placed emphasis on ageing in place with collaboration between family and friends providing informal support alongside formal aged care and health services. The aim is to maintain older people's wellness and prevent entry to costly residential aged care.

Australia's formal aged care supports include entry-level services termed home support, more complex care and support known as home care packages, as well as a range of support services including transport and group activities (Royal Commission into Aged Care Quality and Safety, 2019). High-level home care packages enable people with needs equivalent to residential care to remain living at home. The Australian Federal Government funds home support and home care, with users contributing co-payments for services. Recent reforms are aimed at 'expanding access to care in the home and enabling people to live independently in the community as long as possible' (Department of Health and Ageing, 2012: 20). Older people are also significant users of the health system, and increasingly require multi-disciplinary services from across the health and aged care systems (Royal Commission into Aged Care Quality and Safety, 2019).

The explicit emphasis on older people being primarily responsible for their wellness in formal aged care and health policy in Australia (Kaambwa *et al.*, 2015) raises serious challenges given the structural disadvantage many rural older Australians experience. Disadvantage in accessing education, employment opportunities, lower income, and lesser access to health and welfare services over the life-course are linked to poorer health for rural older adults across diverse international contexts (Milbourne and Doheny, 2012; Rice and Webster, 2017; Savla *et al.*, 2018; Australian Institute of Health and Welfare, 2020). Moreover, the socio-spatial barriers experienced by rural older people in accessing health and aged care services can be substantial (Winterton *et al.*, 2016). There is criticism that health and aged care for older Australians is urban-centric as it does not account for the distinctive interplay of factors that impact on ageing in rural locales (Regional Australia Institute, 2015). Across international contexts, formal services in rural areas face higher delivery costs linked to distance (Burholt and Dobbs, 2012), difficulties attracting and keeping a workforce, and consequently quality care (Rice and Webster, 2017; Savy *et al.*, 2017). Place-based infrastructure and environmental concerns, including a lack of safe roads, long distances and inclement weather, impact on the delivery of formal services (Regional Australia Institute, 2015; Finlay *et al.*, 2020). Transportation and distance are key environmental concerns in the provision of rural home services (Salva *et al.*, 2018; Hansen *et al.*, 2021) and impact directly on older people, their support network and carers. Older people without access to transport experience limited access to health care, goods and services, and are isolated from activities and social networks (Hansen *et al.*, 2021). It is vital that the distinctive social and environmental challenges and opportunities linked to rurality are acknowledged (Spina and Menec, 2015; Winterton *et al.*, 2016) and that policy and service delivery designed for urban locales is not automatically implemented in rural places without due understanding of how similarities and differences manifest and are managed (Regional Australia Institute, 2015).

Arguably, informal support is the major source of care and support for all older people and is expected to increase in next two or three decades (Department of Health and Ageing, 2012; Pickard, 2012). While some prefer this informal help, many older people take responsibility for their own care, with some stating they do not want to be a burden to their family and friends, and some want little to do with others (Eales *et al.*, 2008; Barken, 2019). In relation to rural service provision, there is a common assumption that older people in rural areas are embedded within supportive social networks and that demand for formal services is lower than in urban areas (Wenger and Keating, 2008). Research suggests that most informal support in rural places is undertaken by older people, as families have often moved to cities in search of employment opportunities (Winterton and Warburton, 2011).

In addition to the informal support provided by family and friends, there is increasing reliance on volunteers to sustain critical services for older people in rural communities (Keating and Phillips, 2008; Warburton and Winterton, 2017). However, with older residents increasingly the primary source of rural volunteers, questions of sustainability over the long term arise (Warburton and Winterton, 2017). Further, volunteering is not a universal feature across all rural locales. The preconception of rural life as a caring environment can affect the perceived need for and design of services. The romantic view that rural places are definitively ‘good places to grow old’ can lead to assumptions of resilience and self-determination being attributed to all rural communities (Keating, 2008; Kenny *et al.*, 2015), with policy initiatives championing self-reliance amongst residents (Alston, 2007). Yet studies of rural social exclusion show that community structure, particularly more isolated environments with few resources; poor physical or mental health; living alone; and cultural or other forms of diversity can lead to isolation and risk of social exclusion for many rural older people (Warburton *et al.*, 2017; Urbaniak *et al.*, 2020). Thus, in order to support older people in rural places to maintain their wellness, it is important to consider the degree of fit between the older adult’s views on what support and care they need and will utilise, the ways in which they connect to people and services, and the capacity of the rural community in which they live (Eales *et al.*, 2008).

In light of the challenges associated with providing aged care and health care in rural Australia, and the policy imperatives around ageing in place, greater understanding of how older people negotiate both their independence and their quality of life is needed. Specifically, it is important to understand the interaction between informal supports and formal services for rural older people. To do so, we draw on the convoy of care model, outlined below, to understand how older people construct networks that serve as vehicles through which care and support is provided and received. By utilising care networks to understand the everyday reality of older people living in rural communities, this work extends the use of care convoys developed in the context of assisted living (Kemp *et al.*, 2013) with little research partnering with community-living older people (an exception is Lambotte *et al.*, 2020).

Theoretical and conceptual framework

The convoys of care theoretical framework (Kemp *et al.*, 2013) underpins this study as it acknowledges the complexity of care networks surrounding older people. With

a focus on the care networks of older people living in assisted living, Kemp *et al.* (2013) expanded and modified the convoy model of social relations (Kahn and Antonucci, 1980) by encompassing insights from lifecourse theory, feminism and social ecology. As such, the convoy model attends to a person, their individual attributes, and their interactions within and across multiple domains, including family and friendship relationships, community including volunteers and the services within the locale.

Within this model, all individuals, including the older care recipient, are considered active and engage in negotiations about their care within their socio-cultural contexts. Care recipients are care partners as well, and optimising this involvement requires inclusionary communication practices and has implications for wellbeing and quality of life (Kemp *et al.*, 2013, 2018). The care convoy also accounts for structure (size, homogeneity, stability), function (support given, received, exchanged) and adequacy (such as satisfaction with support) (Lambotte *et al.*, 2020). Importantly, this model also accounts for contexts including policy, resources and structural factors, and how they shape the interactions between the systems of care (Kemp *et al.*, 2018), and has subsequently been used in research with community-living older adults (Lambotte *et al.*, 2020). Of note is that the term care in this model encompasses health care, socio-emotional support, monitoring, advocacy and help with activities of daily living (Kemp *et al.*, 2018).

The range of terms utilised to describe care and support is linked to funding and regulatory arrangements, as well as differing traditions within and across countries. This paper utilises terms used in Australian service provision. Formal services are professional services provided by health care, aged care and welfare organisations, and are used interchangeably with the terms formal supports, professional services and formal care (Kemp *et al.*, 2013; Bieber *et al.*, 2019). Within the community to support ageing in place, formal services also include funded seniors' centres, often with considerable support of volunteers, and local councils administering programmes such as transport and activity groups. Residential aged care facilities operate with funding from Australia's Federal Government and provide high-level care. Multipurpose health centres in rural and remote areas operate under a combination of health and aged care funding given their range of aged care, health and community services tailored to local community needs (Royal Commission into Aged Care Quality and Safety, 2019). As noted earlier, these services are accompanied by a range of informal social supports, differing from social networks as they involve the active exchange of tangible aid, including errands and services, and emotional support from families, friends, neighbours, volunteers and local communities (Warburton and McLaughlin, 2008; Wenger and Keating, 2008). Overall, a large range of potential players are involved in service provision in rural Australia.

Empirical literature operationalising convoys of care uses a range of terms to represent the support network that surrounds older people. These include intersection, interface, interaction and mix; in this paper the term interaction is used (Kemp *et al.*, 2013; Schenk *et al.*, 2014; Winterton *et al.*, 2016; Barken, 2017; Savla *et al.*, 2018). Given this paper's focus is underpinned by the holistic model of wellness, attention is given to the convoy of informal support and formal services accessed by older rural people. Further, the broad socio-spatial environment of

diverse rural places frames this mix of potential supports. This paper addresses the research question:

- How do older people living in diverse rural environments negotiate their care networks?

Research design

Our data are drawn from the ASPIRE (Ageing Services and Supports in Rural Environments) project, a three-stage mixed-method study conducted in six rural regions in Victoria and Queensland that identified the systems, supports and services that facilitate wellness for older rural adults. The material in this paper draws from the third phase of the project, 60 semi-structured qualitative interviews with people aged over 65 years conducted in 2015 and early 2016. In the first stage of the project, six rural regions were identified through a systematic community profiling exercise of all service regions of under 10,000 people located outside urban settings in each state. A set of variables related to individual and community characteristics that influence wellness were identified in a meta-synthesis (Winterton *et al.*, 2016).

In the second stage of the study, a quantitative study was conducted over the six case study sites (N = 266), with recruitment undertaken using a community saturation process. The survey aimed to assess individual's wellness (Adams *et al.*, 1998), and to examine the services and supports that sustained their wellness. From this survey, a set of 60 participants were selected from those who expressed interest, with the intent to capture diversity in age, gender and wellness scores within each case study site (*see Table 1*). Some people were carers, some were recipients of home care and some were independent, in that they were not using home care but accessing health services.

The in-depth interviews were undertaken by the two lead authors and sought to understand how rural older residents experience wellness. Questions in the interview centred on individuals' activities, feelings about ageing in their rural community, and how they kept physically and mentally well. From the interview questions on how participants manage their physical health, mental health, and contact with family, friends and neighbours, important information emerged in relation to the interaction of formal services and informal supports in participants' care networks. All interviews were conducted in participant's homes over one to two hours apart from one interview in a park and four conducted at the local health service, at the request of the participants. All interviews were digitally voice recorded, transcribed and analysed within the software program NVivo version 12 (QSR International, Melbourne). In order to undertake data analysis, the interviews were read multiple times, with themes and exceptions discussed in research team meetings. Data were initially coded according to the interview questions. A second-order analysis was then undertaken to understand the participants' care convoy in the context of their locale with attention to local services and the socio-spatial environment. The structure of participants' care convoys was established using themes including accessing local formal services, minimal support links with family, family support, travelling distance to access specialist formal services and support from community

Table 1. Profile of participants

| Characteristic | Number |
|----------------------------|--------|
| Location: | |
| Site 1 Victoria | 10 |
| Site 2 Victoria | 10 |
| Site 3 Victoria | 10 |
| Site 1 Queensland | 10 |
| Site 2 Queensland | 10 |
| Site 3 Queensland | 10 |
| Gender: | |
| Females | 31 |
| Males | 29 |
| Age: | |
| 65–74 | 24 |
| 75–84 | 21 |
| 85+ | 14 |
| Unassigned | 1 |
| Living circumstances: | |
| Living with partner/family | 29 |
| Living alone | 31 |

businesses. Alongside the themes, the respective functions of different forms of support and care were subsequently coded as subthemes such as within the theme of family support coding emotional support given distance, home maintenance and frequent visits. From this second-order analysis, a typology of care convoys was developed, in relation to their structure and function, which are discussed in the subsequent sections. The perceived adequacy of care convoys, in terms of views and expectations of care and support in the context of local resources, were also coded from the interviews.

Our sample was highly diverse, and included people with histories of farming, mining, professions or home duties, with a range of education levels. Some had lived in their community all their life, others moved decades ago, while others had recently relocated in retirement from other regional or urban settings. The participants differed according to socio-economic background and lived in a range of housing in towns and hamlets, homesteads on grazing properties, cottages on farms, in sheds on small holdings and properties. The sites varied greatly and encompassed hot dry remote sites with a sparse population, an alpine site and mixed farming areas approximately three hours away from a regional centre. The socio-economic profiles of the case study communities also differed, with two sites experiencing relative disadvantage.

Findings

The central focus of this paper is on how older people living in rural communities utilise informal supports and formal services to negotiate their care networks. We draw on the convoys of care model in order to guide the synthesis of evidence and explore the interaction of the older adult, their family, community, services and physical environments. The quotes selected from the in-depth interviews illustrate a range of living circumstances and interactions with formal services and informal supports. With the diversity of older people in the sample, the findings presented below do not capture everything the participants related but instead seek to contribute to understanding how individuals utilise convoys of care and support in diverse rural environments, and the diverse overarching factors that influence this. As such, we explore three forms of convoys all drawn from the interviews below, which include (a) reliance on informal support; (b) co-ordinating informal support and formal services; and (c) self-reliant with minimal reliance on informal supports and formal services. In doing so, we interrogate the structure, function and adequacy of these convoys for diverse rural older people. It should be noted that these care convoy forms are not discrete or permanent, as people's engagement with informal support and formal services may change over time as their needs alter and/or the resources in their community changes. In presenting the qualitative data, participants are identified by their site, interview number, gender, age and wellness score. As such, Q2.623.M.84.H is from Queensland site 2, interview 623, and a male of 84 years reporting high wellness in the survey data.

Reliance on informal support

Some participants, over time, had built and sustained rich networks of family, friends, neighbours and community groups, and drew on these to maintain their independence. Some were long-term residents in small communities where they had raised their families and largely drew on family support. A 90-year-old widow living alone in a remote town of 700 people experienced rheumatoid arthritis and used a walker. This participant accessed no formal services but had strong family support:

I try and keep my house tidy because I've got no help and I don't do very much to be honest. I do try and keep the garden with the help of me girls. My son always does the lawns and if I see a weed or anything I try and keep the garden tidy, and I wash and that's about it. Just the usual housewife more or less, but I don't do very much. I vacuum this room but I don't do the other. The family does all that because I use a different vacuum cleaner ... but meals, the girls always put a heap in the deep freeze, and I do food occasionally, but I don't do much at all. (V2.228.F.90.L)

Some communities in the study had high levels of social resources with some participants highlighting that their communities were supportive. Friends and neighbours offered assistance with driving to appointments for one older male who lived alone. As his three adult children did not live in the area, he noted that he was reliant on 'everybody keeping an eye out' (V2.214.M.90.H). Another long-term

resident affirmed this view of the local community, when discussing the help her neighbour provided:

if I want her, I know she is there if I need help at any time. I know she's there. All the neighbours ... if I need help you can always count on them to help you. I think it's country people. (V2.228.F.90.L)

The support in this remote locale extended to local businesses. One female widow interviewed lived alone in a remote town of 500 people. She was entitled to respite given her chronic health conditions but had not utilised it yet. Her four adult children, whilst in regular phone contact and offering emotional support, lived away. However, after a recent hospitalisation she related:

The girls, even at the chemist shop they say, 'If you can't get down we'll bring your stuff around for you.' The butcher said, 'You've only got to ring up. I'll be down there.' Same with the grocer shop and the banks over the road. Once when I came out of [town] hospital ... the girls at the bank said, 'If you ever want anything, even if it's only a bottle of milk, we can get it for you.' (V2.208.F.86.L)

Participants often highlighted strong community networks, and their participation in these networks was critical in ensuring their supportiveness. One female participant in her nineties (V1.54.F.92.H), whose adult children lived interstate, highlighted both the strength of her connections in the community as well as the reciprocal nature of her relationships. She was embedded in her community, with her account showing how she still helped out locally by visiting the residential aged care facility and hospital, and had many local friends. Relationships within the communities of some participants clearly sustained and contributed to their wellness, as was also demonstrated by a participant who lived in a remote small town with her husband and was experiencing acute grief after two losses. She discussed her involvement as a volunteer in the local nursing home and craft store as contributing to her wellness, stating 'Those things, yes. I find that it does, it does help me a terrible lot' (Q2.617.F.70.L). This evidence is indicative of the (often-contested) idyll of a close-knit rural community (Watkins and Jacoby, 2007) given the rich linked lives of friends, neighbours and community members evident in this group of interviews.

However, some people demonstrated reluctance to access formal services, often because of privacy concerns. For example, one 71-year-old widow with a supportive family, including a neighbouring son, when asked if she would call on networks external to family stated:

They'd be the last resort. I'd ring family if I needed help ... In a small country town everybody knows your business. Family would be a better option for me. Perhaps I'm a bit - I don't know I don't like to disclose everything. (V3.441.F.71.H)

On the other hand, self-reliance can result in some participants managing quite complex care needs through partners alone or with only family support. For example, in a former farming area now subdivided into large blocks, one new resident cared for her husband,

who had a high level of disability as a consequence of a stroke. While allocated a high-level home care package, she felt she was managing and did not access it, stating 'at the moment ... if I need something, I've got my sister-in-law' (Q3.811.F.66.H). With a purposively designed house to fit with her husband's functional abilities, she has her brother and sister-in-law in two wings of a large house. The family provides some respite and help with access to medical services but are her only support.

Others too, particularly new residents, rely almost solely on family. One participant lived in a remote town, having moved a few years prior with family. She was frail, with poor mobility and experienced significant pain, and was living with her husband, son and daughter-in-law. Her daughter-in-law managed the home, cooking and personal care of the participant and her husband. Accessing the local multipurpose health centre was her only external network, as she states, 'I haven't got any enemies here, but I've got no close friends' (Q2.625.F.75.L).

Overall, this group of participants managed to live in their own homes with either minimal support often from family or with a broad range of informal supports. For many, this was linked with convenience, in that their families lived locally and had the ability to be responsive to their needs. Longer-term residents also were able to benefit from the support of neighbours and community members, due to their years of accumulating social capital that could subsequently be drawn on when needed. At the societal level, most of this group were reluctant to draw on formal services, even if they were eligible for them. For some, this was a privacy consideration, as they did not want external parties involved in their everyday care and support. In this group, an individual's preference for informal support was perceived to be adequate as they were situated in the context of a supportive family and/or community that provided that support.

Co-ordinating informal support and formal services

For some rural older people, formal services (including home care packages and health services) combined with support from strong community networks or family enabled their continued independence at home. For example, one woman received a high-level home care package and Meals on Wheels. She lived with multiple health concerns and was reliant on daily personal care, including putting her to bed. While her family lived interstate, they telephoned most nights and thereby maintained close contact. This participant was very active in multiple community groups, with friends transporting her to her activities:

I've got a friend who's 80, and she was a nurse ... she comes and picks me up, that's my one night a fortnight, and we have a meal and I listen to the speakers and socialise with a different group of ladies. Because she was a nurse, she just comes and puts my nightie on and I can go to bed. (V1.59.F.76.L)

She experienced informal support from these networks in addition to the formal services to help her deal with her functional limitations:

I've got a neighbour ... she brings my rubbish bins in every Thursday morning and put the paper in the back door ... she will come in and have a chat. We keep an eye on the old fellow next door. (V1.59.F.76.L)

Both aspects, along with the interaction between adequate formal services and supportive residents in the local community, were essential to enable ageing in place and to prevent social isolation for those living alone.

A number of participants received high-level aged care packages. One male participant lived with a degenerative disease, limited mobility and frequent hospitalisations. His wife was his full-time carer and undertook skilled heavy care duties, alongside driving and companionship. This support was integral, as he noted:

It's [wife]. See, I went to the clinic and they said, '[name] you're doing well'. But without [wife] I'm not worth anything. If I hadn't had [wife] it [the disease] would have hunted me [down] two years ago. (Q1.1013.M.72.L)

His wife acknowledged their partnership and the importance of communication with formal services, with the excerpt below showing a strong relationship focus:

We work very hard to make sure that we do have the facilities here to keep [husband] at home. We can't manage alone so we put in everything that's possible to make it easy, for me as well. We need the two of us to maintain [name's] ability to stay here at home. We don't want him to ever have to go into care. (Q1.1013.M.72.L)

Whilst they were unhappy about respite only being provided in a dementia ward of a care facility, they still felt that their town was well serviced, as his wife noted, 'All our facilities here are close, good facilities, really good supportive facilities and its easy for [husband] to get to them all' (Q1.1013.M.72.L). As well at the interaction between the individual, carer and responsive formal services, community infrastructure also added to the participant's wellness. For this participant, the built environment, namely concrete paths in a large park nearby, enabled this couple to walk daily with the participant in his motorised wheelchair. Thus, the interaction of services provided by the family with the age-friendly environment provided by the local council facilitated the wellness of these participants.

In the same region, the complex care requirements of another participant were managed with a different mix of informal support and formal services, given that home care was not available to them due to their distance from their local service centre. The participant was the full-time carer for his wife, who had limited speech and mobility following a stroke. They were unable to access local home-based care due to distance, so they travelled twice a week to a service town for his wife to be showered. As he noted:

It is a bit awkward for me to shower her. That is the only thing I can't really do. I do everything else, but I can't really shower her. Our shower's not really conducive to doing it, so we go there. (Q1.1011.M.70.H)

Distance also impacted upon the allocation of time people living outside service centres received as part of their high-level home care package. One woman lived on the family farm, with her son living nearby. With his support, she cared for her husband who had sustained spinal injuries after a farm accident. On returning

to the farm after months in the spinal unit, home modifications were undertaken, however, gaining access to services was problematic:

I looked after him then with some help from [provider], but the trouble was he was just over 65, [so] we were only entitled to 14 hours help a week. Now, it took two hours to get him out of bed of a morning and that was used up ... in the end [provider] got tired of us, it wasn't the girls, but the boss in [regional centre] and the one in [nearby town] they came, the two of them came out one day and they said, 'We'll give you six months to move because we're not going to look after you.' (Q3.804.F.79.L)

In this case, the allocated hours in the home care package included the 40-minute drive from the nearest town for two carers, such that the travel time seriously eroded the time available for formal care. This was a common scenario among participants, with many exhibiting a surprising level of pragmatism about this situation. For example, one participant suggested, 'You cannot expect the [provider] to come out here. It's too far away. They will go out of town, but not this far' (Q2.634.F.70.H).

Thus, some participants, like Q1.1011.M.70.H above, are able to access town-based services with help from family or neighbours; while others, like Q3.804.F.79.L in the previous section, are reliant on inadequate visiting home care packages. Whilst assisting frail older people to remain at home is the purpose of funded home care services, many rural older people are unable to access these services due to the distances involved. Thus, the functional needs of both participants were compromised by limitations at a societal level in terms of the reach of formal services in some rural locales. As well as distance, cost was also a barrier to utilisation of formal services. Whilst home care is publicly funded in Australia, co-payments are required for domestic help, personal care, visiting nursing and allied health. This cost imperative was noted by one female participant in her eighties, who attends respite twice a week:

A: I wish I could go more.

Q: So cost gets in the way?

A: It's \$15 a day. I know they come and pick me up and all that and we get lunch, but it's \$30. By the end of the month, it's \$120. (V1.1002.F.86.L)

Reliant on the aged pension, this participant found it difficult to pay for the services. Another also noted that costs associated with rehabilitation following heart surgery were significant. This included both the costs of travel as well as health charges. As he related:

I'm only planning to go to the [provider] two or three times a week. I've got one of these health-care plans and I can get some of it through them and that pays for it, but I'm not going to go down there every day because of the cost. (Q1.1034.M.9.H)

For this group, the findings highlight the circumstances in which a sophisticated integration of informal supports and formal services assist older people's wellness.

However, it is clear that two factors impact on the adequacy of this mixed model of care. First, for very frail residents a resident carer, usually a spouse, is required to facilitate access to formal services, particularly transport and respite. Further, the carer carries out support around the clock, in contrast to the visiting formal home care services. Second, residents living a distance from service centres are disadvantaged with travel time deducted from their allocated home care packages. The co-payment system also disadvantaged some who were unable to afford formal home care services with the cost of travel also making it hard to attend services.

Self-reliant with minimal reliance on informal supports and formal services

A third group of participants who only had limited connections with others or who lived on geographically isolated properties, either chose, or were obliged to be, self-reliant. This group did not have a support network of family and friends, and frequently lived alone. If they needed help, they tended to seek it from formal services, which enabled them to remain living in their home and community. Amongst this group, there was one small group of participants, largely men, some who had never married, and had few networks within the community, with their extended family often very old and frail or in residential care. They had spent their life in the locale, and knew local people but contact was limited. One male participant, for example, lived alone in a town of 3,000 people. He had functional limitations following a stroke. A single man, a farm worker all his life, he had few resources and rented his small flat. He used a walker in his flat and a motorised wheelchair to 'walk up the street or down the road' (Q1.1003.M.74.L). The local home care provider transported him three days a week to the local men's shed (a non-profit organisation funded to provide a space for woodwork and social interaction), and undertook his personal care, domestic cleaning, shopping and meal preparation. This participant was thus reliant on formal aged care services and had few social networks apart from conversations with neighbours, and a 'mate' who picked him up and took him out to his farm once a month. Any family connections were distant and not strong, as he described, 'yeah, there is family around. When they come to town they drop in for a few minutes' (Q1.1003.M.74.L).

There was a group of participants who had a lifelong pattern of self-reliance, some who were largely alone as a consequence of a history of problematic or distant family. While their engagement with formal services was their only support, they did not always elect to use them. For example, one man was independent, lived with chronic health conditions and chose not to receive home aged care services, as he related: 'I don't need them at all. They're available' (Q2.623.M.84.H). This man, who lived in a remote town of 360 people over 100 kilometres from a service town, lived alone and spent his days at home with occasional outings to community events. He was estranged from some family, noting them as 'trouble-makers', and the remainder were elderly. However, this man, who accessed almost no services yet had almost no social support, nevertheless, was confident of his capacity to remain independent and reported high wellness.

There were also solitary people who had ties to social networks in the town but did not receive any functional social support. For some, formal services such as the men's shed were pivotal, as one older man stated, 'it may be just a friendly hello, but you know them, and you know you're among friends. You can ask anybody for

help' (V1.22.M.80.H). For individuals such as this man, friends at the men's shed were highly valued given 'we are not even a close family' (V1.22.M.80.H). However, this group mainly used the men's shed as a social network rather a support network (Wenger and Keating, 2008), and if needed, would access formal services including health care. This was the case with another single man with multiple chronic health problems who rented a flat in a remote town of 300 people, having moved to the area a few years prior. He was estranged from family including his sister and children. His life revolved around the local pensioner group, where he participated in a weekly meal and shopping trip as well as board games:

There was about 19 of us, but a couple died in between that I know of. There's only nine now. There is couple gone in homes. A bit of a worry because if we get too short, that will be the end of PAG [local Planned Activity Group], everything. It will fold up. (V2.243.M.66.L)

For older people with few social networks, access to specialist care poses particular challenges, as one participant suggested, 'Well, if I get that way that I can't drive I'd be bugged' (Q2.621.M.86.H). The availability of transport for people who do not drive, although critical in rural areas without public transport, varies across rural locales. In some areas, people rely on family or friends to access specialist care, but those without these supports often rely on transport services or volunteer drivers. However, as one man noted, 'I'm a volunteer driver. The car is supplied between [shire and regional health] and patients ... pay for that, but our labour as drivers is voluntary' (V1.17.M.80.H). Although an important element of the locale's social capital, the challenge is to maintain local volunteers able to undertake the tasks. As one participant noted, 'I am ready for bed at the end of my [capital city] trip' (Q1.1034.M.79.H). Being able to drive or accessing a volunteer driver was an essential but challenging element, particularly for this group of participants without family or social support.

In this section, we have snapshots of people who are somewhat solitary, and do not look for company in their day-to-day life. Some were reluctant to ask for assistance. Others, given significant health issues, drew on formal services. Thus, for many of those in the above cases, without social supports, their care convoys comprised available formal services, such as home care and locally funded groups including the men's shed, pensioner group and the health centre. These were important, however, as one of the participants above noted, formal services were always at serious risk of being cut for financial reasons, despite this dependency. Furthermore, many of these social groups, such as men's sheds and pensioner groups, were reliant on the availability, time and skills of volunteers to operate and drivers to take participants there if they are no longer able to drive. Thus, while this group were generally self-reliant, feeling that they had adequate access to supports if needed, there were serious concerns about their capacity to be able to continue living this way in the future.

Discussion

This paper explored how older people living in diverse rural environments negotiate their care networks. We utilised data from a large qualitative sample of

interviews with 60 older people living in six rural communities across two Australian states. With the policy imperative of ageing in place, it is essential that research addresses how rural services and local supports interact to maintain rural older people's wellness and independence. To address this gap in knowledge, we draw on the convoys of care model (Kemp *et al.*, 2013) as a theoretical framework, in order to understand how older people living in rural communities structure their care convoys, contributing to the use of this perspective within community rather than assisted living environments. Our findings illustrate the diverse ways that older people access care and support and manage the interactions between formal services and informal supports. Further, our findings highlight how the availability and adequacy of care is linked to the interaction of individual, community and societal levels. As Urbaniak (2021) observes, understanding this interaction is necessary in order to avoid overly simplistic dichotomies associated with why rural older people structure their care in the ways that they do.

Clearly, communities and regions vary in the extent they meet people's needs. These findings resonate with rural gerontology studies that show there is no singular experience of old age in a rural setting (Keating, 2008), and the work of health geographers who have explored the availability of services in rural contexts (Herron *et al.*, 2016). The convoy of care model guided our understanding of rural older adults' use of informal supports and formal services in the context of resources and socio-spatial environments. We have shown the variety of experiences of older rural residents living in the six case study sites. In particular, use of the convoy of care model builds on the work of gerontologists interested in conceptualising the interaction of informal and formal care, as well as how this is influenced by individual, community and societal factors (Kemp *et al.*, 2013; Barken, 2019; Lambotte *et al.*, 2020). Specifically, this study has extended the existing literature relating to convoys of care by examining how individual and rural environmental characteristics interact to influence the structure, function and adequacy of rural older people's care convoys.

This study has identified three care convoy structures utilised by rural older adults – a reliance on informal supports, a mix of formal and informal services, and those with few social supports, who attempt to be self-reliant but, if needing help, tend to rely on minimal formal services. This structural composition, and the function of particular elements of care convoys, is influenced by the interaction of individual characteristics and preferences, as well as features of the rural environment. For example, within the first care model, a reasonable level of health and mobility ensured that participants could rely on informal supports where less care-intensive support was required. Other studies have noted that among rural older adults, a preference for informal help is associated with stronger preferences for family care and negative attitudes towards community services (*see* Savla *et al.*, 2018). However, this was contingent on a supportive spouse or family member, good social networks and a supportive local community, which in this study was observed to be primarily the remit of long-term rural residents in small rural communities.

It was a different scenario for those with more complex needs, many of whom were eligible to receive federal government home care packages and support to assist them to remain in their home and community. However, participants noted several disadvantages with relying on formal services in rural contexts,

which discouraged them from utilising them. In particular, access to home care is impacted by distance from a service centre and specialist care can be difficult for many as it often involves costly travel time. Further, privacy in small rural communities may impact on willingness to use formal services, as well as the cost element, aspects which have also been observed in other rural studies (Scharf *et al.*, 2016; Savy and Hodgkin, 2021).

For participants with close family ties, especially spouses, the interaction between these supports and formal services was often crucial to participants being enabled to remain in the community. For some participants, ageing at home was possible due to a complex and resource-intensive system of support comprised of a primary carer (usually the spouse); family and neighbour support; home care services including personal care, nursing and home modifications; volunteers; and an age-friendly environment. However, this complex system of support is fragile as it rests on the commitment and capability of the resident carer, plus the ongoing availability of other supports. Findings such as these highlight the reliance the formal system has on the informal one in terms of managing the care regime and the relationship with services. These are important elements of the second convoy of care within the findings, where participants were able to co-ordinate different levels of care, including individual, community and societal. Important within this model though is the integral role of informal carers, which is well established within the literature (*see* Kemp *et al.*, 2013). However, these findings demonstrate that with the increased level of care expected at home, the skilled and technical role of the carer belies a distinction often made of family intervention as support and formal services as care.

Amongst the third convoy model, for those who were often alone without close familial or community supports and who had poor health or mobility, formal services assumed a greater role. In the findings, many participants in these circumstances viewed quite limited supports or access to services as adequate and were met with satisfaction. Some, although entitled to appropriate formal services, chose not to access them. Concerned about privacy and self-reliance, this group is clearly at risk of social exclusion, which can impact their capacity to remain living in their rural environment over time (Warburton *et al.*, 2017). Rural gerontologists identify similar dispositions with stoic people not wanting to bother others with requests for assistance (Eales *et al.*, 2008), thereby preserving a continuity of self (Walsh, O'Shea and Scharf, 2020). However, even more problematic is where informal networks are assuming a greater care function in care convoys due to a lack of resources within rural environments, which is consistently noted within the Australian and international rural ageing literature. Findings from this study suggest that high levels of instrumental care are being provided by informal networks due to the inadequacy of formal care services in people's immediate rural settings, where formal services are geographically distant, expensive and not responsive enough (Goins *et al.*, 2005; Gardiner *et al.*, 2019). Despite being eligible for formal services, including community aged care, many older people in rural communities are unable to access them. In most cases, these tasks were assumed by spouses with some holding strong skills in co-ordinating formal services, as noted by Kemp *et al.* (2018). In many rural communities there was a reliance on volunteers to provide informal support, including transport to specialist health care. The lack of transport options for use by older rural residents was evident in our

study with services discontinued or non-existent. The role of volunteers in the provision of services in rural areas, and the potential challenge of such supports as the rural population ages, is evident in Australia (Warburton and Winterton, 2017) and internationally (Colibaba, Skinner and McCrillis, 2021). Our findings also revealed that for rural older adults without extensive social networks, formal services are assuming both a care and social support function.

The levels of interaction between formal and informal care within our findings support criticism of the delineation in service provision and policy between informal and formal care (Barken, 2017). These findings have significant implications for rural policy and practice, particularly in relation to who is vulnerable to social and service-related forms of exclusion. Numerous studies have noted the importance of social capital and connectedness in the context of supporting rural ageing in place (Glasgow and Doebler, 2021; Urbaniak, 2021), and our findings indicate that rural older people who live alone, are new to their communities and/or have limited social networks may lean more heavily on formal services. However, this will be problematic where local formal services do not have the capacity to meet social or functional care needs, reinforcing the point of Savla *et al.* (2018) that where you live rather than need determines access to services. The lack of capacity and choice in rural communities compromises the ability of rural older consumers to access the care that they want and need (Cash *et al.*, 2016). In the context of continued levels of rural retirement in-migration across international contexts (*see* Winterton *et al.*, 2019), it must be considered that not all rural older people have access to the stable, long-term local social networks to support informal care provision, and pathways of support for this cohort must be considered.

Alternatively, this study has highlighted the significant role the spouses of rural older people are playing in compensating for formal service provision. Given the health challenges associated with caring responsibilities for older spouses that have been highlighted in other studies (Cash *et al.*, 2019), this may potentially create greater need for formal services to support rural ageing carers. Alternatively, it must be questioned whether the care being provided to rural older people by informal networks – whether out of need or as a result of preference – is adequate and meeting their objective needs, and if in some cases it is preventing them from accessing care and support that would be more conducive to their physical wellness. As Skinner and Winterton (2018) have noted, there is a need for policy and practice to more clearly articulate the level of responsibility that governments have for providing aged care services within rural regions, so that the role and scope of the informal sector can be more clearly delineated. Specifically, the role of community-level supports that are not necessarily viewed as aged care providers – such as local shops and service providers – must be acknowledged.

Limitations

The data were collected in 2015 and 2016, and since that time the implementation of consumer-directed care with individuals managing their allocated funding rather than aged care providers allocated funding to provide care and support services has expanded (My Aged Care, *nd*). Nevertheless, the points in this paper remain, given

the challenges in accessing services and delivery. The second limitation is that as the research did not formally chart the participants' care convoys (as in Kemp *et al.*, 2013), the understandings discussed in this paper are drawn from questions about how they manage their health and independence, and with whom they spend time. The third limitation is linked to the research undertaken in six sites in two states, Victoria and Queensland. The findings may not apply to all rural areas given a range of socio-economic, climatic, cultural and distance from service centres that exist in rural locales. We also note it was difficult to recruit very frail community-living older people. People with impaired cognitive capacity were not included in the study. We put forward their lives, challenges and opportunities would differ considerably from our participants who all had some level of capacity. However, participants for the in-depth interviews were purposively selected to include older people with a range of low and high wellness scores for both men and women across a range of locales. Connected is our fourth limitation, the structure of an individual's care network is not directly linked to their wellness or the wellness classification of their community. Wellness is very complex and linking wellness with care convoys is beyond this albeit large qualitative study.

Conclusion

Understanding how older people living in rural communities negotiate their care networks is increasingly important given international policy goals for individuals to age at home in their community. This study set out to explore the mix of informal supports and formal services that support community-living older people in rural Australia. Our study used the convoy of care model to understand how older people in diverse rural communities negotiate their care networks, particularly exploring their perceptions of the structure, function and adequacy of care, and how these aspects impact on the wellness and capacity of older rural people to remain in their communities. Thus, we utilise the convoy of care model in order to explore how the socio-cultural context captures diversity in relation to informal support across family, friends and communities, and formal aged care and health service provision. By doing so, we extend the model from previous research conducted in assisted living contexts (Kemp *et al.*, 2013, 2017, 2018), with only limited studies in a community context (Verver *et al.*, 2018; Lambotte *et al.*, 2020), and draw firsthand on the views and experiences of older people themselves in rural communities. With policy commonly designed for an urban context, our findings illustrate the importance of tailoring aged care and health policy with respect to rural community's strengths and challenges (Winterton *et al.*, 2021). Our study highlights that older people living in rural Australia face ongoing challenges to age in their place.

Acknowledgements. The authors thank the participants who generously gave their time to take part in this study, and the agencies and community groups who assisted with recruitment. We acknowledge the Australian Research Council for funding the Linkage project 'The Relationship Between Rural Living and Wellness: What Services and Supports Do Older People Need?'

Author contributions. All named authors for this paper made a substantial contribution to: (a) the conception and design, and analysis and interpretation of data; (b) the drafting of the paper and revising it critically for important intellectual content; and (c) approved the version under review.

Financial support. This work was supported by the Australian Research Council (grant number LP120200226). The Australian Research Council played no role in the design, execution, analysis and interpretation of data, or writing of the study.

Conflict of interest. The authors declare no conflicts of interest.

Ethical standards. The study received ethical approval from La Trobe University (HREC #14-051) and the University of Queensland (HREC #2014001347).

References

- Adams T, Bezner J, Garner L and Woodruff S (1998) Construct validation for the perceived wellness survey. *American Journal of Health Studies* **14**, 212–219.
- Alston M (2007) Globalisation, rural restructuring and health service delivery in Australia: policy failure and the role of social work? *Health & Social Care in the Community* **15**, 195–202.
- Australian Institute of Health and Welfare (2020) *Australia's Health*. Australian Government. Available at <https://www.aihw.gov.au/reports-data/australias-health>.
- Barken R (2017) Reconciling tensions: needing formal and family/friend care but feeling like a burden. *Canadian Journal on Aging/La Revue canadienne du vieillissement* **36**, 81–96.
- Barken R (2019) 'Independence' among older people receiving support at home: the meaning of daily care practice. *Ageing & Society* **39**, 518–540.
- Bieber A, Nguyen N, Meyer G and Stephan A (2019) Influences on the access to and use of formal community care by people with dementia and their informal caregivers: a scoping review. *BMC Health Services Research* **19**, 88.
- Burholt V and Dobbs C (2012) Research on rural ageing: where have we got to and where are we going in Europe? *Journal of Rural Studies* **28**, 432–446.
- Cash B, Hodgkin S and Warburton J (2016) Practitioners' perspectives on choice for older spousal caregivers in rural areas. *Australian Social Work* **69**, 283–296.
- Cash B, Warburton J and Hodgkin S (2019) Expectations of care within marriage for older couples. *Australasian Journal on Ageing* **38**, E19–E24.
- Colibaba A, Skinner M and McCrillis E (2021) A critical view of older voluntarism in ageing rural communities: prospect, precarity and global pandemics. In Skinner M, Winterton R and Walsh K (eds), *Rural Gerontology: Towards Critical Perspectives on Rural Ageing*. London: Routledge, pp. 287–299.
- Dahlbert L, Berndt H, Lennartsson C and Schon P (2018) Receipt of formal and informal help with specific care tasks among older people living in their own home. *Social Policy and Administration* **52**, 91–110.
- Department of Health (2017) *Wellness and Reablement*. Australian Government. Available at <https://www.health.gov.au/sites/default/files/documents/2019/12/wellness-and-reablement-summary-of-consultations-across-the-home-care-sector.pdf>.
- Department of Health and Ageing (2012) *Living Longer. Living Better*. Canberra: Australian Government.
- Eales J, Keefe J and Keating N (2008) Age-friendly rural communities. In Keating N (ed.), *Rural Ageing: A Good Place to Grow Old?* Chicago, IL: Policy Press, pp. 109–120.
- Finlay JM, Gaugler JE and Kane RL (2020) Ageing in the margins: expectations of and struggles for 'a good place to grow old' among low-income older Minnesotans. *Ageing & Society* **40**, 759–783.
- Gardiner FW, Richardson AM, Bishop L, Harwood A, Gardiner E, Gale L, Teoh N, Lucas RL and Laverty M (2019) Health care for older people in rural and remote Australia: challenges for service provision. *Medical Journal of Australia* **211**, 363–364.
- Geerts J and Van den Bosch K (2012) Transitions in formal and informal care utilisations amongst older Europeans: the impact of national contexts. *European Journal of Ageing* **9**, 27–37.
- Glasgow N and Brown DL (2012) Rural ageing in the United States: trends and contexts. *Journal of Rural Studies* **28**, 422–431.
- Glasgow N and Doebler S (2021) Policy and program challenges in delivering health and social care services to rural older people. In Skinner M, Winterton R and Walsh K (eds), *Rural Gerontology: Towards Critical Perspectives on Rural Ageing*. London: Routledge, pp. 117–128.
- Goins RT, Williams KA, Carter MW, Spencer SM and Solovieva T (2005) Perceived barriers to health care access among rural older adults: a qualitative study. *Journal of Rural Health* **21**, 206–213.

- Hansen S, Newbold KB, Scott DM, Grenier A and Kai Huang K** (2021) Rural ageing and transportation: how a lack of transportation options can leave older rural populations stranded. In Skinner M, Winterton R and Walsh K (eds), *Rural Gerontology: Towards Critical Perspectives on Rural Ageing*. London: Routledge, pp. 140–151.
- Herron RV, Rosenberg MW and Skinner MW** (2016) The dynamics of voluntarism in rural dementia care. *Health & Place* **41**, 34–41.
- Inder KJ, Lewin TJ and Kelly BJ** (2012) Factors impacting on the well-being of older residents in rural communities. *Perspectives in Public Health* **132**, 182–191.
- Kaambwa B, Lancsar E, McCaffrey N, Chen G, Gill L, Cameron ID, Crotty M and Ratcliffe J** (2015) Investigating consumers' and informal carers' views and preferences for consumer directed care: a discrete choice experiment. *Social Science & Medicine* **140**, 81–94.
- Kahn RL and Antonucci TC** (1980) Convoys over the life course: a life course approach. In Baltes PB and Brim O (eds), *Life Span Development and Behavior*. New York, NY: Academic Press, pp. 253–286.
- Keating N** (2008) Revisiting rural ageing. In Keating N (ed.), *Rural Ageing: A Good Place to Grow Old?* Chicago, IL: Policy Press, pp. 121–130.
- Keating N and Phillips J** (2008) A critical human ecology perspective on rural ageing. In Keating N (ed.), *Rural Ageing: A Good Place to Grow Old?* Chicago, IL: Policy Press, pp. 1–10.
- Kemp CL, Ball MM and Perkins MM** (2013) Convoys of care: theorizing intersections of formal and informal care. *Journal of Aging Studies* **27**, 15–29.
- Kemp CL, Ball MM, Morgan JC, Doyle PJ, Burgess EO, Dillard JA, Barmon CE, Fitzroy AF, Helmly VE, Avent ES and Perkins MM** (2017) Exposing the backstage: critical reflections on a longitudinal qualitative study of residents' care networks in assisted living. *Qualitative Health Research* **27**, 1190–1202.
- Kemp CL, Ball MM, Morgan JC, Doyle PJ, Burgess EO and Perkins MM** (2018) Maneuvering together, apart, and at odds: residents' care convoys in assisted living. *Journals of Gerontology: Psychological Sciences and Social Sciences* **73B**, e13–e23.
- Kenny A, Farmer J, Dickson-Swift V and Hyett N** (2015) Community participation for rural health: a review of challenges. *Health Expectations* **18**, 1906–1917.
- Kjær AA and Siren A** (2020) Formal and informal care: trajectories of home care use among Danish older adults. *Ageing & Society* **40**, 2495–2518.
- Lambotte D, Smetcoren AS, Rixt Zijlstra GA, De Lepeleire J, De Donder L, Martinus JMK and D-Scope Consortium** (2020) Meanings of care convoys: the structure, function, and adequacy of care networks among frail, community-dwelling older adults. *Qualitative Health Research* **30**, 583–597.
- Milbourne P and Doheny S** (2012) Older people and poverty in rural Britain: material hardships, cultural denials and social inclusions. *Journal of Rural Studies* **28**, 389–397.
- My Aged Care** (nd) *Aged Care*. Department of Health and Aged Care. Available online at <https://agedcare.health.gov.au/programs/my-aged-care> [7 September 2022].
- Pickard L** (2012) Substitution between formal and informal care: a 'natural experiment' in social policy in Britain between 1985 and 2000. *Ageing & Society* **32**, 1147–1175.
- Poulin L, Skinner MW and Hanlon N** (2020) Rural gerontological health: emergent questions for research, policy and practice. *Social Science & Medicine* **258**, 113065.
- Regional Australia Institute** (2015) *Population Dynamics in Regional Australia*. Barton, Australia: Regional Australia Institute.
- Rice K and Webster F** (2017) Care interrupted: poverty, in-migration, and primary care in rural resource towns. *Social Science & Medicine* **191**, 77–83.
- Royal Commission into Aged Care Quality and Safety** (2019) *Navigating the Maze: Australia's Current Aged Care System*. Canberra: Commonwealth of Australia. Available at <https://agedcare.royalcommission.gov.au/publications/background-paper-1-navigating-maze-overview-australias-current-aged-care-system>.
- Savla J, Biven LR, Roberto KA and Blieszner R** (2018) Where you age matters: individual and county level predictors of formal and informal care in rural Appalachia. *Journal of Aging and Health* **31**, 837–860.
- Savy P and Hodgkin S** (2021) Australian rural community aged care services: precarity and capacity. *Australian Journal of Public Administration* **80**, 324–339.
- Savy P, Warburton J and Hodgkin S** (2017) Challenges to the provision of community aged care services across rural Australia: perceptions of service managers. *Rural and Remote Health* **17**, 4059.
- Scharf T, Walsh K and O'Shea E** (2016) Ageing in rural places. In Shucksmith M and Brown D (eds), *Routledge International Handbook of Rural Studies*. New York, NY: Routledge, pp. 80–91.

- Schenk N, Dykstra P, Maas I and Van Gaalen R** (2014) Older adults' networks and public care receipt: do partners and adult children substitute for unskilled public care? *Ageing & Society* **34**, 1711–1729.
- Skinner M and Hanlon N** (2016) *Ageing Resource Communities: New Frontiers of Rural Population Change, Community Development and Voluntarism*. New York, NY: Routledge.
- Skinner MW and Winterton R** (2018) Interrogating the contested spaces of rural aging: implications for research, policy, and practice. *The Gerontologist* **58**, 15–25.
- Smith BJ, Tang KC and Nutbeam D** (2006) WHO Health Promotion Glossary: new terms. *Health Promotion International* **21**, 340–345.
- Spina J and Menec VH** (2015) What community characteristics help or hinder rural communities in becoming age-friendly? Perspectives from a Canadian prairie province. *Journal of Applied Gerontology* **34**, 444–464.
- United Nations** (2015) *World Population Ageing*. New York, NY: United Nations Department of Economic and Social Affairs, Population Division.
- Urbaniak A** (2021) Understanding and performing care in rural contexts in Central Europe. In Skinner M, Winterton R and Walsh K (eds), *Rural Gerontology: Towards Critical Perspectives on Rural Ageing*. London: Routledge, pp. 210–220.
- Urbaniak A, Falk K and Heusinger J** (2020) Navigating care in rural areas: strategies employed by older adults with continuing care needs and their impact on social exclusion. *Health & Place* **66**, 102423.
- Verver D, Merten H, Robben P and Wagner C** (2018) Care and support for older adults in The Netherlands living independently. *Health & Social Care in the Community* **26**, e404–e114.
- Vlachantoni A, Shaw RJ, Evandrou M and Falkingham J** (2015) The determinants of receiving social care in later life in England. *Ageing & Society* **35**, 321–345.
- Warburton J and Winterton R** (2017) A far greater sense of community: the impact of volunteer behaviour on the wellness of rural older Australians. *Health & Place* **48**, 132–138.
- Warburton J, Scharf T and Walsh K** (2017) Flying under the radar? Risks of social exclusion for older people in rural communities in Australia, Ireland and Northern Ireland. *Sociologia Ruralis* **57**, 459–480.
- Watkins F and Jacoby A** (2007) Is the rural idyll bad for your health? Stigma and exclusion in the English countryside. *Health & Place* **13**, 851–864.
- Wenger GC and Keating N** (2008) The evolution of networks of rural older networks. In Keating N (ed.), *Rural Ageing: A Good Place to Grow Old?* Chicago, IL: Policy Press, pp. 33–42.
- Wiles JL, Leibing A, Guberman N, Reeve J and Allen RES** (2011) The meaning of 'aging in place' to older people. *The Gerontologist* **52**, 357–366.
- Winterton R and Warburton J** (2011) Does place matter? Reviewing the experience of disadvantage for older people in rural Australia. *Rural Society* **20**, 187–197.
- Winterton R, Butt A, Jorgensen B and Martin J** (2019) Local government perspectives on rural retirement migration and social sustainability. *Australian Geographer* **50**, 111–128.
- Winterton R, Walsh K and Skinner M** (2021) Towards a critical rural gerontology. In Skinner M, Winterton R and Walsh K (eds), *Rural Gerontology: Towards Critical Perspectives on Rural Ageing*. London: Routledge, pp. 351–359.

Cite this article: Petersen M, Winterton R, Warburton J, Wilson J (2024). Negotiating the care convoys for a diverse group of older Australians living in rural communities: a large qualitative study. *Ageing & Society* **44**, 1494–1514. <https://doi.org/10.1017/S0144686X22000125>