What we need as we get older: needs assessment for the development of a community geriatrics service in an Australian context

Mark I. Hohenberg
Western Sydney University

Najwa-Joelle Metri
Western Sydney University

Rubab Firdaus
Western Sydney University

David Simmons
Western Sydney University

Genevieve Z. Steiner (✉️ g.steiner@westernsydney.edu.au)
Western Sydney University

Research Article

Keywords: Community geriatrics service, needs assessment, aged care

Posted Date: February 18th, 2021

DOI: https://doi.org/10.21203/rs.3.rs-156168/v1

License: ☑️ This work is licensed under a Creative Commons Attribution 4.0 International License. Read Full License
Abstract

Background This study aimed to develop a Community Geriatrics Service (CGS) informed by the healthcare and social requirements of community dwelling older people in an Australian context.

Methods Stakeholders (N= 108) took part in a needs assessment involving 30-minute semi-structured interviews with general practitioners (GPs; N= 49), and three 2-hour community engagement meetings (N = 59) with older people, informal caregivers, allied healthcare workers, and nursing home directors. Data were transcribed and thematically coded, mapped to source and weighted to the frequency that the theme was raised across sources.

Results Five themes informing CGS development and delivery emerged: active health conditions (management of behavioural and psychological symptoms of dementia, falls, multimorbidity, and other relevant conditions), active social challenges (patient non-compliance, need for aged care social workers, caregiver stress, elder abuse, social isolation, and stigma), referrals (availability of specialists, communication, specialist input, and advance care directives), access (lack of transport options, and inaccessibility of local geriatrics clinics and specialists), and awareness (lack of awareness, knowledge, and resources).

Conclusions CGS development will need to address access, referral processes and health system navigation, which were perceived by stakeholders as significant challenges. These findings warrant the development of a CGS with an integrated approach to aged care, pertinent for the health and social needs of the elderly.

Background

The number of people aged 60 years and older has doubled over the past 30 years worldwide (1). Like other industrialised countries, Australia is experiencing significant population ageing, with more than one in every seven people aged 65 years and over in 2017 (1). This is causing a rise in Australia’s old-age dependency ratio (1, 2), attributable to a 3.3% increase in the population aged over 65 years from 1996 to 2016 (3), and expected to result in over 6.4 million older Australians by 2051; nearly triple the 2.3 million in 1999 (4).

This rate of population ageing presents many challenges for federal, state, and local planners (5). In Australia, population ageing is expected to result in a loss of 0.4% in revenue and add 0.3% in spending to annual real growth of GDP, equating to a $36 billion annual cost by 2028–2029, exceeding the anticipated total cost of Medicare in the same timeframe (1). This is due to the fact that greater assistance is required for day-to-day activities as people age. Accordingly, approximately 10% of people aged 65 to 74 years, and over 50% of people aged over 85 years, require assistance to maintain functional independence (1). This is significant in comparison to the 3% requiring assistance aged less than 65 years (1).
A Community Geriatrics Service (CGS) aims to improve access to specialist geriatric healthcare for older people who require management for complex conditions through outreach into general practice for case review or joint consultation (6). CGSs provide overall support through geriatrician outreach, consultation, promote multidisciplinary team care, and also aim to delay or reduce the likelihood of hospital or residential care admissions by providing management plans (6, 7). A focus on community and informal care effectively maintains the functional independence of the individual (8). For these reasons, CGSs have been developed globally to address both specific and generalised challenges in elderly populations (9).

Identified gaps in service provision can inform the strategy for local service providers, improve the healthcare of the local population, and reduce the burden on local hospitals, whilst serving as a model that can be translated to national and international settings. Providing community-based care for older individuals will improve the diagnosis, treatment, and management of chronic conditions (8), and decrease the healthcare spend for local service providers in a way that accounts for the social and cultural demographics within the community (10). The present study aimed to gain a holistic understanding of the social and healthcare requirements of community dwelling older people in South Western Sydney (SWS), where individuals aged 65 years and over account for 11.9% of the population (11), through a needs assessment, with the purpose of developing an integrated approach to aged care via a CGS.

Methods

1. Study Design and Setting

This was an explorative qualitative study designed as a needs assessment to inform the development of a new CGS within SWS Local Health District (SWSLHD). Data sources included transcripts from semi-structured interviews with general practitioners (GPs) and digital audio recordings of focus groups with community healthcare and allied health professionals, older people, their caregivers and representatives. Across March to June 2016, data were collected at 3 participating sites in the local government areas (LGAs) comprising the Macarthur region of SWS, NSW, Australia: Camden Council, Campbelltown City Council, and Wollondilly Shire Council, which are peri-urban, urban, and rural, respectively.

2. Recruitment and Participants

Invitations to participate were sent from March–June 2016 to primary care practices and allied health workers, nursing home directors, and patient and carer representative groups and coordinated by the (male) community geriatrician (MIH) via SWS Primary Health Network (SWSPHN), Camden Council, Campbelltown City Council, Wollondilly Shire Council, and contacts through Campbelltown and Camden Hospitals within SWSLHD. The recruitment strategy for primary care practices included cold calling a non-exhaustive list of GP practices provided in-kind by CJU Medical Marketing. Using a purposive sampling strategy, invitations were open to a broad range of individuals. For this reason, controlling for
factors such as cultural background, gender, age, and years of experience was not possible and not within the scope of this quality assurance (QA) project.

3. Data Collection and Analyses
After verbal consent was obtained, semi-structured interviews 30 minutes in length were conducted for each GP, and three 2-hour community engagement meetings were facilitated by the community geriatrician, whom is experienced in qualitative approaches. A standard set of questions was used across the three community engagement meetings and all GP interviews (see Table 1). These forums engaged with participants to ascertain their understanding of local healthcare service provision, and to identify the needs of older people and caregivers in the region. From this, priority areas for future healthcare provision planning were identified.
| Section                              | Topics Discussed                                                                 | Length | Cumulative |
|--------------------------------------|-----------------------------------------------------------------------------------|--------|------------|
| Introductions                        | Meet and greet                                                                    | 1 minute | 1 minute   |
| Explanation of background to development | Explain the nature of the study, the role of geriatricians, and the basic principles of the objectives of the planned service | 2 minutes | 3 minutes  |
| Consent                              | Check for any questions and obtain verbal consent to participate                   | 1 minute | 4 minutes  |
| Access Demand for CGS                | 1. How many geriatric patients do you see daily approximately?                     | 5 minutes | 9 minutes  |
|                                      | 2. How many geriatric patients have 2 or more major active health problems?       |         |            |
|                                      | 3. Do these active health problems include diabetes?                              |         |            |
|                                      | 4. How many geriatric patients have active social issues?                         |         |            |
|                                      | 5. Do your patients experience any difficulties with driving?                    |         |            |
| Requirements                         | 1. What are the hardest medical issues your geriatric patients have?              | 5 minutes | 14 minutes |
|                                      | 2. What are the hardest social issues your geriatric patients have?              |         |            |
|                                      | 3. Who are your hardest geriatric patients?                                       |         |            |
|                                      | 4. Is there anything that your geriatric patients need that they are not getting? |         |            |
|                                      | 5. Do you feel there is a need for more advanced care directives?                |         |            |
|                                      | 6. How many patients would you refer to secondary care?                          |         |            |
|                                      | 7. Are there some patients you would like to refer but are unable so, and if so, why? |         |            |
|                                      | 8. What would you envisage geriatricians helping you and your patients with?     |         |            |
| Section     | Topics Discussed                                                                 | Length  | Cumulative |
|-------------|----------------------------------------------------------------------------------|---------|------------|
| Geriatricians | 1. What would your expectations of a CGS be?                                    | 5 minutes | 19 minutes |
|             | 2. What are your issues with the current geriatric service?                     |         |            |
|             | 3. What would be your priority requirements from a CGS?                         |         |            |
|             | 4. Would you prefer to have an on-call geriatrician, one geriatrician or a team of geriatricians allocated to your practice? |         |            |
| Conclusions | 1. Is there anything else you feel is important to highlight at this stage?     | 2 minutes | 21 minutes |

All interview responses were directly transcribed by the community geriatrician during the interview, while focus groups were digitally recorded and summarised by two independent attendees, and later transcribed. The transcripts were analysed via the open axial coding method (12) and thematically coded by a single analyst (RF) using Quirkos v.1.3 computerised qualitative analysis software (13). Data were then mapped to source and weighted to the frequency that the theme was raised across sources. This iterative process consisted of identifying and coding the data to ascertain topical responses and emergent substantive categories, coding for word repetition, direct and demanding statements, and discourse markers including intensifiers, connectives and evaluative clauses. Emerging categories among the codes allowed for the development of several themes and sub-themes. All transcripts were initially coded by one researcher (RF), reviewed by a second researcher (MIH), and then thematically organised by the wider research team (MIH, NJM, GZS).

## Results

1. **Sample Characteristics and Data Sources**

   Interviews were conducted with 49 GPs. The community forums held in Camden included 28 representatives, Wollondilly had 15, and Campbelltown 16 representatives from 4 residential aged care facilities (RACFs) and various health service providers and support organisations including Liverpool Hospital Aged Care Services, Ambulance Service, Campbelltown City Council, Wollondilly Shire Council, National Seniors Macarthur, Longevity Senior Services, Dementia Advisory Service, and Dementia Australia. Approximately 4,337 older people are cared for by these service providers each day: RACFs care for 1,476 residents; the GPs see 695 patients, and the health service providers see 2,166 patients.

2. **Qualitative Data**

   Five overarching themes emerged from the coding of the data. Theme 1, *Active Health Conditions*, included four sub-themes: management of challenging behaviours in dementia, management of falls,
management of multimorbidity, and other relevant conditions. Theme 2, *Active Social Challenges*, included six sub-themes: patient non-compliance, need for aged care social workers, caregiver stress, elder abuse, social isolation, and stigma. Theme 3, *Referrals*, included two sub-themes: availability of specialists and communication, and specialist input and advance care directives. Theme 4, *Access*, included two sub-themes: lack of transport options, and inaccessibility of local geriatrics clinics and specialists. Theme 5, *Awareness*, included three sub-themes: lack of awareness, lack of knowledge, and lack of resources.

**Theme 1: Active Health Conditions**

When asked about active health conditions, representatives of three RACFs indicated that the most common, and most difficult to manage, medical condition amongst older people is the behavioural and psychological symptoms of dementia (BPSD). Representatives of RACF1 stated that “behavioural and psychological symptoms of dementia are some of the hardest medical issues geriatric patients have, which require more staff to look after.”

Providers have also indicated that falls occur frequently amongst older people. RACF 2 reports 22 falls a month, of which 5 residents are sent to the hospital. Another provider (RACF 3) indicated that 1–6 residents are referred to secondary care as a consequence of falls, bleeding, and loss of consciousness, where they expressed that “some hard-medical issues include falls and malnutrition. Doctors [are] not available for 24 hours. For falls, review by doctors would help.”

The GPs interviewed indicated that many older patients experience multiple active chronic medical conditions. Multimorbidity amongst geriatric patients was commonly reported by RACF staff: 82% of geriatric patients managed by GPs have 2 or more active health conditions. Specifically, 41% of all geriatric patients managed by participating GPs have been diagnosed with diabetes, and 35% of all residents at RACFs.

When asked, consumers and community representatives described many relevant health conditions for which they require treatment. The lack of available podiatrists was specifically mentioned, with GP referrals to podiatrists not being seen. This demand for podiatry was linked with the high levels of diabetes diagnosed across geriatric patients and RACF residents in all three LGAs. Dental care was also of particular concern. When residents or geriatric patients presented with dental conditions, they were often directed to hospitals, rather than dentists. Within the Campbelltown LGA, people with dementia were reported to disproportionately experience dental conditions. Community representatives have indicated the need for more convenient and subsidised access to dentistry. Mental health conditions were also reported as prevalent amongst older people. Participants from Camden expressed dissatisfaction with long waiting lists, and a lack of public services within the region. Malnutrition within rural and peri-urban communities was also described.

**Theme 2: Active Social Challenges**
While less than 10% of RACF residents were reported to have active social challenges, GPs reported these amongst 57% of geriatric patients. Patient non-compliance was described as the most common personal barrier faced, where patients refuse placements and referrals, particularly so for patients with dementia experiencing challenging behaviours. GP 1, when asked about social challenges, stated “deconditioned, non-compliant patients and frequent attendees … refusing placement, patients refuse to go to care.”

RACF providers indicated the need for social workers who specialise in communicating with older adults. GPs also expressed that the development of an aged care social work service would prevent the referral of individuals to hospitals to access these services. For example, GP 2 expressed that the “need [for] geriatric social work leads to sending patients to hospitals to access social work.”

Consumers and community representatives have described high levels of stress amongst caregivers of older people. This was attributed to social pressures and difficulty dividing their time between work and care. However, many caregivers considered this care as their responsibility to their family members. This was particularly true within culturally and linguistically diverse (CALD) communities with strong family ties.

Elder abuse and social isolation were identified as significant social challenges that require priority attention. Participants thought that elder abuse was becoming prevalent within the Macarthur region, and that the community would benefit from the distribution of resources to raise awareness of elder abuse. Social isolation in rural and peri-urban areas of Camden and Wollondilly was thought to be a consequence of the geographic location, coupled with a lack of accessible transport options.

Consumers and community representatives reported social stigma around ageing as personal barriers to service utilisation. This was discussed as a contributing factor to the under-diagnosis of illnesses, ailments, and chronic conditions, such as dementia, particularly so for older men who have reported not seeing a physician in years. Patient and carer groups expressed the need for education within the community in order to eradicate the social stigma surrounding illnesses and remove these personal barriers to accessing care. Participants have expressed that this education is necessary to create a culture of normalcy regarding healthcare and ageing. For example, Community Representative 1 explained that “education is required for the community, including the elderly and GPs, regarding this, to break the stigma.”

**Theme 3: Referrals**

Participants reported that geriatric patients and residents experiencing acute illness, including falls, are often referred to secondary care. However, RACF representatives (RACF 1) expressed the view that GPs have a lower understanding of when to refer a patient to a specialist, having explained that “some GPs have a lower understanding of when to refer to the specialist and indicated there is a resistance to refer. This will significantly impact on the quality of care provided...”
Despite this, most of the GPs interviewed discussed their expectations of geriatricians in regard to the management of long-term cases, with GP 4 having expressed that “geriatricians need to help troubleshoot new or chronic problems to help aged conditions.” In particular, GPs expressed their expectation that geriatricians should help with mobility or motor and functional conditions.

Similarly, there was also a demand for the comprehensive geriatric assessment of complex cases. The GPs interviewed indicated a lack of education regarding the services offered by specialists, as well as barriers to effective communication between GPs and specialists, which have resulted in higher levels of referral to hospitals. Community Representative 2 explained that “integration is a huge part of this, between primary [care] to hospitals and back, a lot of work needs to be done… they’re not talking to each other so the result for the patient is that the information is not flowing as freely…”

When asked about the need for specialist input, many participants indicated the need for advance care directives in various environments. This included in areas that have lower socio-economic status, or in CALD patient populations, and in RACFs.

**Theme 4: Access**

When asked about challenges regarding access to facilities and aged care services, many consumers and representatives indicated that a lack of transport options was a significant issue, where Community Representative 3 expressed that “the issue with access is logistic[s]... with these clinics, people need a way to get to them...” Of the 695 geriatric patients managed daily by the GPs interviewed, 23% of GPs expressed concerns about older people driving. GPs reported that driving was challenging for their patients and this would be an increasing challenge into the future. This concern also extended to commuting and accessing public transport, which was expressed amongst consumers and community representatives across Campbelltown, Camden and Wollondilly, albeit was more pronounced in rural and peri-urban areas.

The inaccessibility of local geriatrics clinics and specialists was adjunct to the transport issue. Affordability was also identified as a barrier for accessing specialist services, as well as the documentation involved in the process. This concern, like a lack of transport, was heightened in rural and peri-urban areas, including Wollondilly and Camden.

**Theme 5: Awareness**

When asked about guardianship, consumers and community representatives from Camden and Wollondilly LGAs indicated that the larger population is unaware of the way in which enduring guardianship of older people is classified. There were similar concerns regarding power of attorney, where GP 7 expressed “more advance [care] directives are required in low socioeconomic areas.”

Consumers and representatives suggested that there is a lack of resources available to them regarding challenges faced by older people within the community. These participants suggested that education would be the driving factor in the management of the active health and social challenges facing older
people within the community. Suggestions included a community outreach program as an influential action plan for the dissemination of information. Participants felt that these resources should be aimed toward the children, spouses and other caregivers of older people, and should include a specific focus on advance care planning. This concern was common to community representatives across all LGAs.

Discussion

This project captured insights regarding barriers to geriatric service use experienced by the Macarthur community. Findings highlighted the need for the development of a CGS to address health and social issues of older people, facilitate access to services and resources, and improve referral processes and health system navigation. These personal barriers and social challenges are well-documented in multiple settings in the literature, for instance, in diabetes care (14).

There is difficulty associated with managing the BPSD, falls, and multimorbidity in the community care setting. The development of an in-home geriatric programme in the Netherlands found that such programmes can improve the detection of symptoms and management of the BPSD (15). The risk of falls among older adults can be mitigated through balance training programs (16), virtual reality training (17), and dynamic posture training (18), which are potential avenues for CGS service development. Multimorbidity was also reported as a concern, as SWS is thought to be affected by significantly disproportionate health outcomes, including higher prevalence of diabetes, cardiovascular disease (CVD), and lung, gastro-intestinal, liver, kidney, and thyroid cancers (19–22). Costs in managing multimorbidity in the community setting can be reduced through a CGS as shown in the USA where the per patient cost of at-home case-managed individuals is valued at approximately 75% of the cost of institutional care (10).

Active social challenges included non-compliance with treatment plans, which may be exacerbated by the cognitive deficits associated with dementia and creates additional challenges for people experiencing the BPSD (23). CGS development will need to account for the early diagnosis of cognitive impairment and the interactions between cognitive deficits and treatment management (23), as well as the dissemination of this information to stakeholders (6). Gerontological social workers may also relieve communication difficulties, given they are trained to conduct holistic geriatric assessments (24), create conducive housing environments, and encouraging treatment-adherence (25). However, there are currently no gerontological educational programs available across all undergraduate fields in Australia and New Zealand, and it is thought that social work curricula are not heavily focused on this gerontological aspect, despite the critical role of social workers as allied health professionals (26, 27). This is in contrast to the USA, where gerontology-specific degrees are offered at all levels (28, 29). The involvement of these gerontological social workers in healthcare models and their multidisciplinary teams may alleviate the aforementioned social challenges.

Caregiver stress was highlighted as a major challenge within SWS, where primary caregivers often report elevated levels of negative health behaviours and poorer self-reported health (30). This is heightened in
CALD populations, where varying degrees of functional dependency regarding aspects such as language barriers attribute to relatively higher levels of caregiver stress and elder abuse (31, 32). This is also observed in Aboriginal and Torres Strait Islander communities, who experience higher rates of depression and disadvantaged economic and social outcomes when compared to the general population (33). The CGS programmes may relieve these stressors by referring caregivers to support and respite services, as well as providing tailored advice for kinship caregiving. Moreover, elder abuse is prevalent in all populations within society, with studies reporting that one in four older adults are vulnerable to elder abuse (34). Community services, including the CGS, may hence act as essential components of preventing and stopping elder abuse through referring the affected individuals to the relevant support systems.

Social isolation within SWS was of concern, and has previously been identified as an independent risk factor for lower levels of self-reported health and wellbeing (35). Studies also suggest that self-perceived loneliness increases the risk of developing chronic conditions, including all-cause dementia (36), and increases the risk of all-cause mortality (37). This has been exacerbated by the current state of social distancing interventions during the COVID-19 pandemic (37). Purposeful social engagement may be an effective public health intervention for socially excluded members of the community (35), which may be identified and implemented by CGS programmes. Age-related social stigma was described as a challenge as it can lead to marginalisation and the under-diagnosis of illnesses affecting older people, including dementia (38). This is attributed to a ‘hypercognitive culture,’ which results in conditions such as dementia to be viewed as discreditable, ultimately isolating and marginalising older people (38). Social stigma is also exacerbated in CALD communities, where the challenging behaviours in dementia are thought to cause feelings of fear within the community (39). This lack of public awareness also extends to non-age related diseases, including diabetes (14). Through providing informal and community care, CGS programmes may play an essential role in advocating for and destigmatising the illnesses affecting older adults.

Issues with the integration between primary and secondary care, as expressed by the GPs interviewed, are well-documented, with data showing that the median time between a GP sending a referral letter and receiving a response is four weeks in a Canadian setting (40). In Spain, 64–68% of primary and secondary care doctors believe that patient care is not well-coordinated between their two levels (41). In the context of diabetes management for the target Australian health district for the current CGS (SWSLHD), stakeholders believe that traditional modes of collaboration between primary and secondary care professionals lack transparency, as communication lines are typically closed and the processes lack visibility (42). Improving the communication and use of information, through the development of multidisciplinary healthcare teams through a CGS, will evidently provide patients with a better consistency of care (41).

The need for advance care directives was highlighted by participants and deemed necessary as there is a strong association between an individual’s quality of life, quality of dying and the establishment of an advance care plan, as well as for their caregiver (43). Providing targeted education and training to
healthcare practitioners and RACF staff on advanced care planning allows an opportunity to ameliorate the disproportionate health outcomes and high levels of caregiver stress experienced in SWS (19). The literature also attributes the lower levels of understanding of enduring guardianship and power of attorney to a lack of knowledge regarding the services available (44). This lack of knowledge regarding public awareness of the services available has also been seen in diabetes care (14). This can be overcome through an influential action plan to raise awareness of the health challenges faced throughout the community, as delivered by a CGS.

Limited transport has been described elsewhere, for example, in New Zealand, where losing transport options may threaten the functional independence and quality of life of older adults (45). Through CGS development, multidisciplinary healthcare teams are able to travel to the patient, diminishing accessibility issues. Given the current COVID-19 pandemic, virtual health has also become a popular option to deliver quality healthcare (46). By mainstreaming this method of care and providing our healthcare workforce with the appropriate accreditation and training, telehealth options may relieve many of the logistical and equity issues surrounding healthcare access (46). The inclusion of virtual health in CGS development hence ensures better health outcomes for the local community through increasing the accessibility and reach of the programme. This, and the reimbursements provided by the Medicare Benefits Scheme, a selection of healthcare services subsidised by the Australian government, may also mitigate the unaffordability of specialist geriatric services. The affordability of the CGS is paramount, as participants in similar studies have expressed that specialist geriatric services should be free of cost or have minimal out-of-pocket expenses to ensure service utilisation (47).

This study had several strengths, including data triangulation and a relatively large sample size. This study was primarily designed to inform service development; thus, data saturation was not considered crucial to the results and was not achieved when reviewed. Potential introductions of bias include the use of a single researcher, varying transcription methods, and the use of a finite list of primary care providers provided by the medical marketing company. Nevertheless, the primary outcome of this needs assessment was to inform the development of a local service. The results were highly informative and led to the successful development of a CGS in SWS. These results may be valuable for other groups when assessing community needs, providing them with a robust method to inform the development of a CGS programme relevant to needs within their local community.

**Conclusion**

This QA project highlighted many gaps in gerontological service provision in SWS, including active health conditions and social challenges, and issues pertaining to referrals, access to healthcare, and awareness of the services provided locally. These findings confirmed the necessity for the development of community services tailored to the health and social issues of older people, and informed the successful development of a CGS in SWS. Services that are increasing clinical effectiveness whilst also reducing costs are the cornerstone of contemporary clinical and healthcare economic practice.
List Of Abbreviations

| Abbreviation | Term                                      |
|--------------|-------------------------------------------|
| CGS          | Community Geriatrics Service              |
| SWS          | South Western Sydney                      |
| SWSLHD       | South Western Sydney Local Health District|
| SWSPHN       | South Western Sydney Primary Health Network|
| LGA          | Local Government Area                     |
| GP           | General Practitioner                      |
| QA           | Quality Assurance                         |
| RACF         | Residential Aged Care Facility            |
| CALD         | Culturally and Linguistically Diverse     |
| CVD          | Cardiovascular Disease                    |
| COVID-19     | Coronavirus Disease                       |
| BPSD         | Behavioural and Psychological Symptoms of Dementia |

Declarations

Ethics approval and consent to participate

The study was not deemed a quality assurance (QA) project by a registered ethics committee. In Australia, ethics committee approval for QA activities/projects is not required. Instead, there are a set of guidelines from the Australian Government’s National Health and Medical Research Council (NHMRC) that guide the conduct of QA activities/projects. Our QA project was conducted in accordance with these guidelines: NHMRC Ethical Considerations in Quality Assurance and Evaluation Activities: https://www.nhmrc.gov.au/sites/default/files/documents/attachments/ethical-considerations-in-quality-assurance-and-evaluation-activities.pdf

Consent for publication

N/A

Competing interests

As a medical research institute, NICM Health Research Institute receives research grants and donations from foundations, universities, government agencies, individuals and industry. Sponsors and donors provide untied funding for work to advance the vision and mission of the Institute. NJM and GZS are both
affiliated with NICM Health Research Institute, but have no competing interests to declare. MIH has received travel support/honoraria for educational meetings and speaking and educational engagements from Amgen, the Chinese Geriatric Association, and Medtronic. DS and RF have no competing interests to declare. The project that is the subject of this article was not undertaken as part of a contractual relationship with any organisation and was intended as a quality assurance project for SWSLHD.

Funding

The qualitative analysis of the data was supported by SWSPHN. MIH’s contribution was supported by SWSLHD and Western Sydney University, and GZS’s contribution was supported by funding from a NHMRC-Australian Research Council (ARC) Dementia Research Development Fellowship (#1102532). The funding bodies had no involvement in the study’s design, implementation, data collection, analysis, or interpretation of the results.

Author’s contributions

MIH conceptualised and designed the study, drafted the protocol, promoted the study and recruited participants, facilitated the community forums, and oversaw the data analysis. GZS provided conceptual and technical input throughout and oversaw the data analysis and drafting of the manuscript. NJM compiled the data, conducted secondary data analysis, and drafted the manuscript. RF conducted a preliminary data analysis. DS provided conceptual input into the study design and provided critical feedback on the protocol. All authors provided intellectual content to the manuscript, critical feedback and approved the final version.

Acknowledgements

The research team extends thanks to Campbelltown City Council, Camden Council and Wollondilly Shire Council, and the Geriatrics Department and Department of Medicine at Campbelltown Hospital for in-kind support, and to all study participants for their time and valuable insights. Special thanks to Mohammed Ilyas, Kevin Pile, Allison Derrett, and Keith MacDonald for providing feedback on the project scope. We would also like to thank Emma Flack, Justine Binney, and Maureen Lye for their assistance with summarising and transcribing the findings.

References

1. Australian Bureau of Statistics. Census of Population and Housing: Reflecting Australia - Stories from the Census, 2016. Ageing population, 2016. Canberra: ABS; 2017.
2. Ingham B, Chirijevskis A, Carmichael F. Implications of an increasing old-age dependency ratio: The UK and Latvian experiences compared. Pensions: An International Journal. 2009;14(4):221-30.
3. Australian Bureau of Statistics. Australian demographic statistics. Canberra: ABS; 2015.
4. Healy J, Healy J. The benefits of an ageing population: Australia Institute Canberra; 2004.
5. Hugo G. Australia’s ageing population: some challenges for planners. 2003.
6. Health B. Geriatric Clinic (Healthcare for older adults) 2019 [ ]
7. Network SALH. OUTPATIENT GP REFERRAL GUIDELINES GERIATRIC MEDICINE 2017 [ ]
8. Day P, Rasmussen P. What is the evidence for the effectiveness of specialist geriatric services in acute, post-acute and sub-acute settings. New Zealand Health Technology Assessment. 2004;7(3):1-149.
9. Korc-Grodzicki B, Tew W, Hurria A, Yulico H, Lichtman S, Hamlin P, et al. Development of a geriatric service in a cancer center: lessons learned. Journal of oncology practice. 2017;13(2):107.
10. Braun KL, Rose CL. Geriatric patient outcomes and costs in three settings: nursing home, foster family, and own home. Journal of the American Geriatrics Society. 1987;35(5):387-97.
11. Statistics ABo. 2016 Census QuickStats 2019 [Available from: https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/127?opendocument.
12. Cohen L, Manion L, Morrison K. Research methods in education: routledge; 2013.
13. Software Q. Simple qualitative analysis software 2020 [ ]
14. Simmons D, Weblemoe T, Voyle J, Prichard A, Leakehe L, Gatland B. Personal barriers to diabetes care: lessons from a multi-ethnic community in New Zealand. Diabetic Medicine. 1998;15(11):958-64.
15. Perry M, Melis R, Teerenstra S, Drašković I, van Achterberg T, Van Eijken M, et al. An in-home geriatric programme for vulnerable community-dwelling older people improves the detection of dementia in primary care. International Journal of Geriatric Psychiatry: A journal of the psychiatry of late life and allied sciences. 2008;23(12):1312-9.
16. Madureira MM, Takayama L, Gallinaro A, Caparbo V, Costa R, Pereira RM. Balance training program is highly effective in improving functional status and reducing the risk of falls in elderly women with osteoporosis: a randomized controlled trial. Osteoporosis international. 2007;18(4):419-25.
17. Kamińska MS, Miller A, Rotter I, Szylińska A, Grochans E. The effectiveness of virtual reality training in reducing the risk of falls among elderly people. Clinical interventions in aging. 2018;13:2329.
18. Sinaki M, Lynn SG. Reducing the risk of falls through proprioceptive dynamic posture training in osteoporotic women with kyphotic posturing: a randomized pilot study. American journal of physical medicine & rehabilitation. 2002;81(4):241-6.
19. Steiner GZ, George, E.S., MacMillan, F., McBride, K.A. Ageing Australians. In: T. D, R., Williams, & K., McLeod (Eds.) editor. Culture, Diversity and Health in Australia: Towards Culturally Safe Health Care Australia: Allen & Unwin; in press.
20. Network SWSPH. Multicultural & Refugee Health [Available from: https://www.swsphn.com.au/multiculturalhealth.
21. Maneze D, Everett B, Astorga C, Yogendran D, Salamonson Y. The influence of health literacy and depression on diabetes self-management: a cross-sectional study. Journal of diabetes research.
22. Osuagwu UL, Flack J, Piya M, Wong V, Simmons D. Prevalence of Diabetes Mellitus and Risk Factors in South Western Sydney WHERE ARE WE NOW? Western Sydney University 2020.

23. Arlt S, Lindner R, Rösler A, von Renteln-Kruse W. Adherence to medication in patients with dementia. Drugs & aging. 2008;25(12):1033-47.

24. Ivry J. Aging in place: The role of geriatric social work. Families in Society. 1995;76(2):76-85.

25. Netting FE, Williams FG. Can we prepare geriatric social workers to collaborate in primary care practices? Journal of Social Work Education. 1998;34(2):195-210.

26. Holosko MJ. Inclusion of gerontology content in undergraduate social work curricula in Australia and New Zealand. Gerontology & Geriatrics Education. 1995;15(4):5-19.

27. Poulos R, Boon MY, George A, Liu K, Mak M, Maurice C, et al. Preparing for an ageing Australia: the development of multidisciplinary core competencies for the Australian health and aged care workforce. Gerontology & Geriatrics Education Under Review.

28. Haley WE, Zelinski E. Progress and challenges in graduate education in gerontology: The US experience. Gerontology & Geriatrics Education. 2007;27(3):11-26.

29. Fruit D. Are graduates of bachelor's degree programs in gerontology employed? A report of a national survey. Educational Gerontology. 1985;11(4-5):237-45.

30. Son J, Erno A, Shea DG, Femia EE, Zarit SH, Parris Stephens MA. The Caregiver Stress Process and Health Outcomes. Journal of Aging and Health. 2007;19(6):871-87.

31. Aranda MP, Knight BG. The influence of ethnicity and culture on the caregiver stress and coping process: A sociocultural review and analysis. The Gerontologist. 1997;37(3):342-54.

32. Zannettino L, Bagshaw D, Wendt S, Adams V. The role of emotional vulnerability and abuse in the financial exploitation of older people from culturally and linguistically diverse communities in Australia. Journal of elder abuse & neglect. 2015;27(1):74-89.

33. DiGiacomo M, Green A, Delaney P, Delaney J, Patradoon-Ho P, Davidson PM, et al. Experiences and needs of carers of Aboriginal children with a disability: a qualitative study. BMC family practice. 2017;18(1):96.

34. Cooper C, Selwood A, Livingston G. The prevalence of elder abuse and neglect: a systematic review. Age and Ageing. 2008;37(2):151-60.

35. Morgan KJ, Eastwood JG. Social determinants of maternal self-rated health in South Western Sydney, Australia. BMC research notes. 2014;7(1):51.

36. Sundström A, Adolffson AN, Nordin M, Adolffson R. Loneliness Increases the Risk of All-Cause Dementia and Alzheimer's Disease. The Journals of Gerontology: Series B. 2019;75(5):919-26.

37. Hwang T-J, Rabheru K, Peisah C, Reichman W, Ikeda M. Loneliness and social isolation during the COVID-19 pandemic. International Psychogeriatrics. 2020:1-4.

38. Corner L, Brittain K, Bond J. Social aspects of ageing. Psychiatry. 2007;6(12):480-3.
39. Johnston K, Preston R, Strivens E, Qaloewai S, Larkins S. Understandings of dementia in low and midlne income countries and amongst indigenous peoples: a systematic review and qualitative meta-synthesis. Aging & mental health. 2020;24(8):1183-95.

40. Dinsdale E, Hannigan A, O'Connor R, O’Doherty J, Glynn L, Casey M, et al. Communication between primary and secondary care: deficits and danger. Family Practice. 2019;37(1):63-8.

41. Esteve-Matalí L, Vargas I, Sánchez E, Ramon I, Plaja P, Vázquez M-L. Do primary and secondary care doctors have a different experience and perception of cross-level clinical coordination? Results of a cross-sectional study in the Catalan National Health System (Spain). BMC Family Practice. 2020;21(1):135.

42. Chow JS, Gonzalez-Arce VE, Tam CWM, Warner K, Maurya N, Mcdougall A. Creating a successful health pathway to support the integration of patient care. Journal of Integrated Care. 2019.

43. Vandervoort A, Houttekier D, Vander Stichele R, Van der Steen JT, Van den Block L. Quality of dying in nursing home residents dying with dementia: does advanced care planning matter? A nationwide postmortem study. PloS one. 2014;9(3):e91130.

44. Brodaty H, Thomson C, Thompson C, Fine M. Why caregivers of people with dementia and memory loss don’t use services. International journal of geriatric psychiatry. 2005;20(6):537-46.

45. Davey JA. Older people and transport: coping without a car. Ageing and society. 2007;27:49.

46. Smith AC, Thomas E, Snoswell CL, Haydon H, Mehrotra A, Clemensen J, et al. Telehealth for global emergencies: Implications for coronavirus disease 2019 (COVID-19). Journal of Telemedicine and Telecare. 2020;26(5):309-13.

47. Steiner GZ, Ee C, Dubois S, MacMillan F, George ES, McBride KA, et al. “We need a one-stop-shop”: co-creating the model of care for a multidisciplinary memory clinic with community members, GPs, aged care workers, service providers, and policy-makers. BMC Geriatrics. 2020;20(1):49.